

# **BANK FOR INTERNATIONAL SETTLEMENTS**

## **FIFTY-THIRD ANNUAL REPORT**

**1st APRIL 1982 – 31st MARCH 1983**

**BASLE**

**13th June 1983**

## TABLE OF CONTENTS

	Page
Introduction . . . . .	1
I. From Disinflation to Balanced Growth . . . . .	3
II. The Process of Disinflation, 1979-83 . . . . .	8
<p>Highlights (p. 8); disinflation: the background (p. 9); disinflation, 1979 to early 1983 (p. 10); <i>the differential impact of exchange rates</i> (p. 13); <i>changing wage behaviour</i> (p. 17); output and demand (p. 19); <i>demand factors and the nominal GNP "split"</i> (p. 19), <i>the US policy-mix problem</i> (p. 23), <i>fiscal policy outside the United States</i> (p. 25); the unemployment problem (p. 26); disinflation: progress to date and prospects (p. 28); <i>recovery prospects</i> (p. 31).</p>	
III. Financial Markets and Financial Innovations . . . . .	32
<p>Highlights (p. 32); disinflation and income velocity (p. 33); changing patterns of sectoral financing (p. 36); a moderation in total credit flows (p. 38); bank credit and monetary expansion (p. 39); a revival in capital-market activity? (p. 42); financial fragility and balance-sheet restructuring (p. 44); financial innovations (p. 47); liability management (p. 50); maturity shortening and variable rate lending (p. 52); country developments (p. 53); innovations and monetary policy (p. 59).</p>	
IV. Monetary Policy and the Disinflationary Process . . . . .	62
<p>Highlights (p. 62); nominal interest rates (p. 63); <i>recent developments</i> (p. 63), <i>yield structure</i> (p. 65), <i>interest rate variability</i> (p. 65), <i>risk premia and the terms of lending by financial institutions</i> (p. 66); real interest rates (p. 67); problems of monetary policy (p. 68); the monetary aggregates: developments and policies (p. 69); <i>recent monetary developments in perspective</i> (p. 69), <i>the basic policy framework</i> (p. 70), <i>moves towards greater flexibility</i> (p. 73), <i>the near-term outlook for targeting</i> (p. 76); interest rate and exchange rate objectives in monetary policy (p. 78); <i>the basic framework</i> (p. 78), <i>exchange-rate-oriented policies in the period of rising interest rates</i> (p. 79), <i>interest rate responses in a context of declining rates of inflation</i> (p. 81); what margin of manoeuvre for monetary policy? (p. 82).</p>	
V. International Trade and Payments . . . . .	84
<p>Highlights (p. 84); world trade (p. 85); aggregate balance-of-payments developments and global interdependence (p. 86); <i>origins and implications of the discrepancy in global current-account balances</i> (p. 88), <i>interdependence in the evolution of current-account balances of payments</i> (p. 89), <i>the impact of recession in the Group of Ten countries on aggregate current-account positions in the rest of the world</i> (p. 90), <i>adjustment and financing in the face of deteriorating current payments positions</i> (p. 93), <i>the repercussions on the Group of Ten countries of adjustment in the rest of the world</i> (p. 96); balance-of-payments developments in the Group of Ten countries (p. 97); <i>current-account balances</i> (p. 97), <i>capital-account balances</i> (p. 101).</p>	

## VI. The International Credit and Capital Markets . . . . . 108

Highlights (p. 108); total international credit growth in 1982 (p. 109); the international banking sector in 1982: the development of the main aggregates (p. 110); geographical pattern of sources and uses of international banking funds (p. 114); international banking indebtedness, 1974-82 (p. 118); *the build-up of international banking debt, 1974-79* (p. 118), *the approach to the 1982 crisis* (p. 122), *evaluation and conclusions* (p. 129); the international bond markets (p. 132).

## VII. The International Monetary Scene . . . . . 137

Highlights (p. 137); exchange rate developments (p. 138): *the floating currencies* (p. 138), *exchange rate developments within the EMS* (p. 142); exchange rate fluctuations: a review of developments in the dollar exchange market during 1977-83 (p. 146); gold production and the gold market in 1982 (p. 152); reserves and international liquidity (p. 154): *developments in 1982* (p. 154), *longer-term perspectives* (p. 158).

## VIII. Activities of the Bank . . . . . 164

Financial assistance to central banks (p. 164); development of co-operation between central banks and international organisations (p. 166); operations of the Banking Department (p. 168): *liabilities (composition of resources)* (p. 170), *assets (employment of resources)* (p. 172), *forward gold operations* (p. 174); net profits and their distribution (p. 175); 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 (p. 176); the Bank as Agent for the European Monetary Co-operation Fund (p. 176); changes in the Board of Directors (p. 178).

## Conclusion . . . . . 179

\*                      \*

Balance Sheet and Profit and Loss Account at 31st March 1983.

## LIST OF TABLES AND GRAPHS

(Graphs are indicated by an asterisk)

	Page
<b>The Process of Disinflation, 1979-83</b>	
Group of Ten countries: Selected indicators of inflation and disinflation, 1968-83*	11
World-market commodity prices: Oil and non-oil*	12
Nominal income and consumer price deceleration	13
Changes in consumer prices	14
Changes in consumer prices and import unit values*	16
Changes in nominal and real wages	17
Major industrial countries: Changes in real gross national product and its components	20
Industrial production*	21
Industrial countries' export demand, 1978-82	22
United States: Fiscal/monetary policy mix*	23
General-government financial deficits as a percentage of gross private saving, 1966-82	26
Unemployment	27
Industrial countries: Inflation and unemployment, 1967-83*	29
"Discomfort" indices, 1970-83	30
 <b>Financial Markets and Financial Innovations</b>	
Changes in the income velocity of money*	35
Sectoral financial balances	37
Funds raised by domestic non-financial borrowers	39
Changes in bank credit and the broad money stock	41
Domestic capital markets: New issues of shares and bonds	43
Non-financial companies: Internal financing and balance-sheet ratios	45
M <sub>1</sub> income velocity and short-term interest rates	49
Ratio of personal consumption expenditure to currency in circulation*	50
Commercial banks: Demand deposits in relation to total liabilities	51
Changes in M <sub>1</sub> relative to M <sub>2</sub>	52
United States: Structure of commercial and industrial bank loans*	52
Bank credit and maturity shortening	53
United States: The changing composition of money*	55
Variability of long-term interest rates	60
 <b>Monetary Policy and the Disinflationary Process</b>	
Short and long-term interest rates*	64
Day-to-day variability of money-market interest rates	65
Risk premia and intermediation spreads*	66
Real bond yields	67
The broad money stock and GNP in nominal and real terms*	69

	Page
Monetary and credit aggregates: Objectives and rates of expansion . . . . .	71
Deviations of the money stock from target mid-points and interest rates* . . . . .	75
Short-term interest rate differentials, exchange rates and central banks' net foreign assets* . . . . .	80
<b>International Trade and Payments</b>	
World trade, 1980-82 . . . . .	85
International current-account balances, 1980-82 . . . . .	87
Aggregate current-account balances of major groups of countries and the world current-account discrepancy, 1972-82* . . . . .	89
Non-OPEC developing countries: Actual and hypothetical current-account balances of payments, 1980-82 . . . . .	91
Non-OPEC developing countries: Estimated financing of current-account deficits, 1980-82 . . . . .	94
Estimated deployment of the OPEC countries' investible surplus, 1981-82 . . . . .	95
Group of Ten countries: Capital flows and changes in net official monetary positions, 1981-82 . . . . .	102
United States: Regional pattern of net private-sector capital flows, 1980-82 . . . . .	104
<b>The International Credit and Capital Markets</b>	
Estimated net lending in international markets: Changes in external claims of banks and international bond issues . . . . .	109
External assets and liabilities in domestic and foreign currency of banks in individual reporting countries . . . . .	111
Currency breakdown of international banking activity . . . . .	112
Bank/non-bank breakdown of international banking activity . . . . .	113
Geographical pattern of international banking flows . . . . .	116
Estimated flows between the BIS reporting banks and groups of countries outside the reporting area, 1974-82 . . . . .	120
Euro-dollar interest rates and changes in export prices, 1973-83* . . . . .	121
Factors influencing the borrowing needs and net recourse to international bank finance of non-OPEC developing countries, 1974-82* . . . . .	122
Evolution of non-OPEC developing countries' international indebtedness, 1973-82* . . . . .	123
Features of external banking indebtedness of selected countries, 1978-82* . . . . .	125
Evolution of gross and net banking indebtedness of selected countries, 1975-82* . . . . .	127
International bond issues . . . . .	133
International bond issues, by types of instrument . . . . .	134
Euro-currency deposit rates and yields on international markets for US dollar and DM bonds* . . . . .	135
<b>The International Monetary Scene</b>	
Selected industrial countries: Movements of bilateral exchange rates against the US dollar, 1981-83* . . . . .	139
Selected industrial countries: Movements in effective exchange rates, 1980-83* . . . . .	140
Daily volatility of selected spot dollar exchange rates . . . . .	142
Spot exchange rates in the EMS exchange rate mechanism, 1982-83* . . . . .	143
Movements of nominal and real exchange rates of other currencies in the EMS exchange rate mechanism vis-à-vis the Deutsche Mark and of consumer prices in member countries, 1978-83* . . . . .	145

	Page
Movements in nominal and real exchange rates of the Deutsche Mark, the yen and the pound sterling against the US dollar, 1977-83* . . . . .	147
Estimated world gold production . . . . .	152
Estimated market sources and uses of gold . . . . .	153
Market prices of gold in US dollars and Swiss francs, 1981-83* . . . . .	154
Changes in global reserves, 1980-82 . . . . .	155
The pattern of investment of exchange reserves, 1979-82 . . . . .	158
Global non-gold reserves, reserve/import ratios and liabilities vis-à-vis banks reporting to the BIS, end-1969 to end-1982 . . . . .	161
 <b>Activities of the Bank</b>	
Development of the balance-sheet total over the past four financial years . . . . .	169
Development of the composition of resources over the past four financial years . . . . .	170
Borrowed funds, by origin . . . . .	171
Borrowed funds, by nature and term to maturity . . . . .	172
Distribution, by nature, of sight assets and other investments . . . . .	173
Time deposits and advances and securities at term, by term to maturity . . . . .	174

# **FIFTY-THIRD ANNUAL REPORT**

submitted to the

**ANNUAL GENERAL MEETING**

of the

**BANK FOR INTERNATIONAL SETTLEMENTS**

held in

**Basle on 13th June 1983**

Ladies and Gentlemen,

I have the honour to submit herewith the fifty-third Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1982 and ended on 31st March 1983.

The net profit for the year amounted to 65,826,173 gold francs, after transfer of 817,637 gold francs to the Provision for Exceptional Costs of Administration. This compares with a net profit for the preceding year of 66,938,821 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 15,826,173 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 and the remainder of 30,000,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1982-83 will be payable to shareholders on 1st July 1983.

## I. FROM DISINFLATION TO BALANCED GROWTH.

The process of disinflation upon which the western industrial world had embarked in the wake of the second oil crisis accelerated in 1982 and continued during the early months of 1983. A good many countries have scored major successes in their fight against inflation and have thereby paved the way for a resumption of growth. And, indeed, economic recovery seems in recent months to have been taking fairly firm hold in the industrial world, mainly in the United States but also in some other major countries. The OPEC surplus has disappeared and the official "marker" price of oil — admittedly measured in terms of a strong dollar — has declined for the first time in more than twenty years. But along with this good news, disinflation has also brought, or in many cases simply exposed, a number of very serious problems. Domestically, it has entailed protracted stagnation, a sharp rise in unemployment and widespread problems of financial fragility. Internationally, it has exacerbated the external debt-servicing problems of some countries by first pushing interest rates up and then keeping them at high levels in real terms, and by depressing world trade and commodity prices. These are the main features of economic developments in 1982–83 that are analysed in some detail in this Report.

There is growing evidence to support the view that the determined efforts to break the long upward trend of world inflation have been yielding tangible results, much faster over the past year than many had expected. The most visible of these is, of course, the declining rate of increase in various price indices, even when some very helpful but transitory influences are discounted. For some months now wholesale and even retail prices have been almost stable in a number of countries. Prices of real estate and housing have shown little tendency to rise and in some cases have even registered significant declines. But perhaps the most important, and it is to be hoped the most lasting, change has occurred in the labour market. The rate of increase in labour costs has slowed down in some countries to such an extent that, if there is a return to normal productivity growth, and assuming that this does not entail a faster rise in money wages, unit labour costs could be kept on a new path of relative stability. In a large number of countries real wages have declined — with isolated cases of nominal wage cuts — and underlying rates of profitability have improved. Admittedly, despite this progress, a still significant group of countries have made little headway in their efforts to contain inflation and strengthen their external accounts.

Disinflation has been accompanied, at least until recently, by a stagnation of output in the industrial world as a whole. It is probable that the wrong policy mix, i.e. the excessive burden borne by monetary policy in imposing global restraint, made the stagnation more protracted than it would otherwise have been. And it is certain that by exerting upward pressure on interest rates the policy mix has had a particularly inhibiting influence on capital formation, thus mortgaging future growth potential. But one should not forget that the western industrial countries' growth



problems did not begin three years ago, when they jointly undertook to resist the cost-push effect of the second oil shock. The first signs of a break in growth trends, at least as far as fixed capital investment is concerned, were evident in the late 1960s and early 1970s, well before the first oil shock. The deeper-seated causes of the break remain uncertain, but the more immediate ones are not: the rising share of labour in income distribution, the declining profitability of businesses, the expanding rôle of the public sector, sluggish capital formation and weakening productivity growth.

Nor should one attribute the current level of unemployment exclusively to the demand-restraining policies of the last three years. Unemployment, particularly in western Europe, was on an upward trend well before that, under the combined influence of slower growth, an expanding population and in some countries increases in the labour-force participation rates. Last but not least, the excessive rise in real wage costs and growing impediments to labour mobility gave a major incentive to labour-saving investment and innovations. It is against this background that the recent declines in real wages, beyond their direct contribution to slowing inflation, are a helpful element of adjustment.

The story is much the same when it comes to the manifestations of financial fragility that surfaced in most industrial countries from 1981 onwards. There is no doubt that the process of disinflation, with the unavoidable — initial — consequences of a squeeze on cash flows and high interest rates, has aggravated the financial position of many businesses and has driven a number of them to bankruptcy. But it is equally clear that the deterioration in profitability and balance-sheet positions had started much earlier. In most of the industrial countries debt/equity ratios had already begun to worsen, and the share of short-term debt to rise, by the mid-1970s, if not earlier. It must also be added that the worst now seems to be over. There are scattered signs that profit margins are gradually being restored, partly as a direct result of successful disinflation in the labour market, with a correspondingly favourable impact on corporate cash flows and financial structures. The decline in interest rates, albeit in most countries in nominal terms only, has had a positive effect in the same direction. The easing of markets for long-term funds should slowly help to lengthen the maturity profile of corporate debt. The rise in share prices has markedly improved the scope for equity financing. All this has not gone unnoticed by the financial markets: the indicators of financial fragility — the numerous yield differentials — have been improving since last autumn.

In the financial markets disinflation in most countries last year was attended by a substantial weakening of private demand for credit, particularly bank credit, and by a concurrent increase in the demand for real money balances. On the one hand, the business sector sought to reduce its financial deficit by cutting back on investment and employment, while the household sector borrowed less to finance spending on consumer durables and housing. These developments placed an additional cyclical burden on public-sector deficits at a time when governments were struggling to get the structural component of budget deficits under better control. On the other hand, the deficits helped to provide some needed counter-cyclical support as economic activity gave way and also to meet the private sector's demand

for greater liquidity. Thus, precautionary private behaviour, together with falls in inflation and interest rates, were reflected in some noteworthy declines in the income velocity of the monetary aggregates, particularly in the United States. Moreover, in that country and in certain others, financial innovation added to the difficulties of defining, controlling and interpreting developments in the aggregates.

In these circumstances, and because of uncertainties about the persisting strength of inflationary expectations, the conduct of monetary policy became extremely difficult. In various countries a larger element of judgement had to be introduced into policies geared to the control of the monetary aggregates. The declines in the velocity of money were particularly difficult to interpret, because they might signal either a lasting change in inflationary attitudes or a transitory change which could quickly reverse itself as recovery got under way. In general, monetary authorities acted in some measure to accommodate what they perceived to be unusual demands for liquidity in conditions of deep recession accompanied by widespread signs of financial fragility, both domestically and internationally. In the United States, for instance, monetary expansion was permitted to run well beyond the targets. But, while there was some scope for flexibility, the conduct of monetary policy remained subject to narrow constraints set by fears of a revival of inflation and a lack of sufficient support from fiscal and incomes policies. Even so, taking account of the extent to which price and wage inflation has abated, monetary policy in industrial countries seems to be quite able to accommodate a moderate rate of recovery in real output.

It is in the field of international finance that the process of disinflation has brought to the fore most dramatically problems that had been building up for some time. Despite the gradual disappearance of the OPEC surplus, the current-account deficits of the non-oil LDCs, like those of a number of developed countries, have remained very high; at the same time a number of high-absorbing oil producers have also started running sizable external deficits. The explanation lies, of course, in declining world demand, deteriorating terms of trade and, first and foremost, the very high levels of short-term dollar interest rates in 1981 and early 1982. An exacerbating element, at least until recently, was the fact that floating rate bank credits had come to assume a preponderant share in countries' external debt. Moreover, contrary to the experience of the early 1970s, there has been no inflation of export prices, particularly of commodities, that would have helped to erode the real value of this debt. The implied sharp shift from negative to high positive real short-term rates has had devastating repercussions on the current accounts of all those countries that had amassed substantial external debt. On top of this, the maturity profile of the debt, with its heavy short-term bias, has introduced a factor of considerable instability. When, partly under the impact of political events, banks succumbed to the "regionalisation syndrome" and stopped lending first to eastern Europe and then to Latin America, and in some instances even tried to withdraw funds, the "flow" problem of current-account financing was compounded by a "stock" problem as well.

However, just as the emergence of domestic financial problems cannot be ascribed simply to the western countries' anti-inflationary policies, so it would be

equally mistaken to underestimate the rôle played by the process of international debt accumulation. Without this process, which was especially rapid over the last nine years, disinflation would have had a much milder and less damaging effect on eastern Europe and the developing world. Its acceleration began with the first oil shock, when the western banking system stepped in as the major financial intermediary between surplus and deficit countries. This was universally applauded as being in the interests of the world economy, since, in the absence of other large-scale means of intermediating financial imbalances, there was a risk that the world economy might spiral into a genuine depression. This judgement seemed sound enough at the time. And even with hindsight it can be said that both the debt-servicing ratios of most debtor countries and the external exposure of the banks remained within manageable proportions until around 1977-78. By then, however, despite the disappearance of the first oil imbalance, some countries were beginning to accumulate debt at a rate that would have been unsustainable even if world demand for their products had continued to grow at a fast pace and interest rates had remained at low levels. The borrowers' market for bank credit succeeded in crowding out, so to speak, the more cautious conditional lending of the IMF, and the deficit countries therefore had little external incentive to undertake domestic adjustment. The second oil shock made things even worse; and by the time the industrial countries decided to embark upon their anti-inflationary policies, both country indebtedness and the banks' external exposure had reached levels that created a potentially fragile financial situation.

A financial crisis has, however, been averted, thanks to the effective co-operation of the major actors on the international financial scene. The western central banks, under the aegis of the BIS, extended emergency credits, allowing conditional IMF financing to be brought into action: in this way they signalled to the market their determination to resist any fundamental threat to the financial system as a whole. The IMF swiftly negotiated some large, tightly conditional financing facilities. Governments, overcoming earlier reluctance in some cases, agreed on a substantial increase in IMF quotas and on an enlargement of the GAB. A number of deficit countries have put into effect fairly drastic adjustment policies. And lastly, the banks, once they had to face up to an emergency situation, kept their nerve and, despite mounting arrears and difficult rescheduling negotiations, refrained from precipitating defaults. While the emergency actions have not solved the fundamental problems, they have allowed the situation to be kept under control and have given policy-makers a breathing space for a calmer assessment of the situation.

At the same time, exchange rate developments have brought their own contribution to unsettling the policy-making process in many countries. Within eighteen months there were more, and larger, adjustments within the EMS than during the first two and a half years of the system's existence, all these adjustments having been preceded, and followed, by large-scale capital movements. Short-term volatility of the rates of the major floating currencies against the dollar remained disturbingly high. But the most worrying development was the persistent strength of the dollar — attributable to a large extent to the US policy mix — which is in the process of creating an unsustainable pattern of current accounts, producing a wave

of protectionist pressure within the United States and considerably weakening, for a number of countries, the beneficial effects of lower oil prices.

That the policy of disinflation implemented after long years of inflationary distortions was going to be a costly business in the short run was fairly obvious from the outset. Only the most optimistic partisans of the "rational expectations" theorem could have hoped that wage and price pressures would give way without serious losses in terms of output and employment within the industrial countries. Nor could it be expected that the process of disinflation would have no painful consequences for the rest of the world. But there was simply no acceptable alternative: the longer the delay in initiating a decisive, internationally co-ordinated campaign against inflation, the greater would have been not only the disruptive effects of inflation itself, but also the probable costs of disinflation in terms of output, employment and greater financial fragility — both within the industrial world and internationally.

Last year's Annual Report pointed out that policy-makers were faced with a difficult choice between pursuing an anti-inflationary policy which was just beginning to bear fruit, but was not then far enough advanced, and having to support world economic activity sufficiently to prevent a real crisis. This "narrow path of policy" perspective now needs to be updated in two respects. On the one hand, it can be argued that the substantial gains in the fight against inflation registered over the last year now give policy-makers a somewhat greater degree of freedom to consider the level of world economic activity and its domestic and, especially, international financial implications than they had a year ago. On the other hand, policy-makers should continue to keep a proper balance between their immediate concerns and the longer-term objectives of sustainable, non-inflationary growth, a sound international financial system and a properly functioning balance-of-payments adjustment process.

## II. THE PROCESS OF DISINFLATION, 1979-83.

### Highlights.

For the past three to four years the western industrial world has been engaged in an unprecedented, determined attempt to break inflation. The origins of this inflationary malaise go back a long way, in many cases into the mid-1960s. However, it was not until the second oil shock at the end of the 1970s that the damage wrought by inflation had become sufficiently widely and fully appreciated for such a major policy assault to be mounted.

The means employed basically comprised stringent monetary and — to a markedly lesser extent — fiscal policies. In a growing number of cases, however, earlier attempts at incomes-policy-type measures were revived or strengthened. Even so, for the industrial world as a whole, the weight of disinflationary pressure has so far been applied by indirect means, led in particular by monetary policy in the United States.

The aim of disinflation is, of course, to lay the foundation for a return to economic growth and acceptable levels of unemployment. Against this standard, progress to date in the Group of Ten countries and Switzerland has been encouraging, if incomplete. The 1979-83 period has witnessed the most marked break in inflation since the oil shocks began a decade ago. By the spring of this year consumer price inflation was, on average, down to about  $4\frac{3}{4}$  per cent., compared with a peak of over 13 per cent. in mid-1980.

Of potentially even greater significance is the growing evidence of more moderate wage behaviour. Nominal wage inflation has fallen to some  $6\frac{1}{2}$  per cent. recently, as compared with an average of about  $8\frac{1}{4}$  per cent. over the 1965-72 period. There are also signs of more flexibility in real wage behaviour.

On the other hand, not all countries have yet shared in these developments. Success has tended to be concentrated in some of the larger countries, most notably the United States and the United Kingdom, which had experienced rapid inflation earlier, and in Japan, Germany, the Netherlands and Switzerland, where the effects of the second oil shock were minimised.

It is also the case that part of the general slowdown in inflation can be ascribed to falling oil and non-oil commodity prices and may to some extent prove temporary.

At the same time, however, no country has avoided involvement in the general world recession. In the Group of Ten countries total output fell last year by  $\frac{1}{2}$  per cent., thus conferring on the years 1980-82 the lowest three-year average growth rate —  $\frac{3}{4}$  per cent. per annum — for any such period since the Second World War. Unemployment has risen sharply and universally, until by the spring of this year an average of almost 9 per cent. was being recorded.

Thus, the process of adjustment still has far to go. Disinflation has clearly been hampered by lags in the adjustment of domestic prices and wages to market stimuli — that is by a lack of sufficient flexibility. It has also lacked sufficient support from the fiscal policy side. Especially in the United States, the prospect of prolonged structural budget deficits has served to keep real interest rates very high indeed. In turn, this may have exacerbated the weakness of output last year both through the crowding-out of investment spending and through the severe retrenchment forced on other countries, particularly the non-oil developing ones.

Turning to the future, ultimate success in the disinflationary effort will depend firstly on the resolution of fiscal problems and on a further decline in interest rates. Secondly, non-inflationary recovery will require continuing moderation in the behaviour of prices and costs. Chances seem reasonably good that such moderation will prevail, given the many signs of greater flexibility in the labour markets and the fact that the recovery of demand itself is expected to remain of moderate dimensions.

#### **Disinflation: the background.**

During the course of 1978 and 1979 it gradually became clear that the cumulating increases in the price of oil were threatening a second oil shock of major proportions. The growing realisation of this fact on the part of policy-makers in turn generated a degree of policy resolve not formerly seen in the fight against inflation. In part, this was the result of what were felt in some countries to have been bitter experiences during the first oil shock. Consumer price inflation had then risen to a peak of around 15 per cent. on average, with some major countries such as Japan, Italy and the United Kingdom registering rates between 20 and 30 per cent. And now, during the second oil shock, inflation was heading up to a new post-war record of about 15 per cent. in the United States itself, with clear signs that it might be getting out of hand.

Thus, the first aim of policy-makers was to confront the second oil shock with the firm intention of minimising any secondary effects on domestic costs and prices. In addition, however, there was a longer-term aspect to the policy of concerted disinflation. It was recognised that, whatever its immediate causes, the inflationary crisis of the late 1970s had been ten to fifteen years in the making. Various roots can be traced, for example in the excess demand pressures associated with the Vietnam war, in changing labour-market structures and behaviour and — not wholly independently — in growing government involvement in the economy.

At the same time it had become increasingly clear that this secular acceleration of inflation was being accompanied by a major deterioration in general economic performance in terms of growth and employment. One aspect of this deterioration — namely a generalised slowdown in the rate of growth of productivity — was in turn another factor pushing prices up further through its effect on unit costs. Even so, it was perhaps not surprising that the notion gained currency that the inflation itself might be at least one of the basic causes of worsening general economic

performance. If so, then fighting inflation might not necessarily be at the expense of growth and employment — at least in the medium to long term; rather, it might be one of the fundamental means of regaining previous standards of performance.

It was perhaps fortunate that such attitudes to the longer-term consequences of inflation had already been hardening for some time before the second oil crisis erupted. For, when it did, a less ambivalent policy posture — while being the more necessary — was also more feasible than it had been in 1974–75. The chances of avoiding yet another major ratcheting upwards of inflation were thereby the greater.

What was not clear, however, was the extent to which determined disinflation might incur short-term costs. The policy approach adopted was in a sense a paradoxical one. On the one hand, and given the general climate of opinion in favour of fighting inflation, the situation required both a firm stance of policy and a willingness and determination to uphold such a stance even in the face of substantial short-term costs in terms of unemployment and lost output. On the other hand, the more convincing the commitment to disinflation, the less these short-term costs might be.

Put another way, the more that credible monetary targets affected price and wage expectations, the more might inflation be reduced without seriously affecting output. The division of nominal demand between prices and output volume might — it was hoped — be favourably influenced by the announcement effect of money supply targets. But even if not, policy-makers felt that the situation in any case left no alternative. Monetary policy in particular could not be expected always to accommodate whatever rate of inflation was thrown up by the combination of various market and non-market forces.

Thus, the extent to which the process of disinflation would in the event be a “gradualist” one was in large part outside the direct control of policy. Two other factors, however, were also likely to be important in this respect. Firstly, there was the question of how accurately the full international implications of a concerted approach had been assessed. And secondly, there was the question of the necessary degree of support from fiscal policy. Deficiencies in either or both of these areas would clearly carry with them the risk that the recession would be deeper than expected, even deeper, perhaps, than required for a successful disinflationary effort.

### Disinflation, 1979 to early 1983.

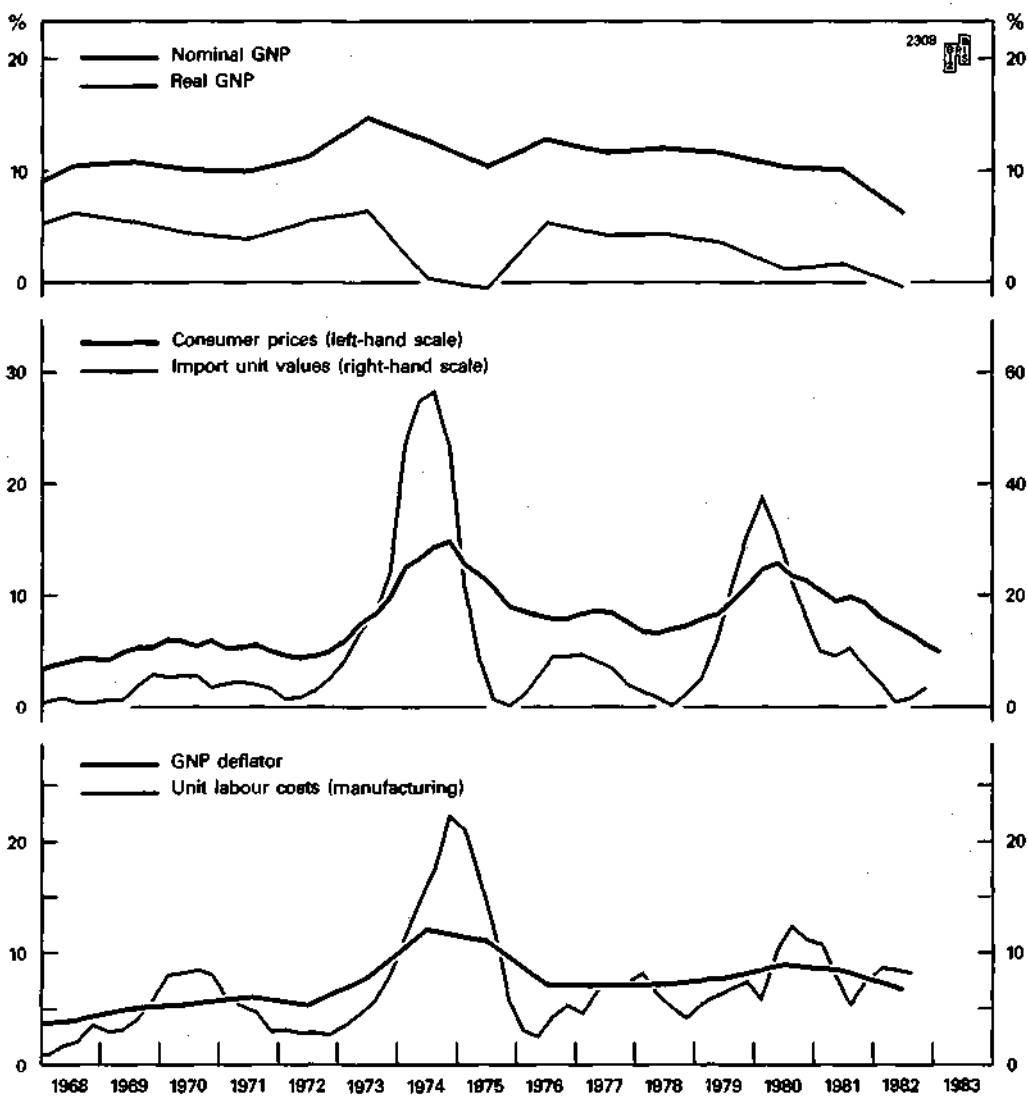
An important initial feature of the anti-inflation strategy thus adopted was a tendency — at least in some of the major cases — to shun relatively direct methods involving one form or another of prices and incomes policy. In turn, this implied relatively heavy reliance on the traditional, indirect, weapons of monetary and fiscal policy. And within this area, stress was laid on control of the money stock, in some cases confirming or tightening previous policies involving monetary targets.

One way of beginning the analysis of the ensuing developments is to examine the flow of GNP in nominal terms. This is not to say that these developments matched mechanically the wishes of policy-makers as implicitly contained in the

monetary targets actually set. Indeed, in a later section on demand it will be suggested that in the event nominal income growth decelerated last year rather faster than might have been expected. (Nor is it necessarily always true that income changes lead price changes: causation can run the other way, especially in the case of exogenous price changes.) Nevertheless, the starting point is a convenient one.

As the first graph shows, the weighted average rate of growth of nominal income in the Group of Ten countries has fallen sharply since 1979, the deceleration being most pronounced in 1982. In fact, last year the growth rate, at around 6 per cent., was the lowest for more than two decades.

Group of Ten countries: Selected indicators of inflation and disinflation, 1968-83.\*



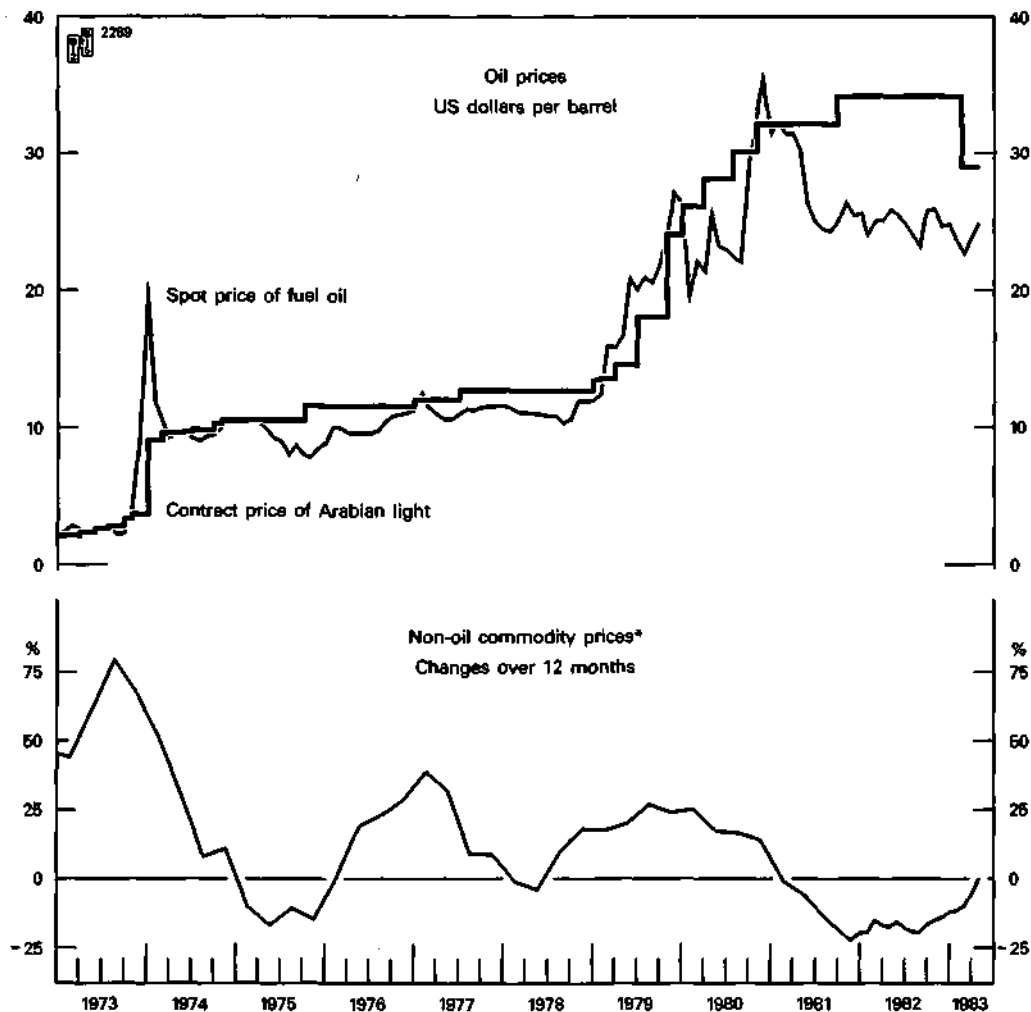
\* All indices are weighted averages, the weights being proportional to GNP in US dollars in 1981. They are shown as percentage changes over one year.



Perhaps partly because disinflation as measured in this way did not appear in full strength until last year, the deceleration in consumer price inflation has not been unusually rapid so far. It has, however, been sustained, so that by March of this year the average inflation rate for the Group of Ten countries was down to 4.8 per cent., compared with a peak of  $13\frac{1}{2}$  per cent. in mid-1980 and an average during the 1960s of  $3\frac{1}{4}$  per cent. per annum. Thus, the current rate of inflation represents the lowest rate seen since the oil and commodity price shocks began in 1973.

On the production costs side, the graph also shows that an important contribution to the decline in inflation has come from weak import prices, reflecting mainly commodity price developments. Non-oil commodity prices in dollar terms fell by about 35 per cent. between the peak in late 1980 and the end of last year, though some revival has been registered more recently. Perhaps more spectacularly,

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



\* The "Economist" index, expressed in US dollars.

with spot oil prices having been weak for nearly two years, the official contract price of oil finally fell earlier this year from \$34 to \$29 per barrel, the first such decline recorded since the oil shocks began a decade ago.

On the other hand, progress in bringing down the rate of increase of unit labour costs — the major element in domestic production costs — has been slower. It is true, as the graph on page 11 shows, that a wage cost explosion such as that of 1973–74 was not repeated during the second oil shock. However, with productivity performance weak, more moderate nominal wage behaviour has not yet been fully reflected in better unit cost performance.

Nevertheless, the graph probably gives too pessimistic an impression of progress on the wages front. On the one hand, 1982 was a particularly bad year for productivity growth. A near-zero result for the Group of Ten countries together was, of course, heavily affected by short-term output developments, especially in North America. On the other hand, when nominal wage behaviour, and particularly the more recent developments, are examined in greater detail (see page 17 below), there is welcome evidence of a more significant slowdown in the crucial area of wage inflation.

Turning to individual countries, virtually all Group of Ten countries are now experiencing declining inflation. However, there have been considerable differences between countries in the timing, speed and extent of the individual declines.

In the first instance, there may have been different degrees of policy commitment to disinflation. This, of course, is impossible to measure at all precisely. The table shows the deceleration in the growth of nominal national income between the 1976–78 period and 1982. As an indicator of disinflationary commitment this is clearly flawed. Nevertheless, the table does to some extent accord with prior intuition. Thus, the United States and the United Kingdom head

Nominal income and consumer price deceleration.

Countries	Nominal GNP growth			Consumer price inflation			
	average 1976–78	1982 <sup>1</sup>	deceleration in growth rate	average 1976–78	1982	deceleration in consumer price inflation from	
						1976–78 to 1982	end-1979 to March 1983
in percentages or percentage points							
United States .....	11.5	4.1	–7.4	6.6	6.2	–0.4	– 9.7
United Kingdom .....	16.3	9.0	–7.3	13.5	8.6	–4.9	–12.6
Canada .....	12.1	5.3	–6.8	8.2	10.8	+2.6	– 2.6
Netherlands .....	10.5	4.5	–6.0	6.4	6.0	–0.4	– 2.1
Japan .....	11.0	5.1	–5.9	7.2	2.7	–4.5	– 3.4
Germany .....	7.8	3.7	–4.1	3.6	5.3	+1.7	– 1.9
Italy .....	21.0	17.1	–3.9	16.1	16.6	+0.5	– 3.4
Belgium .....	9.6	7.2	–2.4	6.9	8.7	+1.8	+ 3.8
Sweden .....	10.9	8.8	–2.1	10.6	8.8	–2.0	– 1.4
France .....	13.8	14.1	+0.3	9.4	11.8	+2.4	– 2.9
Switzerland .....	2.7	5.7	+3.0	1.4	5.6	+4.2	– 0.4
Average <sup>2</sup> .....	11.8	6.0	–5.8	7.7	7.0	–0.7	– 6.4

<sup>1</sup> Preliminary. <sup>2</sup> Using 1981 GNP weights and exchange rates.

the rankings in terms of the decline in nominal growth achieved. And, at the other end of the spectrum, France has registered no deceleration. In the cases of Canada and the Netherlands, unexpectedly weak demand, both domestic and foreign, may have played a greater rôle than elsewhere. However, as will be suggested later, this feature may have been present in most cases, though perhaps to varying degrees.

In any event, the cause of the movement in money GNP, while relevant to the question of policy intent, ought in theory to be less relevant to any resultant decline in inflation. And, indeed, the two countries with the greatest deceleration in income, the United Kingdom and the United States, have, by a clear margin, had the greatest success in bringing down inflation since 1979, although in the British case the 1979 inflation rate had been raised sharply by an increase in VAT. Japan ought also to be added to the list of major successes. Income and inflation were already being brought under control before the second oil shock, so that with further progress since then, Japanese inflation is now only about 2 per cent.

On the other hand, while all countries have, to a degree, witnessed a delayed price response, some have experienced a considerable lag in bringing about an appreciable deceleration of consumer price inflation from its second oil-shock peak. One group comprises the relatively high inflation countries, France, Italy and Sweden. Another — lower inflation — group comprising Belgium, Germany, the Netherlands and Switzerland, saw their inflation rates still tending to rise somewhat

Changes in consumer prices.

Countries	Changes over twelve months ending								
	1972 Dec.	1974 Dec.	1976 Dec.	1978 Dec.	1979 Dec.	1980 Dec.	1981 Dec.	1982 Dec.	1983 March
	in percentages								
United States .....	3.4	12.2	4.8	9.0	13.3	12.4	8.9	3.9	3.8
Japan .....	5.3	21.9	10.4	3.8	5.7	7.5	4.3	1.8	2.3
Germany .....	6.4	5.8	3.7	2.4	5.4	5.5	6.3	4.6	3.5
Netherlands .....	7.9	10.8	8.5	4.0	4.8	6.7	7.2	4.3	2.7
Belgium .....	6.4	15.7	7.6	3.9	5.1	7.5	8.1	8.1	8.9
Switzerland .....	6.9	7.6	1.3	0.7	5.2	4.4	6.6	5.5	4.8
United Kingdom ...	7.6	19.2	15.1	8.4	17.2	15.1	12.0	5.4	4.6
Italy .....	7.3	25.3	21.8	11.9	19.8	21.1	17.9	16.3	16.4
Sweden .....	6.1	11.5	9.5	7.3	9.8	14.1	9.2	9.6	8.4
France .....	6.9	15.2	9.9	9.7	11.8	13.6	14.0	9.7	8.9
Canada .....	5.1	12.3	5.9	8.4	9.8	11.2	12.1	9.3	7.2
Austria .....	7.6	9.7	7.2	3.7	4.7	6.7	6.4	4.7	3.5
Denmark .....	7.0	15.6	13.0	7.1	11.8	10.9	12.2	9.0	7.5
Finland .....	7.1	16.9	12.4	6.4	8.6	13.8	9.9	9.0	7.5
Greece .....	6.6	13.4	11.7	11.5	24.8	26.2	22.5	19.1	23.1
Ireland .....	8.2	20.0	20.6	8.0	15.9	18.2	23.3	12.3	12.5
Norway .....	7.8	10.4	7.9	8.1	4.7	13.7	11.9	11.7	9.2
Spain .....	7.3	17.9	19.8	16.6	15.5	15.2	14.4	13.9	12.8
Weighted average of Group of Ten countries <sup>1</sup> .....	5.1	14.5	7.8	7.3	11.2	11.6	9.0	5.6	4.8

<sup>1</sup> With weights proportional to gross national products for the year 1981.

throughout 1981 and into 1982. However, in all these cases inflation was already low before the second oil shock and did not accelerate too markedly during it. Consequently, the most recent inflation figures are — with the possible exception of Belgium — reassuringly low (see table).

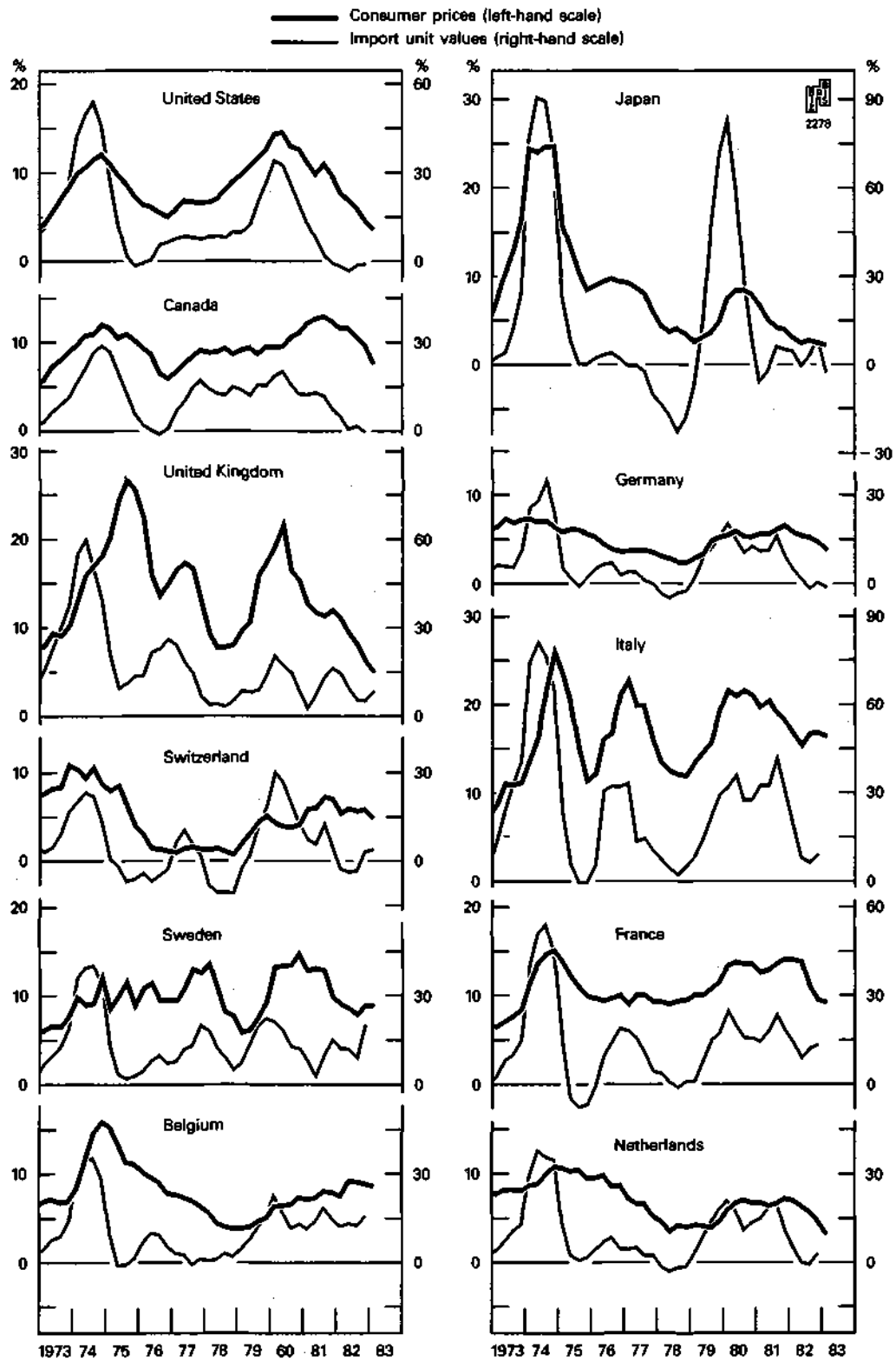
*The differential impact of exchange rates.* An important reason for these developments lies, of course, in exchange rate movements. In large part these have been a reflection of the strength of the dollar, which, in effective terms, appreciated by some 35 per cent. between the third quarter of 1980 and October last year. It is, however, impossible to separate out a completely independent exchange rate factor in differential inflation performance — independent, that is, from differential degrees of disinflationary policy stance. Nevertheless, to speak qualitatively of exchange rate “overshooting”, as many observers do, does suggest that at least part of the recorded movement in exchange rates was of a quasi-exogenous nature. In addition, on the other side, several independent currency devaluations took place in Europe over the past two years, most notably in the cases of Sweden, France and Belgium.

At all events, as the graph overleaf shows, the countries in which the inflation slowdown has been delayed have tended very much to be those which had to wait longest for relief on import price inflation. Indeed, among the more inflationary countries the second import price peak in the third quarter of 1981 was nearly as high as that of the second oil shock itself. In the case of Italy it was actually higher. And although these countries began to experience some relief last year on the import price inflation front, by the year's end import costs started to accelerate again in Sweden and France as devaluation began to play a renewed rôle. In the French case, however, price and wage controls accompanied last year's devaluation of the franc, with the aim of limiting the latter's inflationary impact. The Swedish authorities also instituted a temporary price freeze to accompany the large devaluation of the krona in October.

The reverse side of the devaluation coin is, of course, the appreciation necessarily experienced by one or more other countries and its presumably favourable price effects. Indeed, as the graph shows, the United States has been a major beneficiary in this respect, as import prices in dollar terms actually began to decline last year. The United Kingdom also benefited temporarily from the sharp rise in sterling in 1980, although the effects began to be reversed the following year as the dollar started its strong rise. In the British case, too, many observers have felt that the consumer price level had been unnecessarily increased by a large rise in indirect taxes in 1979, the delayed secondary effects of which may have tended to offset some of the potential benefits of the strong exchange rate. In Italy the acute need for budgetary retrenchment has also led to sharp increases in indirect taxes and public charges, the direct effects of which have delayed the slowdown in inflation associated with decelerating import prices. And in Canada the energy price shocks have been spread out by the policy of gradual adjustment of domestic energy prices to world levels.

In any case, it is worth remarking that unambiguously favourable price influences from a high exchange rate are only experienced if the secondary effects —

Changes in consumer prices and import unit values.



especially on wage costs — are strong. Otherwise the resulting loss of international competitiveness is likely to require either more reductions in demand and output or a reversal of the exchange rate appreciation itself.

*Changing wage behaviour.* It is when one turns to wage developments, however, that — in retrospect — it may come to be seen that the disinflationary process began to yield more fundamental results in 1982. For the weighted average rise in nominal wages in the Group of Ten countries appears to have fallen to the lowest level seen since before 1973 — indeed to almost 2 percentage points below the average over the period 1965–72. In other words, the world has recorded the first serious break in nominal wage inflation since the oil crises began a decade ago. There are also welcome signs of greater flexibility in the behaviour of real wages as the 1982 rise — following three years of negative growth — was still more than 2½ points below the 1965–72 average.

There are, of course, many qualifications to be entered before drawing conclusions from this for the future. In the first place, the development is very recent, though its first signs were already noted in last year's Report. Secondly, progress has not been universally satisfactory. As the table shows, Italy, France and Canada must be considered exceptions to the general statement — at least until last year. Perhaps most importantly, this decline in wage inflation has only come about in the context of unemployment rates which are higher than any seen since the end

Changes in nominal and real wages.

Countries	Nominal wages <sup>1</sup>					Real wages <sup>2</sup>				
	1965–72	1979	1980	1981	1982	1965–72	1979	1980	1981	1982
	average annual per-centage increase	Dec. to Dec. percentage change				average annual per-centage increase	Dec. to Dec. percentage change			
United States . . . . .	8.0	8.0	8.6	7.5	5.0	1.8	-4.7	-3.4	-1.3	1.1
Japan . . . . .	13.4	5.6	5.3	5.5	4.9	7.6	0.0	-2.0	1.1	3.1
Germany . . . . .	8.3	4.8	7.5	5.1	4.0	4.9	-0.6	2.0	-1.1	-0.6
France . . . . .	9.6	13.8	15.4	16.4	12.6	4.6	1.6	1.5	2.1	1.7
United Kingdom . . . . .	8.6	19.6	19.5	10.0	7.7	2.8	2.0	3.8	-1.6	2.2
Italy . . . . .	8.6	22.5	21.6	22.9	15.9	5.0	2.3	0.4	4.2	-0.4
Canada . . . . .	7.6	9.4	11.6	12.7	9.2	3.6	-0.4	0.3	0.5	-0.1
Belgium . . . . .	9.7	8.4	10.2	10.3	3.8	5.8	3.1	2.5	2.0	-4.0
Netherlands . . . . .	9.7	4.3	4.1	4.4	6.6	3.9	-0.5	-2.4	-2.6	2.2
Sweden . . . . .	9.8	8.4	11.9	6.8	6.9	4.3	-1.2	-1.9	-2.2	-2.5
Switzerland . . . . .	6.3	2.6	6.4	5.9	6.3	1.9	-2.5	1.9	-0.7	0.8
G-10 countries <sup>3</sup> . . . . .	8.3	9.3	10.0	8.8	6.5	3.7	-1.7	-1.2	-0.3	1.1
Austria . . . . .	8.4	5.9	7.0	7.9	6.4	4.2	1.1	0.3	1.4	1.6
Denmark . . . . .	11.8	13.6	8.5	10.5	9.3	6.1	1.8	-2.1	-1.5	0.3
Finland . . . . .	11.0	8.4	18.1	10.5	8.8 <sup>4</sup>	5.3	-0.2	2.1	0.6	-0.2 <sup>4</sup>
Greece . . . . .	9.4	22.5	25.0	27.6	36.5	6.3	-1.8	-1.0	4.1	10.9
Ireland . . . . .	12.4	18.1	21.3	13.6	15.6 <sup>4</sup>	5.8	1.9	2.6	-7.9	-1.4 <sup>4</sup>
Norway . . . . .	9.5	0.9	15.5	7.3	10.6 <sup>4</sup>	3.9	-3.6	1.6	-4.1	-0.2 <sup>4</sup>
Spain . . . . .	13.9	19.5	20.5	16.2	15.9 <sup>5</sup>	7.5	3.4	4.7	1.5	2.4 <sup>5</sup>

<sup>1</sup> Hourly earnings in manufacturing, except in France, Italy, the United Kingdom (1965–72), the Netherlands, Switzerland (1965–72) and Austria, where the data refer to hourly rates. <sup>2</sup> Nominal wages deflated by consumer prices. <sup>3</sup> 1981 GNP weights and exchange rates. <sup>4</sup> Third quarter. <sup>5</sup> November.

of the immediate post-war recovery period. Finally, it has to be remembered that the warranted rate of nominal wage increase compatible with satisfactory domestic price performance has fallen everywhere in the same measure as has the secular growth rate of labour productivity.

That said, however, the scale of the change already apparent in the statistics, together with anecdotal evidence and known government initiatives which have successfully modified indexation provisions, all strongly suggest that more than just cyclical influences have been at work. The United States and the United Kingdom, for example, have on this occasion rather firmly rejected an incomes policy approach and yet appear to have recorded a marked change in wage behaviour. In the latter case, the most recent wage rise is more than 10 points below that recorded only two years ago. In the United States cases of outright wage cuts have been reported, apparently in the interests of job preservation.

In continental western Europe, on the other hand, there has traditionally tended to be a more pragmatic approach to incomes policies per se. And here welcome progress is apparent not just in the wage statistics themselves but also, in many cases, in the successful conclusion of national wage-restraining agreements. Many of the latter have involved the suppression or modification of wage indexation practices, practices which had aggravated inflation seriously at a time of external price shock. For example, in Italy a 15 per cent. reduction in the "scala mobile" indexation provisions was agreed early this year by the Government and the two sides of industry. In addition, indirect tax and public charge increases will not be allowed to affect the relevant price index in future. In Denmark a general wage freeze was in force between October last year and March this year, and since then employees have agreed to a relatively low two-year settlement, despite suppression of the automatic indexation of wages. In the Netherlands, too, the Government was able to sblve a mandatory programme of wage and price controls when, in November last year, the trade union federation and the industrial employers reached an agreement on waiving a 2½ per cent. cost-of-living wage adjustment due on 1st January. Similarly, the Swedish employers' confederation and the trade unions concluded a favourable private-sector wage agreement in March of this year. The former indexation system for French public-sector wages was also abandoned last year. Finally, in Belgium, following prolonged government efforts, a mixture of mandatory and voluntary arrangements was brought into force last winter which effectively modified the previous indexation provisions. There are signs, too, that this is beginning to result in the declines in real wages which are necessary for a successful post-devaluation adjustment.

Indeed, in general, the loosening of indexation arrangements holds out the promise of more flexibility in real wages over the longer term. Such an increase in flexibility would not only be important for inflation control, but it should also be of assistance in employment creation and preservation. It is thus of the utmost importance that the major advances in wage moderation so far recorded be maintained in the face of an upturn in activity. Indeed, the most recent wage developments themselves provide one of the primary requirements for achieving such a recovery in the first instance.

### Output and demand.

Turning to output developments and the “real” economy in general, it is at once apparent that the process of disinflation has, in the event, been accompanied by severe recession. It was noted earlier that in 1982 the rate of growth of money GNP in the Group of Ten countries was about 6 per cent., some 6 percentage points slower than the average between 1976 and 1978. A fairly similar deceleration was noted in consumer prices, but only when measured between end-1979 and March 1983 — that is, with a lag. The relevant comparison for output purposes of course requires one to use the price slowdown measured over exactly the same period as the income slowdown. It is also necessary to switch attention to the price of domestic output alone, the GNP deflator, which excludes the direct effects of import price movements and most interest rate effects. When this is done, the comparison — while not contradicting the more recent progress on consumer price inflation — does demonstrate that the lag in the slowdown in inflation has had serious implications for the volume of output. For between 1976–78 and 1982 the average annual rate of change of GNP deflators fell by only half a percentage point, from  $7\frac{1}{4}$  to  $6\frac{3}{4}$  per cent. Thus, over this period the bulk of the disinflation in nominal income growth appeared as a slowdown in real output growth. The volume growth of GNP in the Group of Ten countries, which had averaged  $4\frac{1}{4}$  per cent. per annum over the 1976–78 period, fell sharply until an outright decline in the level of output of some  $\frac{1}{2}$  per cent. was registered last year (see table).

Hence, even though a small one-year fall in output was also recorded in 1975 during the first oil crisis, the period 1980–82 has witnessed the slowest average growth rate over any three-year period since the war. Real GNP has risen on average by no more than  $\frac{3}{4}$  per cent. per annum since 1979. The lowest three-year rate previously was  $1\frac{3}{4}$  per cent. per annum over the years 1974–76 (and prior to that  $2\frac{1}{4}$  per cent. per annum during 1956–58). Given that the more recent period began with what was already a high level of unemployment by post-war standards, it is not surprising that the figures have now reached new record levels in most countries.

*Demand factors and the nominal GNP “split”.* Since real output movements are evidently not invariant to nominal demand over a significant time period, clearly any explanation of the actual course of output will need to account both for changes in nominal income itself and for its division between price and quantity movements.

So far as the first of these is concerned — and speaking in very broad terms — the intention of monetary policy in most countries in recent years has basically been to bring down progressively, but relatively gradually, the rate of growth of nominal GNP. However, as has already been noted (see the graph on page 11), especially in 1982 nominal income growth slowed so sharply as to raise the question whether the gradualist intent of policy was being overridden by other forces. Such a development might not much matter — indeed it might be welcome — were it not for the possibility that the speed of the disinflationary process may itself interact with the so-called price/output “split”. In other words, the sharper the disinflation, the greater the (disproportionate) effect it might have in depressing output growth — at least over the short to medium term.



Major industrial countries:  
Changes in real gross national product and its components.<sup>1</sup>

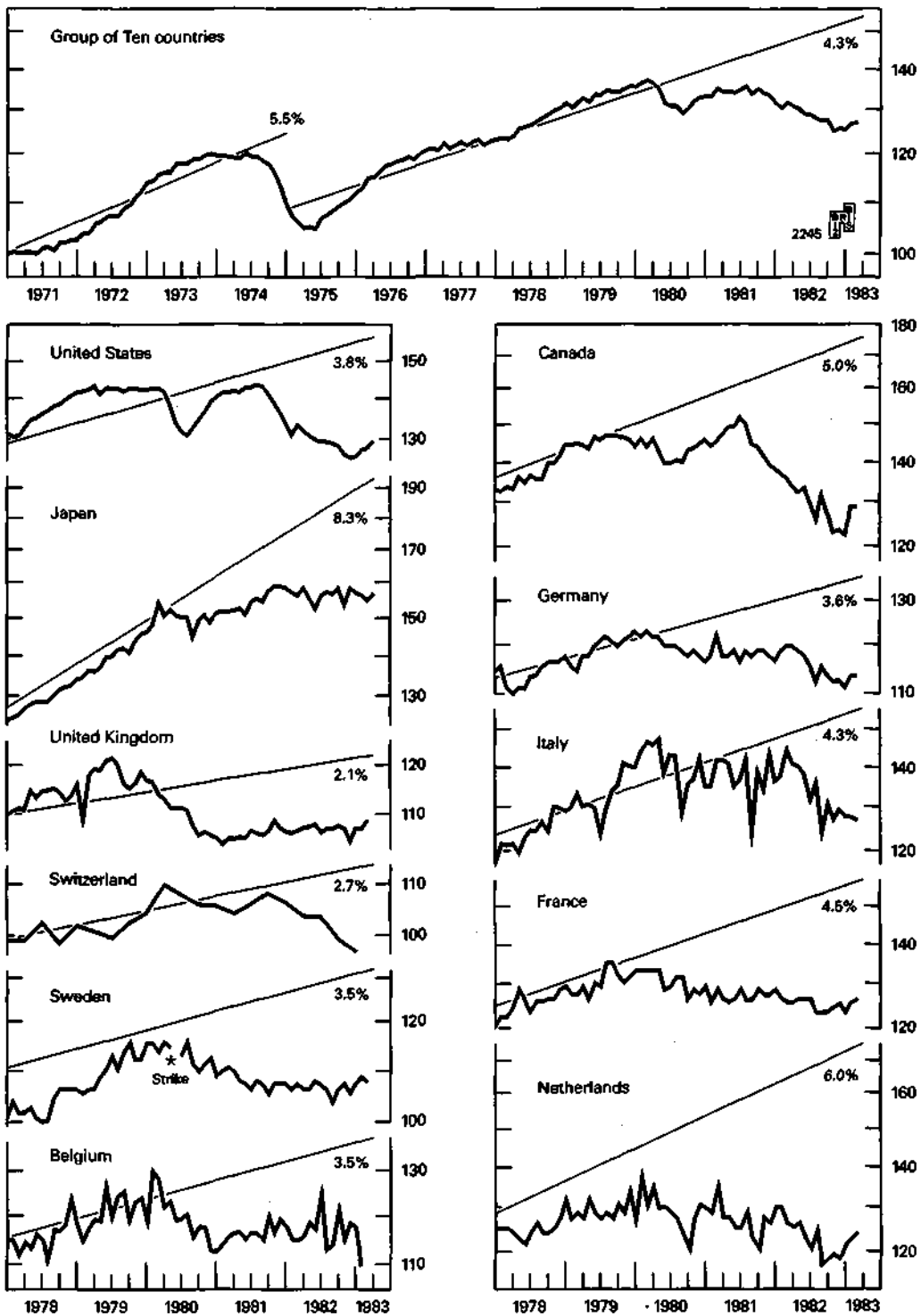
Countries	Years	Real GNP	Consumption		Gross fixed investment			Exports	Imports	Change in stock-building <sup>2</sup>
			private	public	private		public			
					non-residential	residential				
annual volume changes, in percentages										
United States . . . .	1979	2.8	2.7	1.3 <sup>3</sup>	7.3	- 5.3		15.4	6.1	- 0.6
	1980	- 0.4	0.3	2.3 <sup>3</sup>	- 2.2	-20.1		8.9	- 0.4	- 0.8
	1981	1.9	1.8	0.9 <sup>3</sup>	3.6	- 4.9		- 0.4	7.2	1.0
	1982	- 1.7	1.0	1.4 <sup>3</sup>	- 3.8	-10.5		- 7.1	0.0	- 1.2
	1982 IV	- 0.9	2.6	2.7 <sup>3</sup>	- 8.2	8.5		-13.6	- 6.8	- 1.6
Japan . . . . .	1979	5.2	5.9	4.3	11.8	- 1.0	3.1	6.6	14.7	0.5
	1980	4.9	1.3	2.9	9.0	- 9.4	- 3.2	18.8	- 3.9	- 0.1
	1981	3.8	0.5	4.6	5.6	- 2.6	5.3	15.9	5.5	- 0.2
	1982	3.0	4.2	3.5	1.9	- 1.0	0.7	3.3	3.1	- 0.1
	1982 IV	3.7	5.2	3.3	1.1	7.4	1.2	0.1	- 4.1	- 0.6
Germany . . . . .	1979	4.0	3.1	3.4	8.8	6.0	4.5	4.9	10.3	1.3
	1980	1.8	1.5	2.8	3.4	3.3	2.1	5.8	4.4	- 0.7
	1981	- 0.2	- 1.2	2.0	- 2.7	- 4.0	- 7.7	8.5	1.2	- 1.2
	1982	- 1.1	- 2.2	0.2	- 5.2	- 4.9	- 7.9	3.7	0.6	0.3
	1982 IV	- 2.1	- 2.5	0.6		- 2.4 <sup>4</sup>		- 2.2	- 1.3	0.0
France . . . . .	1979	3.1	3.2	1.8	1.8	4.7	1.6	7.1	10.5	0.3
	1980	1.3	1.5	1.3	4.2	- 3.8	1.6	3.0	4.6	0.7
	1981	0.2	2.2	2.4	- 2.3	- 1.2	- 0.7	5.1	1.0	- 2.1
	1982	1.8	2.1	3.1	0.4	- 1.0	0.6	- 0.4	3.6	0.7
	1982 IV	0.9	3.4	3.1	0.6	- 6.1	- 2.8	- 1.5	0.0	0.0
United Kingdom .	1979	1.6	4.9	1.8	5.9	-13.3	- 2.5	2.6	11.2	0.6
	1980	- 1.9	- 0.1	1.9	1.1	-16.1	- 5.9	0.4	- 3.3	- 2.9
	1981	- 2.0	0.4	0.0	- 2.2	-15.5	-17.6	- 2.2	- 0.3	- 0.3
	1982	1.4	1.1	2.0	5.6	10.5	- 6.0	0.5	4.4	1.0
	1982 IV	2.7	3.0	2.4	2.4	16.8	- 0.3	- 1.3	- 2.0	- 0.3
Italy . . . . .	1979	4.9	5.3	1.7	12.0	2.9	1.9	9.1	13.8	1.2
	1980	3.9	4.3	2.1	14.0	4.7	6.1	- 4.3	8.3	3.0
	1981	0.1	0.5	3.0	- 1.3	0.5	1.2	5.2	- 5.3	- 3.1
	1982	- 0.3	0.3	1.8	- 5.9 <sup>3</sup>	- 2.7		1.2	2.1	0.2
	1982 IV	- 2.4				- 6.3 <sup>4</sup>		- 6.8	- 0.9	
Canada . . . . .	1979	2.9	2.0	0.9	12.4	- 2.8	- 5.5	2.9	7.2	1.4
	1980	0.5	1.1	- 1.0	7.4	- 6.1	0.7	1.8	- 2.0	- 2.0
	1981	3.1	1.9	0.9	6.4	5.6	2.2	1.8	2.6	1.1
	1982	- 4.8	- 2.5	0.7	-11.5	-23.5	2.1	- 0.7	- 8.2	- 2.9
	1982 IV	- 5.7	- 2.3	- 0.7	-16.7	-11.6	2.6	3.4	- 5.7	- 2.7
Group of Ten countries <sup>5</sup> .	1979	3.4	3.7	2.0		4.9 <sup>4</sup>		7.8	9.6	0.2
	1980	1.1	0.9	2.1		- 0.8 <sup>4</sup>		5.9	1.1	- 0.5
	1981	1.4	1.1	1.4		0.3 <sup>4</sup>		4.5	1.8	0.1
	1982	- 0.4	1.0	1.5		- 2.8 <sup>4</sup>		- 0.6	1.2	- 0.4

<sup>1</sup> Figures for 1982 and 1982 IV are still preliminary. <sup>2</sup> As a percentage of the previous year's GNP. <sup>3</sup> Including public investment. <sup>4</sup> Total fixed investment. <sup>5</sup> 1981 GNP weights and exchange rates.

Be that as it may, there can be little doubt that the faster-than-expected nominal income deceleration implied a considerably weaker output performance for 1982 itself than most observers had been expecting or even than policy-makers had felt was desirable. The gap between expectation and performance is most clearly illustrated by the contrast between the recovery which had been hoped for during

# Industrial production.\*

December 1970=100.



\* The logarithmic trends are estimated over the period 1963-78 allowing for a shift at end-1974. The estimates do not include country-specific features, nor do they allow for possible further reductions in the trend rate of growth after 1978.

the year and the outcome, which was a near-stagnation in the second half of the year. By then, output in the industrial countries was running some 2-2½ per cent. below the consensus international forecast of the previous winter.

Clues as to the source of this weakness are suggested by an examination of the demand make-up of GNP in the major countries (see table on page 20). It is clear from the data that virtually all the decline in demand growth in 1982 was, in the aggregate, concentrated on domestic investment (in both fixed and working capital) and on exports. For the Group of Ten countries on average, total gross fixed investment probably fell by about 2¾ per cent., and the decline in stockbuilding amounted to nearly ½ per cent. of average GNP. In addition, exports declined by ½ per cent., following a 4½ per cent. rise the previous year.

Industrial countries' export demand, 1978-82.

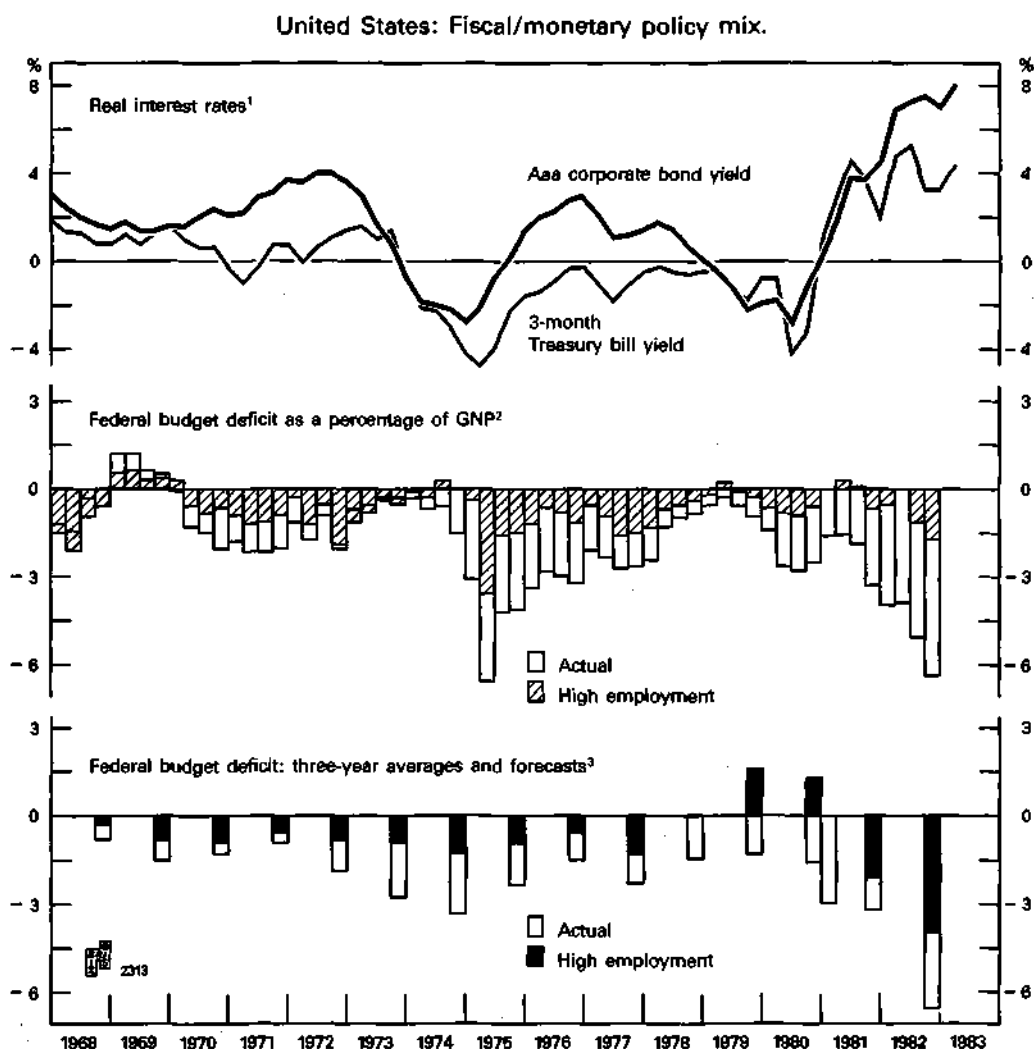
Years	Imports of goods by		Exports <sup>1</sup>		
	non-OPEC LDCs	OPEC countries	goods	goods and services <sup>2</sup>	
			Group of Ten countries	United States	
volume changes, in percentages					
1978	10.5	- 0.3	5.6	10.9	5.6
1979	11.0	-10.6	6.0	11.3	6.3
1980	5.0	21.3	3.9	10.5	5.2
1981	2.0	22.5	2.9	- 3.5	4.1
1982	- 6.5	5.0	- 2.2	-10.3	0.3
1982 IV/1981 IV	.	.	- 5.2	-13.7	.

<sup>1</sup> Including intra-trade. <sup>2</sup> OECD countries, on a national accounts basis.

As the table suggests, the major influence on exports was probably the sharp decline in the growth of imports into the non-industrial countries. For example, the growth in the volume of merchandise imports into OPEC countries fell from 22½ per cent. in 1981 to around 5 per cent. last year as the OPEC surplus disappeared and the oil price began to weaken. Perhaps more significantly, the volume of goods imported by the non-OPEC developing countries is estimated to have fallen by 6½ per cent. in 1982, compared with a rise of 2 per cent. the previous year, and as much as 11 per cent. in 1979. Behind this development, of course, lay the retrenchment forced on many of these countries by the crisis surrounding their high level of international indebtedness. In turn, this crisis had been exacerbated by the high level of world interest rates, the strength of the dollar and the weak demand for primary commodities and other imported goods on the part of the industrial countries.

If one adds to this the likely rôle also played by high interest rates in the weakness of domestic investment spending already noted in the industrial countries themselves, then a common factor begins to suggest itself as at least one explanation of both the export and investment demand weakness. The full range of influences affecting interest rates — especially in the United States — is not the subject of the present chapter. But one factor, which may have had a relatively large effect on this occasion, namely US fiscal policy, is appropriate for discussion here.

*The US policy-mix problem.* The problem of the fiscal/monetary policy mix in the United States was already dealt with in some detail in last year's Report. There it was noted that, in the face of sharply increasing defence expenditure plans and prospective large cuts in taxation, the new Administration was relying very heavily on strong "supply-side" responses in the economy to close the budget gap. The theory was that economic expansion would be sufficiently strong to raise total receipts very substantially even in the face of lower rates of tax. At the same time, however, the firm disinflationary stance of monetary policy was to be maintained. In this way, continued progress in reducing inflation was to be made compatible with economic recovery and a major defence build-up.



<sup>1</sup> Real rates of interest are measured using the rate of change of consumer prices over the previous twelve months.  
<sup>2</sup> On a national income and product accounts basis. Source: US Department of Commerce.  
<sup>3</sup> The figures for 1968-76 show the recorded Federal deficit (unified basis, including off-budget outlays) as a proportion of GNP for the three-year period beginning in the following quarter. Figures for 1977-82 show corresponding (fiscal-year) Administration forecasts compiled at the dates shown. The figure for the first quarter of 1981 represents the revised budget forecast made in February by the incoming Administration; a high employment forecast was not published on that occasion.

In the financial sector, however, the reaction to this economic programme was cautious, if not negative. The fear was that either the supply-side increase in tax revenues would not materialise — in which case the fiscal and monetary policy stances would come into serious conflict — or else the monetary targets would be overshoot, with obvious consequences for inflation. Either way, interest rates would rise.

The unusual thing about the ensuing developments — as the graph shows — was that, although the budget position did begin to deteriorate in 1981 and 1982, this was in the first instance a reflection of the weakening of the economy and the influence of the automatic stabilisers. In other words, given the recession, the current fiscal stance was not necessarily inappropriate when judged by the usual analytical criteria. Nevertheless, in accordance with market consensus, interest rates rose very sharply indeed. After subtracting the rate of inflation over the previous year, real long-term rates so measured reached record levels of 7–8 per cent.

Thus it appears that the expectations held with respect to future budget deficits, considered together with the monetary targets judged to be consistent with keeping inflation under control, conspired to drive interest rates to levels more deflationary than might have been desired. If so, this may help to account for the steepness of the decline in nominal GNP growth with which we have been concerned. The mischief was caused, in other words, by the market's fear of *future*, rather than current, budget deficits — a fear which nevertheless could strongly influence interest rates in the current period.

This, of course, is not easy to demonstrate — especially as the early official budget forecasts naturally reflected the theory of the supply-side response. As the lower panel of the graph shows, although the incoming Administration in 1981 projected larger three-year deficits than its predecessor, these projections did not appear too disturbing in the context of recession. Even so, many observers considered the projections to be serious underestimates, and indeed when the latest budget was presented to Congress early this year, a more realistic (less supply-side-oriented) method of calculation revealed an unprecedented run of structural (i.e. cyclically adjusted) deficits. And this was even after significant measures both of expenditure reduction and revenue increase. In other words, the doubts felt eighteen months previously by many observers and financial market participants were apparently confirmed. Another confirmation lay in the fact that the Government's borrowing in the credit markets leapt suddenly from just under \$100 billion at an annual rate in the first half of 1982 to nearly \$225 billion in the second half.

The fact that long-term interest rates have been slow to come down, at least in inflation-adjusted terms, even after some moves towards more monetary accommodation late last year, is a further pointer. It suggests that it was not current monetary policy which was the root of the problem, as policy after mid-year was more accommodative, with the aggregates providing scope for a real expansion of output. Rather it suggests that the announcement of a major new — and untried — orientation of fiscal policy was an important cause of the interest rate levels observed.

Nevertheless, one should be careful to see US policy-mix difficulties as only one element helping to explain the short-term aggravation of the world recession. Getting inflation down to where it is now might well in any case have involved heavy output costs sooner or later. And, although the international repercussions are naturally more severe in the US case, the United States is not alone in having a budgetary problem.

*Fiscal policy outside the United States.* The United States is, however, probably unique in the sense that its budget problem mainly concerns future policy intentions as opposed to past and current realities. Other countries can perhaps be divided into two different groupings. The first may be said to have made considerable progress in putting their fiscal house in order, while countries in the second group still have some way to go.

In the first group, one may place three of the larger countries, Japan, Germany and the United Kingdom. In the latter case, the decline in the proportion of gross private saving pre-empted by the general-government sector in recent years is especially noteworthy given the depth of the recession experienced. In Japan, too, where the rise in unemployment has been much smaller, the consolidation of the public finances has nevertheless to be seen in the context of slow growth. Finally, in the German case, despite some rise in the general-government deficit/savings ratio since 1979, an appropriately tight rein has been kept on the underlying situation. In other words, in all three countries it is probably fair to say that, given the cyclical position of the economy, the recorded budget deficits should not be considered alarming. It is true that deficits remain large by historical standards, but then so is the recession. Indeed, in the Japanese case the authorities had some measures of fiscal relaxation under active consideration during March and April of this year.

In the second group of countries, Italy and France find a place, together with several smaller European countries. In the French case, however, severe retrenchment measures were implemented earlier this year as a support for the adjustment process implicit in the realignment of EMS exchange rates in March. If successfully carried into effect, these measures may in fact suffice to remove France from the group of countries with unresolved budgetary problems.

Among the smaller countries, some of the most serious and spectacular deteriorations in fiscal position are to be found in Belgium, Denmark and Sweden, where it has been clear for some time that, without remedial measures, the situation would sooner or later become insupportable. In other words, not even a strong general recovery in economic activity could be expected to remove more than a part of recent fiscal deficits in such countries through the agency of the automatic stabiliser mechanisms.

Fiscal policy concerns, however, have not only comprised worries about budget deficits in recent years. It will be recalled that many countries have also wished to reduce the size of the public sector in relation to GNP. This has been desired firstly for its own sake. A rising proportion of resources taken by, or passing through, the public sector has often been cited as at least one important factor in the worldwide deterioration in general economic performance. On the other side, rising

General-government financial deficits<sup>1</sup>  
as a percentage of gross private saving, 1966–82.

Countries	1966–69	1970–73	1974–77	1978	1979	1980	1981	1982 <sup>2</sup>
	annual averages							
United States .....	– 0.4	0.5	6.6	– 0.2	– 3.6	7.6	5.6	20.6
Japan .....	–	– 2.9	9.0	18.2	16.6	14.0	14.4	13.3
Germany .....	1.2	– 1.2	15.9	12.9	15.4	16.2	20.4	19.1
France .....	– 1.1	– 4.0	3.8	8.8	3.3	– 2.1	8.7	15.3
United Kingdom .....	4.1	4.4	26.6	19.8	15.5	18.2	13.6	13.4
Italy .....	–	23.7	33.4	35.1	33.3	30.3	44.8	45.1
Canada .....	– 5.9	– 3.1	6.6	15.5	9.3	9.8	6.2	30.5
Belgium .....	6.8	9.4	16.6	27.4	33.6	43.4	61.9 <sup>2</sup>	57.0
Netherlands .....	3.8	– 0.2	8.1	14.8	20.1	21.6	26.5 <sup>2</sup>	30.0
Sweden .....	–33.1	–32.6	–19.9	3.6	19.6	22.4	31.0 <sup>2</sup>	38.0

<sup>1</sup> 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.

<sup>2</sup> Estimates.

Sources: National statistics and OECD.

tax ratios have been thought to affect incentives adversely, as well as possibly aggravating wage pressures via the so-called “tax-push” mechanism.

Thus, despite the recession, authorities have shown considerable resolve in their attempts to curb deficits and public spending, especially through changes in indexation arrangements and entitlement programmes. These have been seen as involving considerable trouble, both now and in the future, in a world in which growth may be slow and the numbers of eligible claimants increasing. In turn, such retrenchment efforts have contributed to reducing longer-term structural deficits. But, just as in the case of budget deficits, the automatic effects of the recession have served to prevent the success of authorities' consolidation efforts from showing up in the recorded expenditure and tax ratios. Indeed, for the major seven industrial countries the total general-government expenditure ratio rose again in 1982, this time by an average of 1½ percentage points, bringing the total to about 42 per cent., compared with 37½ per cent. as recently as 1978. And in most cases the 1982 figures represented a new peacetime record. Perhaps more disturbing is the way in which a large part of the retrenchment effort has fallen on capital programmes rather than on current expenditure. While this is a reflection of the relative ease with which such outlays can be reduced, public investment can serve a particularly important infrastructural rôle in encouraging private investment and stimulating employment.

On the tax side, only in the United States did the tax ratio fall (by nearly 1 per cent. to 31.7 per cent.), but then only at the expense of a marked rise in the general-government deficit from 1 to 3¾ per cent. of GNP. Elsewhere, tax pressures remained very high, even in the United Kingdom where reduction in the budget deficit has taken precedence over other considerations.

### The unemployment problem.

At the end of last year virtually all countries were registering steep rises in unemployment which were taking unemployment rates to levels not seen in the

post-war period. By the spring of this year, unemployment in the Group of Ten countries averaged nearly 9 per cent., with much higher rates being recorded for certain sections of the labour force, most notably the young. Since 1980, which was already considered a year of high unemployment by post-war standards, joblessness has risen by more than one-half.

It seems fairly clear that the immediate cause of this latest jump in unemployment must be the weakness of activity over the past three years, and especially the sudden fall in output last year. In the case of Europe — but excluding the United Kingdom — it is true that some acceleration in labour-force growth has been seen over the past three years. In the United States, on the other hand, growth of labour supply has slowed down in the most recent period, so that for the industrial countries as a whole, changes in the rate of labour-force growth have probably had little net impact on short-term unemployment trends.

#### Unemployment.

Countries	1974	1976	1978	1979	1980	1981	1982	1982 Dec.	1983 March
	annual averages, in percentages of labour force								
United States .....	5.6	7.7	6.1	5.9	7.2	7.6	9.7	10.8	10.3
Canada .....	5.3	7.1	8.4	7.5	7.5	7.6	10.8	12.8	12.6
Japan .....	1.4	2.0	2.2	2.1	2.0	2.2	2.4	2.4	2.6
Germany .....	2.7	4.6	4.4	3.8	3.9	5.6	7.7	8.5	9.3
France .....	2.3	4.3	5.3	6.0	6.4	7.8	8.8	8.9	8.8
United Kingdom .....	2.6	5.2	5.5	5.1	6.5	10.2	12.0	12.7	13.0
Italy .....	5.4	6.7	7.2	7.7	7.6	8.4	9.1	9.8 <sup>1,2</sup>	
Netherlands .....	3.3	5.5	5.1	5.1	5.9	9.0	12.3	14.1	16.5 <sup>3</sup>
Sweden .....	2.0	1.8	2.2	2.1	2.0	2.5	3.1	3.4	3.6
Belgium .....	2.6	5.7	7.0	7.2	7.9	9.4	11.0	11.6 <sup>2</sup>	12.2 <sup>2</sup>
Switzerland .....	0.0	0.7	0.3	0.3	0.2	0.2	0.4	0.7	0.8
Group of Ten countries .....	3.7	5.5	5.1	5.0	5.7	6.6	8.1	8.8	8.8

<sup>1</sup> First week in January 1983. <sup>2</sup> Not seasonally adjusted. <sup>3</sup> New series from January 1983.

However, to ascribe short-term changes in unemployment to conjunctural factors is not necessarily to deny that other, underlying, secular forces are also at work. Nor is it to deny that unemployment levels which initially appear in a cyclical context can take on a more structural aspect over time.

To take some examples, it should be recalled that demographic factors have been at work over the longer run. One may cite first the rise in female participation rates and the entry into the labour force of the so-called baby-boom generation. In addition, both these developments have tended to raise the proportion of the total labour force accounted for by groups usually having relatively high unemployment rates.

Perhaps more importantly, inappropriate wage levels have been increasingly pointed to as a major cause of present unemployment rates. At the empirical level, one of the most impressive supporting facts appears to be the correlation between the greater flexibility of real wages observed in the United States and the large rise in employment there over the past decade, in contrast to more rigid real wages in



Europe and a correspondingly much weaker employment performance. Thus, between 1970 and 1980 total employment in the United States rose by some 2 1/2 per cent. per annum, while that in the countries of the EEC rose on average by only 1/4 per cent.

Even so, it is difficult to be certain how much unemployment to ascribe to excessive wages. One result is commonly supposed to be a substitution of capital for over-expensive labour, which would tend to increase recorded labour productivity. And, indeed, it is true that in Europe — where the real wage problem is at its most severe — productivity growth has been generally well above that seen in North America. On the other hand, for all countries there has been a marked slowdown in productivity growth compared with trends in the 1960s and early 1970s. Even in Japan, a sharp slowdown has occurred despite notably flexible real wage behaviour, especially during and after the second oil shock.

Another mechanism involving excessive wage costs concerns not capital/labour substitution but inadequate levels of both capital-widening and replacement investment. And, as previous Reports have frequently noted with concern, it is true that investment trends have slowed down generally and markedly since 1973 — thus incidentally also raising further doubts about the extent of capital/labour substitution. Such a development of course threatens an inadequate volume of capital stock relative to employment needs, and thus a growing degree of structural unemployment. But, in this case, one cannot be certain whether it has been excessive real wages per se or the more general slowdown in economic growth which has been responsible for slower growth in the capital stock. The familiar accelerator mechanism may, in other words, have been at work, in conjunction — more recently — with unusually high interest rates. There is also the view that excessively volatile exchange rates may have weakened investment incentives.

The matter is thus difficult, if not impossible, to decide on the evidence available. The truth may be that, while demand factors could in the event have been dominant, the real wage/profitability situation would in any case have had strong effects on employment — especially via capital/labour substitution — even if aggregate demand growth had been much stronger. Even so, if slow output and capital stock growth continue over a prolonged period, the end result — namely growing structural unemployment — is likely to be the same, whatever the underlying mechanism. If so, the risk that economies will fall into what has been called a “low growth trap” should not be ignored.

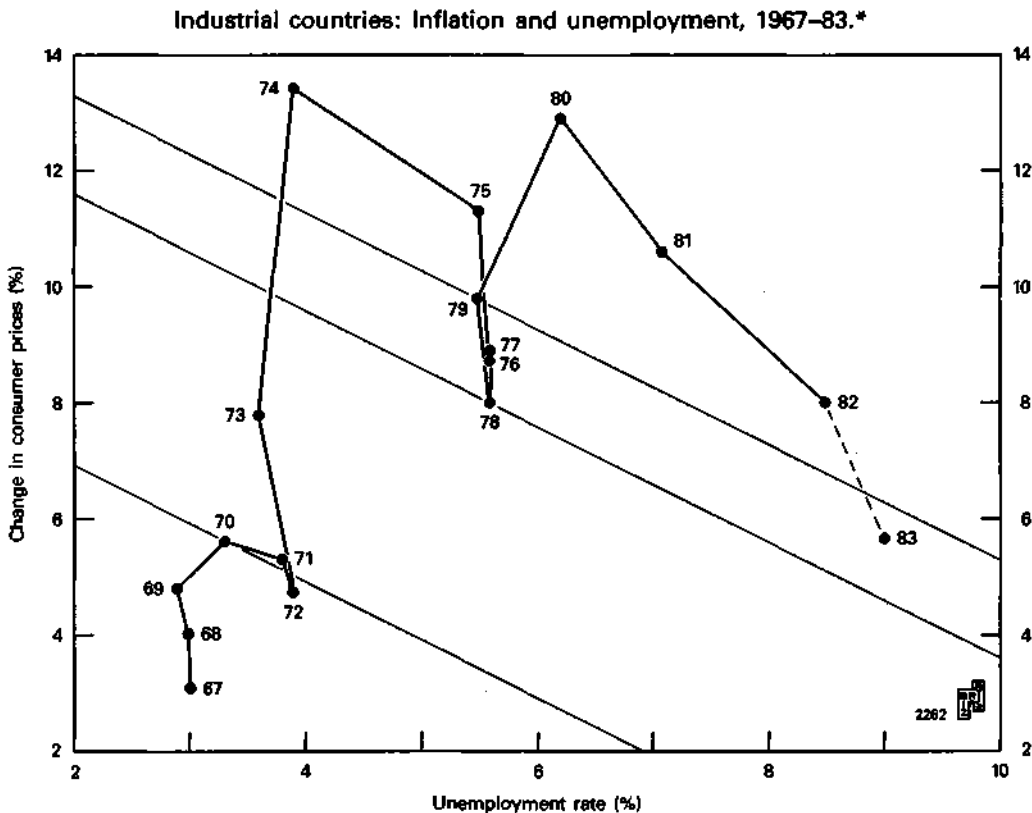
#### **Disinflation: progress to date, and prospects.**

The foregoing narrative has chronicled a fairly spectacular decline in consumer price inflation over the past three years, together with apparently severe costs in terms of unemployment and forgone output. Clearly, any assessment of the disinflationary process so far must take both the benefits and apparent costs into account. But, in addition, a comprehensive reckoning must also try to include some view of future prospects. That is to say, the more that disinflationary policies may have wrought lasting changes in price and cost behaviour, the less, presumably,

should today's low output and high unemployment be counted as costs in a more fundamental sense.

The latest position in terms of the combination of consumer price inflation and unemployment can be seen in the graph and accompanying table. As is well known, any attempt to combine the two phenomena into a single index involves either a completely arbitrary set of weights or else the imposition of a particular value-judgement by the individual observer. Thus, even the so-called "discomfort" index, which simply sums the unemployment and inflation rates, is arbitrary. However, in assessing the disinflationary process so far it may be of some value. For virtually all would probably define the "success" of disinflation as comprising — eventually — the attainment of low levels of *both* inflation and unemployment. That is, sooner or later a successful disinflationary policy would have to imply some movement of the points on the graph back towards the origin.

The three parallel lines on the graph join points of equal levels of the average discomfort index drawn through selected years. Using these as the standard of comparison, the graph does indeed show some progress despite the large rise in unemployment. By the spring of this year the aggregate index had fallen back from its peak and was heading down towards its 1978 level. Nevertheless, the arbitrary



"Discomfort" indices, 1970-83.

Countries	1970	1975	1978	1979	1980	March 1983
Japan .....	8.9	13.8	6.1	5.6	10.1	4.9
United States .....	10.9	17.7	13.7	17.1	20.7	13.9
United Kingdom .....	8.9	28.0	13.6	18.5	24.6	17.4
Germany .....	4.1	10.7	7.1	7.9	9.4	12.8
Netherlands .....	4.8	15.4	9.2	9.3	12.5	19.2
Belgium .....	5.7	17.3	11.5	11.7	14.6	21.0
France .....	7.6	15.6	14.6	16.6	18.9	17.7
Italy .....	10.6	23.3	19.7	23.3	28.8	26.2
Canada .....	9.1	17.7	17.3	16.6	17.7	19.8
Sweden .....	8.8	11.4	12.3	9.3	15.6	12.0
Switzerland .....	3.6	7.1	1.4	4.0	4.2	5.6
Group of Ten countries .....	9.1	16.9	12.1	14.2	17.8	13.6

nature of the index should be stressed again. Different weights and/or a non-linear formulation of the index could clearly put a different light on the most recent developments. Intuitively, too, the graph suggests that a firm downward movement in unemployment would now be the surest and least ambiguous route to a more satisfactory situation. However, that conclusion in no way implies that policy should be shifted towards giving more short-term emphasis to employment, or that, if it were, an overall improvement in the inflation/unemployment situation would result.

In any case, as the table shows, country experience has varied widely. Much of the improvement in the aggregate discomfort index has been accounted for by Japan, the United States and the United Kingdom. In the Japanese case, the index is even lower than that recorded in 1970. Elsewhere, however, there have been several cases where no progress has been made at all — in part because of the rôle played by exchange rate weakness. In the case of the Netherlands, on the other hand, a further worsening of the index has been recorded despite a fairly reasonable inflation performance.

Nevertheless, taking the whole picture, we may tentatively conclude that the evidence so far does not rule out the possibility that disinflation is at least beginning to have the desired longer-term effects in several important cases. However, progress to date — in terms of discomfort indices — has relied almost entirely on the sharp slowdown in consumer price inflation. An important question is thus how firmly based this decline may be.

Unfortunately, some caution is in order mainly for two reasons: firstly, because of the influence of commodity price declines and, secondly, because of the effect of interest rates on consumer price indices in several large countries, notably the United States. The implication is that part of the consumer price slowdown may be temporary and (in the case of non-oil commodity prices) possibly reversible.

Nevertheless, on the wages front, which may be considered the core of the domestic inflationary problem, we have seen grounds for considerable optimism. At the same time a shake-out of labour has been recorded in many countries, and there must now be substantial potential for further marked gains in productivity.

*Recovery prospects.* The considerable progress already made in reducing inflation should, especially if it is consolidated (and if nominal income growth is sustained), itself help to foster recovery. Indeed, such a recovery has apparently already begun in the United States, Germany and the United Kingdom. As will be seen in Chapter IV, real money supply growth has been significantly positive in these countries and Japan over the past year or so. Lower inflation of course automatically reduces the real losses sustained by holders of financial assets. And where, as in the case of the United Kingdom especially, wealth-holders apparently attempt to offset this loss by raising their savings ratio, any decline in inflation tends automatically to raise consumer spending propensities. Other wealth effects may also stem from capital gains arising from the lower nominal interest rates which come in the train of lower inflation. And, to the extent that business confidence in future sales prospects is strengthened by the fact and prospect of lower inflation, there may also be favourable effects on private capital spending. Finally, the decline in nominal interest rates could also, in the context of a general recovery, ease the present constraint on the purchasing ability of the non-oil developing countries — at least partially.

Other automatic forces may also be at work after a prolonged period of slow growth. In particular, pent-up demands may be present in the field of consumer durables purchases, where a replacement cycle has often played a rôle. Some countries also have a pent-up demand for housing as a result of ongoing social and demographic changes. And in the business sector some rebuilding of stocks may now be necessary, while at least in certain areas there may even be the need to increase capital investment to offset the effects of a long period of stagnant or declining capital stock levels.

However, in all these cases the potential for automatic mechanisms to come into play is clearly sensitive to the level of interest rates, especially in real terms. And here, as this and the following chapters make clear, insufficient progress has been made. For, while nominal rates have indeed come down, they have — particularly at the long-term end — done so by less than the decline in inflation. Consequently, there is a widespread perception that real interest rates remain historically high, especially for a period of recession. In turn, this chapter has suggested that one important reason for this lies in the prospective deficits in the US budget. While this situation remains unremedied, the risk will persist that the recovery will be aborted and, with it, the successful conclusion of the disinflation process.

With the decline in inflation now achieved, such a premature end to the recovery process would be particularly unfortunate. Indeed, at a more fundamental level, it would go against the intention of policy as embodied in the current stance of monetary policy. So long as inflation remains under control, this stance clearly allows more scope for faster and more sustained real growth than has been seen for some time.

### III. FINANCIAL MARKETS AND FINANCIAL INNOVATIONS.

#### Highlights.

This chapter is aimed at providing a link, through the banking system and financial markets, between the analysis of real economic developments in Chapter II and that of the conduct of monetary policy in the next chapter. The first part examines the recent behaviour of the income velocity of money and changes in the underlying credit conditions. In this context it has become increasingly important in some countries to consider total financial flows in addition to looking at banking flows, i.e. changes in the money stock and its counterparts. This is because credit flows other than those associated with changes in a particular monetary aggregate may, through their influence on spending, at times have unexpected effects on income velocity. The second part of this chapter looks at some longer-term developments which appear to be altering the pattern of financial flows among various sectors. More specifically, it analyses the major innovations in the financial system over the last few years and points to some of their monetary policy implications.

During the past year, under the persisting influence of disinflationary policies, private-sector credit demand in most industrial countries tended to abate, while at the same time the demand for real money balances generally increased. These developments, reflecting the precautionary behaviour of both borrowers and holders of financial assets, went hand in hand with a decline in inflation and interest rates. They were mirrored as well by a marked reduction in the income velocity of monetary aggregates in some countries, particularly the United States. The changing attitudes towards holding monetary assets and borrowing posed new problems for monetary management, as it was not clear to what extent the decline in velocity was cyclical or might, alternatively, be of a more permanent nature deriving from a winding-down of inflationary expectations.

The overall decline in credit demand was closely associated with some noteworthy changes in the sectoral distribution of net financial surpluses and deficits. Broadly speaking, the business sector in most countries reduced its financial deficit, mainly by cutting back costs and investment, while households borrowed less, particularly for housing, and increased their financial saving. Largely as an automatic response to private-sector financial behaviour, the public sector's financial deficit increased in a number of countries despite efforts by many of them to cut back its structural component.

The reduction in total credit demand was concentrated principally on lending intermediated by the banking system. In most countries the contribution of domestic bank credit expansion to the growth of the broad money supply declined, mainly owing to a slowing-down in borrowing by the private sector. Although the public sector's recourse to bank credit dropped off in some countries, it remained high or increased in others.

As monetary conditions eased during last year, borrowing in the new issues markets showed some incipient signs of revival. However, these markets continued to be dominated, even more than in the past, by public-sector and institutional borrowers. Thus, the extent to which business firms could rely on direct market borrowing to improve their weakened balance-sheet positions was very limited and confined to a few countries and to large companies. It was mainly, therefore, by efforts to improve their internal cash flow and to borrow at longer maturities from financial institutions that companies could hope to strengthen significantly their financial structures.

In this chapter special attention is given to the changes that the financial systems of a number of industrial countries have been undergoing over a period of years. Some of these innovations and modifications have made it more difficult to define and measure the monetary aggregates, while others have changed the terms and conditions of debtor/creditor relationships and, more generally, the process of financial intermediation. Although the pace has been much faster in some than in others, all the larger industrial countries have been experiencing some degree of financial innovation. At a general level, this is evidenced by the fact that velocity relationships have been changing and also show a good deal of volatility that cannot be accounted for by interest rate movements.

Many innovations have been associated with the spreading use of so-called liability management, under which financial institutions have come increasingly to rely on funding their activities with instruments bearing market-related interest rates. This development has reduced the importance of conventional deposits, particularly those of a transactions nature. In addition, in order to protect themselves from the risks arising from high and variable interest rates and from the increasing reliance on liabilities with market-related rates, financial institutions in several industrial countries have been using variable rate lending and/or maturity shortening. These practices, however, are generally less developed than the liability management process.

Changes in the banking system and financial markets have aggravated certain problems for monetary policies in the United States, Canada and the United Kingdom. These problems concern the definition and measurement of money, the stability of the demand for money and the transmission of monetary policy changes to the real sector. Elsewhere, the overall pace of innovation has been more or less gradual and therefore has had less far-reaching consequences for monetary policy.

#### **Disinflation and income velocity.**

After reaching very high rates of change in 1980–81, the income velocity of money has fallen off significantly in most large industrial countries, recording either small or negative changes last year (see graph). Expressed as the ratio of nominal GNP to the money stock, income velocity is influenced by both cyclical and trend changes in the relationship between money and aggregate expenditure. As such, it may reflect credit flows which, though not a counterpart of changes in the money stock itself, nevertheless help to finance total spending. It is in this context that it is

useful to examine changes in the overall balance sheet of the financial system and not simply changes in the money stock, however defined, and its credit counterparts. Total credit flows are related to movements in both monetary and non-monetary financial assets. Thus, in a dynamic context, changes in the demand for financial assets cannot be fully appreciated without reference to changes in credit-market conditions and interest rates. By way of illustration, it may be pointed out that, in parallel with a rise in the income velocity of  $M_1$  in the United States by over 85 per cent. from 1960 to 1981, the ratio of total credit to  $M_1$  increased by about 95 per cent., with the income velocity of total credit remaining virtually unchanged over the period as a whole. As a long-term trend, a development of this kind may partly reflect a process of financial innovation, the course of which may vary widely from country to country. In a cyclical context, fluctuations in velocity may be associated with changes in liquidity preference, spending propensities and interest rates.

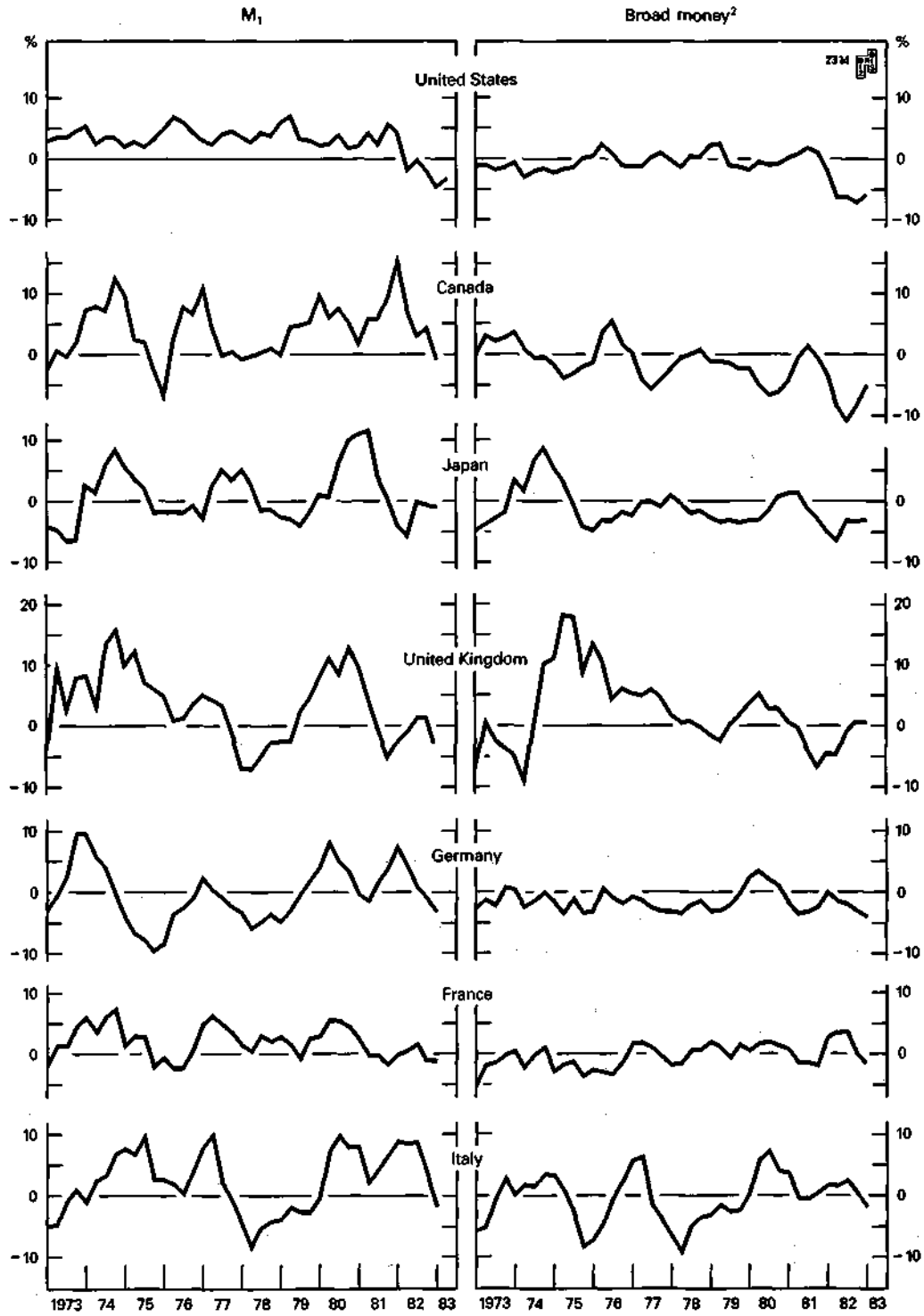
Against these background remarks, this and the next two sections examine velocity movements and credit flows via the banking system and other channels in order to provide a basis for a better understanding of recent developments. Given that short-term changes in income velocity generally move in a pro-cyclical way, the declines during the disinflationary downswing are not altogether surprising, though the recent movement seems to be noteworthy in two respects.

Firstly, the decline in the velocity of transaction balances,  $M_1$ , has been fairly pronounced in almost all countries shown in the graph. That in the United States was particularly striking, because in 1982  $M_1$  velocity actually decreased by 3.6 per cent. in contrast to an annual average rate of increase of over 3.5 per cent. in the previous decade. In other countries too, including Japan, France and, in the second half of 1982, Germany, the income velocity of narrow money fell, while in the United Kingdom velocity appears to have been stable over the year as a whole. The apparent increase in the demand for money was probably a reflection both of a reduced propensity to spend and invest and of an associated decline in nominal interest rates and inflation.

Secondly, the velocity of the broad money stock also declined on a widespread basis during 1982 and early this year. In the United States the velocity of  $L$  (liquidity) fell by over 6 per cent. last year, after having shown no significant trend in the previous decade, while in Germany  $M_3$  velocity has decreased virtually continuously since the final quarter of 1980. The income velocity of broad money also fell sharply in Japan and Canada during 1982. Since these declines are less likely than in the case of  $M_1$  to reflect variations in interest rates and in the composition of credit demand, a further factor may have been at work. It seems quite possible, especially in the circumstances of deepening recession and increased uncertainty, that the precautionary demand for money, and in some cases for liquid assets more generally, increased. This is plausible in view of reduced company cash flow, a growing debt-service burden and rising unemployment.

A part of the sharp drop in income velocity in certain countries during 1982 may well be due to a lasting decline in the willingness to incur debt, and an increased desire to hold monetary assets, brought about by falling inflation and inflationary expectations. However, the extent of this shift is uncertain, because the usual

Changes in the income velocity of money.<sup>1</sup>



<sup>1</sup> Percentage changes over four quarters. Data for the money stock are quarterly averages (end-quarter for the United Kingdom). <sup>2</sup> For the United States, L (liquidity); for Canada and France,  $M_2$ ; for Japan,  $M_2$  and CDs; for the United Kingdom, PSL; for Germany and Italy,  $M_3$ .



difficulties in distinguishing between permanent and cyclical changes have been accentuated by the exceptional nature of the disinflationary process since around 1979. More specifically, concerted disinflationary policies, which were brought to bear after many years of gathering inflationary strains, have been remarkably successful in reducing actual inflation in many countries. Despite this achievement, the extent of the underlying improvement in inflationary expectations is not clear at this stage.

Given the large changes in income velocity last year, and ambiguities regarding the underlying causes, considerable uncertainty surrounds the likely path of velocity over the period ahead. Against this background, monetary authorities have recently adopted a more flexible attitude in easing monetary conditions and accepting temporary overshooting of their monetary targets (see Chapter IV). Past experience suggests that recent velocity declines may tend, partly at least, to reverse themselves as confidence returns and demand picks up. Credit demand may strengthen, interest rates firm up and some of the increased precautionary holdings could be run off as uncertainty subsides. In this event caution will be required to prevent any decline in liquidity preference from contributing to new inflationary pressures. However, if expectations of high inflation and interest rates have been decisively broken, there is less likelihood that a snapback in velocity to the earlier trend will occur. In the face of this uncertainty, monetary authorities may continue to pursue a more pragmatic approach to monetary control, even within the constraints imposed by targeting procedures.

#### **Changing patterns of sectoral financing.**

Some of the linkages between developments in the real economy and financial flows can be seen in the pattern of net sectoral financial surpluses and deficits. According to preliminary data, the changes in these sectoral balances in 1982 generally amounted to a continuation of the patterns that have emerged in most countries since 1979 or 1980. Under the influence of weakening demand, high interest rates and a growing debt-service burden, businesses in most cases continued to reduce their work forces, cut costs and curb their investment in fixed capital and inventories. The result, as shown in the table, was a further reduction in this sector's deficit or, as in the case of Belgium, a rise in the surplus. The only clear exceptions were Japan, where the financial deficit rose slightly in 1982 to close to the level of 1975-76, the United Kingdom and the Netherlands, where small declines in the surplus were recorded, and France.

The main feature of the household sector's financial balance last year was retrenchment. Mainly reflecting a precautionary increase in saving, together with a decline in investment in housing, the sector's financial surplus rose in a number of countries, particularly in the United States, Canada, France and the Netherlands. In striking contrast was the United Kingdom, where the surplus dropped off sharply between 1980 and 1982. One reason cited for this was the decline in inflation and interest rates, which has reduced the need for households to compensate for the erosion of financial wealth by means of new saving. Another is that a recovery in housing got under way at an early stage.

Sectoral financial balances.<sup>1</sup>

Countries	Years <sup>2</sup>	Private sector			Public sector	Rest of the world	Residual
		Households	Business	Total			
		as a percentage of GNP					
United States .....	1975-76	4.5	- 0.3	4.2	- 4.1	- 0.3	0.2
	1979	2.2	- 2.3	- 0.1	- 0.4	0.8	- 0.3
	1980	3.6	- 1.2	2.4	- 2.6	0.2	-
	1981	4.3	- 1.9	2.4	- 2.2	0.2	- 0.4
	1982 <sup>3</sup>	5.1	- 0.4	4.7	- 5.1	0.4	-
Canada .....	1975-76	4.9	- 5.1	- 0.2	- 2.5	2.4	0.3
	1979	5.5	- 5.7	- 0.2	- 1.8	1.9	0.1
	1980	8.7	- 5.0	1.7	- 2.1	0.4	-
	1981	7.1	- 8.0	- 0.9	- 1.2	1.6	0.5
	1982 <sup>3</sup>	9.3	- 3.9	5.4	- 5.5	- 0.8	0.9
Japan .....	1975-76	11.0	- 4.1	6.9	- 7.4	- 0.3	0.8
	1979	9.2	- 3.1	6.1	- 8.0	0.9	1.0
	1980	8.3	- 3.5	4.8	- 6.8	1.1	0.9
	1981	11.2	- 3.1	8.1	- 7.4	- 0.5	- 0.2
	1982 <sup>3</sup>	11.0	- 3.9	7.1	- 7.1	- 0.7	0.7
United Kingdom .....	1975-76	5.1	- 0.2	4.9	- 6.9	1.0	1.0
	1979	6.7	- 1.5	5.2	- 4.3	0.4	- 1.3
	1980	8.2	- 0.6	7.6	- 4.4	- 1.3	- 1.9
	1981	6.6	0.8	7.4	- 3.2	- 2.4	- 1.8
	1982 <sup>3</sup>	4.8	0.2	5.0	- 2.5	- 1.5	- 1.0
France .....	1975-76	4.7	- 4.4	0.3	- 1.3	0.9	0.1
	1979	3.6	- 3.5	0.1	- 0.7	0.1	0.5
	1980	2.8	- 5.1	- 2.3	0.3	1.4	0.6
	1981	3.7	- 4.5	- 0.8	- 1.6	1.5	0.9
	1982 <sup>3</sup>	5.1	- 5.7	- 0.6	- 2.6	2.9	0.3
Germany .....	1975-76	8.5	- 3.1	5.4	- 4.5	- 0.8	- 0.1
	1979	7.0	- 5.2	1.8	- 2.7	0.9	-
	1980	7.3	- 6.2	1.1	- 3.2	2.1	-
	1981	7.9	- 5.1	2.8	- 4.0	1.2	-
	1982 <sup>3</sup>	7.7	- 3.4	4.3	- 3.9	- 0.3	0.1
Italy .....	1975-76	15.5	- 7.6	7.9	-10.8	0.9	2.0
	1979	14.6	- 1.3	13.3	-10.0	- 1.7	- 1.6
	1980	12.5	- 7.1	5.4	- 9.6	2.5	1.7
	1981	14.5	- 7.6	6.9	-12.4	2.3	3.2
	1982 <sup>3</sup>	14.7	- 4.1	10.6	-13.0	1.6	0.8
Belgium .....	1975-76	7.7	- 1.1	6.6	- 6.9	- 0.2	- 0.5
	1979	5.6	0.4	6.0	- 8.9	2.9	-
	1980	6.4	0.9	7.3	-12.2	4.9	-
	1981	10.7	1.4	12.1	-16.5	4.4	-
	1982 <sup>3</sup>	9.3	3.2	12.5	-16.1	3.6	-
Netherlands .....	1975-76	8.7	- 2.1	6.6	- 4.0	- 2.6	-
	1979	5.1	- 0.7	4.4	- 5.8	1.4	-
	1980	5.4	- 1.2	4.2	- 5.9	1.7	-
	1981	7.6	1.6	9.2	- 7.2	- 2.0	-
	1982 <sup>3</sup>	9.5	1.4	10.9	- 8.5	- 2.4	-

<sup>1</sup> These sectoral balances are derived from flow-of-funds data or national accounts and represent the difference between the sector's saving (plus net capital transfers) and its own investment. The balance vis-à-vis the rest of the world is approximately the country's current-account position with the signs reversed. The sectoral balances therefore add to zero (except for the residual which in some cases also includes balances of certain financial institutions and insurance companies). <sup>2</sup> Annual average for the years 1975-76. <sup>3</sup> Preliminary.

With the efforts of the private sector being devoted to a rebuilding of financial positions, and except in the cases where there were offsetting changes in the position of the foreign sector, it was inevitable that public-sector deficits should increase. As the table shows, this sector's deficits last year were quite large in relation to 1979,

with notable increases being recorded in the United States, Canada and the Netherlands. As described in Chapter II, however, a number of countries have sought to reduce the structural, or trend, component of their public-sector deficits. Thus, in several cases — most notably the United Kingdom but also Japan and Germany last year — countries have succeeded in reducing the public sector's financial deficit as a proportion of GNP even in the context of general disinflation. At the same time, Italy and Belgium have been troubled by particularly large public-sector financial deficits of a structural nature, while the public sector in France moved further into deficit as a result of efforts undertaken to sustain output and employment.

#### **A moderation in total credit flows.**

The changes in the inter-sectoral pattern of net borrowing and lending were generally accompanied last year by a decline in the rate of expansion of total domestic credit via the banks and other channels. An approximate measure of these total flows is shown for a selected group of countries in the next table. It should be noted that these borrowings are gross of any changes in sectoral financial assets and are therefore generally larger than the net sectoral balances discussed above.

As a proportion of GNP, total funds raised in credit markets by US domestic non-financial borrowers have declined substantially from their unusually high level in 1979. After falling by 3 percentage points by 1981, they rose slightly last year, mainly as a result of the sharp increase in public-sector borrowing, but partly also in conjunction with the strong deceleration in the growth of nominal GNP. In most other countries, total funds raised followed a more or less distinct cyclical pattern. Thus, in Germany total credit raised by domestic non-financial sectors declined to 12.1 per cent. of GNP in 1982, compared with 15.6 per cent. a year earlier (these estimates include borrowing abroad). Similarly, total funds raised by the domestic non-financial sectors in the United Kingdom fell further in relation to GNP to reach a level well below that prevailing in 1979. In Japan total credit expansion declined somewhat relative to GNP in 1982, although the ratio remained fairly close to that recorded in 1979. By contrast, in France total credit expansion has risen slightly relative to GNP since 1979.

The table also gives an approximate picture of the changing pattern of credit demand, as between both sectors and markets. Consistent with the previous data on sectoral financial balances, the business sector generally cut back on its recourse to loans, while maintaining or increasing somewhat its use of bond and equity financing. This is a typical cyclical phenomenon, arising from the need for companies to strengthen their balance sheets and the existence of favourable market conditions for doing so as interest rates move lower. Moreover, it appears that the shift to longer-term financing picked up in the course of the year. In the household sector, the demand for housing credit declined, except in the United Kingdom, while credit for other purposes appears to have grown steadily. Differences among countries are most marked, however, in the case of public-sector recourse to borrowing. Compared with 1979, strong increases relative to GNP in the United

Funds raised by domestic non-financial borrowers.<sup>1</sup>

Countries	Years	Borrower							Total
		Business sector <sup>2</sup>				Household sector <sup>2</sup>		Public sector <sup>2</sup>	
		Equities	Bonds	Loans <sup>3</sup>	Total <sup>4</sup>	Housing credit <sup>5</sup>	Other		
as a percentage of GNP									
United States .....	1975-76	0.6	1.7	1.7	4.0	3.1	1.2	5.7	14.0
	1979	-0.3	1.3	5.1	6.1	5.0	2.3	2.4	15.6
	1980	0.5	1.6	3.4	5.5	3.7	0.8	4.0	14.0
	1981	-0.4	1.2	4.3	5.1	2.8	1.3	3.7	12.9
	1982	0.1	1.2	2.6	3.9	1.8	1.0	6.8	13.5
Japan .....	1975-76	0.7	0.8	9.5	10.8	5.0		10.0	25.8
	1979	0.6	0.6	4.7	6.2	5.2		10.6	22.0
	1980	0.6	0.3	6.5	7.6	4.4		10.8	23.0
	1981	0.8	0.5	7.4	8.4	3.9		10.5	22.8
	1982 <sup>6</sup>	0.8	0.6	7.2	8.6	3.5		8.6	20.7
United Kingdom ...	1975-76	0.6	0.1	1.7	3.6	3.4	0.1	8.7	15.8
	1979	0.5	0.0	2.7	3.5	3.4	1.9	6.5	15.3
	1980	0.4	0.2	3.3	4.7	3.3	1.6	5.4	15.0
	1981	0.7	0.0	3.2	4.3	3.9	1.8	4.3	14.3
	1982	0.4	0.0	3.0	3.8	5.1	2.0	2.0	12.9
France .....	1975-76	1.2	0.9	5.6	7.7	4.9		4.2	16.8
	1979	1.0	0.5	5.9	7.4	6.2		2.9	16.5
	1980	1.7	0.7	6.6	9.0	4.5		1.9	15.4
	1981	1.5	0.4	6.4	8.3	5.1		3.4	16.8
	1982	1.0	1.1	5.8	7.7	4.2		5.4	17.3
Germany .....	1975-76	0.4	0.0	2.3	5.0	2.3	1.0	5.2	13.5
	1979	0.3	-0.2	4.1	5.4	4.2	1.4	3.1	14.1
	1980	0.3	0.1	3.5	6.2	4.1	0.8	3.7	14.8
	1981	0.2	0.0	3.1	6.5	3.6	0.5	5.0	15.6
	1982	0.3	0.2	2.0	4.3	2.8	0.6	4.4	12.1

<sup>1</sup> Based on national data which differ conceptually from country to country. For the United States, funds raised in credit markets; for Japan, issues of securities and loans from financial institutions and overseas; for the United Kingdom, total borrowing by the sectors shown other than trade credit and intra-company investments; for France, total recorded borrowing. <sup>2</sup> For Japan and the United Kingdom, borrowing by public enterprises is included in public-sector borrowing, and for these countries and France that by unincorporated business is included in household-sector credit. <sup>3</sup> Includes money-market paper. <sup>4</sup> Including foreign borrowing. <sup>5</sup> For Germany, total housing credit. <sup>6</sup> Preliminary.

States and France contrast with a substantial decline in the United Kingdom and a lesser one in Germany. In Japan public-sector borrowing from the markets fell sharply in relation to GNP last year, but it remained high compared with other countries, largely reflecting its rôle as a counterpart to high private-sector saving.

#### Bank credit and monetary expansion.

The slowing-down of total loan expansion last year was accounted for principally by credit intermediated by the banking system (including the central bank). This in itself is not surprising, given the importance of bank credit creation relative to credit flows via other financial institutions and directly via the markets. It is worth emphasising, however, that the relative importance of bank credit has increased recently in most countries as the result of many years of high and variable inflation. Both private-sector borrowers and lenders had become increasingly averse

to the risks involved in undertaking long-term commitments and came to depend greatly on short-term bank financing.

Total domestic credit expansion from the banking system slowed down last year in all Group of Ten countries except the United States, Italy and Belgium. The deceleration was mainly due to a falling-off in loans to the private sector, partly because of a decline in the working capital needs of business firms as inflation waned and inventories were cut back. In addition, given the increased reliance of companies on bank credit to finance their longer-term requirements, the easing of bank credit was associated with last year's marked fall in fixed capital investment. In many countries the banks also granted less new credit to finance housing and the purchase of durable consumer goods. The only countries in the following table in which the contribution of bank credit to the private sector in the growth of broad money rose last year were the United Kingdom, Sweden and Denmark. In France domestic credit continued to expand fairly rapidly in 1982, partly reflecting the strength of demand for funds by firms, particularly public-sector enterprises.

In general, efforts were made last year by governments to limit monetary financing of public-sector deficits so as to make room for bank lending to the private sector without allowing excessive expansion of the money supply. Most countries were successful in this, a noteworthy case being that of the United Kingdom. During 1982 outstanding claims of the UK banking sector on the public sector actually fell by 10 per cent., while sterling claims on the private sector rose by almost 20 per cent. This outcome was the result of an "overfunding" of the public-sector deficit. Owing to heavy sales of government stock outside the banking system, the public-sector contribution to money supply growth was negative. The consequent money-market shortages were relieved by central-bank purchases of short-term government debt and, increasingly during 1982, of commercial bills from the banking system. In this way, bank lending to the corporate sector increased at the same time as the threat of overshooting the money supply targets was reduced. In Japan, France, Germany, Sweden and Switzerland also the contribution of domestic credit flows to the public sector to the growth of broad money declined last year; only in Italy, Belgium and Austria did the contribution of public-sector borrowing increase significantly. In qualification, however, it must be pointed out that public-sector borrowing abroad last year was particularly large in Belgium, Sweden and Denmark. Foreign exchange proceeds limited the decline in the net foreign assets of the banking system and helped to keep domestic monetary conditions easier than they would otherwise have been.

In most countries, the growth of the broad money supply did not slow down as much as domestic bank credit expansion, either in 1982 or over the longer period since 1979 or 1980. One reason for this was the improvement in the banking system's net foreign position, as, for instance, in the Netherlands, Switzerland and Austria. Another was the fact that the weakening of credit demand was accompanied in some cases — for example, Germany, Belgium, the Netherlands and Austria — by a slower rate of growth or even a decline in non-deposit liabilities. These instances help to illustrate how, even within the banking system proper, changes in credit flows and their counterparts may have contributed to declines in the income velocity of broad money. By the same token, in several countries last year, including

Changes in bank credit and the broad money stock.<sup>1</sup>

Countries	Years	Contributions to changes in the broad money stock of changes in					Changes in broad money stock <sup>6</sup> in percentages
		credit to private sector <sup>2</sup>	credit to public sector <sup>3</sup>	total domestic bank credit	net foreign assets <sup>4</sup>	other items <sup>5</sup>	
		December to December, in percentage points					
United States .....	1979	8.7	0.0	8.7	- 1.4	0.5	7.9
	1980	5.9	1.0	6.9	2.6	- 0.7	8.8
	1981	4.6	0.1	4.7	2.7	2.7	10.1
	1982	4.2	1.1	5.3	2.4	1.4	9.2
Canada .....	1979	17.5	- 0.1	17.4	- 1.4	- 0.1	15.9
	1980	10.7	- 0.2	10.5	0.0	0.5	11.0
	1981	33.6	- 0.3	33.3	-1.6	- 4.2	27.5
	1982	0.2	1.1	1.3	1.2	1.7	4.2
Japan .....	1979	7.7	2.3	10.0	- 2.3	1.4	9.1
	1980	8.0	2.0	10.0	- 1.0	- 1.8	7.2
	1981	9.0	2.9	11.9	- 0.2	- 0.7	11.0
	1982	8.6	1.2	9.8	- 0.6	- 2.8	6.3
United Kingdom .....	1979	16.5	3.3	19.8	- 6.0	- 1.1	12.7
	1980	17.1	4.7	21.8	- 0.8	- 2.4	18.6
	1981	16.4	- 0.8	15.6	0.4	- 2.5	13.5
	1982	20.4	- 5.8	14.6	- 2.9	- 2.4	9.3
France .....	1979	14.2	1.1	15.3	0.6	- 1.5	14.4
	1980	11.8	- 0.5	11.3	2.0	- 3.5	9.8
	1981	15.1	2.4	17.5	- 0.5	- 5.6	11.4
	1982	14.0	2.1	16.1	- 3.2	- 1.5	11.4
Germany .....	1979	17.1	4.1	21.2	- 3.8	-11.3	6.0
	1980	14.6	3.5	18.1	- 1.5	-10.4	6.2
	1981	11.2	6.7	17.9	2.1	-15.0	5.0
	1982	9.5	4.9	13.4	0.4	- 6.7	7.1
Italy .....	1979	8.3	10.7	19.0	1.6	2.5	23.2
	1980	7.0	12.5	19.5	- 2.0	- 0.2	17.3
	1981	4.6	12.8	17.4	0.5	- 1.9	16.0
	1982	3.7	14.3	18.0	- 0.7	- 1.9	17.3
Belgium .....	1979	9.8	6.4	16.2	- 7.8	- 2.1	6.4
	1980	5.0	6.5	13.5	- 1.2	- 8.8	3.5
	1981	4.4	7.7	12.1	-11.5	6.0	6.6
	1982	1.6	11.3	12.9	- 7.4	1.6	7.1
Netherlands .....	1979	25.6	6.3	31.9	- 3.6	-20.8	7.5
	1980	17.8	4.2	22.0	- 3.7	-14.5	3.9
	1981	10.1	3.7	13.8	3.8	-12.4	5.3
	1982	5.3	5.1	10.4	3.9	- 5.6	8.8
Sweden .....	1979	12.8	11.0	23.8	- 4.3	- 3.0	16.5
	1980	10.8	14.1	24.9	- 2.6	-10.0	12.3
	1981	9.7	15.2	24.9	- 3.2	- 7.9	13.8
	1982	12.3	8.4	20.7	- 2.7	-10.2	7.8
Switzerland .....	1979	6.2	0.2	6.4	- 2.4	4.8	8.8
	1980	9.3	0.0	9.3	0.5	- 5.5	4.3
	1981	8.4	0.4	8.8	- 0.9	- 3.7	4.2
	1982	3.1	0.0	3.1	2.8	- 0.7	5.2
Austria .....	1979	10.4	6.2	16.6	- 1.3	- 9.1	6.2
	1980	8.5	5.7	14.2	- 1.1	- 4.4	8.7
	1981	10.1	3.9	14.0	1.0	- 2.9	12.1
	1982	2.0	9.9	8.9	4.4	0.9	14.2
Denmark .....	1979	3.7	15.3	19.0	- 3.7	- 4.5	10.8
	1980	6.0	11.3	17.3	- 7.4	- 1.8	8.1
	1981	4.8	15.4	20.2	- 8.8	- 1.8	9.6
	1982	9.8	16.0	25.8	-13.6	- 1.1	11.1

<sup>1</sup> Based on unadjusted national data which differ conceptually from country to country. <sup>2</sup> For the United States, Canada and Switzerland, commercial-bank credit only. <sup>3</sup> For the United States, commercial-bank holdings of Treasury securities only; for France, central government only; for the United Kingdom and Denmark, including public-sector borrowing abroad. <sup>4</sup> For the United States, commercial banks only; for Canada, commercial banks' net foreign currency liabilities to residents and non-residents; for France, Bank of France only; for Switzerland, official reserves only. <sup>5</sup> Including non-monetary bank liabilities. <sup>6</sup> For the United States, Canada, France, Belgium, the Netherlands and Denmark, M2; for Japan, M2 and CDs; for Germany, Italy, Sweden, Austria and Switzerland, M3; for the United Kingdom, sterling M3.

the United States, Japan, the United Kingdom and Sweden, the growth of the broad money supply slowed down more than domestic bank credit, owing to a smaller contribution or a worsening of the net foreign position and/or a faster relative growth of non-deposit liabilities.

#### **A revival in capital-market activity?**

Fragmentary data suggest that lending by non-bank financial institutions to business firms and households generally slowed down in 1982, although credit demands of this type built up somewhat in the second half of the year. In the United States the lending of private non-bank financial institutions — mainly savings and insurance institutions, finance companies and money-market funds — increased in 1982 by only 6.6 per cent., compared with an average rate of growth of 10.8 per cent. over the three preceding years. In Canada the private sector appears to have increased its direct acquisition of securities, especially government bonds, while cutting back on its new placements with non-bank institutions. In Germany the growth of claims of building and loan associations and credit co-operatives fell off substantially last year, and in France and Italy there was also a slowing-down in lending by non-bank financial institutions to the private sector, offset in the case of France by a rise in acquisitions of bonds and shares. Japan is another country where non-bank financial flows (mainly via the trust accounts, insurance companies and government financial institutions) increased more slowly in 1982. In contrast, building societies in the United Kingdom, benefiting from a sharp rise in deposits, increased their loans and mortgages for house purchases and added substantially to their holdings of government securities and other financial assets. However, the growth in financial claims held by insurance companies slowed down considerably. In general, it would appear that non-bank financial institutions, and in some cases the banks as well, were able in a number of countries to build up their portfolios of government paper and to take more private-sector securities into their portfolios. In addition, non-bank private-sector investors began to turn more to the securities markets after the middle of the year. In the paragraphs below, attention is focused on the new issues market, where there were some new developments last year.

After nearly a decade of low issuing activity on the fixed-interest domestic bond markets there were some signs in 1982, particularly in the context of declining interest rates during the second half of the year, of a revival of this type of long-term funding. Although much of the recent increase in bond issues has been on behalf of governments and public-sector agencies, the accompanying table shows that there were also appreciable increases in corporate bond issues in certain countries. Funding through equity issues was in overall terms little different in 1982 compared with the previous year, although sharp increases in equity prices after the middle of the year have improved the outlook for issues of this kind.

Net of redemptions, issuing activity on the domestic bond markets rose in 1982 in the United States, France, Germany and Switzerland, but fell slightly in Canada and the United Kingdom. Gross issues rose in Japan last year, but in net terms there was a small decline. Marked falls in equity issues occurred in Canada, the United Kingdom and Switzerland.

Domestic capital markets: New issues of shares and bonds.<sup>1</sup>

Countries/Years	Shares	Bonds <sup>2</sup>	Total issues	Bonds issued by					
				public sector	private non-financial enterprises <sup>3</sup>	financial institutions	rest of world		
in national currencies <sup>4</sup>			as a percentage of GNP	as a percentage of total bond issues					
United States	1975-77 <sup>5</sup>	11.2	136.5	147.7	8.5	72.2	17.3	5.6	4.9
	1980 ...	20.5	195.1	215.8	8.2	79.0	17.0	3.6	0.4
	1981 ...	25.3	183.1	208.4	7.1	84.4	13.1	- 0.4	3.0
	1982 ...	30.6	291.9	322.5	10.5	89.3	7.7	0.8	2.2
Canada	1975-77 <sup>5</sup>	1.9	8.1	10.0	5.3	71.8	21.3	5.9	0.9
	1980 ...	5.4	16.0	21.4	7.3	89.3	7.2	2.1	1.3
	1981 ...	5.8	11.6	17.4	5.2	83.0	10.5	6.2	0.4
	1982 ...	3.8	10.6	14.4	4.1	91.6	9.3	- 3.2	2.3
Japan	1975-77 <sup>5</sup>	1.1	13.6	14.7	8.9	78.2	6.3	17.4	-
	1980 ...	1.4	19.3	20.7	6.8	88.5	2.9	8.6	-
	1981 ...	2.1	20.8	22.9	9.1	85.0	5.1	9.8	-
	1982 ...	2.0	19.5	21.5	8.1	81.3	3.3	15.4	-
United Kingdom	1975-77 <sup>5</sup>	1.0	7.4	8.4	6.8	100.2	-	0.4	- 0.7
	1980 ...	1.0	11.1	12.1	5.3	100.1	0.4	- 0.6	0.1
	1981 ...	1.8	7.6	9.4	3.8	96.2	1.1	- 1.2	3.9
	1982 ...	1.0	6.5	7.5	2.7	88.2	- 1.2	4.3	8.7
France	1977 ...	11.1	39.1	50.2	2.8	26.8	20.8	51.7	0.8
	1980 ...	21.1	92.0	113.1	4.1	33.7	12.1	53.2	1.1
	1981 ...	23.3	82.5	105.8	3.4	27.6	7.8	64.2	0.4
	1982 ...	24.2	118.9	143.1	4.0	31.7	18.3	49.0	1.0
Germany	1975-77 <sup>5</sup>	5.5	51.0	56.5	5.1	33.4	- 0.7	62.6	4.8
	1980 ...	6.9	52.6	59.5	4.0	9.4	- 2.4	79.1	13.9
	1981 ...	5.5	73.0	78.5	5.1	- 3.6	- 1.3	96.5	6.4
	1982 ...	6.9	63.7	69.7	6.6	34.1	- 0.8	53.5	13.1
Switzerland	1975-77 <sup>5</sup>	1.0	7.1	8.1	5.5	30.9	27.1	13.6	28.4
	1980 ...	2.1	10.1	12.2	6.9	5.1	8.4	41.5	45.0
	1981 ...	1.9	12.3	14.2	7.3	6.9	8.1	30.7	54.3
	1982 ...	0.3	15.6	16.1	8.1	4.5	9.3	27.3	58.9

<sup>1</sup> Based on national sources which differ conceptually from country to country. <sup>2</sup> Net issues, excluding private placements in the case of France. <sup>3</sup> Including public non-financial enterprises in France and Switzerland. <sup>4</sup> In billions of national currency units, except for Japan (thousand billions). <sup>5</sup> Annual average.

The weakness of corporate balance sheets, the reliance of this sector on bank credit for its external funding and concern over limiting the monetisation of public-sector deficits all combine to make a revival of capital-market activity a major consideration of current monetary policy. Since the early 1970s, the experience of historically high inflation and nominal interest rates has encouraged a type of "vicious circle". Owing to the uncertainty surrounding long-term fund-raising, companies in some countries have been compelled to rely heavily on short-term borrowing from banks, thus encouraging higher monetary growth. In addition, the high and relatively inelastic demand for funds by the public sector has contributed to higher interest rates and to a de facto crowding-out of the more price-responsive corporate bond issues. However, this outcome was attenuated in some cases by public-sector borrowing abroad.



In the second half of 1982 the combination of lower inflation and reductions in interest rates created more favourable conditions for capital issues. Although long-term rates remained very sticky, the reverse yield gap, which had been so prominent everywhere in the years 1980–81, gradually disappeared and a steepening of the positive yield curve has followed. However, interest rates are still perceived to be high, especially in real terms, and need to come down further. If this does not happen immediately but is expected to do so as time goes on, then companies will be deterred from switching over on a large scale to long-term fixed rate finance. Uncertainties regarding the long-run success of the fight against inflation, particularly in view of prospects concerning government borrowing requirements, are also keeping the cost of long-term funding high. A further problem for many potential borrowers is that their balance sheets are too weak to allow a rapid transition to long-term funding, while for many smaller borrowers the bond market is, in any case, effectively closed.

The table also indicates the extent to which public-sector issues have dominated the bond market in the United States, Canada, Japan and the United Kingdom. There was little improvement in this situation in 1982 except in the United Kingdom where, however, the reduced share of public-sector issues was offset by a rise in the proportion of issues by financial institutions and foreign borrowers, with net issues by non-bank private enterprises being negative. In some cases, however, where governments have sought to raise more funds outside the banking system they have made use of short-term markets or borrowed abroad, so leaving the long-term markets to be tapped by corporate borrowers.

Certain innovations may also have facilitated borrowing by the corporate sector, including some experimentation with discount bonds. Basically, however, a lasting revival of capital-market activity must depend chiefly on a return to low and stable inflation rates, with corresponding adaptations in nominal and real interest rates, rather than on changes in financial techniques.

### **Financial fragility and balance-sheet restructuring.**

The underlying strength of business firms' financial positions has been seriously eroded since the 1960s. Increasing international competition, declining productivity and higher wage costs combined to put severe and growing pressures on business profitability. These developments, together with the uncertainties associated with volatility in inflation and exchange rates, contributed to sharply lower operating surpluses and trend growth rates of fixed capital investment in most countries. The two oil shocks, of course, greatly exacerbated these tendencies, so that the concerted policy of disinflation, when it came, posed very severe adjustment problems of a historically unique character.

With company debt burdens often at or near their post-war peaks, with debt structures having shortened and become increasingly based on variable interest rates and with the level of interest rates being unusually high, the weakening of final demand associated with protracted disinflation implied a much reduced cash flow and serious problems of company liquidity, if not solvency. In the first adjustment

phase, mainly from late 1979 to 1981, companies sought to buy time for more fundamental adjustments by drawing upon liquid assets and increasing their short-term borrowing, which for a number of particularly hard-pressed companies was often of a "distress" nature. But as time went on, as has already been seen in the marked reduction in company financial deficits, the main thrust of adjustment lay in cutting back investment outlays and reducing costs and work forces. Last year, more than previously, this involved less recourse to external funds, which eased company debt-servicing burdens.

As a result of this adjustment process, company-sector financial ratios have, paradoxically, maintained a somewhat better appearance than might have been expected — but mainly at the expense of declining profitability and sharp cutbacks in inventories, fixed investment and employment. In these respects, perhaps, the

Non-financial companies: Internal financing and balance-sheet ratios.<sup>1</sup>

Financial ratios		Average		1979	1980	1981	1982 <sup>3</sup>
		1960-69 <sup>2</sup>	1970-79				
in percentages							
United States	Operating surplus/net factor income . . . .	29	25	26	25	25	24
	Change in real gross fixed investment <sup>4</sup> . .	6.7	3.8	3.8	- 6.9	1.7	- 5.3
	Internal financing ratio . . . . .	93	85	86	90	89	96
	Cash flow/total debt . . . . .	15	15	15	15	16	15
	Liquid assets/short-term debt . . . . .	25	20	18	18	18	18
	Long-term debt/total debt . . . . .	44	40	37	37	36	37
	Equity <sup>5</sup> /total debt . . . . .	193	118	96	116	101	96
Japan	Operating surplus/net factor income . . . .	47	38	33	32	31	.
	Change in real gross fixed investment <sup>4</sup> . .	16.6	5.6	6.3	0.2	2.1	1.1
	Cash flow/total debt . . . . .	.	19 <sup>6</sup>	19	24	21	.
	Liquid assets/borrowing . . . . .	46	47	48	47	48	47
	Long-term debt/total debt . . . . .	14.5	8.9	8.6	8.3	8.3	.
Germany	Operating surplus/net factor income . . . .	36	29	29	27	26	27
	Change in real gross fixed investment <sup>4</sup> . .	4.5	2.3	7.2	3.2	- 3.8	- 5.6
	Internal financing ratio . . . . .	77	80	83	72	75	85
	Cash flow/total debt . . . . .	17	15	18	17	13	13
	Liquid assets/short-term debt . . . . .	93	113	122	113	118	120
	Long-term debt/total debt . . . . .	63	59	57	56	54	54
	Equity <sup>5</sup> /total debt . . . . .	35	23	21	20	19	19
France	Operating surplus/net factor income . . . .	39	31	29	27	26	.
	Change in real gross fixed investment <sup>4</sup> . .	6.1	3.0	3.2	2.4	- 2.2	- 1.1
	Internal financing ratio . . . . .	.	61	65	64	54	46
	Liquid assets/total credit . . . . .	.	25	28	27	27	27
United Kingdom	Operating surplus/net factor income . . . .	25	22	22	20	19	.
	Change in real gross fixed investment <sup>4</sup> . .	5.7	1.0	0.9	- 2.9	- 8.9	2.7
	Internal financing ratio . . . . .	98	99	84	91	118	105
	Cash flow/total debt . . . . .	14	16	17	14	14	12
	Liquid assets/bank borrowing . . . . .	92	63	60	69	62	61
Belgium	Operating surplus/net factor income . . . .	39	30	28	27	26	.
	Change in real gross fixed investment <sup>4</sup> . .	6.7	2.4	- 2.6	5.3	- 16.2	- 4.9
	Internal financing ratio . . . . .	.	78	83	77	75	89

<sup>1</sup> BIS estimates based on national sources. Stock data refer to amounts outstanding at end of period. Except for operating surpluses (national accounts definition) and changes in gross fixed investment, data cover non-financial corporations for the United States, France and Belgium, the corporate business sector for Japan, industrial and commercial companies for the United Kingdom, the enterprise sector (excluding housing) for Germany. The internal financing ratio is normally that of gross saving and capital transfers received (net) to gross investment. (For the United Kingdom and the United States both saving and investment are calculated net of stock appreciation.) Liquid assets consist mainly of bank deposits but include government and certain other securities in some cases. <sup>2</sup> For the United Kingdom, 1963–69, except the operating surplus and change in gross fixed investment. <sup>3</sup> Preliminary. <sup>4</sup> Annual average change in percentages. For the United States, private sector only. <sup>5</sup> At market values. <sup>6</sup> 1974–79.

plight of the company sector is reflected more in real economic indicators than in the purely financial ones. Automatic stabilisers, in the form of interest-cost tax write-offs and lower profits-tax liabilities, also helped. Some insight into long-term trends and recent developments in these ratios is provided by the preceding table, which shows selected data for a number of countries. One summary indicator is the ratio of cash flow (retained after-tax profits plus capital consumption allowances) to total debt. In the United States last year, although corporations' pre-tax profits declined by some 25 per cent. compared with 1981, the ratio of cash flow to total debt fell only slightly and remained higher than in 1973. Elsewhere, too, the evidence of strong deterioration is limited, though for reasons which may be deceptive as regards the sector's basic economic health.

Much the same can be said of the company sector's (or, in the case of some countries, the enterprise sector's) internal financing ratio, i.e. the cash flow (as defined above) relative to the sector's own investment outlays. Except in France, these ratios in 1982 were not far off their long-term average, which reflects the fact that companies tend, in some measure, to adjust their investment outlays to the availability of internal financing means.

Over a long period the ratio of liquid assets to short-term debt has declined in the United States and has gone down even more in the United Kingdom. The proportion of long-term debt to total debt has tended to decline in the United States, but to remain just over a half in Germany. In both these countries the equity/debt ratio has dropped substantially over the years.

It is clear that the process of protracted disinflation has entailed intensive efforts at cost-cutting and retrenchment and, where these have not been sufficient, large-scale bankruptcies. In 1982 business failures in the United States and Germany were running at about twice their average during the years of deep recession in 1974-75, while in the United Kingdom and Canada they were about three and four times higher respectively. The lowering of interest rates since last summer has been a helpful factor, partly because it reduced debt-service burdens and partly because it supported new investment. However, it is unlikely that investment will show any significant response until real interest rates come down appreciably and demand recovers strongly. Therefore, a recovery of investment may depend largely on the behaviour of consumption and, in some cases, exports. With regard to the structure of company indebtedness, it is significant that yield curves have become more normal in most countries. If price inflation remains subdued, or declines further, financial investors may prove more willing to invest in long-term markets, thus facilitating a return by companies to borrowing at longer maturities. By making company balance-sheet positions more robust, such a development could contribute importantly to a recovery in investment.

It is instructive, perhaps, to consider some similarities and differences between the problem of domestic company fragility in the industrial countries and international fragility relating to the growth of countries' external indebtedness. In both cases the basic problem can be seen as one deriving, on the one hand, from reduced debt-servicing capacity (i.e. higher interest charges, lower earnings and hence reduced cash flow) and, on the other hand, from heavy and badly structured

debt burdens, weighted towards shorter-term maturities. As far as adjustment is concerned, companies seem to be better placed than countries in at least four respects. One is that, as companies seek to reduce their financial deficits and strengthen their financial structures, a strong element of automatic support to their efforts emerges in the form of growing cyclical public-sector deficits. While the latter also lend support to the world economy, they do not do so in the same positive sense unless they are associated in the stronger countries with actual current-account deficits. A second difference is that political and social impediments to undertaking needed adjustments are much less constraining for companies than for countries. A third difference is that many — particularly small — companies do not as a rule have any significant proportion of their debt expressed in foreign currencies, whereas in the case of the indebted country this is a rather typical feature. As a result, further uncertainty is created for the indebted country as exchange rate movements affect debt-servicing burdens in an arbitrary way. A fourth difference, perhaps, is that in the event of a loss in creditworthiness, companies are often in a better position than countries to mobilise assistance in restructuring their balance sheets, although this capability also depends crucially on the size of the country or company concerned.

#### **Financial innovations.**

The remainder of this chapter aims to provide a long-term perspective of a number of changes which have occurred in the banking systems and financial markets of various countries in recent years. So far, the changes have been much more apparent in some countries, such as the United States, Canada and the United Kingdom, than in others, for instance Germany and Switzerland. These changes or innovations are part of a continuing process and are likely to have a permanent and notable impact on the financial behaviour of economic agents and on the pattern of sectoral financial flows. They have already had a significant effect on the way in which financial institutions fund their activities and, more broadly, on the process of financial intermediation. The spectrum of financial instruments and practices that can be used by businesses and households for investments, for making payments and for arranging loans has widened considerably during the last few years. Other things being equal, these developments imply, over time, increases in the capacity of the financial system to lend/borrow and alterations in the size and composition of various monetary and credit flows.

Financial innovations generally fall into two broad categories: new or altered financial instruments and practices which act as close substitutes for assets included in monetary aggregates, and new instruments and practices or institutional changes which cannot be substituted for assets included in monetary aggregates without substantial costs. The first group of innovations makes it more difficult to define and measure various monetary aggregates. The second group alters the terms and conditions for borrowing/lending arrangements and usually affects the relative attractiveness of various non-monetary financial assets. Innovations of the latter type may not have any *direct* effect on the definition and measurement of any given

monetary aggregate, since the assets whose attractiveness is being influenced generally fall outside the aggregates. However, to the extent that they influence the degree of liquidity of certain financial assets relative to others and enable economic agents to undertake more transactions than before, they raise issues with regard to the stability and meaningfulness of the existing monetary aggregates.

Both types of innovation affect the workings of the financial system and may lead to shifts in the relationship of monetary aggregates and/or other financial variables to economic activity. Therefore, given a substantial degree of financial innovation, it may be difficult to interpret changes in monetary aggregates, and, more generally, to assess the effects of monetary policy on the rest of the economy.

The following discussion, although not intended to be comprehensive, highlights some significant recent innovations under both headings. Starting from the analysis earlier in the chapter, it first centres on movements of income velocity, but with the emphasis shifted to its long-run behaviour since the late 1960s. Specifically, the focus here is on movements in the income velocity of  $M_1$  relative to changes in short-term interest rates in the larger industrial countries. The discussion then turns to the major changes in the financial system which appear to underlie the recent behaviour of velocity, as illustrated by some significant innovations in certain of these countries. Finally, the implications of financial innovations for monetary policy are briefly considered.

The following table shows the variations, expressed as average annual percentage changes, in  $M_1$  velocity and in the levels of short-term interest rates for three five-year periods — 1968–73, 1973–78, 1976–81 — and separately for 1978–81 and 1982. The table also presents some rough estimates of the velocity trend for the three five-year periods. Standard theory maintains that changes in the velocity of  $M_1$  are directly related to the size of interest rate movements. It appears that this relationship, which never really held very closely, has become rather unstable over the last few years in most countries. While interest rate increases seem to have played a more or less significant rôle in the higher velocity growth in the 1978–81 period in Germany, Italy, Japan, the United Kingdom and Canada, the size of the changes does not appear to be consistent, in most cases, with earlier experience. In addition, the United States and France experienced lower average velocity growth in 1978–81 in the face of larger interest rate increases than in the preceding period. During 1982 the large interest rate declines were accompanied by significant decreases in  $M_1$  velocity in the United States, the United Kingdom and Germany, but again their relative magnitudes were not in line with previous experience. Meanwhile, in Canada  $M_1$  velocity showed no significant change in the face of a decline of one-third in short-term interest rates.

The trend estimates of velocity — some of which are unreliable judged by conventional statistical criteria — exhibit considerable volatility across different time periods, thus underlining the apparent instability of the velocity behaviour indicated by other data in the table. With the exception of Germany, however, they do show an upward tendency over the early or mid-1970s. On the whole, therefore, the data leave no doubt that something new has happened or is happening to the relationship between  $M_1$ , interest rates and economic activity.

M<sub>1</sub> income velocity and short-term interest rates.<sup>1</sup>

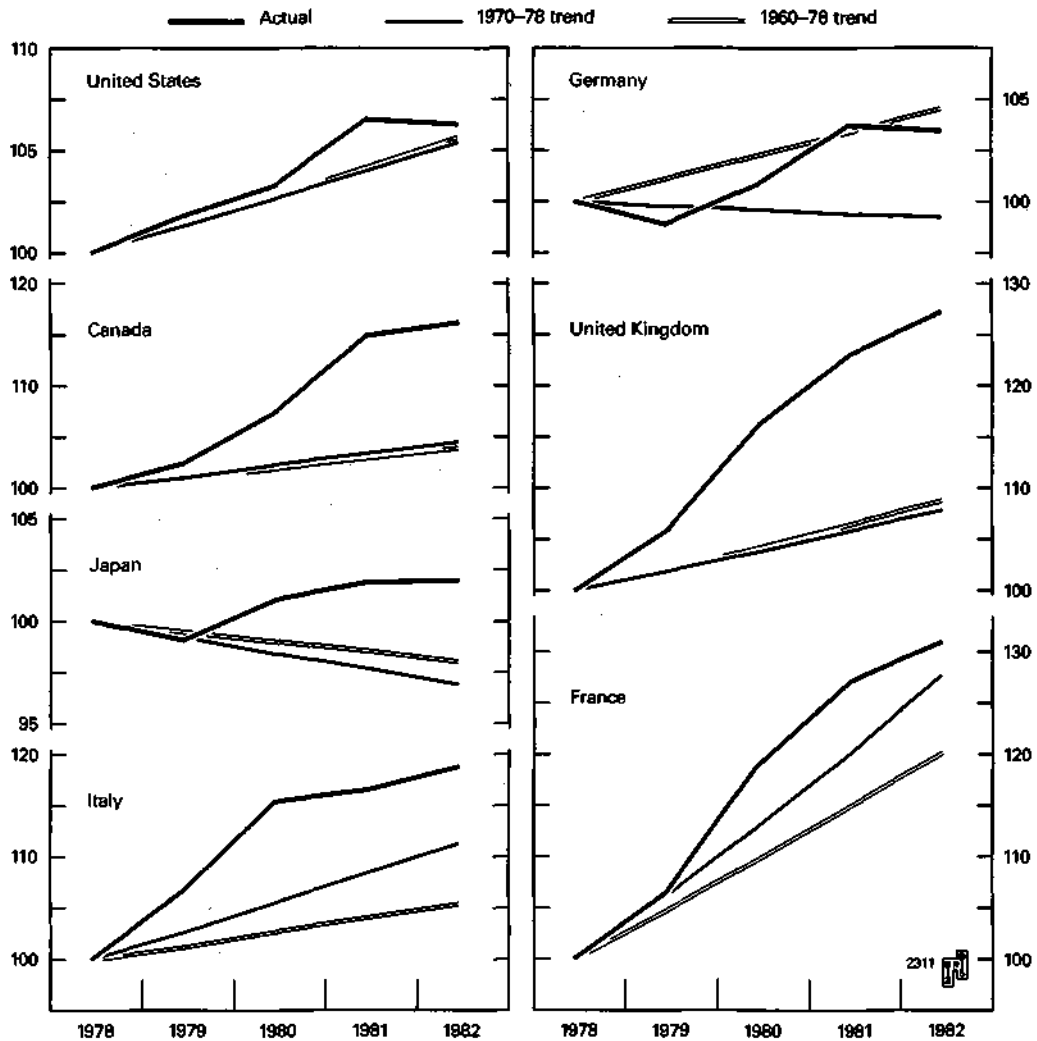
Countries		Average annual percentage change					Estimates of velocity trend <sup>2</sup>		
		1968-73	1973-78	1978-81	1978-81	1982 <sup>3</sup>	1968-73	1973-78	1978-81
		fourth quarter to fourth quarter							
Canada	Velocity .....	1.73	2.63	5.17	8.85	- 0.65	1.16	2.06	3.62
	Interest rates ..	10.20	11.30	14.90	16.30	-33.10	(1.54)	(1.92)	(3.48)
France	Velocity .....	1.56 <sup>4</sup>	1.95	1.74	1.70	- 1.20	- 0.12 <sup>4</sup>	2.02	2.15
	Interest rates ..	10.00	- 4.20	14.20	37.20	-14.80	(0.25)	(3.16)	(3.91)
Germany	Velocity .....	2.62	- 3.69	0.41	3.51	- 3.20	0.51	- 0.79	- 1.56
	Interest rates ..	30.90	-18.10	27.40	59.10	-36.10	(0.60)	(1.28)	(2.07)
Italy	Velocity .....	- 5.96	1.90	1.59	5.47	- 1.80	- 6.12	- 0.96	- 2.06
	Interest rates ..	3.20	14.80	9.70	17.20	- 4.90	(7.13)	(1.01)	(2.00)
Japan	Velocity .....	- 4.76	0.68	2.07	2.80	- 1.10	- 3.88	1.65	1.92
	Interest rates ..	2.20	- 6.90	3.60	21.20	- 3.00	(3.19)	(2.37)	(1.79)
United Kingdom	Velocity .....	2.84	1.87	0.01	3.41	- 2.30	1.89	2.62	1.02
	Interest rates ..	19.20	11.00	13.90	11.50	-35.40	(2.04)	(1.91)	(0.71)
United States	Velocity .....	2.78	3.93	3.64	2.83	- 3.80	2.08	3.84	3.33
	Interest rates ..	10.80	5.70	22.1	13.1	-32.70	(9.39)	(12.69)	(7.68)

<sup>1</sup> For Canada, the United States and the United Kingdom, the three-month Treasury bill rate; for Japan, the two-month Treasury bill rate; for Germany, the three-month interbank rate; for France, the one-month money-market rate; for Italy, the public-sector bond rate. <sup>2</sup> Trend estimates of velocity are based on a linear regression of annualised percentage changes in velocity on annualised percentage changes in interest rates and intercept terms — those intercept terms are reported here together with their t-ratios in parentheses. <sup>3</sup> Estimates. <sup>4</sup> Fourth quarter of 1969 to fourth quarter of 1973.

One explanation for the rise in the velocity trend and for the instability of velocity behaviour is the process of financial innovation. A principal element of that process is that it leads to economies in the holding of cash and transaction balances (or other lower-yielding monetary assets) through the application of cash management techniques and the development of new financial instruments. On this view, the instability of velocity behaviour reflects shifts in the relationships between monetary and credit aggregates, interest rates and the real sector, induced by innovations which are generally unpredictable and work unevenly over time.

It would appear that over the last few years financial innovations have been helping to reduce the attractiveness of holding currency relative to other assets. The accompanying graph shows that in virtually all the major industrial countries the ratio of personal consumption expenditure to currency in circulation rose faster between 1978 and 1981 than the historical rates over 1960-78 or 1970-78 would have implied, although in some cases the faster growth was partially reversed during 1982, probably for precautionary reasons associated with the recession. The acceleration in the growth of consumption relative to currency suggests that the rate at which individuals and households shifted to non-cash transactions speeded up over this period. It is, however, not clear to what extent this reduced demand for currency reflects a *normal* response to high and volatile interest rates (or inflation) in recent years. But, of course, high and variable interest rates are themselves an important stimulant to the innovation process.

Ratio of personal consumption expenditure to currency in circulation.



### Liability management.

In many countries changes in the banking system and financial markets appear to be having significant effects on the demand for and supply of both cash and non-cash transaction balances. A major source of these effects is the process of so-called liability management under which financial institutions have come to rely increasingly on instruments bearing market-related interest rates in funding their activities. This process advanced rapidly in the mid-1970s, partly following the practices that had developed even earlier in the Euro-markets. Subsequently, under the influence of high and volatile interest rates and their interaction in some countries with certain regulatory constraints, and facilitated by the use of computers and information technology, liability management moved much further along. It is now widely used by banks and non-bank financial institutions, and it has increased

their capacity to extend credit to potential borrowers. It is carried out by issuing new or altered instruments (see the country notes below) and/or utilising various markets for interest-sensitive funds (e.g. markets for certificates of deposit (CDs), repurchase agreements (RPs), Euro-dollars and commercial paper). The counterpart of liability management has been the increased demand for such instruments by households and businesses — which have become financially more sophisticated and more sensitive to the potential earnings loss from holding non-interest-bearing or lower-yielding financial assets.

For the banking system, one important consequence of liability management is the reduced importance of lower-yielding transaction balances and a greater rôle for non-deposit funds on the liabilities side of the balance sheet. The following table shows the ratios of demand deposits to total liabilities at commercial banks since 1976. These ratios have fallen in all countries over the last three or four years. The sharpest declines were recorded in Canada, the United Kingdom and the United States — the three countries where the pace of financial innovation has been fastest. Of course, total liabilities may increase faster than demand deposits as a result of increases both in non-deposit funds and in various forms of time and savings deposits. In any case, the table suggests that the capacity of the banking system to extend credit has increased substantially faster than the growth of demand deposits in recent years.

Commercial banks: Demand deposits in relation to total liabilities.<sup>1</sup>

Country	1976	1978	1981	1982
	percentage ratios			
Canada .....	10.6	8.9	5.7	4.8
France .....	17.4 <sup>2</sup>	16.5	14.6	13.4 <sup>3</sup>
Germany .....	8.2	8.4	7.1	7.2
Italy .....	26.2	28.1	24.2	24.5 <sup>3</sup>
Japan .....	6.2	6.5	5.1	4.7
United Kingdom <sup>4</sup> .....	7.6 (30.8)	8.2 (34.0)	5.2 (24.1)	5.0 (23.3)
United States <sup>5</sup> .....	32.7 (18.8)	30.8 (22.5)	21.0 (23.8)	17.3 (22.3)

<sup>1</sup> Based on end-year data; levels for any given period are not comparable across countries because of conceptual and institutional differences. Demand deposits are defined as: total domestic-currency demand deposits at chartered banks for Canada; domestic-currency sight or current-account deposits at banks in France, Italy and Japan; non-bank sight deposits at banks in Germany; private-sector sight deposits at monthly reporting banks in the United Kingdom; demand deposits at commercial banking institutions in the United States. <sup>2</sup> Based on data for 1977. <sup>3</sup> Based on data for September 1982.

<sup>4</sup> Figures in parentheses represent the ratios of London clearing banks' total sterling sight deposits to their total liabilities. <sup>5</sup> Figures in parentheses represent the ratios of non-deposit funds plus large time deposits to total liabilities.

Not surprisingly, as the next table shows, the declining importance of currency and transaction balances for making payments has led to a fall in the ratio of  $M_1$  to  $M_2$  in all major countries. The fall has been particularly steep in Canada, where the ratio dropped by nearly 40 per cent. between 1976 and 1982. By contrast, over the same period in the United States the ratio declined by only about 10 per cent., despite the rapid pace of innovation. To a considerable extent, this reflects the fact



that financial innovations in the United States have also reduced the significance of  $M_2$  through the availability of many new financial instruments which are close substitutes for assets included in that aggregate.

Changes in  $M_1$  relative to  $M_2$ .<sup>1</sup>

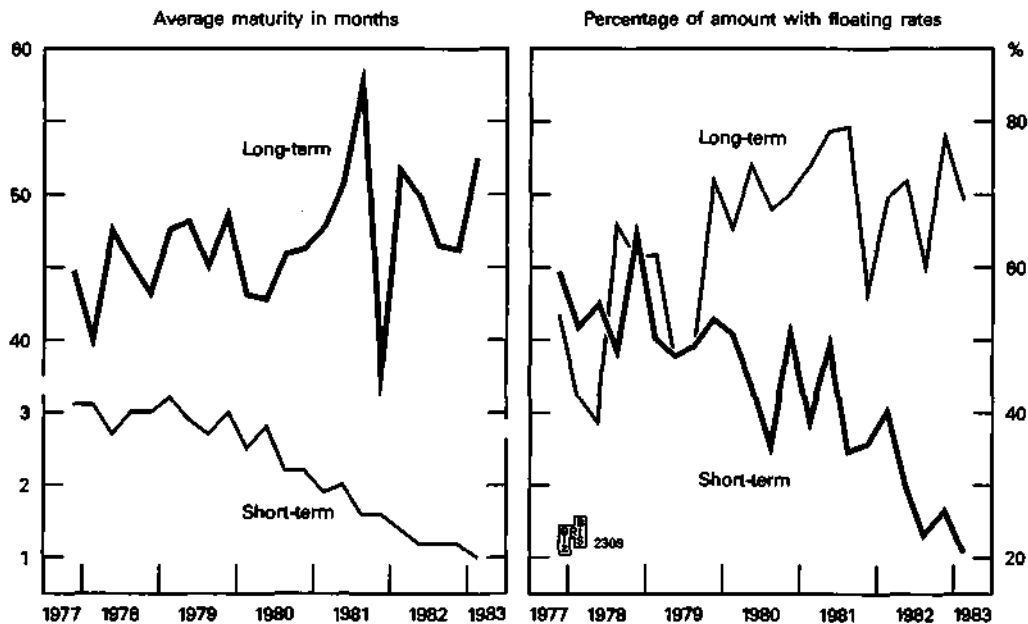
Country	1976	1978	1981	1982
	percentage ratios			
Canada .....	23.5	22.1	15.1	14.6
France .....	51.9	49.8	49.2	49.0
Germany <sup>2</sup> .....	35.0	35.6	32.3	32.0
Italy .....	50.9	50.3	45.5	45.5
Japan .....	38.5	36.9	32.0	31.3
United Kingdom <sup>3</sup> .....	47.1	52.6	41.7	42.5 <sup>4</sup>
United States .....	26.7	25.9	24.2	23.9

<sup>1</sup> Based on fourth-quarter average levels; seasonally adjusted data except in the case of Italy. <sup>2</sup> Ratio of  $M_1$  to  $M_2$ . <sup>3</sup> Ratio of  $M_1$  to sterling  $M_2$ . <sup>4</sup> New definition for  $M_1$ ; 40.1 when estimated using earlier definition.

### Maturity shortening and variable rate lending.

The financial intermediaries have attempted to seek protection from the higher risk arising from high and unpredictable interest rates by introducing changes on the assets side of the balance sheet. In particular, increases in interest-sensitive liabilities (frequently of short duration) have been matched by reducing the maturity of fixed rate loan contracts and/or by stepping up variable rate lending. Both techniques appear to have been applied extensively in the United States in recent years. As

United States: Structure of commercial and industrial bank loans.



shown in the preceding graph, 60–80 per cent. of long-term commercial and industrial bank loans in the last three years or so were made on a variable rate basis. The graph also shows that the average maturity of short-term commercial and industrial loans has fallen over the last few years. In the United Kingdom mortgage lending by building societies has for many years been on a floating rate basis. In both that country and France medium and long-term variable rate lending by banks appears to have increased considerably, although reliable data are not currently available. Similarly, in Italy explicit or de facto indexation of assets and loans has been going on for several years, but its extent is difficult to quantify.

In Germany the indexation of loan contracts is virtually non-existent, but there has been quite an extensive shortening of loan maturities over recent years. The ratio of increases in short-term lending to increases in total bank lending, as shown in the following table, was around 22 per cent. during 1980–82, compared with 13 per cent. in the preceding six years and 11 per cent. during 1974–75. The differences are even larger when measured in terms of lending to the private sector alone. The table also shows that the share of short-term bank credit flows relative to total bank credit flows rose in France and Italy during 1980–82. However, in the case of France the movements were less marked during 1980–82 than during the 1974–75 period of economic slowdown.

Bank credit and maturity shortening.<sup>1</sup>

	France	Germany <sup>2</sup>	Italy
	ratio of changes in short-term bank credit to those in total bank credit		
1974–79 .....	31.3	12.8 (17.2)	61.9
1980–82 <sup>3</sup> .....	35.4	21.8 (27.1)	65.8
1980–81 .....	33.5	23.8 (29.9)	74.4
Memorandum item: 1974–75 .....	41.9	11.0 (5.5)	52.1

<sup>1</sup> Levels for any given period are not comparable across countries owing to institutional and other differences. <sup>2</sup> Figures in parentheses are based on the expansion of short-term bank lending to the private sector relative to the expansion of total bank lending to the private sector. <sup>3</sup> Data for 1982 are partially estimated.

### Country developments.

The above discussion suggests that the course of financial innovations has differed substantially from one country to another. Underlying the divergent pace of innovations are a variety of influences: notable among them are differences in inflation and interest rates, in the institutional and financial structures, in the rôle of regulations and moral suasion, in the breadth and depth of financial markets, in the application of electronic funds transfers and new information technology and in the rôle of the Euro-markets. It is important to keep these differences in mind when looking at developments in individual countries. But it must be emphasised that the

diversity of the financial changes mentioned below is particularly difficult to appreciate without a recognition of the vast dissimilarities among countries in the structure of the financial industry and in the regulatory framework. For instance, with respect to the financial structure, the banking system is far less concentrated in the United States than it is in the other large countries. Also, whereas non-bank financial intermediaries offer strong competition for the banks in the United States and, to a somewhat lesser extent, in the United Kingdom, France, Canada and Japan, they do not play a significant rôle in Germany or Italy.

In terms of regulatory constraints, extensive interest rate controls continue to exist in Japan and France, while Germany, Canada, Italy and the United Kingdom have not had any significant interest rate controls since at least the early 1970s. In the United States many interest rate ceilings have been dismantled over the last few years and some, such as Regulation Q, are gradually being phased out under the Monetary Control Act of 1980. There are significant balance-sheet constraints (in the form, for example, of credit expansion limits) in Italy, France and Japan, but none in the other major countries. Finally, even though all the countries have reserve requirements, their level and institutional coverage differ considerably.

Broadly, these comments on developments in individual countries aim to supplement the analysis in the previous section. The focus, here again, is on changes which might significantly alter the workings of the financial system. At a somewhat more specific level, however, the analysis considers mostly (though not exclusively) those innovations which tend to distort the meaning and interpretation of the targeted monetary aggregates. The targeted aggregates differ from one country to another (see Chapter IV), and the innovations highlighted may have different implications from case to case.

The extent of financial innovation has been by far the greatest in the *United States*. On the one hand, only two years after being redefined, the existing monetary aggregates, especially  $M_1$  and  $M_2$ , are facing serious definition and measurement problems due to the introduction of new financial instruments and cash management practices. On the other hand, variable rate lending, maturity shortening and a whole range of other new practices in the financial industry, as well as the development of new financial markets, are changing the workings of the financial system. Many of these changes seem to be part of a continuing process, and so the problems stemming from them could become even more serious with the passage of time.

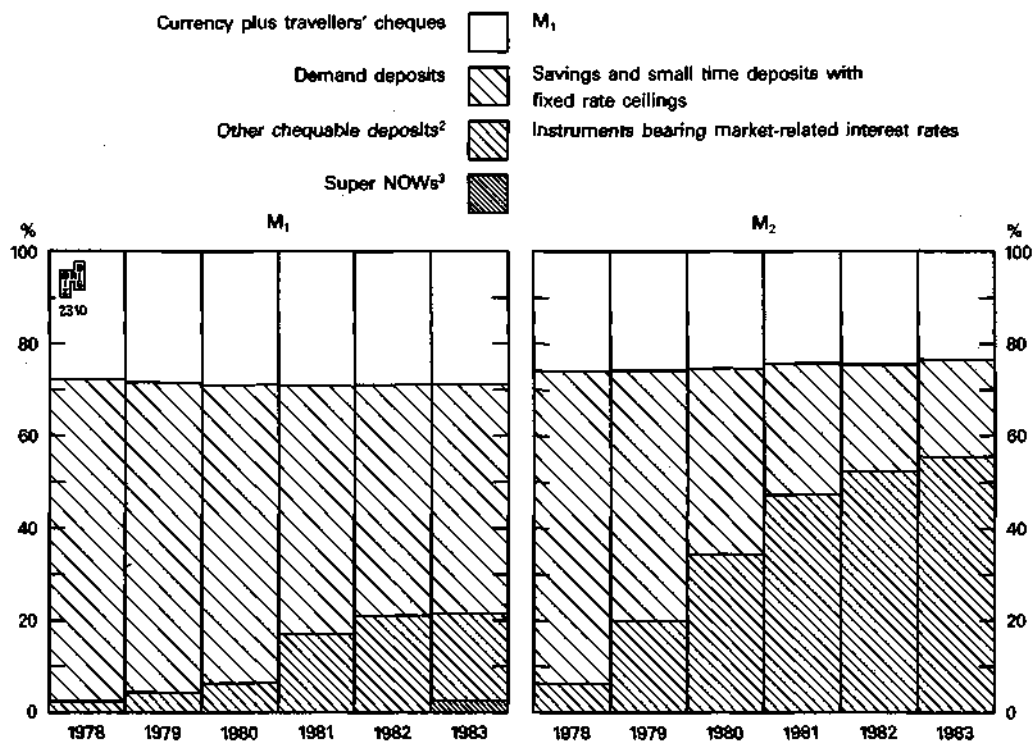
The redefinitions in early 1980 came in response to earlier financial innovations that had altered the meaning and reduced the significance of the old measures. In particular, those innovations had shifted the  $M_1$  demand function downwards during 1974–76. Further innovations occurred in the subsequent period and since the redefinitions their pace seems to have become even faster, partly owing to the deregulatory changes brought about by the Monetary Control Act. As a result, the redefined aggregates have once again lost their intended meaning.

Both  $M_1$  and  $M_2$  have been greatly affected by many new financial instruments or practices, as well as by the increased use of instruments developed before the redefinitions. A typical list would certainly include money-market certificates,

money-market mutual funds, negotiable order of withdrawal (NOW) accounts, automatic transfer service accounts, "sweep accounts" and other cash management practices, automated clearing houses and teller machines, and more recently the introduction of money-market deposit accounts in December 1982 and of super NOW accounts in January of this year. These and other similar instruments and practices have reduced the payments rôle of non-interest-bearing transaction balances and have led to drastic changes in the composition of  $M_1$  and  $M_2$  (see graph). Following the nationwide introduction of NOW accounts towards the end of 1980, the interest-yielding component of  $M_1$  rose from about 6½ per cent. to nearly 22 per cent. in January 1983. Over the same period the share of ordinary demand deposits fell from 65 per cent. to 50 per cent. As shown in the table on page 52, the proportion of  $M_2$  accounted for by  $M_1$  has fallen appreciably over the last few years. But a more significant change in the composition of  $M_2$  has resulted from a sharp increase in the share of instruments paying market-related rates, which rose to nearly 56 per cent. early this year from about 20 per cent. in late 1979, just before the new definition was introduced.

In addition to the variable rate lending developments mentioned in the previous section, many new financial-market vehicles have emerged with potential for providing protection from risk. Some of these instruments also afford an opportunity for speculative profits. The list of such instruments is endless and is

United States: The changing composition of money.<sup>1</sup>



<sup>1</sup> 1978-82: fourth-quarter data; 1983: January. <sup>2</sup> Mostly NOWs with fixed interest rates. <sup>3</sup> Chequeable deposits bearing market-related interest rates.

constantly changing: floating rate notes, commodity-linked bonds, adjustable rate mortgages, deep discount (zero coupon) bonds, interest rate futures, foreign currency futures, options on futures, bonds with put options, pass-through securities, all-savers certificates, variable life policies and so on. Most of these instruments have no *direct* effect on the measurement of conventional monetary aggregates such as  $M_1$  or  $M_2$ . However, these instruments and the associated developments in financial markets are changing the intermediation process and the workings of the financial sector with respect to the non-financial sector. Financial markets for some of the new instruments (e.g. currency and interest rate futures) have been developing rapidly, while those for the old ones (e.g. CDs, Euro-dollars, RPs, commercial paper and bankers' acceptances) have been expanding and deepening. Most of these markets are accessible to banks and to non-bank financial institutions as well as to non-financial businesses (in some cases even to households).

In *Canada*, unlike the United States, the deregulation or dismantling of interest rate controls has not been a factor in inducing financial innovation. Regulations on interest rates were removed under the 1967 Bank Act. Innovations in Canada have come largely in response to high and variable interest rates and the application of new technology, and have mainly affected the activities of the banking (including quasi-banking) sector.

Since around the mid-1970s, major innovations have occurred in two areas of banking activity: corporate accounts and household accounts. These innovations have substantially altered the meaning of  $M_1$  — the primary target of monetary policy until it was suspended in 1982 — and have reduced its significance.

So-called cash management packages have become widely available to large and medium-sized companies over the last few years. Under these packages, funds from various accounts can be consolidated into a single account on a daily basis. This reduces the level of working balances and allows for overnight investment of surplus funds. In addition, the use of regional lock boxes and pre-authorised withdrawals from accounts enables flows to be speeded up, thus allowing further reductions in working balances.

In recent years two major innovations have taken place with respect to Canadian household deposits. In 1979 banks started offering to individuals and households savings accounts with interest computed daily. Some of the funds flowing into these accounts came from personal chequing accounts, but most reflected shifts from other forms of savings accounts. A second innovation in household deposits took place in 1981, when banks began to offer daily-interest chequing accounts which combine features of both daily-interest savings accounts and personal chequing accounts. These new accounts are now gaining popularity and greatly affecting the demand for  $M_1$ .

The *United Kingdom* has been experiencing significant financial innovations since the early 1970s. Changes in regulations and monetary régimes, high and variable interest and inflation rates and, more recently, technological developments have been the major influences underlying the innovation process. In September 1971, as a result of a package of financial reforms (known as "Competition and

Credit Control”), ceilings on bank lending were removed and banks were requested to abandon their cartel agreement on interest rates. This appears to have spurred the growth of CDs and other deposits paying market-related interest rates to finance higher bank lending and led to an acceleration of sterling  $M_3$ . The authorities responded, *inter alia*, by imposing, on more than one occasion, the supplementary special deposit scheme (or “corset”) for limiting the growth of interest-bearing bank deposits. The “corset” — eventually abolished in 1980 — discouraged interest rate competition for deposits, while encouraging non-controlled forms of bank and non-bank financing.

Another major financial change followed the elimination of all foreign exchange controls in 1979. This increased the importance of UK residents’ foreign currency deposits, which rose very sharply to 18 per cent. of sterling bank deposits by the third quarter of 1981 from around 11 per cent. at the end of 1978.

The process of financial change has continued to move ahead in recent years. Banks have stepped up their efforts to attract retail deposits; for example, they now offer contractual deposits combined with general borrowing privileges, and savings deposits tied to current accounts with easy transfer between the two. Since 1980 the clearing banks have been active on a large scale in the residential mortgage lending market, in direct competition with the building societies. In response, the latter have become much more interested in innovations. The popularity of credit cards has steadily increased, with about 25 per cent. of all adults now holding credit cards, compared with 13 per cent. in 1977. Following the example of the United States, financial futures markets have opened up in the United Kingdom during the last year. Finally, the Government itself has recently offered index-linked securities to the general public in an attempt to boost National Savings.

In *Germany* the shortening of bank loan maturities, mentioned earlier, was not the only significant innovation on the financial scene over the last few years. Some existing financial instruments appear to have been used more intensively than in the past, which could be affecting the meaning and significance of the broad aggregate  $M_3$  on the basis of which the targeted aggregate central-bank money is measured. The general rise in interest rates in 1980–81 sparked bank competition for funds. For the most part, this was concentrated on instruments that are included in  $M_3$ . There was apparently, however, some effect on instruments outside  $M_3$  as well. For example, the growth of bank bonds with a maturity of less than four years held by non-bank residents accelerated substantially in 1980 and 1981. These bonds appear to be a fairly close substitute for savings deposits included in  $M_3$  but, unlike those deposits, are not subject to reserve requirements. If these bank bonds had been included in  $M_3$ , its growth rate would have been 2 percentage points higher than the recorded 6.2 per cent. in 1980 and almost double the 5 per cent. recorded in 1981. Bank bonds continued to grow considerably faster than  $M_3$  even in 1982. While all of the increased demand for these bonds has not been diverted from  $M_3$  assets, there could be a significant correlation between that demand (especially the part related to bonds with a maturity of less than one year) and the lower growth of  $M_3$ .

Euro-currency deposits of German non-bank residents have also become more important over the last three or four years. These deposits rose sharply in 1980 and

1981 and may have influenced the growth of  $M_3$ . Over those two years the inclusion of liabilities of foreign branches and subsidiaries of German banks to German non-bank residents would have raised  $M_3$  growth by around  $\frac{1}{2}$  percentage point on an annual basis.

The banking system and financial markets in *Japan* have undergone significant changes during the last decade. Over the years the authorities have encouraged greater interest rate flexibility, while still maintaining substantial interest rate and other controls. There has been a continuous but gradual development of the markets for bonds and short-term paper, and of new financial instruments. The gradualness of the pace of changes partly reflects the fact that the authorities have tried to guide or control their extent.

Several significant financial innovations have taken place in recent years. In 1978 the Government began to offer short-term bonds with maturities of two or three years. In May 1979 negotiable CDs were introduced, and these have since grown rapidly. The 1980 changes in foreign exchange regulations have permitted a faster growth of foreign currency deposits. Also in 1980 the Government introduced a bond mutual fund, geared to the needs of the personal sector, fund shares being issued by the security houses, which invest the proceeds mainly in government bonds and call money.

The financial markets in *France* have experienced at least two potentially significant changes in recent years. Firstly, floating rate bonds have been expanding rapidly. Among others, banks have been very active in issuing these bonds. In 1981, for example, around 40 per cent. of bonds issued by banks were on a floating rate basis. Partly as a result of the popularity of floating rate issues, the share of bonds in total financial asset flows rose to somewhat more than 28 per cent. in 1982 from about 17 per cent. in 1979.

Secondly, a number of money-market funds have emerged since late 1981. This development was triggered by the French authorities' decision to raise the minimum level of deposits that are not subject to interest rate ceilings to Fr.fr. 500,000 for six months from Fr.fr. 100,000 for one month. But it also owes something to the Government's financing needs, since the money-market funds have been helping to hold up the bond market — bonds being by far the most important financial asset in which funds can be invested in France. Whether or not the money-market funds are having any significant effect on the demand for  $M_2$  — the targeted aggregate — is not clear at this stage.

In *Italy* one of the most significant recent financial changes has been the development of the Treasury bill market. The popularity of Treasury bills (low-denomination and tax-free) led to a considerable disintermediation of bank deposits between 1978 and 1981. Over that period the share of Treasury bills in financial asset flows rose from 7 per cent. to 32 per cent., while that of deposits fell from over 60 per cent. to around 40 per cent. The bank deposit disintermediation and the increased demand for Treasury bills resulted, in part, from the tightening of the bank credit ceilings, which reduced the banks' demand for deposits and left them with little incentive to raise their deposit rates. In 1982, as the differential between

the Treasury bill rate and deposit rates narrowed, part of the earlier deposit disintermediation was reversed.

### **Innovations and monetary policy.**

It is clear from the preceding discussion that the United States, Canada and the United Kingdom have been in the vanguard as regards financial innovation in recent years. Elsewhere the overall pace of innovation has been more or less gradual or otherwise kept under control. The high degree of financial innovation in the United States, Canada and the United Kingdom has aggravated at least three major problems concerning the intermediate monetary targets of monetary policy. Specifically, there are serious difficulties in defining and measuring monetary aggregates, controlling them and interpreting the significance of their movements. Accordingly, this section presents a brief overview of these difficulties.

The difficulties in defining and measuring monetary aggregates have already been illustrated, to a considerable extent, in the country notes above. To sum up, financial instruments with both investment characteristics (i.e. market-related interest payments) and transaction characteristics are becoming very common, making it difficult satisfactorily to identify any given instrument in terms of its predominant characteristic. In addition, the declining transaction costs of shifting from one instrument to another are widening the spectrum of instruments that can be used for making payments. The identification of the degree of "moneyness" is especially important if monetary targets are to be specified in terms of  $M_1$ , as has been the case in the United States and, until recently, in Canada and is now in the United Kingdom. But this problem is much more general, as is evidenced by the measurement difficulties for sterling  $M_3$  in the United Kingdom; financial innovations create instruments which are substitutable for those included in both broad and narrow aggregates.

In all three countries financial innovations seem to have made it more difficult to control the targeted aggregates over the short run because of shifts in the demand for those aggregates (see below), in the currency/deposit ratio and in the effective reserve ratio resulting from transfers out of lower-yielding deposits into higher-yielding instruments not subject to reserve requirements. During the last few years these shifts appear to have been significant, but it is difficult to estimate the extent to which they were associated with the innovation process.

In the United States and the United Kingdom, where broader aggregates ( $M_2$ ,  $M_3$  and sterling  $M_3$ ) have been used as targets, it has become more difficult to control them over the short run through changes in interest rates, because the interest elasticity of the demand for them has declined over time. That decline stems from a rise in the share of deposits linked to market interest rates within these aggregates; since the yield on such instruments tends to rise (fall) with the rise (fall) in the general level of market rates, there is no incentive to shift out of or into them. Given that the proportion of interest-bearing deposits in  $M_1$  is also increasing, especially in the United States, changes in interest rates are likely to become less effective over time in the short-run control of that aggregate as well.



From a long-run perspective, the effects of changes in the financial system on the relationships between monetary aggregates, interest rates and economic activity are more important than any short-run monetary control problems. The usefulness and significance of the intermediate targets obviously depend on the nature of these relationships. In this respect the two main issues concern the effects of recent financial innovations on the stability of the demand for money and on the nature of the mechanism whereby monetary influences are transmitted to the real sector.

For all three countries, there is considerable evidence of at least one shift in the money-demand function in the early or mid-1970s:  $M_1$  in the case of Canada and the United States, and  $M_3$  in the case of the United Kingdom. Some recent evidence also indicates a further shift in the early 1980s. More specifically, during 1980–81 and/or 1981–82 the  $M_1$  functions for Canada and the United States are estimated to have shifted downwards, while the sterling  $M_3$  function is believed to have shifted upwards. These findings of a recent shift in the demand for money are consistent with the analysis of monetary velocity and interest rates presented above. For the United States, however, some economists dispute this evidence and provide alternative estimates which suggest that so far the recent wave of financial innovation has not caused a significant shift in the demand for  $M_1$ . The explanation for the opposite findings appears to be that the downward shift was masked by an upward shift caused by the introduction of the nationwide NOW accounts around end-1980.

Empirical studies of this kind are frequently ambiguous and imprecise. What is perhaps more important about the recent behaviour of the estimated money-demand functions is that it suggests a considerable increase in instability over the short run — that is, over periods of one to four or five quarters — even if it is assumed that the very long-run behaviour may have remained relatively stable. For example, prediction errors in the demand for US  $M_1$ , based on the Federal Reserve Board's quarterly econometric model, have been substantially larger since early 1980 than in the previous three or four years.

In the United States, Canada and the United Kingdom, as well as in some other countries, the innovation process may also be changing the mechanism

Variability of long-term interest rates.\*

Countries	Standard deviation of long-term monthly rates					Standard deviation of trend-adjusted long-term monthly rates				
	1968–70	1971–73	1974–76	1977–79	1980–82	1968–70	1971–73	1974–76	1977–79	1980–82
United States .....	0.8	0.4	0.4	0.9	1.5	0.5	0.3	0.5	0.6	1.5
Canada .....	0.6	0.4	0.5	0.7	1.7	0.4	0.3	0.5	0.4	1.6
United Kingdom ..	0.8	1.2	1.0	1.0	1.4	0.5	0.9	1.1	1.0	1.6
Germany .....	0.9	0.8	1.2	0.9	1.0	0.8	0.7	1.2	0.8	1.0
Japan .....	0.3	0.6	0.3	0.8	1.0	0.6	0.7	0.4	0.9	0.9
France .....	0.7	0.5	0.4	0.7	1.4	0.3	0.5	0.7	0.8	1.1
Italy .....	1.1	0.5	1.7	0.5	2.5	0.6	1.1	1.1	1.0	1.9

\* Secondary market yields for the United States, ten-year Federal Government bonds; for Canada, government bonds with maturities of ten years and more; for the United Kingdom, government stocks with maturities of twenty years; for Germany, public-sector bonds; for Japan, local-authority bonds; for France, public-sector bonds; for Italy, Treasury bonds.

through which monetary policy influences are transmitted to the real sector. The greater interest rate sensitivity of financial institutions' liabilities and assets, variable rate lending and maturity shortening, the development and integration of financial markets and, more generally, increasing competition in the financial system mean that interest rate changes, policy-induced or otherwise, tend to spread more quickly over the range of financial assets and liabilities. These developments are therefore enhancing the rôle of interest rates in influencing the real economy. At the same time, the deregulatory changes in certain countries (e.g. dismantling of many deposit rate ceilings and usury laws in the United States, removal of "corset" and exchange controls in the United Kingdom, and relaxation of exchange controls and of certain interest rate regulations in Japan) are reducing the rôle of credit availability or "non-price rationing" as a channel of monetary influences to the non-financial sector and correspondingly adding to the burden of influence that must be carried by market interest rates.

The elimination of or reduction in various sources of market imperfections and the increasing competition in the financial system imply greater fluctuations in interest rates than before. This seems to be consistent with the actual behaviour of interest rates in recent years relative to the earlier period. The accompanying table presents standard deviations of actual and trend-adjusted long-term monthly rates for five three-year periods from 1968 to 1982. These two measures show that, with the possible exception of Germany, interest rate variability was higher in the three-year period 1980-82 than in the earlier years.

The trend away from credit rationing and towards greater competition for funds and the associated greater variability of interest rates may be strengthening the link between real expenditure and interest rates. In the new environment, interest rate effects may become more evident and easier to estimate, but some significant changes in the behaviour of economic agents may also become apparent. Previous estimates of the interest elasticities of various components of final demand may prove to be no longer valid and, after a transitional phase, they could turn out to be higher than before.

The innovation process and the problems and issues raised by that process are for the time being in a continual state of flux in a number of countries. Where this is the case, monetary policy cannot rely solely on controlling the movements of monetary aggregates, which are undergoing unpredictable changes in meaning and significance. This has been recognised by the authorities in the United States, Canada and the United Kingdom. For this and other reasons, in 1982 all three countries shifted to a more flexible monetary policy strategy under which various monetary aggregates, as well as other indicators, are being used as guides for monetary policy (see Chapter IV, pages 73-78).

#### IV. MONETARY POLICY AND THE DISINFLATIONARY PROCESS.

##### Highlights.

Interest rates in the main North American and European markets declined appreciably last year. In relation to recorded rates of inflation, however, they remained very high.

As short-term interest rates moved down more than longer-term rates, the strains on financial institutions which had been associated with inverse yield structures eased. In deep recession, however, capital-market yields were kept exceptionally high by fears of a resurgence of inflation, concern about large prospective borrowing requirements in the public sector and awareness of the continuing need for businesses to restructure their balance sheets. Market concern about financial positions was at times reflected in sizable risk premia incorporated in the interest rates which some borrowers had to pay and, more generally, as banks were obliged to make larger provision for loan losses, they were slow to lower their lending charges when money-market rates declined. Hence, despite earlier moves towards a greater use of variable interest rates in lending, the benefits of lower interest rates were not felt as widely or as quickly as might have been expected.

Monetary policy has borne the main burden of the struggle against inflation and of efforts to establish a stable climate of price expectations. Last year rates of wage and price increase came down, but the adjustment process entered a very difficult stage. In several countries, however, the authorities were in a position to respond to the needs arising from recession and financial fragility without putting longer-term adjustment aims at risk, as confidence in their policy approaches had built up over the last few years. In a troubled and rapidly changing environment judgement had to play a larger rôle in the implementation of policy. In the United States, in particular, the markets realised that there was a need to accommodate the exceptional demand for liquidity associated with recession and accepted that a broader, longer-term approach to control was called for. It was also perceived that the monetary aggregates were being seriously distorted by financial innovation at a crucial time.

Publication of objectives for the monetary aggregates is still generally thought to serve useful purposes in the major industrial countries. However, there has been a growing tendency in a number of them to introduce greater flexibility into such policies and to take other financial indicators and developments in the economy more into account in appraising monetary conditions.

In certain countries interest rate policies geared to defending the domestic currency in the exchange market have been a cornerstone of efforts to restore price stability. Declines in rates of inflation permitted the authorities in many of these countries to encourage an easing of monetary conditions last year.

In present circumstances high real interest rates continue to be an obstacle to a sustainable recovery of the world economy. Fears of a resurgence of inflation place strict limits on what can be achieved by monetary policy alone, however, and in most cases imbalances in the private and public sector impose additional constraints. In some countries an improvement in the external position has reduced the risk that a lowering of interest rates will lead to depreciation of the currency in the exchange markets and to a resurgence of cost inflation. However, countries' positions differ considerably in the scope available for encouraging a decline in interest rates.

#### **Nominal interest rates.**

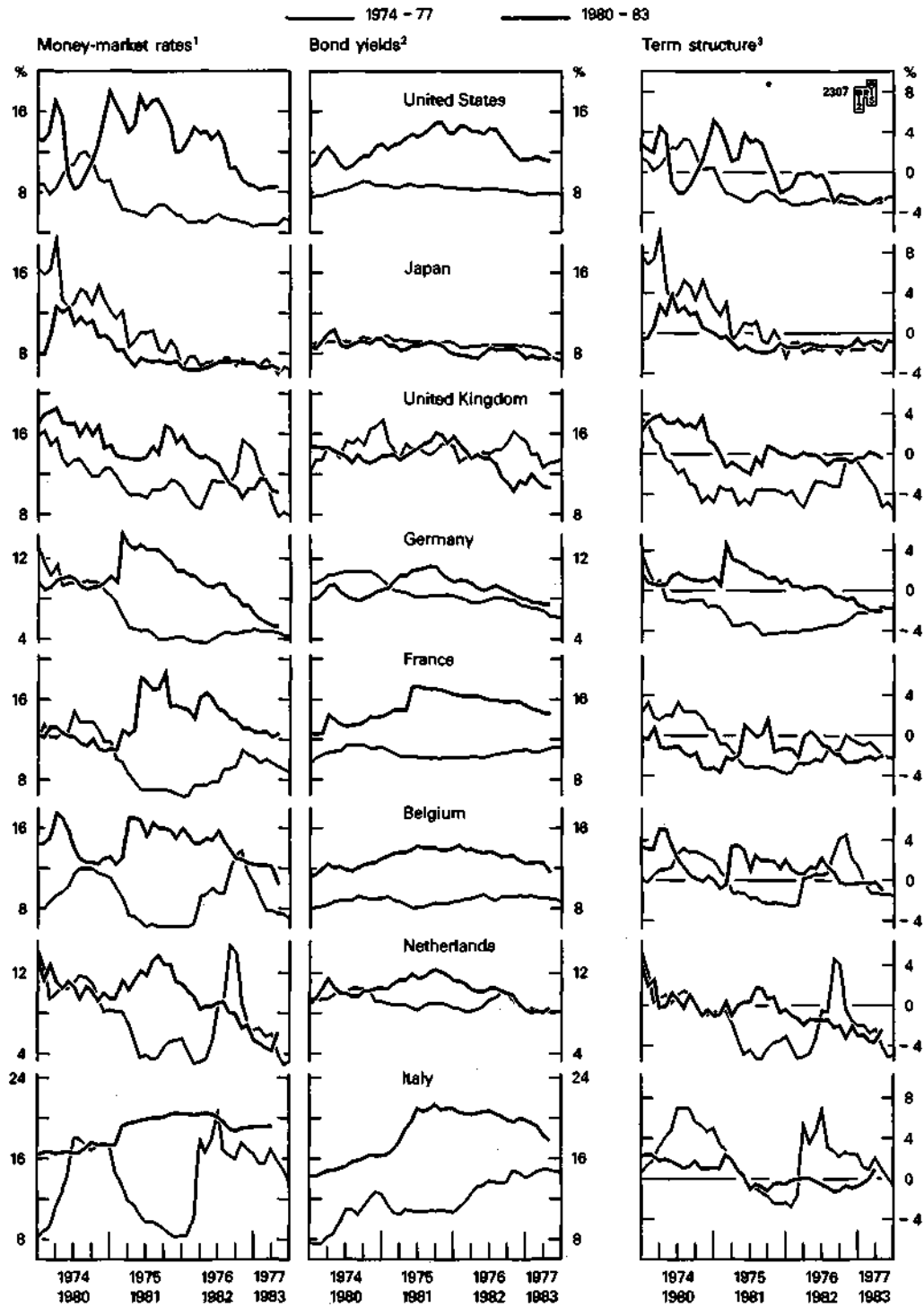
*Recent developments.* To the relief of all types of borrower — and many of their creditors — interest rates in the principal markets of North America and Europe eased considerably last year. Even in comparison with developments in the troubled years following the first oil crisis the latest high interest rate period has been painfully protracted. And though the decline last year was in fact steeper than most optimists had expected, the level of interest rates in many countries remained extraordinarily high for a period of recession.

In the United States money-market rates had fallen in the autumn of 1981 but they moved up again in early 1982 and remained very high until mid-year. Then they dropped by 5-6 percentage points within six months. The markets had become more confident that the impressive recent gains in the struggle against inflation could be consolidated and accepted that, accordingly, monetary policy could now take greater account of recession and the need to foster an economic recovery. Nevertheless, long-term interest rates were slow to move down and in early 1983 bond yields were still some 3 percentage points higher than they had been on average during the 1970s.

Once interest rates in the United States began to move down, monetary authorities in European countries could resume their efforts to lower rates in their own money markets. In the course of 1982 short-term interest rates fell by between 2 and 4 percentage points in nearly all the European countries shown in the graph overleaf, though in Italy they declined less. By the spring of 1983 the level of most of these rates was less than half that recorded at their peaks in 1980 and 1981. In March short-term interest rates in Belgium and France had to be raised to cope with exchange-market pressures. However, following a currency realignment in the European Monetary System money-market rates in these countries could be lowered. In the United Kingdom money-market interest rates remained sensitive to the oil-price-related outlook for sterling but on balance declined substantially between 1981 and early 1983.

Last year bond yields fell back progressively in Germany, the Netherlands, Switzerland and (up to November) the United Kingdom, but remained very high in France, Belgium and Italy. In these three countries the external current-account position is in deficit, and in Italy and Belgium budget deficits are comparatively large. Moreover, the underlying rate of inflation is still high in France and even more so in Italy.

Short and long-term interest rates.



<sup>1</sup> 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. <sup>2</sup> Representative rates; for the United States, industrial bonds; for the United Kingdom and the Netherlands, government bonds; for other countries, various public-sector bonds. <sup>3</sup> Short-term interest rates minus long-term rates.

In Japan, where the process of adjustment following the second oil crisis was already well advanced, interest rates remained at low levels last year. In Canada, on the other hand, interest rates rose on balance in the first half of 1982, when short-term interest rate differentials vis-à-vis the United States increased in a context of exchange-market pressures. After mid-year, however, with the Canadian balance-of-payments position improving, interest rates in Canada came down even more than interest rates in the United States.

*Yield structure.* With bond yields remaining high or coming down much less than money-market rates, term yield curves, which had been steeply inverse for unprecedentedly long periods in 1980 and 1981, became positively sloped in the course of last year — with the slope unusually steep in some cases. A slow response of long-term interest rates to declines in money-market rates has been observed on previous occasions — typically it reflects restructuring of corporate debt in recession. Last year government budgetary imbalances were an additional influence. Moreover, the large gap between money-market rates and bond yields evident in the United States in particular could be partly interpreted as an indication of doubt in the markets as to whether the low rates of inflation being recorded in recession were sustainable in the medium term.

*Interest rate variability.* The easing in money-market conditions last year was accompanied by a marked decline in the volatility of interest rates. In the United States, where the efforts made since October 1979 to gain closer control over movements in the money stock in the very short term had been associated with extreme interest rate instability, there has recently been a noteworthy decline in the scale of month-to-month movements in money-market interest rates (see page 75) and also in day-to-day variability. The latter can be clearly seen in the table showing the trend-adjusted variability of day-to-day interest rates in consecutive six-month periods. There can be little doubt that the relative stability seen in the last six months reflects a move away from short-term targeting of the monetary aggregates and progress in bringing down inflation. In most other countries the day-to-day variability of money-market interest rates had remained much lower than in the United States in the 1980–81 period, but it nevertheless decreased last year. In Germany, the Netherlands and Switzerland, in particular, the process of lowering interest rates has been much smoother and has been fraught with fewer exchange-

Day-to-day variability of money-market interest rates.\*

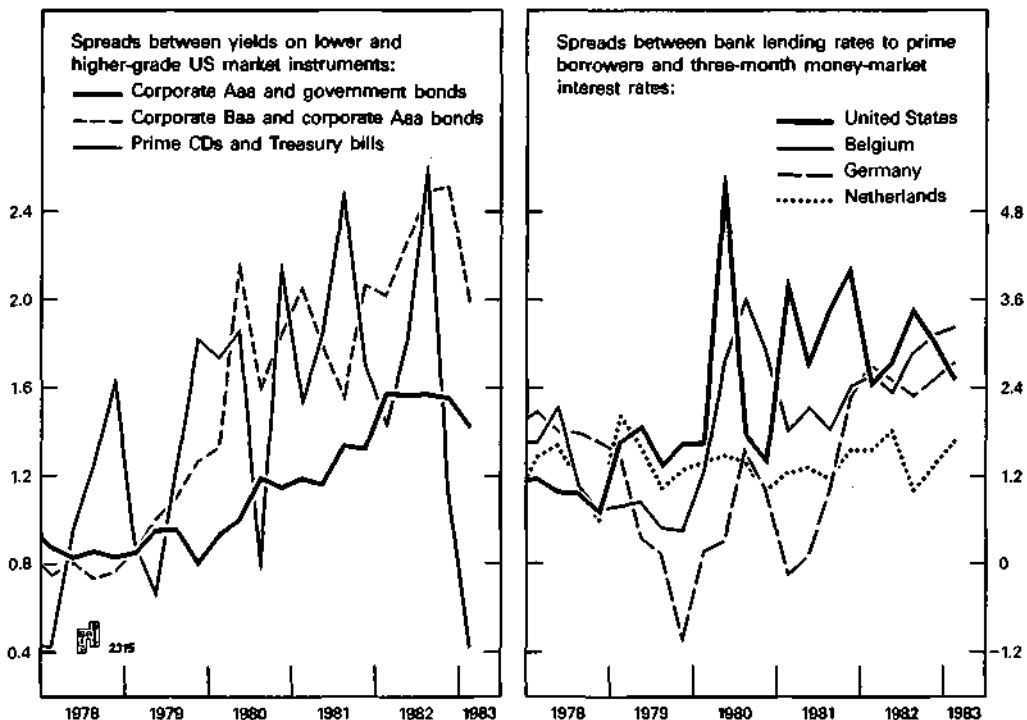
Six months ending	United States	Canada	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland
September 1979 ...	0.43	0.25	0.53	0.19	0.27	0.05	0.54	0.38	0.37
March 1980 .....	1.27	0.53	0.61	0.40	0.35	0.75	0.61	1.28	0.68
September 1980 ...	2.58	1.04	0.42	0.34	0.26	0.31	0.53	0.41	0.44
March 1981 .....	2.12	1.27	0.47	0.96	0.46	0.43	0.48	0.48	0.75
September 1981 ...	1.10	0.81	0.52	0.23	1.92	0.06	0.49	0.53	0.74
March 1982 .....	1.36	0.95	0.51	0.29	0.92	0.20	0.51	0.34	0.54
September 1982 ...	1.08	1.01	0.33	0.34	0.28	0.32	0.60	0.42	0.83
March 1983 .....	0.43	0.40	0.54	0.25	0.27	0.07	0.59	0.28	0.47

\* Variability is measured by the standard error of estimates from regressions on time for each six-month period. Based on daily measures of rates on three-month instruments, except for France (one-month). Domestic money-market rates for the United Kingdom, France and Italy; Euro-currency rates for other countries.

market uncertainties than the earlier process in which rates were raised. A decline in the volatility of money-market rates is the more welcome since there are indications that in some countries fluctuations in short-term interest rates have come to be more closely reflected in the level and variability of capital-market yields in recent years than was usual in the past.

*Risk premia and the terms of lending by financial institutions.* At times last year interest rate differentials reflected marked sensitivity in the financial markets to weaknesses in balance-sheet positions caused by the recession and high interest rates. This, and a tendency towards high risk aversion in general, can best be illustrated by developments in US markets. Both specific and general concerns were reflected, for instance, in a sharp rise just after mid-year in the differential between the yields on certificates of deposit and that on Treasury bills. Similar developments can be seen in the longer-term markets in the yield spread between corporate bonds rated Baa quality and those rated Aaa, or in the spread between yields on corporate bonds in general and those on government securities. Risk premia of many kinds in the US markets subsequently declined almost as sharply as they had risen. In the bond market, however, there has been some tendency for quality-based yield differentials to drift upwards over a period of years. The risk premia incorporated in the long-term interest rates which corporate borrowers of less than prime credit standing have to pay still appear to be about 1½ percentage points higher than they were in 1978.

Risk premia and intermediation spreads.\*



\* In percentage points.

In many countries financial institutions were faced last year with pressure on their profitability deriving from the need to make larger provisions for loan losses. As a result they tended to increase the margins between their interest-bearing assets and liabilities and were unusually hesitant in adjusting their lending charges downwards in response to declines in money-market interest rates. In a recession behaviour of this kind can pose something of a dilemma for the authorities. Over a longer period, however, banks in many countries have increased the share of their lending which bears adjustable interest rates (see Chapter III). Some borrowers must therefore have benefited from declines in short-term interest rates soon after they occurred.

### Real interest rates.

In a number of countries where long-term interest rates declined last year the falls were much less than those in rates of inflation. In some of the countries shown in the table bond yields, deflated by current rates of increase in consumer prices, came down last year, but in most cases they rose and were much higher in early 1983 than they had been in 1980. Measured in this way, real long-term interest rates in early 1983 ranged from around 3 per cent. in Germany (about normal for that country), Italy and the United Kingdom to some 7 per cent. in the United States. In deflated terms, long-term interest rates are also high in Japan.

Figures of this kind must be approached with caution. Recorded rates of price increase are often a poor surrogate for inflationary expectations — the latter are

Real bond yields.

Items and periods	United States	Japan	United Kingdom	Germany	France	Italy	Belgium	Switzerland
annual averages, in percentages per annum								
Real yields <sup>1</sup>								
1963-72 average ....	2.7	1.6	2.7	4.1	2.7	3.0	3.0	1.0
1974-77 average ....	0.3	-5.3	-3.9	2.8	-0.6	-5.7	-1.7	0.7
1979-82 average ....	1.8	3.6	0.6	3.7	1.6	-0.7	5.7	0.1
1980 .....	-1.8	1.9	-4.5	3.0	0.6	-5.3	6.0	0.7
1981 .....	3.2	2.9	2.1	4.7	3.1	-0.2	6.3	-0.3
1982 .....	6.5	5.1	2.9	3.3	3.0	3.6	4.9	-1.1
1983 1st quarter .....	7.5	5.2	5.3	3.1	5.3	2.3	3.7	-1.3
Memorandum items:	in percentages							
Inflation rates <sup>2</sup>								
1963-72 average ....	3.2	5.7	4.8	3.2	4.6	4.3	3.8	4.5
1982 .....	6.2	2.7	8.6	6.3	11.8	16.6	8.7	5.6
Real GNP growth rates								
1963-72 average ....	4.0	9.8	2.8	4.7	5.5	5.6	4.8	4.4
1982 .....	-1.7	3.0	1.4	-1.1	1.8	-0.3	-0.7	-1.7
Budget deficits <sup>3</sup>								
1963-72 average ....	0.1	-0.2 <sup>4</sup>	0.5	-0.0	-0.5	5.4	1.7	-
1982 .....	3.6	4.1	1.6	3.9	2.9	12.0	12.2	-
1983 <sup>5</sup> .....	4.5	3.4	2.5	3.8	2.3	11.6	10.7	-

<sup>1</sup> Representative long-term bond yields deflated by six-month moving averages of percentage changes over twelve months in consumer prices. <sup>2</sup> Year-on-year increase in consumer prices. <sup>3</sup> Net lending (-) by general government as a percentage of gross national product. <sup>4</sup> 1965-72. <sup>5</sup> OECD estimates and forecasts.



almost certainly less volatile than the former, and some survey evidence suggests that long-term inflationary expectations may at present remain higher than recent rates of inflation. The perennial question of which price index to use has recently been less relevant than usual; by whatever measure, inflation-adjusted long-term interest rates are high, and these are the ones most relevant for savings and investment decisions. Of course, taxes affect real rates of return effectively paid by borrowers and received by lenders, though in ways which are difficult to measure. In recession, however, the taxable profits of many firms may not be large enough to permit them to take full advantage of the tax concessions for interest payments.

That being said, there can be little doubt that real before and after-tax interest rates are unusually high for a period of recession or early recovery. They are also very high in relation to average real rates of return on capital and to any rates of growth of the economy which can realistically be expected in the next few years. In these respects conditions in the 1960s were very different, and comparisons with early years can only serve to underline the importance of bringing down real interest rates in order to improve growth prospects.

High real interest rates as measured here no doubt reflect an inappropriate policy mix, the weakness of company-sector finances and persisting doubts about whether a resurgence of inflation can be avoided. In particular, high actual and prospective budget deficits stimulate continuing concern not only about interest rate pressures that could arise to the extent that they are financed in the capital market, but also about the inflation that could result if they were to be financed by monetary means.

### **Problems of monetary policy.**

For some years monetary policy in the industrial world has had to give high priority to controlling inflation, and for this purpose consistent strategies have been essential. Last year recession and financial innovation called for a larger element of discretion in the implementation of these strategies. The question of the scope for flexibility has been most evident in a context of monetary aggregate control policies of the kind used in recent years by most of the larger countries.

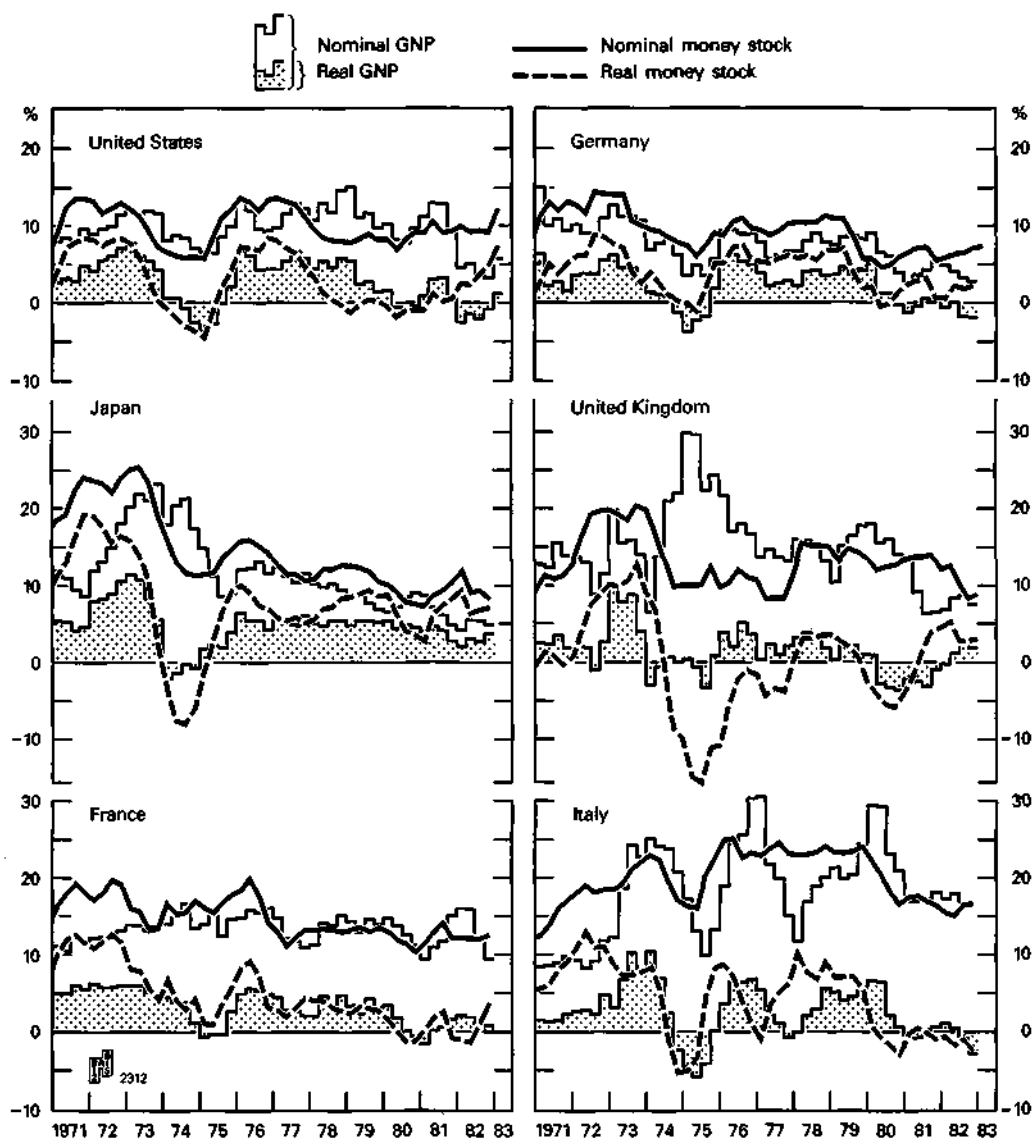
Similar issues regarding flexibility may also arise, however, under a different type of non-accommodating monetary policy — one in which the influence of the exchange rate on domestic costs and prices is a decisive consideration in the setting of interest rates. Exchange rate norms in monetary policy need not be rigid and can be changed from time to time. However, objectives or constraints in this sphere have in recent years become an important influence on interest rate policy in most countries, large and small (the United States being the only notable exception), and have exerted a significant influence on the extent to which monetary policy impulses are transmitted from one country to another. Monetary aggregate and exchange rate orientations in monetary policies are reviewed in the next two sections of this chapter. The general question of options and constraints and of countries' room for manoeuvre in the conduct of monetary policy is taken up in the final section.

## The monetary aggregates: developments and policies.

*Recent monetary developments in perspective.* After a pronounced slowdown in 1980 the pace of monetary expansion quickened in the course of 1981 in most of the industrial countries. As the graph shows, rates of growth of broad aggregates remained comparatively high in some countries last year considering the slowdown in inflation. Uncertainties about the impact of financial innovation and, in the case of the United States, regulatory changes, some of which took effect at the end of

The broad money stock and GNP in nominal and real terms.

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, M2; for Japan, M2+CDs; for Germany and Italy, M3; for the United Kingdom, PSL2) and GNP/GDP deflators.

1982, call for caution in the interpretation of developments in particular aggregates. One influence, however, seems to have been exceptional demand for precautionary balances, which is analysed in the discussion of velocity in Chapter III. With respect to policy the important thing is that ultimately it was largely accommodated.

Viewed over a longer time span, rates of growth of the broad aggregates shown in the graph have been lower on average in recent years than in the early 1970s in all of the countries considered. In most of them the rates of expansion recorded since 1979 have also been lower on average than those reached after the first oil crisis.

When inflation accelerated again in 1979, rates of growth of the broad money stock, measured in real terms, declined steeply, much as in 1974. Between 1979 and 1981, with rates of inflation remaining stubbornly high, real monetary growth rates remained low or negative for long periods in all countries other than Japan. Foreshadowing protracted recession, the real money stock continued to serve as a good leading indicator of developments in output, though the causal relationships involved are undoubtedly complex. Equally striking, however, is the sharp rise in price-deflated rates of monetary expansion recorded last year in the United States, Germany and France. The change is particularly marked in the case of  $M_2$  in the United States, which had previously displayed a close relationship to subsequent developments in GNP in both nominal and real terms.

Rates of expansion of narrow monetary aggregates also quickened markedly last year in many countries under the influence of the decline in interest rates. Partly because of their known sensitivity to changes in interest rates and because interest rate policy often has to be geared to achieving exchange rate objectives, narrow aggregates have never been considered appropriate for targeting purposes in most continental European countries. In the United States and Canada, where the narrow money stock has in the past been at the centre of policy attention, developments in  $M_1$  became so erratic last year as to make this aggregate inappropriate for targeting purposes. As is pointed out in Chapter III, the development of improved technical facilities for transferring funds between transaction and savings accounts, together with the emergence of interest-bearing accounts which can be used both for making transactions and as a repository for precautionary savings balances, has made it increasingly difficult to identify aggregates which meaningfully reflect the holding of money for purely transaction purposes.

*The basic policy framework.* Norms for rates of increase in the money stock have been in use for many years. In several countries they were first published in late 1974 or early 1975, shortly after the first oil crisis. Essentially aimed at bringing down high rates of inflation, the use of quantitative targets for the monetary aggregates reflected the recognition that interest rate signals could be misleading under highly inflationary conditions. Another important consideration in countries such as Germany and Switzerland was that the move to a more flexible system of exchange rates was seen to remove a previous constraint on monetary policy. It had become widely accepted that earlier growth-oriented demand-management policies had contributed to the build-up of inflation and inflationary expectations. As a counter to this, the targeting approach was from the beginning medium-term in orientation and also gradualist. Considerable importance had also come to be

attached to the potential influence of monetary policy on expectations, though it was recognised that its impact might not be felt immediately. Once set, the norms were changed little from year to year or were lowered progressively over a period of years in the hope that this would help in eroding inflationary sentiment.

Unchanged or still gradually declining norms in effect became less accommodating after the second oil price shock. From 1979 onwards, moreover,

Monetary and credit aggregates: Objectives and rates of expansion.

Countries and aggregates <sup>1</sup>		Objectives <sup>2</sup> and (in italics) actual result								
		1975	1976	1977	1978	1979	1980	1981	1982	1983
		increase during period, <sup>3</sup> in percentages <sup>4</sup>								
United States	M <sub>1</sub> .....	5-7½ 5.0	4½-7½ 5.7	4½-8½ 7.9	4-6½ 7.2	1½-4½ 5.5	4-6½ 7.2	6-8½ 5.1	2½-5½ 8.5	4-8
	M <sub>2</sub> .....	8½-10½ 9.6	7½-10½ 10.9	7-10 9.8	6½-9 8.7	5-8 8.3	6-8 9.0	6-9 9.4	8-9 9.2	7-10
	M <sub>3</sub> .....	10-12 12.3	9-12 12.8	8½-11½ 11.7	7½-10 9.5	6-9 8.1	6½-9½ 9.8	6½-9½ 11.7	6½-9½ 10.1	6½-9½
	CR .....	6½-8½ 3.4	6-9 4.1	7-10 7.6	7-10 13.3	7½-10½ 12.6	6-9 8.0	8-9 8.3	8-9 6.1	8½-11½
Japan	M <sub>2</sub> +CDs ..	- 14.5	- 14.3	- 10.6	12-13 12.6	11 10.3	8 7.6	10 10.4	8 8.3	7
	Germany CBM .....	8 9.9	8 9.3	8 9.0	8 11.4	8-9 6.4	5-8 4.8	4-7 3.5	4-7 6.0	4-7
France	M <sub>2</sub> .....	- 18.2	- 12.8	12½ 13.9	12 12.2	11 14.4	11 9.8	10 11.4	12½-13½ 12.0	9
	United Kingdom	£M <sub>3</sub> .....	- 7.3	9-13 7.3	9-13 15.4	8-12 11.4	8-12 10.3	7-11 20.0	5-10 14.6	8-12 9.8
M <sub>1</sub> .....		- 9.9	- 9.9	- 22.2	- 12.1	- 2.7	- 9.4	- 9.3	8-12 10.8	7-11
PSL <sub>2</sub> .....		- 7.8	- 7.8	- 15.6	- 13.3	- 9.6	- 14.5	- 12.0	8-12 8.9	7-11
Italy	TDC .....	17½ 25.4	17½ 19.9	15 17.8	16 20.9	18½ 18.5	17½ 18.5	16 18.1	15½ 20.8	18
	Netherlands	M <sub>2</sub> .....	- -	- -	10 7.5	7 5.5	8½ 5.8	7½ 7.8	6½ 3.0	- -
Switzerland		CBM .....	6.8	3.0	3.5	16.6	6.8	-0.6	4 -0.5	3 2.6
	M <sub>1</sub> .....	6 4.0	6 7.8	5 5.4	5 16.6	- 8.5	- -15.8	- -3.8	- 2.9	-
	Canada	M <sub>1</sub> .....	- 10.9	10-15 10.9	8-12 8.3	7-11 9.2	5-10 8.0	5-9 6.2	4-8 3.9 <sup>5</sup>	4-8 3.5 <sup>6</sup>

<sup>1</sup> CR=credit proxy, bank credit or (for 1983) total domestic non-financial debt; CBM=central-bank money; £M<sub>3</sub>=sterling M<sub>3</sub>; PSL<sub>2</sub>=private-sector liquidity; TDC=total domestic credit. For the United States, newly defined aggregates as from 1980 and 1983; the targets and rates of expansion for M<sub>1</sub> in 1980 and 1981 are those for M<sub>2</sub> without adjustment for the estimated effects of financial innovation. For the Netherlands the targets (and results) for 1980 and 1981 are for M<sub>2</sub> creation from domestic sources. <sup>2</sup> For Japan, projection only; for France (except 1978) and the Netherlands (1979 only), limits. For Italy the percentages are based on limits expressed in terms of lire. <sup>3</sup> Target periods: fourth quarter to fourth quarter for the United States, Japan (to 1982) and Germany (since 1979); December to December for Italy (since 1976), France (except 1983) and Germany (1975 only); annual averages for Switzerland (except 1980) and Germany (1976 to 1978). Various periods beginning in April (1976, 1977 and 1978), June (1979) and February (1980, 1981 and 1982) for the United Kingdom and in the second quarter (1975 and 1979), February–April (1976), June (1977 and 1978), and August–October (1980) for Canada. For Italy and the United States the targets shown for 1975 are for periods beginning respectively in March and in the first quarter. For 1983 the targets are based on February–March in the case of M<sub>2</sub> in the United States and November–January in the case of France; for Japan the second quarter to second quarter projection is shown. Actual rates of monetary expansion are normally those for the target period indicated and are calculated on the same basis as the objective. Not shown in the table are the targets set for domestic credit expansion in the United Kingdom and for total credit in Italy for certain periods between 1974 and 1978, or all the norms set for monetary expansion in successive overlapping four-quarter periods in the United States (prior to 1979) and in Japan. <sup>4</sup> At annual rates where the period is other than one year. <sup>5</sup> To December 1981. <sup>6</sup> December–December.

countries' targeting procedures were tightened in certain respects. Most significantly, in October 1979, in an effort to gain closer control over short-term movements in the money stock, the Federal Reserve discarded procedures which had called for explicit agreement in the Open Market Committee on changes in interest rates. They were replaced with ones which, more geared to movements in bank reserves, left money-market interest rates free to fluctuate over a wide range. Thereafter, phases of restraint on the growth of bank reserves alternated with periods of comparative ease. In 1980, following a short period of emergency recourse to direct credit controls, unprecedentedly large fluctuations occurred in the money stock, in interest rates and also in economic activity. When in 1981 output recovered temporarily, the Federal Reserve resisted a renewed acceleration in the growth of  $M_1$ . Short-term interest rates soon moved up to levels even higher than those reached in 1980.

Beginning in 1979, stricter attitudes to controlling the aggregates and a tightening of control procedures could also be seen in other countries. In particular, vigorous efforts were made by the authorities in Germany, the United Kingdom and France to bring the rates of expansion of particular monetary aggregates down more in line with published norms or, in the case of Germany, into the lower half of the target range. In Germany a further sharp rise in interest rates in early 1981, though encouraged by the Bundesbank mainly to counteract the external current-account deficit, proved compatible with continued expansion of the central-bank money stock at a rate close to the lower limit of the target range. In Japan the growth rate of  $M_2$  and CDs slowed down in 1980 under the influence of tighter "window guidance" ceilings on credit granting. However, the policy of acting quickly to forestall a build-up of inflationary sentiment probably relied more on a steep rise in the Bank of Japan's discount rate and on responsible behaviour by the trade unions.

In the United Kingdom the Government's plan to reduce the rate of expansion of sterling  $M_3$  year by year over a five-year period, together with the implied limits this was seen to place on the public-sector borrowing requirement, were set out in numerical terms in a Medium-term Financial Strategy published with the March 1980 Budget. The authorities also gave consideration to introducing a system of monetary base control and established institutional arrangements thought to be consistent with doing so in the future. In the event they made only minor changes in their operating procedures, however. These were mainly intended to reduce the rôle of administrative mechanisms in monetary control and to give somewhat more scope for the play of market forces in the determination of interest rates. Subsequently, sterling bank lending to the private sector expanded strongly, and to restrain the growth of sterling  $M_3$  it became necessary to overfund the public-sector borrowing requirement on a large scale (see Chapter III).

Inflationary expectations did not react promptly in any country to the announcement of the authorities' intention to restrain monetary expansion. Indeed, little progress was made towards restoring price stability until output had weakened and the economy was in recession. Yet in the absence of wage moderation or of effective action to cope with large actual and prospective budget deficits, monetary discipline eventually came to be seen as the main bulwark against a resurgence of

inflation. Markets remained acutely sensitive to anything which might indicate a weakening in the authorities' resolve to keep monetary restraint policies in place.

Difficulties were experienced by some monetary authorities in strengthening their credibility. Indeed, the time it took for belief in the earnestness of the authorities' policy intentions to build up varied considerably from country to country. In Japan, where inflationary sentiment was effectively brought under control soon after the second oil price shock, an easing of monetary conditions set in as early as 1980, and in Germany a similar process was able to begin in 1981 when the external current account showed signs of improvement. In the United States, on the other hand, the decisive change came only in the course of last year, and even afterwards public concern about the long-range outlook for prices had still to be taken into account in the conduct of monetary policy.

*Moves towards greater flexibility.* Entrenched inflationary expectations clearly called for consistency and determination in policy strategies. By the same token, they increased the economic and financial pressures entailed in slowing down monetary expansion, and these pressures had to be taken into account in the execution of monetary policy. In the United States, in particular, memories of previous occasions on which an excessive build-up of liquidity in the economy had been permitted remained vivid. However, in view of the deep worldwide recession, accompanied by signs of financial fragility domestically and internationally, there were new risks to be borne in mind. If in these circumstances swelling demands for liquidity were not partially accommodated, and if some relief were not provided in the sphere of interest rates, deflationary forces could rapidly gain momentum on an international scale. In some countries, moreover, the policy response had to be gauged and explained in a context in which the emergence of an array of new financial instruments was changing fundamentally the underlying money-holding relationships.

Though targeting strategies were primarily intended to ensure continuity in the thrust of policy, certain kinds of flexibility had been provided for in designing them — partly for technical reasons but also to give some scope for adapting monetary management in changing cyclical and/or external conditions. Some of this flexibility had been lost, however, particularly in the United States, where control procedures had earlier been tightened. That difficulties might be encountered, including financial disturbances of external or domestic origin, had been recognised to some extent. It had generally been acknowledged, for instance, that efforts to gain close control over short-run movements in the aggregates might be associated with an increase in the volatility of interest rates in the money market. It is very unlikely, however, that anyone foresaw the scale of the movements in interest rates which actually occurred in the United States or fully appreciated how large an impact financial innovation was to have on the US monetary aggregates. In most other countries, it is true, circumstances were less unfavourable but, in addition, the procedures remained less mechanistic.

As the basic anti-inflationary thrust of their policies became more widely appreciated, and as inflation continued to decline, monetary authorities could take

weakness in the economy more into account in their targeting strategies. In particular, in setting objectives for 1982 countries refrained from pursuing further the efforts made in previous years to bring about a reduction in rates of monetary expansion and, in some cases, raised the limits of the target ranges. At the beginning of 1982 the Bundesbank and the Federal Reserve both indicated that they would be prepared to envisage expansion of the target aggregates at rates in the upper part of the target ranges, and in both countries the ranges were made subject to review at mid-year. In the United Kingdom the high priority previously attached by the authorities to curbing the growth of sterling  $M_3$  had made it necessary for them to accept a substantial appreciation of the pound. In his March 1982 budget speech the Chancellor announced a higher target range for monetary expansion in 1982–83 than had been envisaged in the Medium-term Financial Strategy published a year earlier. In addition, against a background of growing concern about the representativeness of sterling  $M_3$  in a context in which bank lending to the private sector was expanding strongly, he stated that the new target range would also apply to two other aggregates,  $M_1$  and private-sector liquidity ( $PSL_2$ ). In future, he indicated, monetary developments would also be interpreted more in the light of developments in other financial variables, including the exchange rate and interest rates expressed in nominal and real terms.

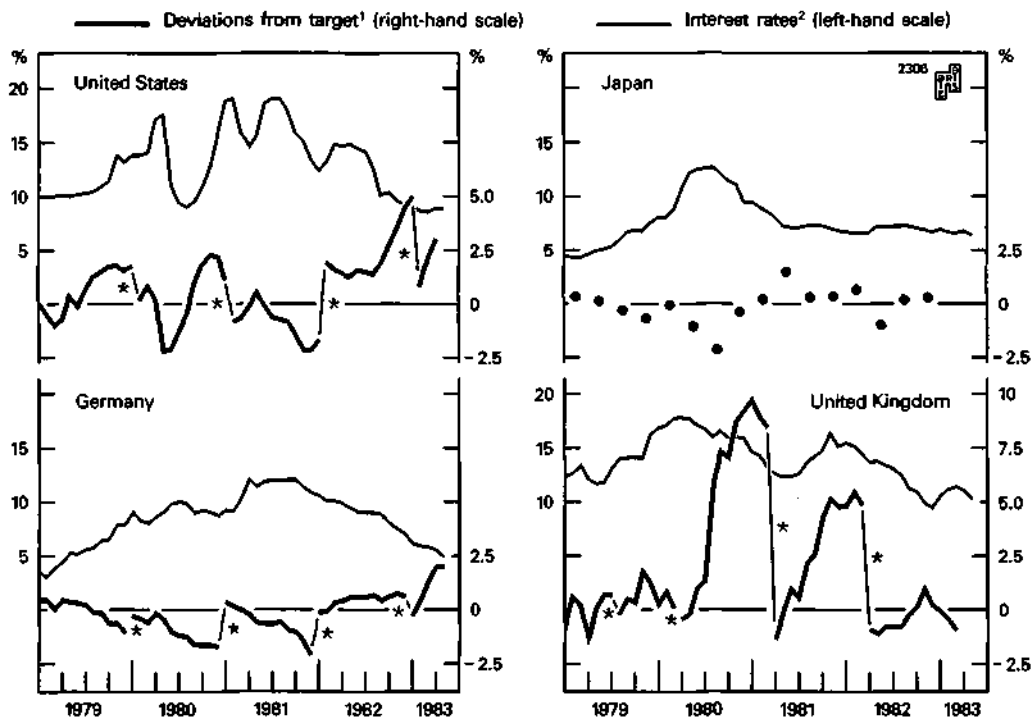
Several landmarks stand out in the evolution of monetary policy in the United States in the course of 1982. Recognising that rapid growth in  $M_1$  in the early months of the year could reflect unusual precautionary behaviour in the economy, the Federal Reserve Open Market Committee decided in March to evaluate deviations in  $M_1$  from the short-term target range more in the light of developments in  $M_2$ . In June it took the view that, in the prevailing conditions of market uncertainty and turbulence, growth in all the aggregates in excess of the upper limit of the target ranges should be tolerated for a time — a conclusion which the Chairman of the Board reported to Congress in July.

In May and June problems experienced by two small dealers had unsettled the government securities market and after mid-year the failures of Penn Square National Bank, Abilene National Bank and Lombard Wall, a government securities firm, were reported. The economic difficulties experienced by Mexico in the summer drew attention to US banks' international exposure — at a time when failures of domestic non-bank enterprises were calling for larger provisions against losses on domestic loans. Then, in the midst of genuine needs for increased liquidity, came the prospect of an upsurge in the monetary aggregates for largely innovative reasons. One source of uncertainty was how a large volume of funds invested in tax-privileged "all-savers certificates", specially authorised a year earlier to help thrift institutions and due to mature in October, would be relocated. Also unpredictable were the likely reactions of savers to the new money-market deposit accounts and "super NOW" (negotiable order of withdrawal) accounts which banks were authorised to offer, free of interest rate ceilings, as from December 1982 and January 1983 respectively. On the positive side, inflation continued to abate, and sudden falls in interest rates in July and August provided indications that inflationary expectations were at last beginning to be wound down.

It was against this background that the Chairman of the Federal Reserve announced in October that the System had no alternative for the present but to attach less weight than usual to movements in  $M_1$ . Indeed, at the October meeting of the Open Market Committee short-run monetary targets were established only for the broader aggregates. Since  $M_1$  was the only aggregate published on a weekly basis, this implied an end to unduly strong market preoccupations with very short-term developments in the money stock. Month-to-month movements also came to be interpreted more cautiously.

Between October and December the Federal funds rate gradually moved further down and Federal Reserve discount rates were lowered progressively. Coming at a time when all the monetary aggregates were increasing at rates well above the upper limits of their target ranges, the decline in interest rates marked a clear break in the short-term relationship which had held in the previous three years. Ever since bank reserve targeting had been introduced in late 1979 interest rates had come under strong upward pressure — on the expectation of official corrective action — whenever rates of expansion of the narrow money stock had moved even slightly above the mid-point of the target range. In other countries, where the authorities had not attempted to keep rates of monetary expansion so close to their objectives over short periods, developments in the money stock and interest rates

Deviations of the money stock from target mid-points and interest rates.



\* New target set.

<sup>1</sup> For the United States,  $M_1$ - $M_1$ ; for Germany, central-bank money; for Japan,  $M_2$ +CDs; for the United Kingdom, sterling  $M_3$ . For Japan, changes over four quarters in relation to official projection figure. <sup>2</sup> For the United States, Federal funds rate; for Japan, call money; for Germany, day-to-day interbank rate; for the United Kingdom, three-month interbank rate.



were quite different. Consistent with conventional money-demand relationships — but reflecting also other channels of influence, domestic and external — high interest rate levels had generally been associated with low rates of monetary expansion in relation to the norms. An exception is the United Kingdom, where difficulties encountered in 1980 and 1981 in controlling sterling  $M_3$  had been partly attributable to the complex influence of high interest rates on the demand for this broad aggregate. However, interest rates had nevertheless remained much less volatile than money-market rates in the United States.

New targets for monetary expansion in the United States in 1983, announced in February, provided for changes in the ranges for  $M_1$  and  $M_2$  and in the base for measuring  $M_2$  growth. These were designed to accommodate further shifts of funds and continuing atypical behaviour of velocity in the prospective economic recovery. For the first time a range indicating the Federal Reserve's expectations with regard to developments in a broad credit aggregate, total domestic non-financial debt, was also published. All the targets were to be subject to review within three months; for the time being, the main emphasis would continue to be placed on  $M_2$ . In the early months of this year all of the monetary aggregates ran above their target ranges. The markets, though much calmer than they had been prior to October 1982, remained sensitive to anything which might indicate that the Federal Reserve was returning to a more restrictive course in its management of the supply of bank reserves.

In Germany and Switzerland targets for monetary expansion in 1983 were set at the same levels as those for 1982. In the United Kingdom the new target range announced in March was lower than the previous one, but in line with what had been envisaged in the Medium-term Financial Strategy published a year earlier. In France the 1983 target reflected a tightening of economic policy generally in the context of a large external current-account deficit which had emerged because aggregate demand developments in France were out of step with those abroad. In Italy, where the target for total domestic credit expansion was exceeded in 1982 because the public-sector borrowing requirement was far larger than expected, the target for 1983 implies a substantial slowdown in the rate of growth of the broad credit aggregate.

*The near-term outlook for targeting.* That the application of simple rules for monetary expansion would not suffice to stabilise a troubled environment, and that the rules themselves might have to be adjusted when shocks and disturbances occurred, was not altogether unexpected. Monetary aggregate strategies were typically inspired by the more modest aims of making policy objectives more transparent, of overcoming a possible bias towards delay in changing official interest rates and of ensuring that medium-term stabilisation goals were taken adequately into account. Even so, the implementation of these strategies has sometimes proved unexpectedly difficult, and in the past year the conditions under which they have had to operate have become particularly complex.

Over the years unanticipated difficulties of various kinds have been encountered in efforts to apply monetary aggregate stabilisation policies. As a result of disturbances of external origin, all countries have over the past decade had to cope with supply-side shocks which have lowered output potential and made the

adjustment process more difficult. The demand for money is inherently unstable in the short run, and in some countries it has displayed large movements in conjunction with changes in liquidity preference domestically or shifts in currency preference internationally. Rapid changes in payment systems and in patterns of intermediation, stemming partly from regulatory changes and financial innovation, have been experienced in some countries, though by no means in all of them. Recently problems of this kind have been particularly severe in the United States. Moreover, the recession, accompanied by financial imbalance, and coming at a time when the battle on the inflation front was only half won, has vastly complicated an objective assessment of the needs of the situation. As a result, the whole targeting exercise has become much more difficult.

In some countries the targeting arrangements have been flexible enough to permit discretionary responses to most difficulties that might arise. Cyclical changes in velocity could be taken into account to some extent in setting target values, excesses or shortfalls in relation to the targets in one period could be incorporated into the base for the next, and base periods could be selected to avoid including distortions. Short-term instability in the demand for money could be coped with satisfactorily by the use of target ranges instead of single values, or by provisions for measuring monetary developments in terms of annual or quarterly averages and for assessing them over periods of no less than one year.

In cases where existing arrangements could not accommodate the disturbances encountered, countries were generally able, by making appropriate alterations in the targeting arrangements, to continue using aggregates as objectives or as indicators of monetary conditions. In the context of abrupt changes in the demand for particular aggregates, a different target aggregate could sometimes be seen as more appropriate, or targets could be applied to a range of aggregates. In most cases the reasons for the change were explained by the authorities and could be understood in the market place. This might not be possible, of course, where the developments which had distorted a particular aggregate were expected to continue and where an appropriate alternative aggregate could not be identified. In circumstances of this kind the targeting of  $M_1$  was terminated in Canada last year, but the search for a more appropriate aggregate continues.

A key consideration in the continued use of monetary aggregates as an anchor of stabilisation policy has been the even greater problems associated with approaches of other kinds. Developments in nominal GNP, in broad credit aggregates, in exchange rates and, beyond the very short run, in nominal and real interest rates are all influenced by many factors other than monetary policy and are not always amenable to close control by the central bank. The level and pattern of credit flows may be no less prone to unpredictable shifts over time than the size and composition of the public's asset holdings. Moreover, considered as indicators or intermediate objectives of monetary policy, nominal and real interest rates have other well-known shortcomings.

Against this background, monetary authorities in many countries have continued to regard policies geared to stabilisation of the monetary aggregates in the medium term as, on balance, the most effective approach to stabilisation policy. In

the United States, where the practical difficulties associated with interpreting developments in particular aggregates have recently become very large, the Federal Reserve has continued to make every effort to surmount them. In the United Kingdom influences of various kinds have over the years distorted signals given by developments in the monetary aggregates, but a flexible approach to targeting the aggregates still lies at the heart of the Government's Medium-term Financial Strategy for controlling inflation. In Germany and Switzerland, too, the authorities still consider that only policy consistency over time as expressed in the targeting approach can establish the conditions necessary for price stability and balanced growth in the medium term. In these countries the pace of financial innovation has been moderate, the approach to targeting has always been flexible and the authorities have never attempted to control short-term developments in the money stock too closely. In France the monetary objective helps to provide a framework for the restraint efforts in the budgetary, incomes, savings and credit spheres which are needed to restore internal and external balance in the economy.

Increasingly, however, it has been realised that the complexity of the mechanisms through which monetary policy interacts with the economy implies that it is often necessary for policy-makers to look at a number of different financial indicators and also to keep a close watch on developments in the economy. There are grounds for hoping that approaches of this kind, which provide for elements of continuity and discretion, will prove consistent with keeping inflation in check and also with giving sustenance to a recovery of the economy. It is unlikely that consistency will prove feasible in the long run unless there is some scope for flexibility in policy-making in the short run.

#### **Interest rate and exchange rate objectives in monetary policy.**

*The basic framework.* While the issues raised by monetary aggregate policies have been widely discussed, the extent to which interest rate policies in the industrial countries have in recent years been geared to achieving exchange rate objectives is often overlooked. A large number of countries, when confronted with the second oil crisis and the subsequent upsurge of the dollar, adapted their money-market policies mainly with a view to resisting downward pressures on their currencies in the exchange market. The main reason was their sharpened awareness of the implications of the openness of their economies and of the rigidity of their domestic wage-fixing procedures — whether characterised by formal price-indexation arrangements or not. In combination, these exposed them to the risk that devaluation of their currencies, should it go too far, would not help to support competitiveness and employment but would instead touch off a domestic wage/price spiral which monetary policy would ultimately have to accommodate.

Exchange rate norms need not be formal or binding. In a world characterised by floating exchange rates between the major currencies, many countries have found it useful simply to try to limit excessively rapid depreciation of their currencies in effective terms. The goals have been much more specific, of course, in the case of certain European countries which decided, in view of the importance of their mutual

political and trading links, to establish the European Monetary System. These commitments were expected to serve various purposes, but among these control of inflation was very important. Indeed, in some of the countries concerned exchange rate norms came to serve, in effect, as the main anchor of price stabilisation policies — and also of monetary policy.

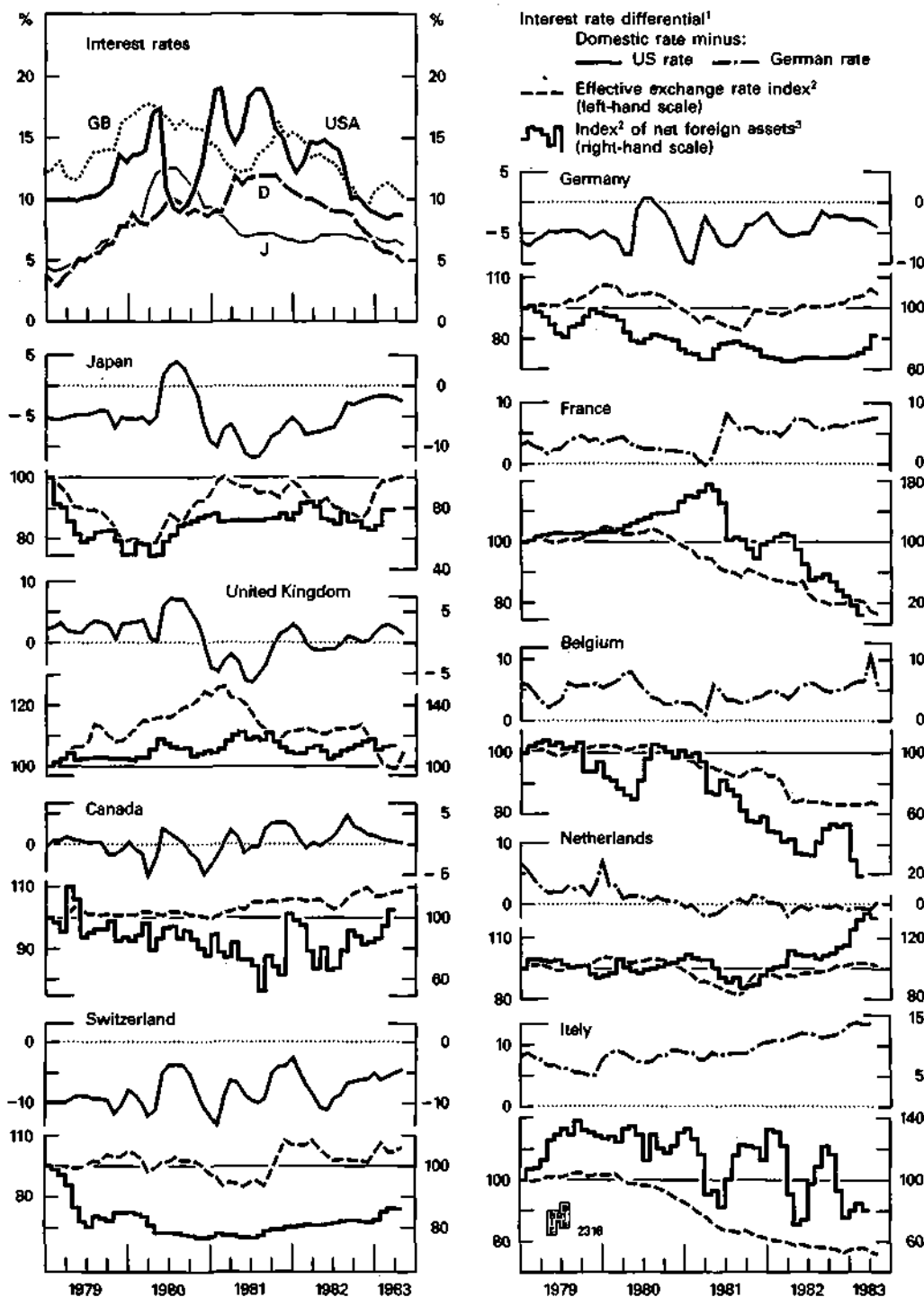
Viewed as a proximate objective of monetary policy, stabilisation goals for bilateral exchange rates can seem an attractive option in countries with a large and relatively stable neighbour. In seeking to stabilise their currencies in terms of the Deutsche Mark, some European countries could let the relatively low rate of inflation in Germany exert some downward pressure on high underlying rates of price increase at home. They may also have hoped that their exchange rate commitments would be taken into account in wage negotiations and in price-setting decisions.

*Exchange-rate-oriented policies in the period of rising interest rates.* Confronted with large fluctuations in interest rates in the United States, central banks in other major centres consistently acted to limit fluctuations in their own money-market rates. At the same time they “leant against the wind” in exchange-market operations. As can be seen in the graph overleaf, differentials between US money-market rates and those in Japan, Germany and Switzerland, in particular, moved over a wide range in the period between late 1979 and mid-1981, with the changes mainly mirroring swings in US interest rates. Given the possibility that successive upsurges in interest rates in the United States would soon be reversed, monetary authorities in other centres at first sought to limit increases in interest rates in their own markets, but in so doing accepted large net declines in their holdings of foreign exchange in order to moderate falls in their exchange rates. They were prepared, however, to encourage increases in domestic money-market rates insofar as these were seen to be needed to control inflation at home and, in the case of Germany, to assist in coping with fundamental imbalance in the external current account.

A policy of this kind in Germany established a fairly stable interest rate standard to which other countries could refer in determining their own money-market rates. In seeking to meet exchange rate objectives, many other European countries, though they intervened in the exchange markets from time to time on a considerable scale, relied mainly on action to encourage changes in interest rates in the money market — underpinned, in some cases, by exchange controls.

By following these policies, some European countries were in effect taking a middle course. They were able to avoid short-term fluctuations in the exchange rates of their currencies vis-à-vis their main trading partners, though not against the dollar, and at the same time to keep their interest rates more stable than interest rates in the United States. Rates of inflation in Europe continued to differ widely, however, and countries whose currencies came to be regarded in the market as devaluation-prone had to keep their money-market rates relatively high for most of the time and to push them up even further whenever pressures for exchange rate realignments seemed to be threatening. Shifts of funds into and out of the dollar normally had the largest direct impact on Germany and Switzerland, but other countries had to take them into account in their interest rate policies to the extent

Short-term interest rate differentials, exchange rates and central banks' net foreign assets.



<sup>1</sup> Based on monthly averages of daily measures of rates on call or day-to-day placements, except for Belgium and Switzerland (one-month) and the United Kingdom (three-month). Euro-currency rates for Belgium and Switzerland; domestic money-market rates for other countries. <sup>2</sup> December 1978=100. <sup>3</sup> Cumulative change based on transaction values expressed in terms of domestic currency. Excluding, in the case of Germany and Switzerland, swaps and repurchase agreements with domestic banks. For the United Kingdom and Canada, official reserves. Half scale for France.

that relationships between European currencies came under pressure. Relative stability of interest rates in some European countries and of exchange rates within Europe could only be achieved at the expense of large fluctuations in exchange rates against the dollar, the inflationary consequences of which went beyond the relative importance of trade links with the United States, since world market prices of many important basic commodities, including oil, are fixed in dollar terms. A middle path was also followed in Canada in that money-market interest rates were adapted in order to limit movements in the exchange rate of the domestic currency against the US dollar, although this implied a marked appreciation in real terms vis-à-vis other currencies.

Though their efforts to meet exchange-market objectives at times called for sharp rises in money-market rates, central banks in most European countries retained a good deal of influence over developments in short-term interest rates. In guiding money-market rates to higher levels they sought, moreover, to moderate the impact of the rise on interest rates in the domestic economy more generally. Without making changes in official discount and lombard rates, which could have served as a signal for the adjustment of credit charges to businesses and households, they took steps to restrict the availability to the banks of these traditional kinds of central-bank credit. The banks' residual liquidity needs could then be met by special facilities and by market instruments at interest charges which could be varied fairly flexibly if necessary with only limited effects on rate-setting in other markets. In Germany ordinary lombard facilities were replaced in February 1981 by a special lombard facility, and the charge for the use of this facility served as an anchor for day-to-day interest rates through most of the high interest rate period which followed. In Germany, Switzerland, the Netherlands and Italy the central banks made extensive use of foreign exchange swaps, security repurchase agreements and special loans at market-related interest rates. Other arrangements for supplying bank liquidity at interest rates which could be quickly adapted to changing exchange-market conditions were introduced in 1980 and 1981 in France and Belgium. In some of these countries administrative interest rate measures were also used to help shield lending and deposit interest rates from impulses originating in the money market. In a number of them, it should be noted, much of the burden of restraining credit to the domestic economy was borne by credit ceilings.

*Interest rate responses in a context of declining rates of inflation.* Once the tide of inflation had turned, monetary policy in European countries and in Japan could be adapted to encouraging a decline in interest rates.

As can be seen in the graph, the phase of falling interest rates and that of the earlier rise were asymmetrical in certain respects. In the first place, the amplitude of the swings in differentials between money-market rates in the United States and those in most other countries decreased markedly after mid-1981. In the second place, the decline in interest rates which took place in 1980 in Japan and in 1981-82 in Germany and Switzerland — against a background of stronger external current-account positions — was comparatively smooth. In the process there was little change in the net foreign assets of the central banks in these countries, their currencies strengthened progressively and the differentials between nominal short-

term interest rates in these centres and money-market rates in the United States gradually narrowed.

In Germany the decline in money-market rates was guided by official money-market operations cautiously adapted to exchange-market conditions. At each stage it was underpinned by cuts in official discount and lombard rates. In this period a gradual lowering of central-bank lending rates also took place in the Netherlands and Switzerland, the changes being closely synchronised with those in Germany. Developments were different, however, in European countries with weaker external positions. In France and Belgium the move towards lower interest rates had to be interrupted at times, and in Italy money-market rates were kept very high. The relative weakness in the external positions of these countries was clearly reflected in the net foreign assets of their central banks and in the declining effective exchange rates of their currencies. In the United Kingdom the authorities were not unwilling last year to see some decline in the exchange rate of sterling, considering that it had previously been so strong, but interest rate policies were adapted in order to moderate the scale and speed of the adjustment.

Having made progress towards reducing domestic and external imbalances, some countries found last year that they could encourage substantial declines in interest rates without running the risk that their currencies would come under downward pressure in the exchange markets. Oil prices expressed in dollar terms had begun to fall and in the case of some countries, including Germany, depreciation of their currencies in dollar terms could also now be less of a concern to the extent that its impact on the effective exchange rate was offset by appreciation vis-à-vis other currencies.

#### **What margin of manoeuvre for monetary policy?**

Remarkable progress was made last year towards restoring price stability, and in some countries there were the first signs of a firming-up of demand. Subject to continued progress in winding down inflationary expectations, there is now a widespread desire to see an early recovery of output strong enough to ease financial stress and to make inroads on unemployment. The declines in nominal interest rates recorded so far have been very helpful, but interest rates have remained very high in real terms. It is difficult to see how a balanced and sustainable recovery of output can take place with real interest rates at their present levels.

In these circumstances, the conduct of monetary policy has become extremely difficult. The problem is no longer simply one of fighting inflation, even though the gains made against inflation have not yet been consolidated. Recession, financial fragility and perhaps also incipient recovery have swollen demands for liquidity, but it is by no means easy to judge the extent to which these demands can be accommodated without running the risk of a resurgence of inflation. The uncertainties have been particularly evident in the United States, where real interest rates have been very high but where in early 1983 all the aggregates began to expand at rates well above the upper limit of the target ranges. In some other countries,

where fiscal policy bears more of the burden of restraint, the monetary authorities have more room for manoeuvre.

As inflation has declined, monetary policy has already become more accommodating in many countries. This is partly due to the practice of setting monetary targets in nominal terms but partly also reflects the spreading tendency towards interpreting movements in the monetary aggregates in a broader context and towards utilising fully the scope given by improvements in external positions for lowering interest rates. Getting real rates down, particularly those at long term, now depends primarily on curbing public-sector credit demands, particularly in the United States. In some countries rates of wage and price increase still need to be brought down further, especially when the decline in rates of inflation is recent and still needs to be consolidated. Almost everywhere rapid inflation is still a fresh memory, and public opinion is sensitive to the risk of a resurgence of inflation as recovery in aggregate demand strengthens. Monetary policy has in the past accommodated excessive accumulations of liquidity, especially during recession and early upswing, and in each successive cycle rates of inflation climbed close to or beyond previous peak levels. The chances of a break-through this time are seen in the markets to depend on the preservation of a stable monetary framework.

To a considerable extent, the heavy reliance placed on monetary policy reflects the constraints within which it has had to operate. Efforts to achieve incomes restraint, partly through alterations in indexation arrangements, have been helpful in some countries in bringing down underlying rates of inflation. However, the moderation recently seen in wage and price-fixing behaviour seems to be attributable more to exceptionally low rates of utilisation of labour and capital resources, raising the question of whether it will continue as recovery proceeds. Moreover, although budget deficits have been reduced in some countries, they remain large in others, not least in the United States. Despite continuing efforts to reduce them, large prospective public-authority borrowing requirements still inspire fears of inflation and of pressures on capital markets. Finally, real interest rates are still subject to pressures associated with imbalances in the private sector, stemming notably from the need for a lengthening of the structure of company indebtedness.

Some of these constraints are specific to the United States or are particularly severe in North America. Others are common to many countries. To a considerable extent developments in the United States continue to influence the options available elsewhere, but in varying degrees improvement in other countries' external positions has eased external constraints on their monetary policies. The room for manoeuvre is still limited, however. Countries can only try to make the best use of whatever scope they have for easing monetary conditions and for actively supporting the recovery.



## V. INTERNATIONAL TRADE AND PAYMENTS.

### Highlights.

This chapter deals with two main topics: interdependence in the evolution of developed and developing countries' current-account balances of payments during recent years; and 1982 balance-of-payments developments, both on current and on capital account, in the Group of Ten countries and Switzerland.

In 1982, two years after the second oil shock, the configuration of aggregate current-account balances of payments was in some respects quite different from what it had been at the corresponding stage after the 1973 oil price increases. In particular, the disappearance of the second round of OPEC surpluses has been accompanied neither by a re-emergence of the traditional aggregate surplus of Group of Ten countries nor by any marked reduction of the aggregate deficits of the other developed countries and of non-OPEC developing countries. This has been due partly to a very large increase last year, to over \$100 billion, in the excess of world current-account deficits over current-account surpluses and partly to the protracted recession of economic activity in the main industrial countries, following their widespread adoption of firm anti-inflationary policies from 1979 onwards.

These policies, at the centre of which were monetary policies which helped to produce unprecedented increases in interest rates, especially in the United States, had adverse effects on the current external accounts of other non-OPEC countries in two respects: by reducing the demand for their exports and by increasing the burden of their external debt service. The external constraints on these countries, particularly the developing ones, became such that they adopted restrictive policies themselves, which added to the recessionary forces in the industrialised world and brought about a progressive contraction of world trade in 1982. At the same time, however, it is clear that, even if the world economic environment had been more favourable in recent years, non-OPEC developing countries could by 1982 no longer have sustained the growth of their economies and their imports at the rates prevailing at the end of the 1970s.

As regards developments in the balances of payments of the Group of Ten countries, there was little change in their aggregate current-account balance between 1981 and 1982, but some major shifts in the positions of individual countries. The biggest change was in the United States, where, partly under the influence of particularly weak export markets in the western hemisphere, the current-account balance moved into substantial deficit in the second half of the year. The current external account of France, too, deteriorated markedly in 1982, as a result of the relatively strong growth of domestic demand, while those of most other Group of Ten countries improved, most notably with the emergence of surpluses in Germany and Canada.

On capital account there were three main developments in the Group of Ten countries last year. Firstly, the United States was again the world's principal

intermediator of savings and investments, with continuing large-scale exports of funds by the banks and even more sizable inflows of private non-bank funds, a large proportion of which was unidentified. Secondly, there were sizable net outflows of capital through the non-bank private sectors in Japan, Germany, Switzerland, the Netherlands and the United Kingdom, all countries which were in a rather comfortable current-account position. Thirdly, there was substantial official, or officially inspired, external borrowing and, in some instances, use of reserves by four Group of Ten countries with current payments deficits — Belgium, France, Italy and Sweden — to cover their external financial requirements.

### World trade.

The volume of world trade, which had hardly increased at all in 1981, declined last year by around 2 per cent., the first fall since 1975 when it had shrunk by 3½ per cent. As average world trade prices dropped by 4½ per cent., the dollar value of world trade fell by 6½ per cent., to a total of less than \$1,900 billion. The principal reasons for these developments were the global recession and sharp cutbacks of imports by a number of developing countries with precarious balance-of-payments positions.

Preliminary estimates indicate that in 1982 only trade in agricultural products increased in volume, by 1 per cent., while trade in mineral products (including petroleum) and manufactured goods declined by 7 and 1 per cent. respectively. The

World trade, 1980–82.

Areas <sup>1</sup>	Items	Annual and semi-annual percentage changes in volumes and terms of trade					Value <sup>2</sup> (US\$ billions)
		1980	1981	1982 year	1982 first half	1982 second half	
Group of Ten countries	Exports .....	4.0	2.5	- 2.0	- 1.0	- 4.5	1,040
	Imports .....	- 2.0	- 3.0	- 1.0	- 1.0	- 3.5	1,080
	Terms of trade ..	- 7.5	- 2.0	2.5	2.5	- 0.5	
Other developed countries	Exports .....	2.5	1.0	0.5	0.0	- 0.5	165
	Imports .....	4.0	0.5	0.5	0.0	- 3.0	210
	Terms of trade ..	- 4.0	- 3.5	0.5	1.0	- 1.0	
OPEC countries	Exports .....	-16.0	-18.0	-14.5	- 9.5	- 1.0	220
	Imports .....	21.5	22.5	5.0	4.0	- 7.0	160
	Terms of trade ..	51.0	18.0	- 2.0	- 3.5	2.0	
Non-OPEC developing countries	Exports .....	8.5	7.0	0.5	0.5	- 1.0	235
	Imports .....	5.0	2.0	- 8.5	- 3.0	- 5.5	275
	Terms of trade ..	- 7.0	- 5.5	- 3.0	- 3.0	- 2.5	
World	Trade <sup>3</sup> .....	1.5	0.5	- 2.0	- 1.0	- 3.5	1,875 <sup>4</sup>
	Unit value in US dollars <sup>3</sup> ...	23.0	- 1.5	- 4.5	- 0.5	- 3.5	

<sup>1</sup> For country composition see table on page 87.

<sup>2</sup> Exports f.o.b., imports c.i.f.

<sup>3</sup> Excluding centrally planned economies.

<sup>4</sup> Including trade of centrally planned economies.

Sources: GATT, IMF, OECD and own estimates.

weak performance in agricultural and mineral products was primarily due to sluggish demand in the industrial countries, but the fall in trade in manufactured goods must be attributed mainly to a reduction, estimated at 8 per cent., in imports of such products by the non-OPEC developing countries. Prices in US dollars of non-oil primary products fell by 12 per cent., almost as much as in 1981, while oil prices declined, for the first time since the second oil shock, by about 5 per cent. Prices of manufactured goods held up comparatively well, falling by only 2 per cent., or much less than the 5 per cent. recorded in 1981. Consequently, both the Group of Ten and the other developed countries experienced terms-of-trade gains, of  $2\frac{1}{2}$  and  $\frac{1}{2}$  per cent. respectively. Conversely, relative trade prices deteriorated in the other two groups, for the fifth year in succession in the case of the non-OPEC developing countries.

By groups of countries, the developed countries outside the Group of Ten and the non-OPEC developing countries avoided a fall in the volume of their exports last year, though the growth of  $\frac{1}{2}$  per cent. was — especially in the case of the latter group — substantially less than that achieved in earlier years. The two other groups recorded declines in export volumes, which were particularly large in the OPEC countries, where, under the combined influence of world recession and competition from other oil suppliers, real exports slumped by  $14\frac{1}{2}$  per cent. On the import side, by contrast, only OPEC countries lent any significant support to world trade growth. The decline in the volume of world trade became more pronounced as the year went on, amounting to  $3\frac{1}{2}$  per cent. in the last six months, against 1 per cent. in the first. On the import side this involved all groups of countries; however, the concomitant reduction in export volumes was heavily concentrated in the developed world.

The source of drag on world trade, which in 1981 had been concentrated in the Group of Ten countries, spread to developing countries last year. In 1981, when world trade had virtually ceased to grow, the reduction in the Group of Ten countries' import volumes had still been largely offset by expanding import demand in the rest of the world. In 1982 as a whole the Group of Ten countries' import demand fell away more slowly, but the developing countries' import performance was much weaker than in 1981. As will be discussed in the next section, the spreading of import reductions, which in the second half of 1982 affected all groups of countries shown in the table above, had its origin in the onset of recession in the major industrial countries after the second oil shock. As these recessionary forces were transmitted through external accounts to the developing world, they set in motion a vicious circle in which lower imports into one group of countries helped to induce import reductions in other groups.

#### **Aggregate balance-of-payments developments and global interdependence.**

Two features dominated the recorded aggregate current external payments positions of the main groups of countries in 1982: the disappearance of the OPEC surplus, which, after having peaked at \$114 billion only two years before, gave way

International current-account balances, 1980-82.<sup>1</sup>

Countries and areas	Trade balance (f.o.b.)			Invisibles balance			Current balance		
	1980	1981	1982	1980	1981	1982	1980	1981	1982
in billions of US dollars									
BLEU .....	- 5.3	- 4.8	- 4.0	0.4	0.6	1.0	- 4.9	- 4.2	- 3.0
Canada .....	7.6	6.4	14.7	- 8.5	-10.9	-12.8	- 0.9	- 4.5	2.1
France .....	-13.4	-10.0	-15.8	9.2	5.2	3.8	- 4.2	- 4.8	-12.0
Germany .....	8.1	15.7	24.2	-23.8	-22.2	-21.0	-16.7	- 6.5	3.2
Italy .....	-16.4	-10.6	- 7.9	6.7	2.5	2.4	- 9.7	- 8.1	- 5.5
Japan .....	2.1	20.0	18.1	-12.9	-15.2	-11.2	-10.8	4.8	6.9
Netherlands .....	- 1.4	3.9	3.9	- 1.6	- 1.0	- 0.5	- 3.0	2.9	3.4
Sweden .....	- 0.4	1.6	1.1	- 4.0	- 4.4	- 4.5	- 4.4	- 2.8	- 3.4
Switzerland .....	- 5.9	- 2.6	- 1.5	5.4	5.2	4.9	- 0.5	2.6	3.4
United Kingdom ...	2.9	6.3	3.8	3.9	6.3	3.0	6.8	12.6	6.8
United States .....	-25.3	-27.9	-36.3	26.8	32.4	28.2	1.6	4.6	- 8.1
Group of Ten countries .....	-47.4	- 2.0	0.3	1.6	- 1.5	- 6.5	-45.8	- 3.6	- 6.2
Australia .....	1.5	- 2.4	- 2.6	- 5.5	- 5.9	- 8.0	- 4.0	- 8.3	- 8.8
Austria .....	- 6.1	- 4.3	- 3.2	4.4	2.9	3.8	- 1.7	- 1.4	0.4
Denmark .....	- 2.1	- 1.0	- 1.0	- 0.3	- 0.8	- 1.5	- 2.4	- 1.8	- 2.5
Finland .....	- 0.5	0.6	0.4	- 0.9	- 0.9	- 1.3	- 1.4	- 0.3	- 0.9
Greece .....	- 5.7	- 5.8	- 4.9	3.5	3.4	3.1	- 2.2	- 2.4	- 1.8
Ireland .....	- 1.8	- 1.9	- 0.8	0.3	- 0.4	- 0.6	- 1.5	- 2.3	- 1.4
Israel .....	- 3.4	- 3.7	- 3.9	2.4	2.2	1.7	- 1.0	- 1.5	- 2.2
New Zealand .....	0.4	0.3	- 0.1	- 1.3	- 1.3	- 1.5	- 0.9	- 1.0	- 1.6
Norway .....	2.0	3.2	2.5	- 0.9	- 0.9	- 1.7	1.1	2.3	0.8
Portugal .....	- 4.2	- 5.1	- 5.3	3.0	2.5	1.8	- 1.2	- 2.6	- 3.5
South Africa .....	7.4	- 0.2	0.5	- 3.5	- 4.0	- 3.9	3.9	- 4.2	- 2.8
Spain .....	-11.7	-10.1	- 9.2	6.5	5.0	4.9	- 5.2	- 5.1	- 4.3
Turkey .....	- 4.0	- 3.1	- 1.9	0.3	0.8	0.7	- 3.7	- 2.3	- 1.2
Yugoslavia .....	- 4.7	- 3.0	- 1.9	2.4	2.1	1.4	- 2.3	- 0.9	- 0.5
Other developed countries .....	-32.9	-36.5	-31.4	10.4	4.7	1.3	-22.5	-31.8	-30.1
Total developed countries .....	-80	-38	-31	12	3	- 5	-68	-35	-36
OPEC countries <sup>2</sup> ...	172	120	60	-58	-57	-63	114	63	- 3
Non-OPEC developing countries <sup>3</sup> .....	-56	-61	-43	- 9	-18	-24	-66	-79	-67
Total developing countries .....	116	59	17	-67	-75	-87	49	-16	-70
Centrally planned economies <sup>4</sup> .....	- 6	1	8	- 5	- 6	- 5	-11	- 5	3
Total .....	30	22	- 8	-60	-78	-97	-30	-56	-103

<sup>1</sup> On a transactions basis. <sup>2</sup> OPEC countries (Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela) plus Oman. <sup>3</sup> The group of non-OPEC developing countries comprises all countries not included in the other groups referred to in this table. However, this definition differs from that used in Chapters VI and VII and the data on non-OPEC developing countries are therefore not comparable with those in the other two chapters. <sup>4</sup> Albania, Bulgaria, People's Republic of China, Czechoslovakia, German Democratic Republic, Hungary, North Korea, Poland, Rumania, USSR and Socialist Republic of Vietnam.

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

to a deficit of \$3 billion in 1982; and the fact that there was relatively little movement towards greater balance in the other main groups of countries. With the exception of the centrally planned economies, which moved from a \$5 billion aggregate deficit in 1981 to a surplus of \$3 billion, all groups of oil-importing countries remained in deficit. The aggregate deficits of the non-OPEC developing countries and the developed countries outside the Group of Ten, of \$67 and 30 billion respectively, though below their 1981 levels, were still substantial, while the Group of Ten countries recorded a \$3 billion widening of their deficit to \$6 billion. Consequently, the negative sum of all current-account positions — which has come to be known as the discrepancy in global current-account balances — showed an unprecedented increase of \$47 billion in 1982.

*Origins and implications of the discrepancy in global current-account balances.* This sharp rise in the world current-account discrepancy in 1982 to over \$100 billion, or not far short of the identified OPEC surplus at its 1980 peak, renders the analysis of changes in the global pattern of current accounts very difficult and calls into question the validity of the recorded positions of individual groups of countries. Moreover, to the extent that policies are influenced by countries' perceived current-account balances, over-recording of deficits or under-recording of surpluses may result in policy stances being more restrictive than they otherwise would have been.

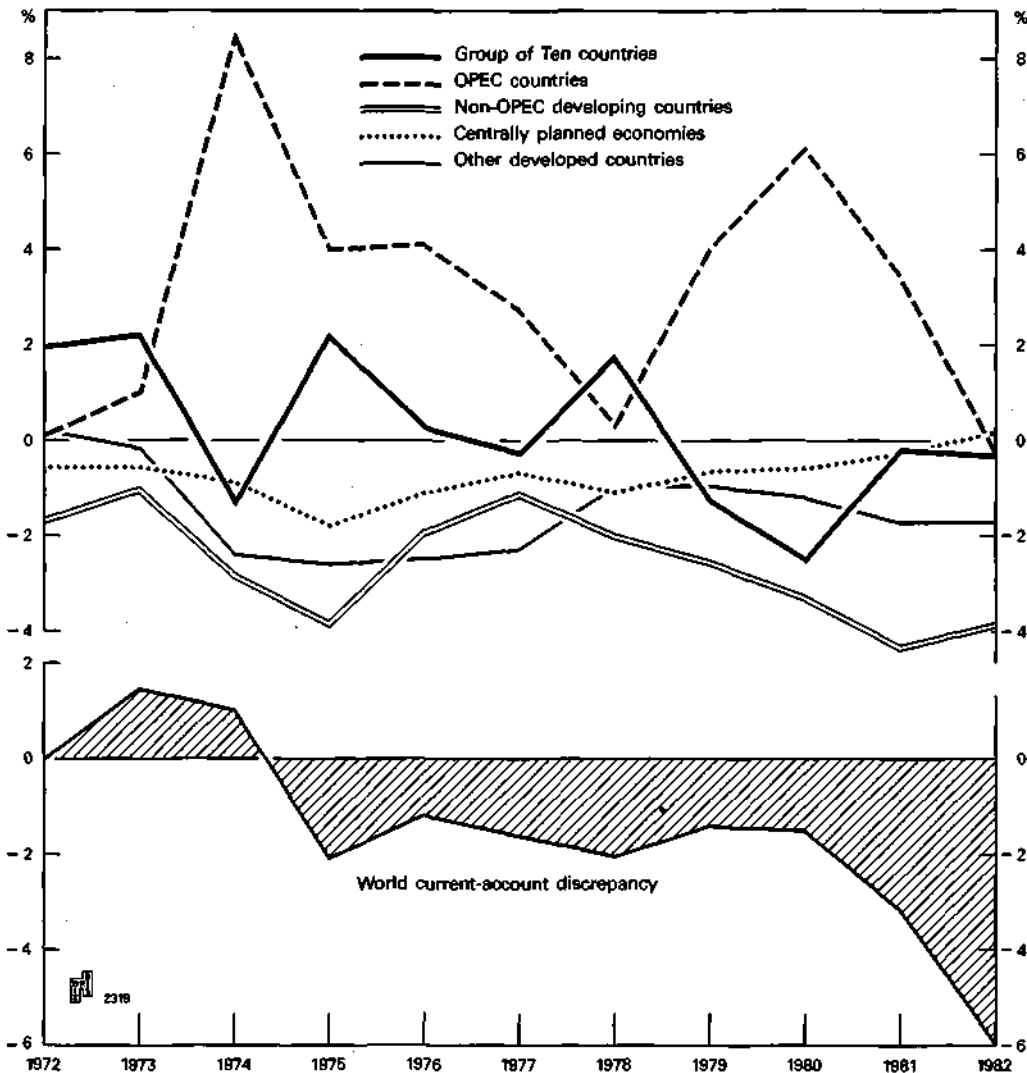
While, in theory, the sum of all countries' current-account balances should be zero — since each current-account transaction should be recorded simultaneously but with opposite signs by the two countries involved — this has in practice never been the case. The discrepancy can be attributed mainly to reporting gaps and recording and timing differences, particularly in services and transfers accounts, which have shown a steeply growing deficit for the world as a whole: while in 1972 the negative discrepancy on invisibles account had amounted to \$11 billion, it had risen to \$78 billion by 1981, and last year it went up by another \$19 billion. This reflected in part the growth of invisibles transactions, especially the rapid rise in those components, such as investment income and transportation, which are particularly prone to recording inaccuracies. The second element in the world current-account discrepancy is to be found in the balance on world merchandise trade and is largely attributable to the fact that exports are recorded earlier than the corresponding imports. For this reason the trade balance discrepancy fluctuates in line with changes in the value of world trade. At times of accelerating growth in the value of world trade the discrepancy will be positive and growing, but when world trade contracts the discrepancy will become negative. This was the case last year when the world trade balance swung from a surplus of \$22 billion in 1981 to a deficit of \$6 billion, thus accounting for the bulk of the 1982 increase in the discrepancy in world current-account balances.

It is impossible at this stage to re-allocate the 1982 world current-account deficit among the main groups of countries. There is, however, reason to believe that little of the counterpart is likely to be reflected in a reduced deficit of the non-OPEC developing countries. This is because receipts from service transactions of the kinds which appear to be primarily responsible for the world discrepancy accrue in large part to the Group of Ten and OPEC countries. If this supposition is correct,

the extent of any deflationary bias imparted to economic policy may be less powerful than might be suggested by the size of the total discrepancy, since countries in these two groups, with the exception of some high-absorbing OPEC countries, have not generally been faced with severe external constraints.

*Interdependence in the evolution of current-account balances of payments.* Two years after the 1979–80 oil price increases the world pattern of current-account balances was in some respects very different from what it had been after the 1973 oil price increases. The main reason for this was that the second oil shock was followed by a shallower but more protracted recession in the major industrial countries than

Aggregate current-account balances of major groups of countries and the world current-account discrepancy, 1972–82.  
As a percentage of world exports.



in 1974–75. This not only resulted in an unprecedented increase in the world current-account discrepancy, but also affected the underlying aggregate current-account positions.

From the preceding graph, which shows the evolution of the current-account balances of the main groups of countries since 1972 in relation to world exports, it can be seen that the two rounds of major oil price increases initially boosted the current-account surplus of the OPEC countries to as much as 8½ and 6½ per cent. of world exports in 1974 and 1980 respectively, while producing large deficits on the current external accounts of all the other main groups of countries. In both 1975 and 1981 the OPEC surplus was then roughly halved, but the evolution of the current-account balance of the Group of Ten countries followed a rather different path from those of the other groups of oil-importing countries. The more favourable development of the Group of Ten countries' aggregate current account was to some extent a reflection of the large share of these countries in total OPEC imports but, in addition, higher oil prices slowed down economic activity much more strongly in the Group of Ten countries than in the other groups of non-OPEC countries.

In 1982, however, the development of the different groups of non-OPEC countries' current external balances contrasted sharply with that after 1975. In 1976–77 there had been a marked narrowing of aggregate current-account imbalances in the different groups of non-OPEC countries, and this was followed in 1978 by the re-emergence of something like the pre-1974 world structure of current-account balances, with the Group of Ten countries again becoming the principal net suppliers of goods and services to the rest of the world. In 1982, on the other hand, the recorded aggregate current-account balance of the Group of Ten countries was still in deficit, while the aggregate deficit of the non-OPEC developing countries was larger in relation to world exports than in 1976–77. This was in large part attributable to developments in the Group of Ten countries, and in particular to their widespread adoption of strong anti-inflationary policies after 1979 which have kept domestic demand depressed for much longer than in the mid-1970s and resulted in significantly higher interest rates on key currencies. As a consequence, the current accounts of countries outside the Group of Ten were burdened simultaneously by a fall-off in demand for their export products and by considerably higher service payments on foreign debt.

*The impact of recession in the Group of Ten countries on aggregate current-account positions in the rest of the world.* The downswing in economic activity in the Group of Ten countries set in after 1979. Two years of stagnating industrial production in 1980–81, accompanied by a reduction in their aggregate output growth to only 1 per cent. a year, were followed in 1982 by a slight decline in aggregate GNP and a 4½ per cent. drop in aggregate industrial production. The volume of imports into the Group of Ten countries, which on average had grown by about 7 per cent. a year during 1976–79, shrank in each of the three following years, with adverse effects on exports in all other groups of countries.

The strict anti-inflationary policies adopted by the major industrial countries after 1979 also significantly raised interest rates in domestic and international financial markets. The annual average of the six-month London interbank offer rate

on US dollars, which had risen by 2 percentage points in 1980, reached 16.8 per cent. in 1981. After declining somewhat in the first half of 1982, the rate dropped sharply to an average of 11.5 per cent. in the second half of the year. Interest rates on other key currencies, such as the Deutsche Mark, the Swiss franc and the Japanese yen, followed a similar pattern, even though they stayed well below the level of dollar rates. As a large portion of total foreign debt is denominated in US dollars and has been contracted at variable interest rates, which are adjusted to market rate movements only with a time-lag, the decrease in short-term dollar rates in the latter part of 1982 had only a relatively modest impact during the rest of the year on the flow of interest payments between countries.

The adverse impact of depressed export markets and higher interest rates was most pronounced in the *non-OPEC developing countries*. As in the past, the downturn in their principal export markets — the Group of Ten countries take more than half of their total exports — was first reflected in an erosion of their export prices. Led by declines in non-oil primary commodity prices of 14½ per cent. in 1981 and 12½ per cent. in 1982, their export prices fell by 1 and 5 per cent. respectively in these two years and their terms of trade deteriorated by 5½ and 3 per cent. These price effects were reinforced by a decline in the volume growth of their exports from an average of 7 per cent. in 1977–81 to only ½ per cent. in 1982.

Superimposed on these adverse developments on foreign trade account were the effects on the non-OPEC developing countries' invisibles balances of the higher rates of interest that they had to pay on a strongly expanding stock of foreign debt. Between 1979 and 1982 these countries' interest payments on their external indebtedness more than doubled, from \$21 to 47 billion, the estimated stock of debt having increased from \$320 to 500 billion and the average interest rate paid on it from 7.2 to 10 per cent.

The following table shows the actual evolution of the non-OPEC developing countries' current-account balances of payments during 1980–82, as well as hypothetical calculations of what these balances might have been under two different

Non-OPEC developing countries:  
Actual and hypothetical current-account balances of payments, 1980–82.

Items	Trade balance			Net services and transfers			Current account			Estimated gross external debt		
	1980	1981	1982	1980	1981	1982	1980	1981	1982	1980	1981	1982
	in billions of US dollars											
Actual .....	-56	-61	-43	-9	-18	-24	-65	-79	-67	380	450	500
Hypothetical												
Scenario I <sup>1</sup> .	-58	-48	-7	-7	-10	-12	-63	-58	-19	380	430	440
Scenario II <sup>2</sup> .	-56	-62	-65	-7	-11	-16	-63	-73	-81	380	460	520

<sup>1</sup> Scenario I assumes: constant terms of trade in 1981 and 1982; an increase in export volumes in 1982 in line with the 1977–81 average increase of 7 per cent.; an average interest rate on foreign debt in 1980–82 of 7.2 per cent., the actual average interest rate of 1979; imports at the level actually recorded. <sup>2</sup> Scenario II assumes that the volume of imports rose in 1981 and 1982 in line with the 1977–80 average growth of 7 per cent. but maintains the other assumptions made in Scenario I.



scenarios. The first of these is designed to highlight the effects on their exports and their external interest payments of the combination of recession and high interest rates in the Group of Ten countries. For this purpose, the actual results have been adjusted by assuming that the non-OPEC developing countries' terms of trade in 1981 and 1982 remained at the 1980 level, that the volume of their exports grew in 1982 at the average rate for 1977-81 and that the average interest rate paid on their external debt during 1980-82 remained at the 1979 level. On the other hand, the import figures for 1980-82 are those that were actually recorded. The second scenario is designed to show what would have happened to their current-account balances in 1980-82 if the world economic environment had been more favourable to these countries, as simulated in the first scenario, but if, at the same time, the volume of their imports had risen in 1981 and 1982 at the average growth rate of 7 per cent. recorded in 1977-80.

Scenario I shows that, on unchanged terms of trade in 1981-82 and export volume growth in 1982 in line with past performance, the non-OPEC developing countries' trade deficit would have been \$13 billion less in 1981 and \$36 billion less in 1982. On invisibles account, had interest rates during 1980-82 remained at their 1979 level, and had total external debt increased more slowly, in line with the hypothetical current-account balances, total net external interest payments, and consequently the deficits, would have been \$8 billion lower in 1981 and \$12 billion lower in 1982. If these changes are applied to the aggregate current-account balance of the non-OPEC developing countries, the total deficit is reduced from \$79 to 58 billion in 1981 and from \$67 to 19 billion in 1982.

Such a simulation of current-account deficits is, of course, highly artificial. It is, for example, extremely improbable that in the more favourable world economic environment assumed in Scenario I the growth of non-OPEC developing countries' imports would have been cut back to the extent that it actually was. Scenario II therefore shows the additional effect on these countries' aggregate current-account positions in 1981-82 when it is assumed that their imports continued to grow at their 1977-80 average rate of 7 per cent. For 1982 this then gives a current-account deficit of \$81 billion, or \$14 billion higher than the deficit actually recorded.

From these hypothetical calculations two things are clear: firstly, that the combination of recession and high interest rates in the Group of Ten countries had major adverse effects on the non-OPEC developing countries' balance of payments; and, secondly, that these developing countries would, in any case, have had to take action to correct their external payments positions in 1982, since the rate at which their domestic demand, and thus their imports, had been growing in the late 1970s would have been unsustainable even in a more favourable world economic environment.

Current-account developments in the other main groups of countries outside the Group of Ten were similarly affected, although the adverse impact of recession and high interest rates was generally less marked than in the case of the non-OPEC developing countries. In the *developed countries outside the Group of Ten* the aggregate current-account deficit declined modestly in 1982 to \$30 billion, after having jumped from \$22 to 32 billion between 1980 and 1981. Higher average

interest rates and a \$30 billion increase in foreign indebtedness to \$235 billion are estimated to have raised net interest payments in the last two years by \$7 billion, largely accounting for the decline in these countries' traditional invisibles surplus from \$10 to 1 billion between 1980 and 1982. However, the effect of the recession on this group's exports, almost 75 per cent. of which go to Group of Ten countries, appears to have been even larger. Indeed, had the terms of trade remained at the 1980 level and had a modest export volume growth of 2½ per cent. been sustained in 1981–82, these countries' aggregate trade deficit in 1982 would have been \$20 billion instead of the recorded figure of \$30 billion. This estimate, however, assumes that imports would have remained at the level actually recorded.

The *OPEC countries'* current payments balance was exposed to opposite effects from recession and interest rates. The recession, together with further progress in oil conservation and some destocking, brought a substantial cutback in the volume of oil imports into the Group of Ten countries. This development was aggravated for OPEC countries by growing competition from other oil-producing countries. Between 1979 and 1982 real oil exports from OPEC countries fell by 45 per cent., from an average of 31 mb/d to less than 17 mb/d. As oil export prices, after having risen by 10 per cent. in 1981, fell back by 4½ per cent. in 1982, the decline in oil export volumes over the two-year period 1981–82 was almost fully translated into losses of export earnings. These losses, which amounted to \$28 billion in 1981 and \$59 billion in 1982, were thus the principal reason for the disappearance of the OPEC surplus. High interest rates, on the other hand, strengthened the OPEC countries' current balance, even though, because of reporting gaps, this appears not to be fully reflected in the balance-of-payments statistics. On the basis of the cumulative OPEC surplus on current account since 1973, these countries' aggregate net foreign asset position may be estimated to have amounted to \$345 billion at the end of 1980 and \$405 billion at the end of last year. If interest paid on the increasing stock of net foreign claims had roughly followed interest rate movements in world financial markets, OPEC countries' net earnings from foreign investment would have risen by \$16 billion in 1981 but declined by \$4 billion in 1982. Total recorded service receipts of OPEC countries increased by \$8 to 45 billion in 1981 but declined by \$2 billion in 1982.

Finally, the recession in the major industrial countries also contributed to losses in convertible currency earnings of the *centrally planned economies* in eastern Europe and Asia, whose exports to developed countries in the West, after having declined by \$1.6 billion in 1981, virtually stagnated in 1982. However, as the centrally planned economies reduced their net indebtedness to the international banking system last year, a part of the interest-rate-induced deterioration in their invisibles balances in 1980–81 was reversed in 1982, helping the combined current account to swing from a \$5 billion deficit in 1981 to a \$3 billion surplus in 1982.

*Adjustment and financing in the face of deteriorating current payments positions.* The response of groups of countries outside the Group of Ten to worsening current-account positions in 1981–82 combined recourse to external financing from both private and official sources with shifts to more restrictive domestic policies. Partly voluntarily, but mainly because there was no other choice, emphasis was increasingly placed on adjustment policies.

The most visible sign of domestic policies of restraint in the group of *non-OPEC developing countries* was the slowdown in growth of output, from a weighted average of about 5 per cent. in 1978–80 to one of little more than 1 per cent. in 1981–82. While the growth in the volume of imports was still sustained at a level of 2 per cent. in 1981 — though mainly on account of the oil-producing countries in the group — there was a cutback of 6½ per cent. in 1982, the first since 1975. As import prices, too, declined by 2 per cent., the total value of these countries' imports fell by \$29 billion in 1982. The decline in imports was particularly sharp in some of the most heavily indebted countries. For example, the value of imports into Mexico and Argentina fell by around 40 per cent., implying cutbacks in volume terms of more than 35 per cent., while in Brazil real imports were reduced by almost 10 per cent. By contrast, earlier adjustment policies and export-led growth enabled Korea, which ranks as the fourth largest borrower in the developing world, to maintain its 1981 import volume last year.

As regards the financing of these countries' current external deficits, the striking features of the broad picture presented in the following table are the sharp decline in new foreign borrowing from all sources (excluding the IMF) from \$63 billion in 1981 to \$40 billion in 1982 and the abrupt reduction in short-term borrowing, which in 1980–81 had accounted for more than 30 per cent. of total new borrowing by these countries. The decline in new foreign borrowing was concentrated in the banking sector (see Chapter VI), while concessional loans and other official flows (excluding the IMF) are estimated to have remained at their 1981 level of nearly \$20 billion. Reduced access to financing, especially from private-sector sources, led to a rundown of the non-OPEC developing countries' aggregate official reserves by about \$9 billion, as well as to a decline in private external assets and a build-up of payments arrears in a number of countries.

Non-OPEC developing countries:  
Estimated financing of current-account deficits, 1980–82.

Items	1980	1981	1982
	in billions of US dollars		
Current-account deficit .....	-65	-79	-67
Financing			
Direct investment (net) .....	8	11	10
Change in gross foreign debt (excluding IMF) .....	61	63	40
of which: long-term .....	37	48	37
short-term .....	24	15	3
(bank lending)* .....	(33)	(40)	(16)
Net drawings on the IMF .....	2	5	5
Total .....	71	79	55
Change in foreign assets .....	6	0	-12
of which: official reserves .....	0	0	-9
other assets .....	6	0	-3
(deposits with banks) .....	(2)	(4)	(0)

\* Includes changes in the net position of banks located in offshore centres.

In a number of *developed countries outside the Group of Ten*, too, external constraints were responsible for the adoption of more restrictive demand-management policies, which led to a slowdown of growth of GNP from more than 2 per cent. in 1980-81 to only 1 per cent. in 1982. The growth of these countries' import volumes declined to 1/2 per cent. in 1981-82, and large cutbacks were recorded last year in Yugoslavia and South Africa. However, the large majority of these countries have not encountered external financing problems. For the group as a whole total liabilities to the BIS reporting banks, which may account for almost two-thirds of these countries' total foreign debt, expanded last year by \$15 billion, or as much as in 1981. Moreover, the official reserves (excluding gold) of countries in the group, which had been drawn down by \$2.6 billion in 1981, remained virtually unchanged last year.

While the recession in the major industrial countries was the most important factor in the disappearance of the OPEC surplus in 1982, its effects on domestic developments were less severe in the *OPEC countries* than elsewhere. Not least on the strength of financial assets accumulated in earlier years, the volume of their imports continued to rise during the first part of 1982, and output in the non-oil sector is estimated to have expanded by 4 per cent., one percentage point less than the 1980-81 average. There were, however, marked differences in the experience of individual OPEC countries last year. The high-absorbing countries, whose combined current payments deficit widened by \$10 to 19 billion in 1982, were nearly all faced with increasing external constraints which prompted them to adopt less expansionary demand-management policies and to reduce sharply the volume growth of their imports, from an average of over 20 per cent. in 1980-81 to only 2 per cent. in 1982. The largest cutback in import volume, of around 35 per cent., was

Estimated deployment of the OPEC countries' investible surplus, 1981-82.<sup>1</sup>

Items	1981	1982		
		year	first half	second half
Identified investible surplus .....	49.5	3.1	8.5	- 5.4
Short-term investments .....	0.6	-16.2	- 6.7	- 9.5
of which:				
in the United States <sup>2</sup> .....	- 2.5	4.8	6.1	- 1.3
in the United Kingdom <sup>2</sup> .....	8.2	- 8.2	- 5.8	- 2.4
(of which: Euro-currency deposits) .....	(7.8)	(- 9.4)	(- 8.5)	(- 2.9)
in other industrial countries <sup>3</sup> .....	- 5.1	-12.8	- 7.0	- 5.8
Long-term investments .....	48.9	19.3	15.2	4.1
of which:				
in the United States .....	18.8	7.6	6.5	1.1
in the United Kingdom .....	1.1	- 0.8	0.1	- 0.9
in other industrial countries .....	19.4	6.6	5.9	0.7
with international institutions <sup>4</sup> .....	2.4	2.0	0.1	1.9
in developing countries .....	7.2	3.9	2.6	1.3

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

Source: Bank of England.

recorded by Nigeria. In the low-absorbing OPEC countries, whose combined current external surplus, at \$16 billion, was still comfortable, although greatly reduced, the growth of real imports in 1982, at 13 per cent., was only moderately below the 1980-81 average of 17 per cent. Most of the decline in this group's real import growth was accounted for by a 45 per cent. decline in the value of Libya's imports.

With regard to the 1982 pattern of OPEC countries' external financial flows, three features stand out in the evolution of the identified investible surplus of the group as a whole shown in the table above. Firstly, concomitant with the disappearance of the current-account surplus, OPEC countries' aggregate identified gross new investments abroad dwindled to \$3.1 billion, a \$16.2 billion drawdown of short-term assets being rather more than offset by new long-term investments of \$19.3 billion. Secondly, there was a movement of short-term investments away from the United Kingdom and other industrial countries into the United States. Thirdly, both the overall increase in foreign assets and the geographical redistribution of short-term placements occurred in the first half of last year, while in the second half total assets shown in the table declined by \$5.4 billion. The situation differed significantly between surplus and deficit countries in the group, as can well be illustrated by movements in the deposits of low and high absorbers with BIS reporting banks outside the United States (a breakdown of US banks' liabilities and assets vis-à-vis low and high absorbers is not available). The principal low absorbers' deposits with these banks declined by \$1 billion in 1982, whereas the high absorbers reduced their deposits by \$23 billion in 1982. Coming after a \$13.5 billion drawdown in 1981, this meant that the high-absorbing OPEC countries had by the end of 1982 withdrawn 40 per cent. of their total assets held with banks outside the United States at the end of 1980. A part of these funds may, however, have been shifted to banks in the United States.

In most of the *centrally planned economies* shortages of convertible currency had led to the imposition of restrictive domestic economic policies already at the beginning of the decade. Cutbacks in the group's aggregate imports from western countries of \$4 and 5 billion in 1981 and 1982 respectively were an important factor in the improvements in the group's trade account of about \$7 billion in each of the last two years. The combined current account swung into surplus in 1982, and these countries' net indebtedness to the BIS reporting banks was reduced. The eastern European countries' gross liabilities to the banks declined by \$4.7 billion, exactly the same amount that had been borrowed a year earlier, while their deposits were rebuilt to the extent of \$2 billion. Moreover, China's net creditor position with the banks strengthened further by \$3.5 billion in 1982, following a \$2.7 billion rise in 1981.

*The repercussions on the Group of Ten countries of adjustment in the rest of the world.* As countries outside the Group of Ten responded to external constraints by reducing import volumes, these adjustment measures fed back onto the Group of Ten countries. The decline in the demand for their exports not only prevented an improvement in the Group of Ten countries' aggregate trade account in 1982 but also exacerbated the recession in the industrial world. For example, had the demand for real exports from the Group of Ten not declined in 1982, but risen at the same

rate as in 1980-81, the aggregate national income of the Group of Ten countries would have been, *ceteris paribus*, about 1/2 percentage point higher than it actually was. In fact, the recessionary forces re-transmitted from the rest of the world became particularly pronounced in the second half of 1982, when the volume of exports fell by 4 1/2 per cent.

#### **Balance-of-payments developments in the Group of Ten countries.**

*Current-account balances.* The aggregate current-account deficit of the Group of Ten countries widened last year by \$2.7 to 6.2 billion, despite a \$40 billion reduction in net oil payments, a 12 per cent. decline in non-oil primary product prices and a rise in net investment income receipts. Two factors appear to have been responsible for the lack of improvement in the group's aggregate current account. Firstly, last year's rise in the world current-account discrepancy — which, as discussed earlier, appears to have been mainly related to the contraction of world trade — may well mask some underlying improvement in the combined trade account. Secondly, the adoption of restrictive policies elsewhere reduced the demand for exports of goods and services from the Group of Ten in 1982. This second factor became increasingly important during the course of the year, as is shown by the substantial deterioration of the US foreign trade balance in the second half of the year, when export markets in the western hemisphere were particularly weak.

The sharp change in the US position caused the aggregate current account of the Group of Ten countries to swing, at seasonally adjusted annual rates, from a surplus of \$6 billion in the first half of 1982 to a \$18 billion deficit in the second half. The combined position of the other countries improved slightly in the course of the year. More importantly, however, changes in relative cyclical positions and competitiveness produced a number of marked shifts in their individual current-account balances between 1981 and 1982.

Outside the United States the biggest deterioration on current account was recorded in France, where the deficit was two and a half times larger than in 1981. Sweden's deficit also widened, especially in the second half of the year, and the surplus of the United Kingdom, while still substantial, was little more than half the record 1981 figure. All other countries in the group recorded improvements on current account, the largest of which resulted in a swing into surplus in the case of Germany and Canada.

The turn-round in the current account of the *United States*, from a surplus of \$4.5 billion in 1981 to a deficit of \$8.1 billion in 1982, was by far the largest in the Group of Ten. Most of the deterioration was on trade account, where the seasonally adjusted deficit more than doubled to \$24.5 billion in the second half of the year. The increase in the US trade deficit can be attributed to the combined influence of weak export markets and loss of international competitiveness. On the export side, these two factors together caused a 12 per cent. decline in volume; on the import side, the improved price competitiveness of foreign suppliers of non-oil products appears to have broadly offset the impact of weakening domestic demand in the United States, since the volume of non-oil imports remained constant. However,

despite the pronounced worsening in US competitiveness, import penetration in the non-petroleum sector has hardly risen in recent years, in either value or volume terms. This suggests that profit margins, rather than volumes, have borne the brunt of the competitive adjustment in US import-competing industries, and also that the profitability of exports to the US market may have improved.

Changes in the volume of trade thus resulted in a deterioration of more than \$25 billion in the non-oil trade balance last year. However, a small improvement in the non-oil terms of trade and a decline of \$16 billion in oil import payments limited the worsening of the total trade deficit to \$8.4 billion.

The \$25 billion fall in exports was distributed among all major categories of commodities. The largest decline, of \$7.5 billion, was in sales of capital goods, followed by reductions of \$6.9 billion and \$6.2 billion in agricultural products and industrial supplies respectively. Non-oil imports remained virtually at their 1981 level, a decline of \$7.2 billion in purchases of industrial supplies being offset by increases in other categories of goods.

A breakdown of US trade by regions shows an improvement of \$18 billion in the balance of transactions with OPEC countries, whose share in total US petroleum imports fell by more than one-fifth. On the other hand, there were deteriorations, of \$11.2 billion and \$14.4 billion respectively, in the balances of trade with non-OPEC developing countries and industrial countries. Half of the total decline in US exports last year was accounted for by reduced sales to Canada and Mexico.

The invisibles surplus declined from \$32.4 billion in 1981 to \$28.2 billion in 1982. Net direct investment income fell by \$6 billion as a result of the combined effects of the strengthening of the dollar and the recession.

In *France* the current external deficit widened from \$4.8 billion in 1981 to \$12 billion in 1982. More than four-fifths of this deterioration was in the foreign trade deficit, which rose from \$10 to 15.8 billion. As the terms of trade were virtually constant, last year's increase in net imports was fully accounted for by adverse changes in import and export volumes, which appear to have moved in line with relative demand pressures in France and other industrial countries. Real domestic demand in France increased by almost 4 per cent. and, while real energy imports declined, the volume of non-energy imports grew by 5½ per cent. At the same time, the volume of exports fell by around 3 per cent. These cyclical factors particularly affected trade with other OECD countries, whose total surplus with France, on the basis of customs data, increased from \$11.3 billion in 1981 to \$16.6 billion in 1982. By commodities, the worsening was concentrated on trade in industrial products, on which France's 1981 surplus of \$9 billion was more than halved in 1982. The invisibles surplus fell last year by \$1.4 billion as a result of increased transfer payments by the public sector.

In *Sweden* the current-account deficit widened by \$0.6 to 3.4 billion in 1982. Nearly all of the deterioration occurred in the trade account, and was ascribable to unfavourable movements in net trade volumes; real exports rose by 3 per cent. but the volume of imports expanded by almost twice as much. The rise in the volume of exports was concentrated in the first half of the year, when gains in competitiveness

from the devaluation of the krona in September 1981 were reinforced by relatively buoyant export markets. On the import side, where the growth in volume contrasted with stagnating real GDP, the increase may have represented a rebounding from the previous year, when import volumes fell by 6 per cent. in the face of widespread destocking.

The *United Kingdom's* current-account surplus fell back in 1982 to \$6.8 billion from the previous year's record level of \$12.6 billion. A further increase in the surplus on oil account, from \$6.3 to 8.1 billion, was more than offset by the combination of a deterioration on non-oil trade from approximate balance in 1981 to a deficit of \$4.2 billion, and a halving of the invisibles surplus. With non-oil terms of trade and non-oil export volumes barely changed from the previous year, the principal factor in the deterioration on trade account was a 7 per cent. rise in the volume of non-oil imports, the highest recorded last year by any Group of Ten country. The main beneficiaries of the increase in import demand were other EEC countries, which, on the basis of customs data, accounted for over 60 per cent. of the total increase in the value of UK non-oil imports. The rise in imports was almost entirely in manufactured goods, and the \$9.6 billion trade surplus in these goods recorded in 1981 was more than halved last year.

While the volume of non-oil imports grew strongly over the year as a whole, there was a 3 per cent. fall between the first and the second halves of 1982, despite a pick-up in consumer demand during the year. This may partly reflect an improvement in the competitive position of domestic manufacturers since 1980, as well as the sharp reductions in inventories in the second half of last year. As export performance also improved in the latter part of the year, the overall trade balance strengthened considerably in the last quarter, when the surplus amounted to \$2.1 billion, or more than one-half of the year's total.

The UK invisibles surplus fell from \$6.3 billion in 1981 to \$3.0 billion last year, mainly as a result of smaller private-sector net receipts of interest, profits and dividends, reflecting reduced net earnings from direct investment and investment by oil companies.

*Germany* recorded the largest improvement on current account of any Group of Ten country in 1982. Almost entirely on the strength of a \$8.5 billion rise in the trade surplus, its current-account balance swung from a \$6.5 billion deficit in 1981 to a surplus of \$3.2 billion in 1982. In addition, the traditional deficit on services and transfers declined by \$1.2 billion. The improvement in the seasonally adjusted current account continued throughout the year, from a \$0.3 billion deficit in the first quarter to a \$2 billion surplus in the last.

The decisive factor behind last year's record trade surplus of \$24.2 billion was a terms-of-trade improvement of 4 per cent. In dollar terms, German export prices fell by only 2 per cent., while import prices declined by 6 per cent. Mainly in response to the lagged effects of the 1980-81 depreciation of the real effective exchange rate of the Deutsche Mark, the volume of exports rose by 2 per cent.; this, however, was concentrated in the first few months of the year. The largest export gains were in sales to low-absorbing OPEC countries, the Soviet Union and the



larger EEC countries, nearly one-third of the increase in the total value of exports being accounted for by motor vehicles.

The modest increase of 1 per cent. in the volume of imports for the year as a whole was a reflection of generally sluggish domestic demand conditions and of further cutbacks in energy imports, which were about 5 per cent. lower in the last quarter of 1982 than in the corresponding period of 1981. Real imports were relatively buoyant in the early months of the year, but slackened thereafter. Notable shifts occurred in the geographical distribution of imports in 1982, some of which appeared to be related primarily to changes in suppliers' competitive positions. While Denmark, Austria and the Netherlands increased their shares of the German market, imports from the United States, France (excluding aircraft) and Sweden lost ground. With the improvement in the competitiveness of the German motor industry last year, imports from Japan fell twice as fast as total imports, though it has to be remembered that prior to 1982 Japanese exporters had made very large gains in the German market.

In *Canada* the current account improved last year from a \$4.5 billion deficit to a surplus of \$2.1 billion, the first since 1973. The trade surplus more than doubled to \$14.7 billion, primarily reflecting Canada's deep recession. Total domestic demand fell last year by 7 per cent. — much more than in any other Group of Ten country — and import volumes by as much as 15 per cent. On the other hand, and despite a drop of 4 per cent. in the volume of sales to the United States, which accounts for two-thirds of Canada's exports, the overall volume of exports was maintained at its 1981 level. Mainly as a result of these volume trends, Canada's bilateral trade balance with the United States improved by \$7.1 billion.

Three other Group of Ten countries recorded higher current-account surpluses in 1982. In *Japan* the increase was from \$4.8 to 6.9 billion and was more than accounted for by a \$4.0 billion decline in the invisibles deficit, which itself was mainly due to an increase in net investment income. The trade surplus, on the other hand, fell back from \$20 to 18.1 billion, the non-oil balance deteriorating by around \$7 billion as the value of exports fell by more than that of non-oil imports. Japan's relatively poor export performance in 1982 — the 3 per cent. loss in volume exceeded the contraction of world trade — is somewhat surprising in view of the substantial improvement in its competitive position during the year and may have been associated with export restraint in the face of mounting protectionist pressures abroad. The weakness of exports was particularly pronounced in the second half of the year, when their seasonally adjusted value was over 10 per cent. lower than the first-half level. A breakdown by region shows that exports to Japan's two principal markets, the United States and the Far East — each of which took 26 per cent. of its exports in 1981 — fell in 1982 by 6 per cent. and 10 per cent. respectively.

The improvement which has been observed since 1980 in the current external account of the *Netherlands* continued last year, although by far the greater part of the \$3.4 billion surplus was recorded in the first half of 1982. The trade surplus remained at the 1981 level of \$3.9 billion, while the invisibles deficit contracted by \$0.5 billion, on the strength of a rise in the transport surplus and lower deficits on net factor income from abroad and net transfers. Export volume declined by nearly

1 per cent. over the year owing to a sizable fall in the energy sector. Import volumes, which had fallen in 1981 by 7 per cent., mainly because of the extent of destocking, fell by a further  $\frac{1}{2}$  per cent. in 1982, rather less than the reduction in domestic demand.

*Switzerland's* current-account surplus increased by \$0.8 to 3.4 billion in 1982. A 5 per cent. improvement in the terms of trade was the main reason for the reduction in the trade deficit to \$1.5 billion. Trade volumes fell significantly, real exports declining by  $4\frac{1}{2}$  per cent., or twice as fast as real imports. The lower import volumes reflected the cyclical fall in demand, which came late by comparison with other countries and which extended to all categories of imports except consumer goods. The reduction in export volumes was an important influence in the 1.7 per cent. decrease in GNP in 1982, as exports account for almost one-third of total output.

In *Italy* the current-account deficit declined from \$8.1 billion in 1981 to \$5.5 billion last year. Most of this improvement was on trade account, the deficit on which was reduced by \$2.7 to 7.9 billion owing to a 4 per cent. strengthening of the terms of trade. The invisibles surplus, which had fallen steeply in 1981, mainly because of higher interest payments, was little changed in 1982. For the year as a whole, the volume of exports was about the same as it had been in 1981, a large rise of 13 per cent. over the year in the first half being followed by a fall of 9 per cent. in the second half.

The volume of imports, after shrinking by nearly 9 per cent. in 1981, recovered slightly in 1982, even though there was a marginal decline in domestic economic activity for the year as a whole. The expansion of real imports was concentrated in the first half of the year, and much of it was probably due to the termination of the import deposit scheme in February. In the second half of the year, when industrial production fell at an annual rate of over 10 per cent., the volume of imports was 10 per cent. below the first-half level.

The improvement in the current-account balance of the *Belgium-Luxembourg Economic Union*, which began in 1981, continued last year with a further decline of the deficit to \$3 billion. Both the trade balance and the invisibles balance improved, by \$0.8 and 0.4 billion respectively. Although its economy is the most open of all those in the Group of Ten — and so particularly vulnerable to changes in the course of world trade — and although it has an industrial structure (e.g. its iron and steel industry) which is relatively sensitive to recession, Belgium has succeeded in each of the last three years in expanding the volume of its exports. This has been accomplished partly through improvements in export profitability, and partly as a result of domestic demand restraint that diverted production to the export sector. In 1982 exports rose by nearly 2 per cent. in volume terms, owing mainly to a better performance in the US market, while the total growth of imports was minimal.

*Capital-account balances.* The capital-account balances of the Group of Ten countries exhibited three main features last year. Firstly, in the United States continued large-scale net banking outflows were accompanied by even larger non-bank private-sector capital inflows, including an unprecedented amount of

Group of Ten countries:  
Capital flows and changes in net official monetary positions, 1981-82.

Countries	Years	Official sector <sup>1</sup>	Private sector			Total identified capital flows	Balancing item	Changes in net official monetary position <sup>2</sup>
			total	short-term banking flows	other			
in billions of US dollars								
Belgium-Luxembourg ..	1981	6.4	- 4.8	- 3.7 <sup>3</sup>	- 1.1	1.6	- 0.1	2.7
	1982	5.5	- 3.5	- 3.2 <sup>3</sup>	- 0.3	2.0	0.0	1.0
Canada .....	1981	6.2	6.9	16.2	- 9.3	13.1	- 7.6	- 1.0
	1982	6.6	- 7.3	- 4.3	- 3.0	- 0.7	- 2.0	0.6
France .....	1981	- 0.9	3.0	8.0	- 5.0	2.1	- 2.3	5.0
	1982	2.3	5.4	2.2	3.2	7.7	- 0.9	5.2
Germany .....	1981	8.0	- 3.7	- 4.2	0.5	4.3	1.3	0.9
	1982	2.1	- 4.2	3.5	- 7.7	- 2.1	0.1	- 1.2
Italy .....	1981	4.4	4.3	- 1.3	5.6	8.7	- 0.6	- 0.0
	1982	2.3	- 1.9	- 2.3	0.4	0.4	0.9	4.2
Japan .....	1981	- 1.4	0.4	6.4	- 6.0	- 1.0	0.5	- 4.2
	1982	- 1.7	-14.9	0.0	-14.9	-16.6	4.7	5.0
Netherlands .....	1981	- 0.2	- 2.7	- 0.6	- 2.1	- 2.9	- 0.6	0.7
	1982	- 0.0	- 1.6	2.5	- 4.1	- 1.6	- 0.0	- 1.9
Sweden .....	1981	1.3	2.0	1.3	0.7	3.3	- 0.3	- 0.3
	1982	2.4	0.6	0.4	0.4	3.2	0.2	- 0.0
Switzerland .....	1981	.	- 5.1	4.0 <sup>3</sup>	- 9.1	- 5.1	2.7	- 0.2
	1982	.	-10.2	2.1 <sup>3</sup>	-12.3	-10.2	7.4	- 0.6
United Kingdom .....	1981	- 3.6	-15.3	1.5 <sup>3</sup>	-16.8	-18.9	1.2	5.1
	1982	- 0.0	- 1.8	10.0 <sup>3</sup>	-11.8	- 1.8	- 7.8	2.9
United States .....	1981	- 5.4	-25.7	-43.3 <sup>3</sup>	17.6	-31.1	25.8	0.8
	1982	- 5.8	-26.0	-43.8 <sup>3</sup>	17.8	-31.8	41.9	- 1.9

<sup>1</sup> Includes long-term capital only. <sup>2</sup> Excluding SDR allocations and valuation adjustments; minus sign indicates an improvement. <sup>3</sup> Includes long-term banking flows.

unidentified inflows. A significant part of last year's inflows into the United States originated in other major industrial countries. Indeed, the second prominent development in the pattern of capital movements was the large scale of non-bank private-sector outflows from Japan, Germany, Switzerland, the Netherlands and the United Kingdom, all countries which were in a rather comfortable current-account position. In Japan and the United Kingdom the outflows were of such magnitude that despite substantial surpluses on current account there was a marked deterioration in their net official monetary positions. The third feature, in contrast, was the necessity for the authorities in four countries with sizable current payments deficits to finance these deficits by external borrowing, as well as, in some cases, through the use of exchange reserves.

Turning to developments in individual countries, in most respects the capital account of the *United States* showed remarkably little change last year. Indeed, three broad categories of aggregate capital flows — net official outflows of \$5.8 billion, net inflows through the non-bank private sector of \$17.8 billion and net outflows through the banks of \$43.8 billion — were virtually the same as in 1981. However, the balancing item, which in the main probably consists of unidentified capital

inflows, exceeded the already high 1981 figure of \$25.8 billion to reach an unprecedented \$41.9 billion in 1982, broadly offsetting the deterioration in the current account.

The very large non-bank private-sector capital inflows into the United States were attributable to three factors: interest rate differentials, which were particularly large in the first half of the year; the international debt crisis and associated concerns about the stability of the international banking system, which produced large inflows into the United States in the second half of the year; and favourable exchange rate expectations induced by the strength of the dollar in the exchange markets during the first ten months of 1982.

The aggregate figures, however, mask some noteworthy changes in US private-sector capital flows. While the net inflow of \$11.6 billion on direct investment account was only \$1 billion less than in 1981, there were significant shifts in its constituents. The balance of direct investment transactions by US residents, which in 1981 had recorded a \$8.7 billion outflow, showed an inflow for the first time in post-war history, of \$2.2 billion, mainly due to movements on inter-company accounts. As already mentioned in last year's Annual Report, these inflows reflected external borrowing by US corporations, in part in the Euro-bond market, through their foreign subsidiaries. Indeed, over one-half of the turn-round on US direct investment can be traced to increased financing through affiliates in the Netherlands Antilles. Net foreign direct investments in the United States fell back to \$9.4 billion from the exceptionally high \$21.3 billion in 1981, primarily reflecting lower inflows from EEC countries and Canada. Portfolio transactions, which had resulted in a net inflow of \$3.1 billion in 1981, showed a small net outflow of \$0.9 billion, mainly due to US residents' sharply increased purchases of foreign securities in the second half of the year. To some extent, however, this was counterbalanced by non-residents' acquisitions of Treasury bills and certificates, which produced net short-term inflows of \$6 billion, appreciably more than the \$1.5 billion recorded in 1981.

Net outflows through the banks — which are discussed in Chapter VI — amounted to \$43.8 billion, practically the same as in 1981. While net flows were fairly evenly distributed between the two halves of the year, the growth of claims and liabilities slowed down considerably in the last six months.

The co-existence of very large net outflows through the banks and even bigger inflows through the non-bank private sector highlights the importance of the United States as an intermediary between saving and investment elsewhere in the world. The following table, which shows the regional pattern of private capital flows between the United States and the rest of the world in recent years, indicates three significant developments.

Firstly, the balance on total private-sector flows (excluding non-residents' transactions in US Treasury securities but including unidentified inflows) with major industrial countries (western Europe, Canada and Japan) swung from net outflows of \$28.4 billion in 1980 to net inflows of \$1.6 billion in 1982. This change was concentrated on direct investment transactions, banking flows and unidentified transactions, while other non-banking flows, which are largely made up of portfolio transactions and loans, showed little change. Secondly, during 1980 and 1981 by far

United States:  
Regional pattern of net private-sector capital flows, 1980-82.<sup>1</sup>

Items	Years	All countries	Western Europe and Canada	Japan	Latin America	Asia and Africa <sup>2</sup>	Other <sup>3</sup>
		in billions of dollars					
Total net private-sector flows .....	1980	- 7.5	-37.5	9.1	-12.3	36.2	- 3.0
	1981	- 3.0	-22.8	14.3	-19.9	29.4	- 4.0
	1982	8.9	-14.6	16.2	- 6.1	15.1	- 1.7
Identified capital flows .....	1980	-36.4	-26.6	- 0.3	-22.9	14.6	- 1.2
	1981	-28.8	-25.7	1.9	-12.8	9.5	- 1.7
	1982	-33.0	-17.0	- 3.2	-13.8	- 3.1	3.9
<i>of which:</i>							
direct investment .....	1980	- 5.6	- 6.0	0.7	- 1.2	2.0	- 1.1
	1981	12.6	10.1	2.2	1.4	- 0.1	- 1.0
	1982	11.6	5.5	1.8	6.1	- 2.0	0.2
other non-banking flows ....	1980	5.3	3.9	- 0.7	- 0.2	1.3	1.0
	1981	1.9	3.5	0.1	0.0	- 0.9	- 0.8
	1982	- 0.8	2.5	- 0.9	1.6	- 3.1	- 0.9
banking flows .....	1980	-36.1	-24.5	- 0.3	-21.5	11.3	- 1.1
	1981	-43.3	-39.3	- 0.4	-14.2	10.5	0.1
	1982	-43.8	-25.0	- 4.1	-21.3	2.0	4.6
Unidentified capital flows <sup>4</sup> .....	1980	28.9	-10.9	9.4	10.6	21.6	- 1.8
	1981	25.8	2.9	12.4	- 7.1	19.9	- 2.3
	1982	41.9	2.4	19.4	7.5	18.2	- 5.6

<sup>1</sup> Excludes non-residents' transactions in US Treasury securities. <sup>2</sup> Excludes Japan and South Africa. <sup>3</sup> Includes international institutions and unallocated flows. <sup>4</sup> Equal to the balancing item.

the largest inflows of capital came from developing countries in Africa and Asia, which not only placed sizable amounts with US banks but were also the source of a large part of the unidentified inflows into the United States. It is not unlikely that a good part of these inflows came from oil-exporting countries in these areas. However, as much OPEC investment would fall under official flows, which are not included in the table, it appears that a number of other countries in this area have also been net exporters of capital to the United States. In 1982 total net private inflows to the United States from Asia and Africa fell by nearly 50 per cent., to \$15.1 billion, no doubt in relation to the decline in the OPEC countries' current external surplus. The largest single source of capital inflows into the United States in 1982 was Japan, where the level of interest rates was among the lowest in the developed countries. Thirdly, banks in the United States have been important suppliers of capital to Latin American countries, in amounts which, until last year, far exceeded capital exports from these countries to the United States in other forms. There was, however, a very large fall in net outflows to this area in 1982, presumably related to the flight of domestic funds from Latin American countries with severe external debt problems.

The unusual size of net banking outflows from the United States in recent years, as well as of net inflows from other private capital transactions (including unidentified inflows), raises questions about the desirability of movements of funds on this scale. Clearly, the inflows of funds into the United States — although to

some extent they simply reflected the rechanneling through inter-company accounts of lending by US banks to foreign affiliates of domestic corporations — have become the major factor in the persistent strength of the dollar on the exchange markets. Given the size of the non-bank inflows, however, the appreciation of the dollar would have been even greater had there not been large net outflows through the banks. At the same time, these outflows have meant increases in the international exposure of banks in the United States on a scale that may not be sustainable in the future.

Among the countries with large private-sector capital outflows, *Japan* experienced the biggest deterioration on capital account in 1982. Total identified net capital outflows rose from \$1 billion in 1981 to as much as \$16.6 billion, of which a large part went to the United States. Net outflows through the private sector, excluding short-term banking flows, rose particularly strongly, from \$6 to 14.9 billion, including an increase of \$5.1 billion in net exports of long-term capital. In addition, net short-term inflows through the banks, which had totalled \$6.4 billion in 1981, dried up last year, when net inflows of \$2.4 billion in the first half gave way to net outflows of equal size in the second half. Consequently, despite a positive balancing item of \$4.7 billion and an increase in the current payments surplus, the net official monetary position, which had improved by \$4.2 billion in 1981, deteriorated by \$5 billion last year.

Last year's increase in net long-term private-sector outflows was mainly attributable to two factors. Firstly, on portfolio account, net inflows fell between 1981 and 1982 from \$4.4 to 2.1 billion. Japanese residents stepped up their net purchases of foreign securities by \$1 billion as compared with 1981, and non-residents' net purchases of Japanese securities, though still very substantial indeed at \$11.9 billion, were somewhat lower than in 1981. Secondly, there was a \$2.8 billion increase in net long-term foreign lending by Japanese financial institutions, reflecting the attractiveness of yen interest rates to foreign borrowers.

In *Germany* the large turn-round on current account in 1982 was counterbalanced by an opposite movement in the capital account. Total identified capital transactions shifted from net inflows of \$4.3 billion in 1981 to net outflows of \$2.1 billion, with the consequence that despite the achievement of a current-account surplus there was only a modest improvement in the net official monetary position. A significant part of the change in the balance of identified capital transactions was due to the fact that, because of the improvement on current external account, foreign borrowing undertaken directly or indirectly by the public sector was cut back to \$3.8 billion, or half the 1981 figure. Net long-term outflows through the private sector more than doubled last year to a total of \$8.9 billion, a part of which is likely to have reflected the attraction of US dollar investments. Indeed, regional data on capital flows indicate that private-sector long-term capital outflows to the United States quintupled between 1981 and 1982, to \$2.5 billion. In addition, net short-term inflows through the non-bank sector declined by \$3.7 to 1.1 billion last year, while the banks became net importers of capital to the extent of \$3.5 billion. These latter changes appear to have been related to the decline in short-term DM interest rates, which reduced the incentive for banks to lend to German corporations via their foreign subsidiaries.

In the *Netherlands* net capital outflows through the private sector, excluding short-term banking flows, accelerated considerably in 1982, from \$2.1 to 4.1 billion. An increase in residents' purchases of foreign securities virtually eliminated the \$1.1 billion net inflow from portfolio transactions that had been recorded in 1981, and there was also a rise in banks' net long-term foreign lending. The balance of short-term banking transactions, on the other hand, swung from net outflows of \$0.6 billion in 1981 to net inflows of \$2.5 billion in 1982. As, in addition, the negative balancing item recorded in 1981 disappeared, the net official monetary position registered a \$1.9 billion improvement in 1982.

In *Switzerland* identified capital outflows doubled to \$10.2 billion in 1982. The increase resulted from larger net portfolio investment abroad, as well as lower net inflows through the banks. At the same time, unidentified inflows increased by \$4.7 billion, and the net official position (excluding dollars swapped by the commercial banks with the National Bank) improved slightly.

In the *United Kingdom* 1982 was the third successive year in which there were very large outflows of long-term private capital, continuing the process of portfolio diversification that began after the removal of exchange controls in late 1979. Net long-term non-bank capital exports totalled \$14.2 billion, bringing the cumulative total of such capital exports since 1979 to nearly \$41 billion. The major component of these long-term outflows last year consisted of net purchases by residents of foreign securities totalling \$10.2 billion, which was \$1.6 billion more than in 1981. In addition to the continued outflow of non-bank private capital, the banks' sterling lending to non-residents, at \$5.6 billion, was again substantial. Despite this, however, total net banking inflows increased more than sixfold to \$10 billion. This resulted mainly from much higher foreign currency borrowing by banks in the United Kingdom to finance lending in sterling to the private sector. There were two periods of strong pressure on sterling during 1982, the first during the Falklands crisis and the second towards the end of the year. These pressures contributed to a major shift in the balance of unidentified transactions between 1981 and 1982, to net outflows of \$7.8 billion, as well as to a \$2.9 billion deterioration in the net official monetary position last year, nearly all of which resulted from a drawdown of exchange reserves.

In *Canada* the movement into current-account surplus last year was accompanied by a \$6.3 billion reduction in net outflows through the private sector, excluding short-term banking flows, and a \$20.5 billion swing from net short-term inflows to net short-term outflows through the banks. Both these changes were primarily related to the fact that Canadian takeovers of foreign-owned companies in the energy sector in 1981 had produced a very high level of net outward direct investment as well as net borrowing by the banking system to finance the takeovers. In the absence of such takeovers last year net direct investment outflows declined from \$8.8 to 1 billion, while the repayment of part of the very large foreign currency borrowing by banks that financed the takeovers caused the swing in the net balance of short-term banking flows. All other major categories of capital flows were little changed in 1982.

In *France* the financing of the increased current-account deficit was achieved by generating net inflows through both the public and private sectors. Net foreign

borrowing subject to official authorisation, at \$12 billion, was about double its 1981 level. In addition, the net outflow from other long-term capital transactions declined from \$10 to 7.6 billion. On the other hand, net inflows of short-term capital through the banks declined very sharply last year, while the negative balancing item became smaller. A significant part of last year's current-account deficit was therefore financed out of reserves; the \$5.2 billion reduction in the net official monetary position was almost exactly the same as it had been in 1981.

In the *Belgium-Luxembourg Economic Union*, despite last year's improvement in the current external account, there were again relatively large net outflows of private capital, of which \$0.3 billion was through the non-bank sector and \$3.2 billion through the banks (the latter figure excludes the banks' borrowing on behalf of the Belgian Government). Very large foreign borrowing, totalling \$5.5 billion, had therefore once more to be undertaken by the authorities, partly directly and partly through the Belgian banking system. The decline in net reserves, at \$1 billion, was considerably less than it had been in 1981.

In *Italy* the \$2.6 billion reduction in the current-account deficit was more than counterbalanced by a very large decline in total identified capital inflows and the net official monetary position deteriorated markedly, by \$4.2 billion. Net borrowing by the central government, which had financed more than one-half of the current-account deficit in 1981, fell by \$2.1 to 2.3 billion in 1982. The balance of total private-sector transactions swung from net inflows of \$4.3 billion in 1981 to net outflows of \$1.9 billion in 1982. This was attributable to a \$2.2 billion reduction in inflows from net long-term borrowing abroad, a \$2.9 billion reversal of trade credits and a \$1 billion increase in net short-term outflows through the banks.

In *Sweden* total net capital inflows in 1982 virtually matched the shortfall on current account, so that the net official monetary position was unchanged over the year as a whole. Net long-term borrowing by the central government was stepped up by \$1.3 to 2.6 billion in 1982, more than offsetting some repayments of foreign debt incurred by other public-sector agencies as well as a small reduction in net inflows through the private sector.



## VI. THE INTERNATIONAL CREDIT AND CAPITAL MARKETS.

### Highlights.

1982 was a year marked by increasing strains in the international banking sector, caused by the mounting payments difficulties of a number of important debtor countries and by banks' growing reluctance to expand their exposure vis-à-vis those countries. This development, together with lower demand for international bank credit from inside the industrial countries and a shift of corporate borrowing to the capital markets, meant that the growth of international bank credit slowed down sharply. At the same time the volume of new international bond issues recorded an unprecedented increase, as the high level of dollar interest rates, the strength of the dollar on the exchange markets and hopes of capital gains boosted the demand for such paper.

The combination of continuing very high levels of real interest rates and deepening recession in the industrial countries, with its depressive influence on developing countries' export volumes and prices, entailed a serious deterioration in the external payments position and debt situation of a large number of borrower countries. Against this background, in the late summer of 1982 the external payments crisis in Mexico, the largest debtor country in the international banking sector, caused a further sharp weakening of market confidence. Whereas in the first half of 1982 new bank lending to developing countries had still held up quite well, in the second half of the year it contracted abruptly.

Indeed, the spontaneous flow of bank credit to a broad group of countries, notably in Latin America, which account for a large part of international banking indebtedness virtually came to a halt in the last few months of the year. It took massive official support programmes, usually tied to continued bank lending, to keep these countries financially afloat and to prevent the outbreak of a general international financial crisis with dire consequences for the stability of the world economy. The official support programmes were successful as a holding operation, but a more lasting improvement in the international credit climate will depend on successful adjustment in the debtor countries, which will be impossible without a sustained recovery of economic activity in the industrial countries and a further decline in real interest rates.

Besides giving a detailed description of the development of the international banking aggregates and the situation in the bond markets last year, this chapter looks at the build-up of international banking indebtedness from a longer-term point of view and discusses some of the questions posed by the recent difficulties and the need for large-scale official support operations.

### Total international credit growth in 1982.

Developments in the two principal sectors of the international financial markets last year showed sharply divergent trends: a pronounced slowdown, from \$265 billion in 1981 to \$174 billion, in the expansion of BIS reporting banks' external assets and a marked acceleration, from \$49 billion to \$72 billion, in new issues of international bonds. After allowing, on an estimated basis, for double-counting resulting from the redepositing of funds between the reporting banks themselves, for redemptions of outstanding bond issues and for double-counting due to the banks' rôle as borrowers and investors in the issues markets (see table below), the total amount of new credit channelled through the international markets last year may be put at roughly \$145 billion, or some \$50 billion less than in 1981. This deceleration in the growth of international credit expressed in dollar terms has, however, to be seen against the background of a sharp slowdown in national inflation rates, declining raw-material prices and continuing dollar appreciation, all of which meant a smaller erosion than in earlier years of the real value of outstanding credits and debts. At the same time, near-zero or even negative economic growth rates and a contraction in international trade led to a further sharp increase in the relative weight of total outstanding international credit and of corresponding debt-service burdens.

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

	Flows excluding exchange rate effects <sup>1</sup>				Stocks at end-1982
	1979	1980	1981	1982	
	in billions of US dollars				
Total international lending of reporting banks <sup>2</sup> .....	205.9	241.2	264.7	173.5	1,686.7
minus: double-counting due to redepositing among the reporting banks .....	80.9	81.2	99.7	78.5	666.7
A = Net international bank lending <sup>3</sup> .....	125.0	160.0	166.0	95.0	1,020.0
Euro-bond and foreign bond issues .....	38.9	39.4	48.8	71.7	.
minus: redemptions and repurchases <sup>4</sup> .....	10.9	11.4	12.3	13.2	.
B = Net new international bond financing .....	28.0	28.0	36.5	58.5	.
A+B = Total new bank and bond financing .....	153.0	188.0	201.5	153.5	.
minus: double-counting <sup>5</sup> .....	8.0	8.0	6.5	8.5	.
Total net new bank and bond financing .....	145.0	180.0	195.0	145.0	.

<sup>1</sup> Non-dollar bank credits are converted into dollars at constant end-of-quarter exchange rates, non-dollar bonds at mid-month rates. <sup>2</sup> Banks located in the Group of Ten countries and Switzerland, Austria, Denmark and Ireland and the offshore branches of US banks located in the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. <sup>3</sup> 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. <sup>4</sup> These figures are based on very rough guesses and are inserted here mainly for illustrative purposes. 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. <sup>5</sup> 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.

**The international banking sector in 1982: the development of the main aggregates.**

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 the offshore centres of the Caribbean and Far East expanded from \$1,550 to 1,687 billion last year. If valuation effects resulting from exchange rate changes are excluded (as is done, unless otherwise stated, with all flow figures in this and the following section), the increase amounted to \$174 billion, compared with \$265 billion in 1981; this was equivalent to 11.5 per cent., or only about half the rate of expansion recorded in preceding years. Growth was more modest than in 1981 in each quarter of the year, but under the influence of the increasing strains in the international credit structure the slowdown in comparison with 1981 was particularly pronounced in the fourth quarter, when the reporting banks' external assets expanded by only \$33.5 billion, or by one-third of the increase registered in the corresponding quarter of 1981. Moreover, a sharp deceleration in assets growth, from an estimated \$64 billion in 1981 to \$17 billion (in current dollars) last year, was recorded by non-reporting banks in the offshore centres.

The external assets figures were, as usual, inflated by the redepositing of funds between the reporting banks themselves. After eliminating this kind of double-counting, the amount of funds channelled through the international banking sector may be estimated to have increased by \$95 billion last year to a cumulative total of \$1,020 billion. Again, this was very considerably less than the \$165 billion growth recorded during 1981.

A second main feature of international banking in 1982 was the shifts in the location of new business. As a result of both the growing importance of the new international banking facilities (IBFs) in the United States and confidence factors favouring the United States as the country of issue of the currency in which the bulk of international debt is denominated, most of the new business in 1982 was booked via the United States. The external claims of banks in the United States accordingly showed an increase of \$105 billion, or over 40 per cent., thereby accounting for 60 per cent. of the assets growth of all reporting banks. The external assets of the IBFs alone expanded by \$80 billion to a total of \$144 billion, while conventional external claims of banks in the United States rose by about \$25 billion.

As was to be expected, the growing importance of the IBFs particularly affected business booked via the offshore centres, so that the external assets of the branches of US banks in the principal offshore centres of the Caribbean and the Far East showed hardly any increase during 1982. As a substantial part of their outstanding loans was rebooked via the IBFs, their claims on the United States expanded by \$12 billion, while those on OPEC and non-OPEC developing countries and eastern Europe contracted by nearly the same amount.

A very sharp slowdown in external assets growth, from \$134 billion in 1981 to \$59 billion, also partly related to the growing importance of the IBFs, was recorded by the banks in the reporting European countries. This slowdown largely affected new lending in foreign currency, which contracted by nearly two-thirds to \$39 billion, whereas new external lending in domestic currency, which is in large part

External assets and liabilities in domestic and foreign currency  
of banks in individual reporting countries.

	Flows at constant end-of-quarter exchange rates					Amounts outstanding at end of		
	1980	1981		1982		1979	1981	1982
		year	4th quarter	year	4th quarter			
in billions of US dollars								
Assets								
United States .....	40.5	75.3	40.9	105.4	15.1	136.4	256.3	361.4
of which: IBFs .....	—	63.4	63.4	80.3	10.3	—	63.4	143.6
Foreign branches of US banks <sup>1</sup> ..	13.7	31.9	4.1	0.6	3.0	127.6	172.0	172.0
Reporting European countries ..	158.6	134.1	54.1	58.7	17.5	776.0	998.4	1,023.6
of which: United Kingdom ...	74.9	79.9	19.2	35.2	-6.5	285.5	432.1	457.8
France .....	24.9	9.1	10.2	10.4	10.5	123.6	143.4	148.1
Luxembourg .....	13.7	6.3	1.0	5.6	2.3	80.8	88.4	90.5
Germany .....	10.2	7.4	7.2	-0.2	3.0	69.3	73.2	69.7
Switzerland .....	4.0	5.1	2.0	2.0	-2.3	59.1	63.1	61.5
Netherlands .....	9.2	7.6	0.5	0.2	-0.1	55.9	65.6	62.8
Belgium .....	14.1	8.8	2.0	1.1	1.1	43.0	61.5	60.3
Italy .....	1.8	6.4	12.3	-1.0	9.4	29.6	36.3	34.5
Others <sup>2</sup> .....	5.6	3.5	-0.3	5.4	0.1	29.2	34.8	38.4
Japan .....	18.3	20.7	0.9	7.9	-2.8	45.4	84.6	90.9
Canada .....	10.1	2.7	-0.4	0.9	0.7	25.6	38.2	38.8
Total .....	241.2	264.7	99.6	173.5	33.5	1,111.0	1,549.5	1,686.7
Memorandum item: non-reporting banks in offshore centres <sup>3</sup> .....	40.0	64.0	17.0	17.0	-4.0	135.0	239.0	256.0
Liabilities								
United States .....	9.2	37.8	22.7	67.2	5.4	130.1	177.5	244.5
of which: IBFs .....	—	47.9	47.9	76.1	9.6	—	47.9	123.9
Foreign branches of US banks <sup>1</sup> ..	14.4	33.6	2.8	2.9	3.3	128.9	175.8	178.2
Reporting European countries ..	178.9	128.1	62.0	57.6	17.3	778.0	1,014.5	1,039.0
of which: United Kingdom ...	76.9	78.8	23.2	44.9	-5.6	302.0	447.9	482.4
France .....	28.2	14.9	14.8	7.8	10.3	106.2	138.6	142.5
Luxembourg .....	12.9	4.0	1.4	3.9	1.7	76.7	83.1	83.7
Germany .....	3.3	1.5	3.0	-0.5	2.0	77.8	68.3	65.1
Switzerland .....	7.3	2.7	2.9	-2.5	-1.7	38.2	45.2	40.8
Netherlands .....	11.7	4.7	0.9	1.0	1.6	55.4	64.9	62.8
Belgium .....	18.0	9.8	2.4	2.6	0.3	50.1	71.1	70.0
Italy .....	9.8	4.4	13.2	-4.3	7.1	38.1	49.0	43.5
Others <sup>2</sup> .....	11.0	5.3	0.4	4.7	1.6	33.5	46.2	48.2
Japan .....	28.8	21.7	1.8	0.8	-7.3	50.5	100.4	100.0
Canada .....	11.0	18.0	1.6	-3.5	-1.2	32.8	62.6	58.7
Total .....	242.3	237.1	90.9	125.0	17.5	1,120.3	1,530.8	1,620.4
Memorandum item: non-reporting banks in offshore centres <sup>3</sup> .....	39.0	62.0	18.0	17.0	-3.0	125.0	226.0	243.0

<sup>1</sup> In the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. <sup>2</sup> Austria, Denmark, Ireland and Sweden.  
<sup>3</sup> Estimates — at current exchange rates — for non-reporting banks in the five major offshore centres and for all banks located in Bahrain, Lebanon and the Netherlands Antilles.

trade-related, continued at nearly the same pace as in 1981, totalling \$19 billion. As regards individual reporting European countries, \$35 billion, or 60 per cent., of total external assets growth in 1982 was recorded by banks in the United Kingdom. Banks in France (+\$10.5 billion) and Luxembourg (+\$5.5 billion) accounted for much of the rest. External claims in foreign currency of banks in a number of other

Currency breakdown of international banking activity.

	Assets				Liabilities			
	Flows at constant end-of-quarter exchange rates			Stocks at end-1982	Flows at constant end-of-quarter exchange rates			Stocks at end-1982
	1980	1981	1982		1980	1981	1982	
	in billions of US dollars							
Total .....	241.2	264.7	173.5	1,886.7	242.3	237.1	125.0	1,620.4
in domestic currency .....	69.7	99.8	127.8	537.0	39.3	47.8	76.2	371.8
of which, banks in:								
United States .....	38.6	74.0	102.7	353.7	7.4	37.5	66.0	239.7
Germany .....	9.9	4.6	1.2	48.6	2.9	0.1	0.3	42.1
Switzerland .....	4.9	2.6	3.0	31.7	5.5	2.4	-1.6	11.2
United Kingdom .....	6.0	5.3	5.8	25.7	6.9	4.8	7.8	30.9
Japan .....	3.3	5.3	5.2	25.3	7.2	1.7	1.6	14.1
Other reporting countries	7.0	7.8	9.9	52.0	9.4	1.3	2.1	33.8
in foreign currencies .....	171.5	164.9	45.7	1,149.7	203.0	189.3	48.8	1,248.6
of which:								
US dollars .....	125.6	116.0	19.4	866.1	152.9	148.4	35.6	970.6
Deutsche Mark .....	14.1	15.8	8.1	126.7	14.0	10.2	1.0	118.3
Swiss francs .....	16.1	11.2	3.6	59.7	19.0	15.8	-3.0	62.2
Pounds sterling .....	1.2	3.7	0.3	12.6	7.4	0.4	-0.8	16.2
Japanese yen .....	2.6	6.6	0.5	16.7	-1.0	5.8	2.0	17.1
Dutch guilders .....	-0.1	1.6	1.6	9.3	0.5	2.0	2.0	10.8
French francs .....	4.9	-1.0	1.2	8.4	4.6	-0.2	1.6	11.3
Other and unallocated*	7.1	9.0	11.1	51.2	5.6	6.9	10.4	44.1

\* Including external positions of banks in the United States and of their branches in the five major offshore centres in currencies other than the US dollar.

European countries, such as Germany, Italy, the Netherlands and Switzerland, actually declined, but this reduction was partly or, in some cases, more than offset by new external lending in domestic currency.

Outside Europe and the United States, banks in Japan recorded a very sharp slowdown, from \$15.5 billion in 1981 to barely \$3 billion, in new external credit in foreign currency, whereas their new external lending in domestic currency, at around \$5 billion, was about the same as in 1981.

As regards the currency composition of new international banking activity, the increased importance as an international financial centre of the United States, where most international activity is denominated in dollars, meant that the bulk — nearly three-quarters — of new external lending in 1982 was, from the point of view of the location of the transacting banks, conducted in domestic currency. Thus, dollar lending from the United States accelerated from \$74 billion in 1981 to \$103 billion, while new Euro-dollar business transacted outside the United States contracted sharply from \$118 billion to less than \$20 billion. Euro-lending conducted in currencies other than the dollar also slowed down, though less dramatically, from \$47 billion to \$26 billion. Euro-lending in yen and sterling, which had picked up strongly in 1981, nearly came to a halt.

On the sources side of the market, the currency pattern of new Euro-market business was somewhat different. The growth of dollar liabilities of banks outside the United States held up somewhat better than that of their dollar assets, whereas

Bank/non-bank breakdown of international banking activity.

	Assets				Stocks at end-1982	Liabilities			Stocks at end-1982
	Flows at constant end-of- quarter exchange rates			Flows at constant end-of- quarter exchange rates					
	1980	1981	1982	1980		1981	1982		
	in billions of US dollars								
Total .....	241.2	264.7	173.5	1,686.7	242.3	237.1	125.0	1,620.4	
Interbank <sup>1</sup> .....	172.3	183.5	118.3	1,186.4	198.9	169.4	93.1	1,307.5	
of which:									
A. within the reporting area, between banks in the United States and other reporting banks .....	129.2	153.4	97.7	938.0	156.2	155.5	102.0	1,026.0	
between other reporting banks .....	26.9	83.3	99.3	349.0	34.8	71.4	111.9	381.0	
between other reporting banks .....	102.3	70.1	- 1.6	589.0	121.4	84.1	- 9.9	645.0	
B. vis-à-vis official monetary institutions <sup>2</sup> ..	2.5	- 0.3	0.5	8.5	19.1	-14.1	-27.4	119.0	
booked in the United States <sup>2</sup> .....					- 0.1	- 1.4	0.1	23.8	
other <sup>2</sup> .....	2.5	- 0.3	0.5	8.5	19.2	-12.7	-27.5	95.2	
Vis-à-vis non-banks .....	68.9	81.2	55.2	500.3	43.4	67.7	31.9	312.9	
booked in the United States ..	11.8	22.6	26.8	107.1	0.6	5.6	17.5	42.9	
outside the United States ..	57.1	58.6	28.4	393.2	42.8	62.1	14.4	270.0	
of which: in US dollars ...	31.6	29.2	7.0	225.9	31.6	51.6	8.1	196.6	
in other foreign currencies .....	16.3	18.0	7.6	82.3	7.5	6.5	3.8	33.8	
in domestic currency .....	9.2	11.4	13.8	85.0	3.7	4.0	4.5	39.6	
Memorandum items:									
Foreign currency positions vis-à-vis residents <sup>3</sup> .....	82.8	70.6	52.6	428.6	58.7	53.7	50.4	357.2	
of which:									
interbank .....	82.0	51.2	40.0	321.8	53.1	48.4	43.2	307.0	
vis-à-vis non-banks ...	20.8	19.4	12.8	106.8	5.6	5.3	7.2	50.2	
of which: in US dollars	9.2	15.9	7.6	73.1	4.1	0.8	4.2	34.6	

<sup>1</sup> Including positions vis-à-vis official monetary institutions except, on the assets side, in the case of banks in the United States and the offshore branches of US banks, for which, owing to the lack of an adequate breakdown, these positions are included under non-banks. <sup>2</sup> See footnote 1. <sup>3</sup> Banks in Europe, Canada and Japan only. <sup>4</sup> Including positions vis-à-vis the Japanese non-bank sector not available separately.

liabilities in Deutsche Mark increased only marginally and those in Swiss francs, after a \$16 billion expansion in 1981, actually showed a \$3 billion decline. A significant feature last year was the relatively large increase in the foreign currency residual item, which on the basis of incomplete evidence appears to have resulted in part from the build-up of substantial balances denominated in ECUs.

As regards types of asset, the bulk of the growth in external positions was, as usual, accounted for by interbank business. Total interbank claims, including about \$10 billion of claims on official monetary institutions, expanded by \$118 billion, compared with the \$184 billion growth recorded in 1981. Interbank claims within the reporting area itself increased by \$98 billion, or by about \$56 billion less than in 1981. A totally different picture from that in 1981 was presented by the geographical structure of these interbank assets. Whereas in 1981 cross-border interbank claims between reporting banks outside the United States had shown an increase of \$70

billion, they declined by \$1.5 billion. This meant that all new cross-border interbank business within the reporting area last year was channelled through banks in the United States. Owing largely to the new IBFs, the growth of cross-border interbank business in the traditional Euro-market therefore virtually came to a halt. Local interbank business in foreign currency within individual market centres, however, continued to show a substantial increase on balance.

As a result of both weak credit demand and the shift of corporate financing to the capital markets, direct lending to non-banks also slowed down last year, from \$81 billion in 1981 to \$55 billion. Here again, owing in large part to the new IBFs, the slowdown was concentrated on lending booked outside the United States, which contracted from \$59 to 28 billion, whereas lending from the United States accelerated from \$22 to 27 billion. In particular, direct credits to non-banks (excluding US residents) booked through the foreign branches of US banks showed an absolute decrease of \$7 billion.

On the sources side of the market, the so-called "flight into quality" meant that both the decline in the amount of direct business with non-bank customers and the shift of such business to banks in the United States were even more pronounced than on the uses side. The total inflow of new external deposits from non-bank entities dropped from \$68 billion in 1981 to \$32 billion. Whereas new deposits with banks in the United States picked up from \$6 to 18 billion, new deposits with banks outside the United States shrank from \$62 billion to \$14 billion. In particular, the expansion of non-bank dollar holdings outside the United States dwindled from \$52 billion to a mere \$6 billion, thereby drastically reducing the rôle of the Euro-market as a substitute for the growth of US-held money and liquidity balances.

One salient feature last year was the withdrawal of official funds from the Euro-market. Deposits by official monetary institutions had already shown a substantial decline in 1981, but at \$27 billion their decrease during 1982 was nearly twice as large and included withdrawals of funds by both OPEC and non-OPEC developing countries. The most important reason for these withdrawals was balance-of-payments difficulties in these countries but, as in the case of non-bank deposits, confidence factors may also have played an important rôle. It may be noted in this connection that US liabilities to foreign official holders grew by \$3 billion in 1982. Reflecting the "flight into quality", foreign official holdings of marketable US Treasury bonds and notes in particular expanded by \$14.5 billion. Liabilities of banks in the United States to foreign official holders, by contrast, after increasing by \$2.1 billion in the first half of 1982, declined by \$2.3 billion in the second half.

#### **Geographical pattern of sources and uses of international banking funds.**

The 1982 slowdown in the growth of international banking activity encompassed both final lending within the reporting area itself and lending to countries outside this area. The slower pace of inside-area lending — it declined from about \$92 billion in 1981 to around \$46 billion — was due largely to demand factors. It reflected both the general economic slowdown and firms' increased recourse to the Euro-bond markets with the aim of improving the maturity profile

of their debts. On the other hand, official balance-of-payments-related borrowing needs in some European countries remained quite high. The slowdown in new lending to the outside area, by contrast, from about \$66 billion in 1981 to \$39 billion in 1982, was due largely to the debt-servicing problems of a growing number of debtor countries and the consequent reluctance of the banks to grant new loans.

On the sources side of the market, the more moderate pace of lending had as a counterpart a slowdown from \$133 billion in 1981 to \$96 billion in new funds supplied from within the reporting area itself and, as regards the outside area, a turn-round from \$16 billion of new deposits to \$12 billion of withdrawals last year. This run-down of deposits by the outside area meant that, despite the slower pace of new lending, the net flow of funds from the reporting area via the international banking sector to the rest of the world, at around \$50 billion, was virtually unchanged last year.

On the uses side of the market, about \$31 billion of the \$46 billion of new funds absorbed by the reporting area itself represented direct credits to non-banks. The largest groups of borrowers were British residents, who obtained \$6.8 billion, largely in the form of foreign currency credit from banks in the London Euro-market, and non-bank, largely public-sector, entities in Belgium-Luxembourg and France (slightly over \$5 billion each). Canadian and German non-banks also raised a substantial amount of new international banking funds (\$3.5 billion each), but on a much smaller scale than in 1981, when they had been the largest groups of inside-area borrowers. Italian and US non-bank entities, which had also been quite important credit-takers in 1981, did not take up any new funds last year. Banks' own use of external funds for domestic lending may be estimated at some \$15 billion.

On the sources side of the market, about \$25 billion, or only 26 per cent. of the new funds supplied from within the reporting area itself, represented direct deposits from non-banks; this was about half the amount recorded in 1981. The slowdown was largely accounted for by a sharp fall-off from \$31 billion in 1981 to \$8 billion last year in new Euro-currency deposits constituted by US residents. This deceleration was due to developments during the second half of the year, and may have been influenced by confidence factors and the introduction of more attractive deposit facilities in the US domestic market towards the end of the year. In addition to identified deposits by US non-bank entities, there were very substantial new placements by US money-market funds in Euro-dollar CDs, amounting to \$12 billion during the first half of the year, followed, however, by a \$2 billion cutback during the second half. A sharp slowdown, from about \$23 billion in 1981 to around \$3 billion, was also recorded last year in non-bank funds channelled into the Euro-market via trustee accounts of banks in Switzerland.

Excluding Euro-dollar deposits by US money-market funds, the reporting banks, through outward switching of domestic deposits, may be estimated to have contributed just under \$60 billion, about the same amount as in 1981, to the inside-area sources of new banking funds last year. As already mentioned on page 110, banks in the United States alone showed a \$105 billion increase in their external assets, although a major portion of this amount was undoubtedly financed by part of



the \$67 billion of new funds obtained abroad by US banks last year. Banks in Japan showed an improvement of nearly \$7 billion in their net external position.

Turning to the outside area, the main feature on the sources side of the market was a run-down of deposits by OPEC countries to the extent of over \$18 billion. Such withdrawals, amounting to \$3.2 billion, had already occurred in the second half of 1981, but in the first half of that year OPEC deposits had still registered a \$6.5 billion increase. Including exchange rate effects, the 1982 decline in OPEC deposits amounted to over \$22 billion. Of this amount, \$9.3 billion (excluding

Geographical pattern of international banking flows.<sup>1</sup>

	Flows at constant end-of-quarter exchange rates						Stocks at end-1982
	1979	1980	1981		1982		
			1st half	2nd half	1st half	2nd half	
<b>Banks' claims on:</b>							
Reporting area .....	112.8	136.4	41.3	100.8	29.7	64.6	893.8
Offshore banking centres <sup>2</sup> .....	31.6	32.5	23.7	26.1	13.5	18.4	268.4
Other developed countries .....	7.5	15.4	8.5	8.2	9.3	6.7	112.0
Eastern Europe .....	7.1	6.8	3.0	1.8	- 3.1	- 1.6	53.3
OPEC countries <sup>3</sup> .....	7.2	7.0	- 1.0	6.3	4.9	3.2	78.6
Non-OPEC developing countries .....	35.3	38.9	12.4	27.5	15.5	4.2	246.9
of which: Latin America <sup>4</sup> .....	23.1	27.3	9.4	21.1	11.8	0.1	169.0
Unallocated <sup>5</sup> .....	4.4	4.2	5.7	1.4	2.5	5.7	33.7
<b>Total .....</b>	<b>205.9</b>	<b>241.2</b>	<b>93.6</b>	<b>171.1</b>	<b>72.3</b>	<b>101.2</b>	<b>1,686.7</b>
of which: inside area, gross .....	141.4	167.0	65.7	125.7	42.9	81.7	1,141.9
inside area, net of double-counting <sup>6</sup> .....	60.5	85.8	37.1	54.6	20.6	25.5	475.2
outside area .....	57.1	68.1	22.9	42.8	26.6	12.5	490.8
unallocated <sup>7</sup> .....	7.4	6.1	5.0	2.6	2.8	7.0	54.0
<b>Total net international bank lending ..</b>	<b>125.0</b>	<b>160.0</b>	<b>65.0</b>	<b>100.0</b>	<b>50.0</b>	<b>45.0</b>	<b>1,020.0</b>
<b>Banks' liabilities to:</b>							
Reporting area .....	143.8	157.3	53.2	101.7	47.3	50.9	1,026.7
Offshore banking centres <sup>2</sup> .....	41.6	28.3	15.9	38.8	11.6	19.6	249.6
Other developed countries .....	7.1	5.7	- 0.6	4.0	- 0.1	0.2	49.3
Eastern Europe .....	4.6	0.9	- 5.0	5.1	- 2.4	4.3	16.4
OPEC countries <sup>3</sup> .....	37.4	41.8	6.5	- 3.2	- 8.6	-11.7	135.2
Non-OPEC developing countries .....	12.3	4.0	- 0.5	9.9	3.0	1.2	101.0
of which: Latin America <sup>4</sup> .....	5.0	- 1.0	- 0.8	5.5	- 0.8	- 1.4	37.0
Unallocated <sup>5</sup> .....	6.1	4.3	7.4	3.9	5.9	1.8	42.2
<b>Total .....</b>	<b>252.9</b>	<b>242.3</b>	<b>76.9</b>	<b>160.2</b>	<b>58.7</b>	<b>86.3</b>	<b>1,620.4</b>
of which: inside area, gross .....	180.3	183.9	68.6	135.8	58.2	68.0	1,245.3
inside area, net of double-counting <sup>6</sup> .....	52.4	101.6	56.9	75.6	49.5	46.7	644.9
outside area .....	61.4	52.4	0.4	15.8	- 6.1	- 6.0	301.9
unallocated <sup>7</sup> .....	11.2	6.0	7.7	8.6	6.6	4.3	73.2
<b>Total net international bank lending ..</b>	<b>125.0</b>	<b>160.0</b>	<b>65.0</b>	<b>100.0</b>	<b>50.0</b>	<b>45.0</b>	<b>1,020.0</b>

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. Flows for the second half of 1981 and the first and second halves of 1982, as well as the stock figures for end-1982, include the external positions of international banking facilities.

<sup>1</sup> 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. <sup>2</sup> Bahamas, Barbados, Bermuda, Cayman Islands, Hong Kong, Lebanon, Liberia, Netherlands Antilles, Panama, Singapore, Vanuatu (formerly New Hebrides) and other British West Indies. <sup>3</sup> Includes, in addition, Bahrain, Brunei, Oman, Trinidad and Tobago. <sup>4</sup> Including those countries in the Caribbean area which cannot be considered as offshore banking centres. <sup>5</sup> Including international institutions other than the BIS. <sup>6</sup> Excluding redepositing among the reporting banks but including positions vis-à-vis the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. <sup>7</sup> Including positions vis-à-vis the remaining offshore centres.

deposits with banks in the United States) was accounted for by the "high-absorbing" countries in the Middle East. The "low absorbers" kept their deposits virtually unchanged in the first three quarters of the year, but then drew them down by nearly \$3 billion in the fourth quarter. Outside the Middle East, Venezuela and Algeria reduced their deposits with the reporting banks by \$5.6 and 1.7 billion respectively.

Non-OPEC developing countries, by contrast, continued to add to their deposits with the reporting banks, although at a slower pace than in 1981, viz. \$4.2 billion as against \$9.4 billion. However, this increase was more than accounted for by countries outside Latin America. Non-OPEC developing countries in Latin America, which had added \$4.7 billion to their deposits with the reporting banks in 1981, drew them down by \$2.2 billion in 1982. Eastern European countries increased their deposits with the reporting banks by \$1.9 billion last year, after leaving them nearly unchanged in 1981, with the Soviet Union alone accounting for more than the whole of the 1982 increase. "Other developed countries", after adding \$3.4 billion to their deposits in 1981, left them on balance virtually unchanged last year.

On the uses side of the market, the sharp slowdown in new lending was concentrated in two groups of countries, the non-OPEC developing countries and eastern Europe. In the first half of 1982 credits to non-OPEC developing countries expanded at an even faster pace than in the corresponding period of 1981, viz. by \$15.5 billion. However, in the face of the increasing payments difficulties of some of the largest borrowing countries, this credit growth dropped off sharply to \$4.2 billion in the second half of the year (as against \$27.5 billion a year earlier). As a result, total claims on non-OPEC developing countries expanded by only \$19.7 billion, about half the amount registered in 1981. Not too surprisingly, the slowdown was largely vis-à-vis Latin American countries. After obtaining \$11.8 billion in new credits during the first half of 1982, they were unable, despite various kinds of rescheduling operations, to borrow any significant amounts of new funds from the banks in the second half of the year. In the last six months of 1981 they had taken up \$21.1 billion of new credits. By contrast, countries in the Middle East and Asia were able more or less to maintain the pace of their new borrowing, and, with \$5.4 billion of new drawings (in current dollars), obtained only \$1 billion less than in 1981. Since, at the same time, they accelerated their deposit build-up, they were small net suppliers of new funds to the reporting banks last year.

Vis-à-vis eastern Europe the change in banking flows was even more drastic than vis-à-vis Latin America. Whereas in 1981 the reporting banks had further increased their claims on eastern European countries by \$4.8 billion, last year they reduced them by about the same amount. Since at the same time these countries added to their deposits with the reporting banks, there was a net capital reflux to these banks of over \$6.5 billion, as a result of which net banking claims on eastern Europe were reduced to \$37 billion at the end of 1982.

The situation was virtually the reverse in the case of the OPEC countries. They stepped up their borrowing from the reporting banks from \$4.3 billion in 1981 to \$8.1 billion. In view of the sharp run-down of their deposits, this meant that with

a \$26.4 billion deterioration in their net position they were by far the largest net takers of funds from the reporting banks last year.

"Other developed countries" more or less maintained the pace of their borrowing in 1982 — they received \$16 billion of new credit, only slightly less than in 1981. As a result of the near-standstill in their depositing activities, these countries, too, were larger net takers of funds than in 1981.

#### **International banking indebtedness, 1974–82.**

The acute debt problems which emerged in 1982 marked the end of a nine-year period during which international indebtedness, much of it originating in sovereign lending by banks, had expanded very rapidly. The following section reviews the build-up of international banking indebtedness since 1974 and the factors which, from 1980 onwards, led directly to last year's sharp deterioration in the international financial climate. This deterioration was only prevented from developing into a full-scale international financial crisis in the second half of last year by forceful official emergency action, coupled with close co-operation between all the parties concerned — debtor countries, the International Monetary Fund, the central banks of the industrialised world and the international banking community. Looking ahead, the present situation raises questions about the future of the system of international credit intermediation by banks on which the world economy has depended so heavily since 1974.

*The build-up of international banking debt, 1974–79.* While the international banking sector, especially the Euro-currency market, had been growing rapidly during the 1960s, it was only following the 1973 oil price increases and the removal of all restrictions on bank lending out of the United States in January 1974 that banks came to play the predominant rôle in net international capital movements. They began to provide general balance-of-payments finance for oil-importing countries on an unprecedented scale, as well as development finance particularly for non-OPEC LDCs. In addition, bank credit at times enabled countries to add to their gross foreign exchange reserves.

Between end-1973 and end-1982 the gross external assets of all banks in the BIS reporting area increased nearly sixfold, from \$290 to 1,690 billion, or from \$155 to 1,020 billion if double-counting is excluded. Of this \$865 billion expansion in net credit, \$380 billion can be identified as having been granted to countries inside the reporting area itself and \$420 billion to the rest of the world. While a number of developed countries have relied heavily on the banks for financing external payments deficits since 1974, the two groups of outside-area countries in which the debt problems are largely concentrated are the non-OPEC LDCs and eastern Europe. So far as the first of these groups is concerned, the identified gross indebtedness of non-OPEC LDCs (excluding offshore centres) to the BIS reporting banks went up, in round figures, from \$32 to 247 billion, or more than sevenfold, between end-1973 and end-1982. This was equivalent to nearly twice the growth, in terms of current dollars, of these countries' aggregate gross national product and more than twice the growth of their aggregate exports over the same period. As a result, these countries'

external banking debt increased over the period from 60 to 130 per cent. of their exports, in parallel with a rise from about one-third to one-half in banking debt as a proportion of their total external indebtedness. In the case of eastern European countries, external banking debt increased between end-1973 and end-1981 from \$10 to 61 billion, compared with a rise from \$14.5 to 50 billion in their exports to western industrial countries.

Until the 1973 oil price increases, non-OPEC LDCs had financed their relatively modest structural deficits on current external account mainly through official capital transfers, direct investment and import finance. At end-1973 their gross liabilities to the international banks, as already mentioned, accounted for about one-third of their total external indebtedness, and these liabilities were, in the aggregate, almost offset by their external banking claims. This situation began to change rapidly from 1974 onwards. The combination of sharply increased oil import bills and recession in the industrialised countries — itself related both directly and indirectly to the oil price increases — raised the aggregate current external deficit of the non-OPEC LDCs from an average of about \$7 billion a year during 1970–73 to \$21 billion in 1974 and \$31 billion the following year. Whereas industrialised countries to a considerable extent were able to finance their oil-induced payments deficits in these years by attracting direct inflows of OPEC funds and by borrowing in the international bond markets, the non-OPEC LDCs, in the absence of corresponding increases in official capital inflows, had much greater recourse to international bank credit to cover their increased external financing needs. The international banks in the main industrialised countries, faced with the combination of very large inflows of funds from OPEC countries and relatively modest credit demand from domestic customers, were both able and willing to meet the needs of many LDCs (although not those of the poorest countries), transforming relatively short-term deposits into relatively long-term loans through the technique of roll-over credits. During 1974–75 the LDCs' gross liabilities to the BIS reporting banks nearly doubled to \$61 billion, while their net banking indebtedness went up by \$21 billion.

With banks consequently becoming more concerned about the international payments situation of the Third World and charging wider spreads on new loans, by 1976 a number of non-OPEC LDCs had begun to respond to the dramatic increase in their current external deficits by taking domestic adjustment measures. This, in combination with the recovery of economic activity in the industrialised world, brought the non-OPEC LDCs' aggregate deficit on current external account in 1977 down to \$13 billion, which in real terms roughly corresponded to its average size in the years before the late-1973 oil price increases. As a result, the non-OPEC LDCs in 1976–77 were able to borrow substantial further amounts from the banks, using the proceeds largely for a badly needed strengthening of their international reserve positions: out of total gross borrowings of \$27 billion from the banks during these two years, \$23 billion was added to foreign exchange reserves.

The successful adjustment efforts of the non-OPEC developing countries, and the absence of losses in international lending, tended to reduce the banks' risk awareness and contributed from 1977 onwards to a pronounced improvement in the market climate in favour of borrowers. The principal sources of the liquidity which

Estimated flows between the BIS reporting banks<sup>1</sup> and groups of countries outside the reporting area, 1974-82.

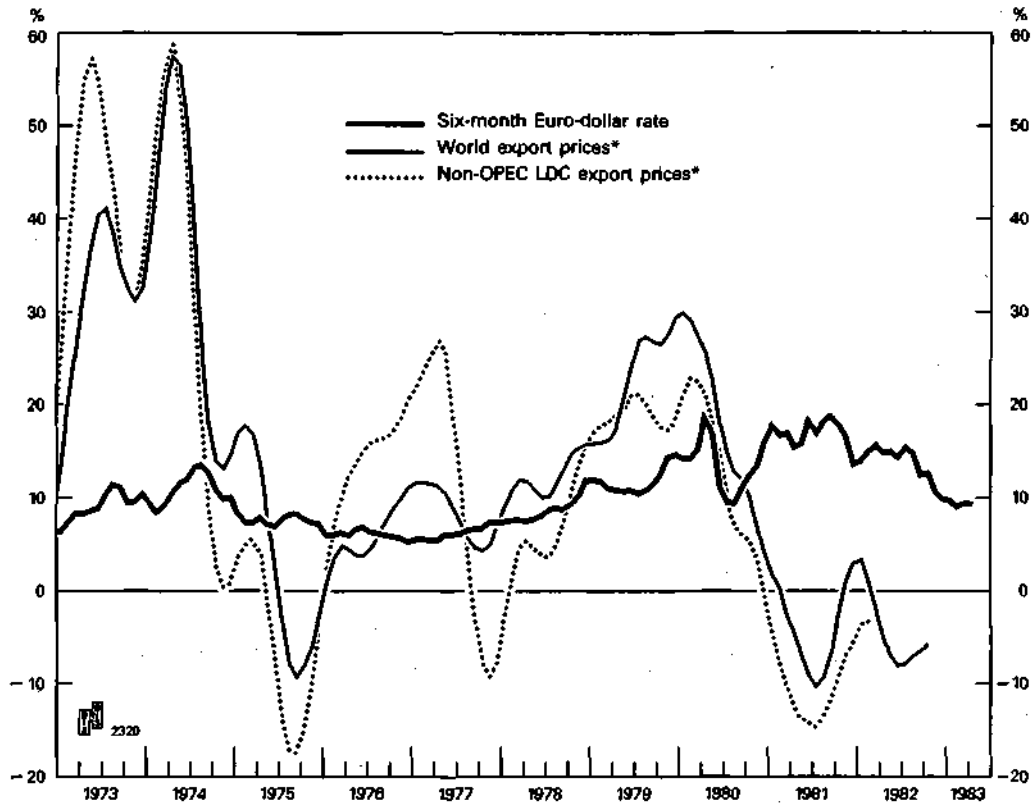
Items	Stocks at end-1973	Flows <sup>2</sup> 1974-77 yearly averages	Stocks at end-1977 new series	Flows <sup>2</sup>					Stocks at end-1982
	1978	1979	1980	1981	1982				
in billions of US dollars at constant end-of-quarter exchange rates									
<b>OPEC countries<sup>3</sup></b>									
Gross deposits .....	16.0	14.8	77.9	3.3	37.4	41.8	3.3	-18.3	135.2
Gross borrowings .....	6.5	7.0	39.1	16.7	7.2	7.0	4.3	8.1	78.6
Net deposits <sup>4</sup> .....	9.5	7.8	38.8	-13.4	30.2	34.8	- 1.0	-26.4	56.6
<i>Memorandum items:</i>									
Foreign exchange reserves <sup>5</sup> .....	12.6	14.3	69.6	-14.5	15.4	19.5	- 0.2	-11.1	78.7
Current-account balances .....	.	41.0	.	4.5	62.0	114.0	63.0	- 3.0	.
<b>Non-OPEC LDCs<sup>6</sup></b>									
Gross deposits .....	27.6	8.1	60.7	14.6	12.3	4.0	9.4	4.2	101.0
Gross borrowings .....	32.0	14.3	97.2	22.4	36.3	38.9	39.9	19.7	246.9
Net deposits <sup>4</sup> .....	- 4.5	- 6.2	-36.5	- 7.8	-23.0	-34.9	-30.5	-15.5	-145.9
<i>Memorandum items:</i>									
Foreign exchange reserves <sup>5</sup> .....	21.2	5.5	43.5	11.1	8.5	- 1.6	0.1	- 2.4	59.1
Current-account balances .....	.	-21.0	.	-24.0	-40.0	-62.0	-67.0	-59.0	.
<b>Developed countries<sup>7</sup></b>									
Gross deposits .....	27.0	3.0	28.2	8.5	7.1	5.7	3.4	0.1	49.3
Gross borrowings .....	23.0	11.3	55.5	5.7	7.5	15.4	18.7	16.0	112.0
Net deposits <sup>4</sup> .....	4.0	- 8.3	-27.3	2.8	- 0.4	- 9.7	-13.3	-15.9	-62.7
<i>Memorandum items:</i>									
Foreign exchange reserves <sup>5</sup> .....	23.5	- 0.4	15.7	6.3	3.5	1.3	- 1.5	1.2	28.6
Current-account balances .....	.	-20.0	.	- 8.0	- 7.0	-15.5	-24.5	-24.0	.
<b>Eastern Europe</b>									
Gross deposits .....	4.5	0.7	8.4	1.7	4.6	0.9	0.1	1.9	16.4
Gross borrowings .....	9.5	5.1	38.3	5.7	7.1	6.8	4.8	- 4.7	53.3
Net deposits <sup>4</sup> .....	- 5.0	- 4.4	-29.9	- 4.0	- 2.5	- 5.9	- 4.7	6.6	-36.9

Note: The definition of non-OPEC developing countries employed throughout this chapter differs from that used in Chapter V in two ways: firstly, it excludes offshore banking centres as well as Bahrain, Brunei and Trinidad and Tobago (which are included under the OPEC countries); secondly, it includes Israel and the centrally planned economies of China, North Korea and Vietnam.

<sup>1</sup> Up to 1977 the BIS reporting banks covered Belgium-Luxembourg, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, the United States and the branches of US banks in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. Thereafter they also covered Austria, Denmark and Ireland, as well as certain trade-related items in domestic currency for banks in France and the United Kingdom not included before. From December 1981 onwards banks in the United States also include international banking facilities. <sup>2</sup> The total of the flow figures shown for each of the years under consideration may not necessarily be equal to the difference between the amounts outstanding at the beginning and the end of the whole period, as a result both of breaks in the series and of the method used for the calculation of flow figures. <sup>3</sup> Includes, in addition, Bahrain, Brunei, Oman and Trinidad and Tobago. <sup>4</sup> A minus sign (-) equals net borrowing. <sup>5</sup> At current exchange rates. <sup>6</sup> Excludes offshore centres. <sup>7</sup> Including up to 1977 Austria, Denmark and Ireland, which are thereafter considered as part of the reporting area.

fuelled the borrowers' market during 1977-78, when the OPEC surpluses temporarily disappeared, were substantial deficits on the current account of the US balance of payments, coupled with large outflows of capital from the United States, reflecting the relatively easy stance of monetary policy in that country. The US external deficits both reduced the demand for balance-of-payments finance and increased the supply of funds available for lending to the rest of the world. Competition for new international business in 1978-79 squeezed the banks' margins to levels that left little room for building up reserves and led, in some instances, to lending that took little account of the borrowing countries' situations and policies.

Euro-dollar interest rates and changes in export prices, 1973-83.



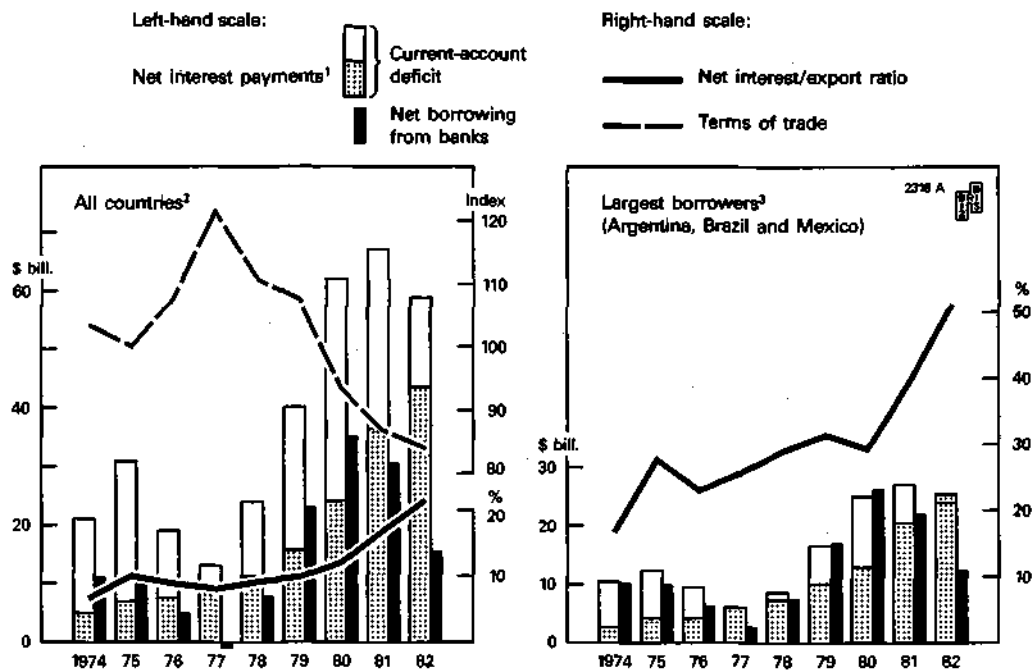
\* Six-month annualised rates of change of three-month moving averages.

Moreover, the fact that these funds were readily available at very low, or sometimes negative, real interest rates (measured in relation to the dollar unit value of the borrowers' exports) gradually tempted a number of LDCs to overborrow.

By 1978, therefore, despite the virtual disappearance of the OPEC surplus, the non-OPEC LDCs' aggregate current external deficit began to increase again, and in 1979, with the re-emergence of a large OPEC balance-of-payments surplus, it reached \$40 billion, three times the 1977 level. Notwithstanding this very large renewed increase in their external financing requirements, the LDCs added almost \$20 billion more to their aggregate foreign exchange reserves in 1978-79, mainly because, in addition to their other sources of financing, they were able to borrow \$58 billion of new funds from the banks during these two years.

By the end of 1979 the non-OPEC LDCs' gross liabilities to BIS reporting banks had reached \$156 billion, and their net liabilities \$67 billion. Nevertheless, their external debt situation still appeared manageable in the aggregate. Their combined current external deficit was little more than half as large in 1979 as it had been in 1975 in relation to their total exports, while their total net interest payments (also in relation to exports) — despite the rise in interest rates since 1977 — were more or less unchanged. There were, however, some less bright spots in the picture. By end-1979 the total gross indebtedness of non-OPEC LDCs to the BIS reporting

Factors influencing the borrowing needs and net recourse to international bank finance of non-OPEC developing countries, 1974-82.



<sup>1</sup> Figures for net interest payments are partly estimated.

<sup>2</sup> Net borrowing from banks calculated in constant dollars.

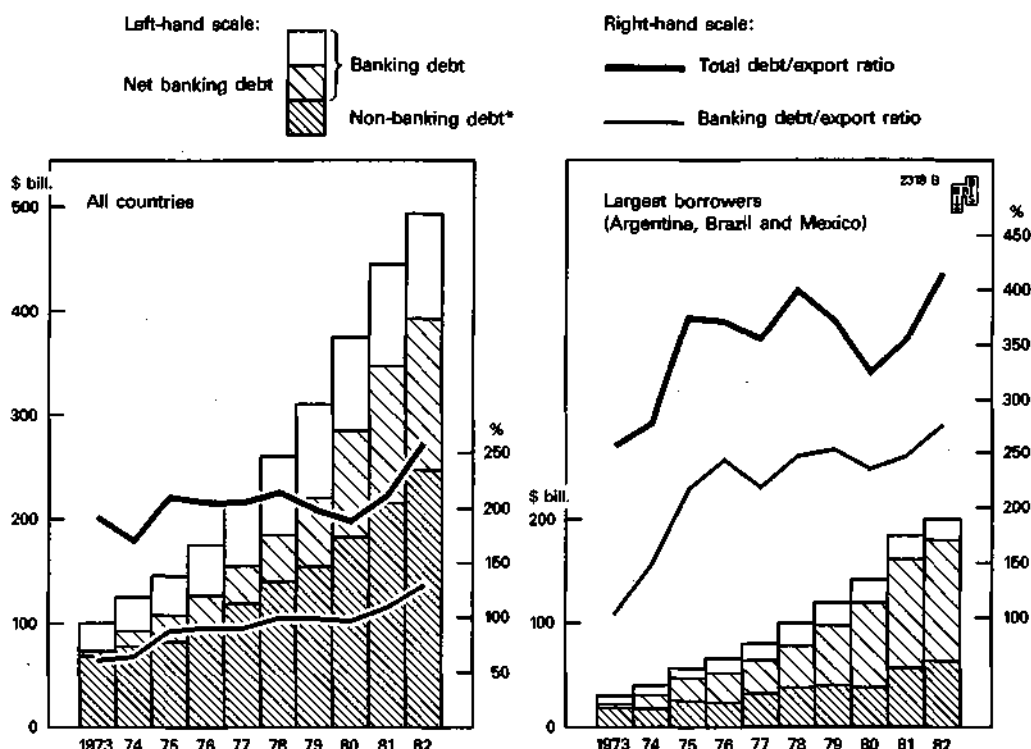
<sup>3</sup> Net borrowing from banks calculated in current dollars.

banks was, to the extent of 52 per cent., concentrated on Brazil, Mexico and Argentina, while these three countries' net interest payments to the rest of the world amounted to the equivalent of nearly one-third of their merchandise exports. This meant that there was only limited scope for accommodating a further deterioration of the external payments situations of the main LDC debtor countries.

More generally, the large-scale financing by banks of countries' balance-of-payments deficits between 1974 and 1979 had changed the character of international indebtedness in two important respects: firstly, the proportion of external debt carrying variable interest rates had increased substantially, making the debtor countries more vulnerable to increases in interest rates; and secondly, the maturity profile of international indebtedness had shortened as compared with the pre-1974 situation. These developments increased the vulnerability of the debtor countries in the ensuing period of turbulence. Furthermore, this increased external vulnerability arising out of large-scale recourse to bank financing was compounded by the fact that non-OPEC developing countries' imports were continuing to expand at rates that would not have been sustainable even had the world economic climate remained relatively favourable to them.

*The approach to the 1982 crisis.* Various factors contributed to the subsequent critical deterioration of the international debt situation. Firstly, the renewed sharp increase in oil prices, which had already begun in early 1979 and which continued into 1980, brought with it, as in 1974, a slowdown of economic activity in the oil-

Evolution of non-OPEC developing countries' international indebtedness, 1973-82.



importing world. Secondly, and more importantly, the widespread adoption of firm anti-inflationary policies in the industrialised countries had unfavourable effects both on world trade and on the terms of trade of many borrowing countries and, through its effects on interest rate levels, produced a quantum jump in the costs of servicing external indebtedness. The most important influence in that respect was the change in both the stance and the techniques of US monetary policy in late 1979, which not only helped to carry dollar interest rates to unprecedented levels, but was also a key factor in the appreciation of the dollar, the currency in which the bulk of international debt is denominated. Thirdly, certain political disturbances heightened the banks' perception of the risks involved in their international lending.

The non-OPEC LDCs' combined current-account deficit increased sharply, to \$62 billion in 1980 and \$67 billion in 1981, before receding only moderately, despite virtually zero economic growth, to \$59 billion in 1982. Owing to a strong increase in unit values, these countries' export earnings continued to grow rapidly in 1980, but with the weakening of economic activity and increasing protectionist tendencies in the industrial countries, as well as a drop in raw-material prices, their growth slowed down in 1981, and in 1982 they showed an absolute decline of 9 per cent. Superimposed on this were the effects of the steep rise in interest rates, which, in view of the importance of roll-over credits and short-term liabilities, very quickly affected the bulk of the non-OPEC LDCs' banking debts. The combination of



higher interest rates and continued increases in indebtedness raised the non-OPEC LDCs' net external interest payments from \$11 billion in 1978 to \$43.5 billion in 1982. This increase in net interest payments deprived non-OPEC developing countries to a large extent of the fruits of their adjustment efforts. After experiencing a widening in the non-interest content of their current-account deficit from \$13 billion in 1978 to \$38 billion in 1980, they had been able to bring this payments gap back to \$15.5 billion in 1982, despite the very unfavourable international economic environment. However, of this \$22.5 billion adjustment, \$19.5 billion was offset by the further increase in their net interest payments. This phenomenon was particularly pronounced in the case of the three big Latin American debtor countries. Between 1980 and 1982 their combined current external deficit remained virtually unchanged at around \$24 billion; excluding net interest payments, the balance of their current-account transactions, however, shifted from a \$12 billion deficit to a \$1.5 billion surplus.

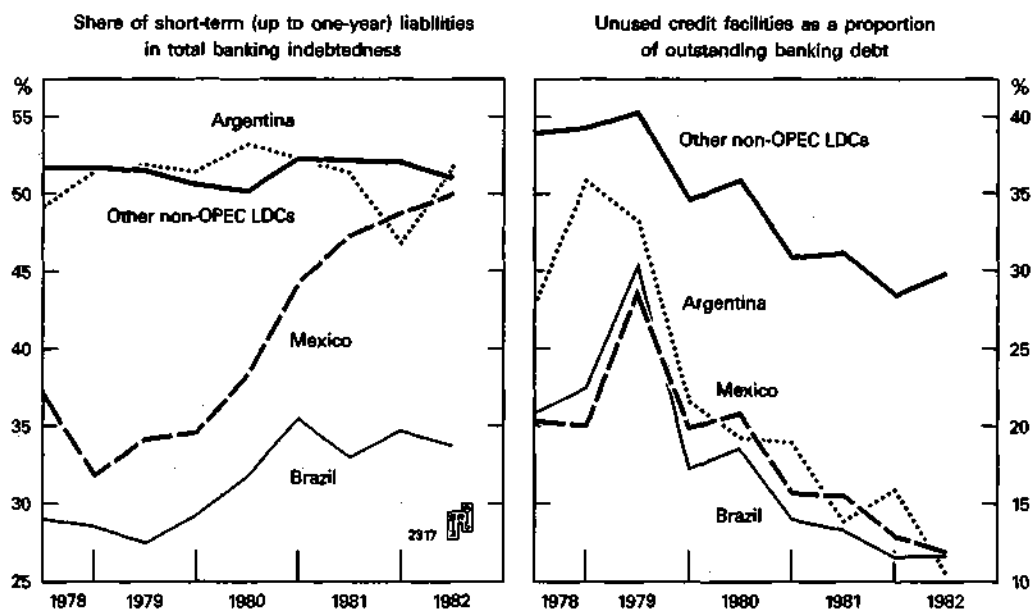
The combination of increasing external indebtedness and higher interest rates led to a further sharp increase in the relative weight of non-OPEC LDCs' external debt-service burdens. The net interest payments/export ratio for the group as a whole, which had on balance shown no increase between 1975 and 1979, more than doubled to nearly 23 per cent. in 1982. For the three large Latin American borrowers this ratio reached 51.5 per cent. in 1982, up from 31 per cent. in 1979.

The external payments positions of non-OPEC developing countries were further burdened by the weakening of their export prices, which caused the interest cost of their outstanding debt to increase even more in real terms than in nominal terms. In fact, the 1981-82 decline in their export prices meant that interest payments, which in earlier years had in large measure represented amortisation payments, now entailed a real call on the debtor countries' resources and that the real value of the outstanding stock of debt continued to increase, even without any new borrowing. Finally, the fact, illustrated in the graph on page 122, that the non-OPEC LDCs' aggregate current-account deficits in 1981 and 1982 were largely made up of net interest payments meant that net new borrowing no longer provided them with new capital resources, but simply financed part of the interest service on their existing debt.

Looking at post-1979 developments from the point of view of the banks, at first they did not react strongly to the change in the international payments situation. The central banks of the Group of Ten countries and Switzerland had, in 1979, reviewed the recent rapid growth of international bank lending and, recognising that the recycling of the re-emerging OPEC surplus would lead to further substantial calls on the banks by deficit countries, they emphasised in a communiqué issued in mid-April 1980 the importance of preserving the soundness and stability of the international banking system. In that connection, they laid particular stress on the importance of banks' maintaining adequate capital resources and liquidity, as well as of their avoiding undue concentration of risks in their international business.

Given the continued large inflows of new funds which they were experiencing, as well as the relatively weak demand for credit from their domestic customers and

Features of external banking indebtedness of selected countries, 1978-82.



the very good loan-loss record to date in their international business, the banks' increased awareness of risk was at first limited to somewhat greater selectivity with regard to individual borrowers. New credits to non-OPEC LDCs continued to expand, although at a slower rate than before and by much less than the increase in these countries' current external deficits. Deficit countries that were heavily dependent on oil imports and whose external indebtedness had already reached high levels had to accept wider spreads, but prime borrowers — and until mid-1981 these included (thanks to its oil resources) Mexico — were able to obtain credit on finer terms than before. Some smaller banks began to opt out of new loans to the more risky countries, and where it became difficult to distribute loan participations widely, the major banks made use of the technique of "club loans", or simply gave credits individually. It may be added that, while supervisory authorities were tending to encourage a moderation in the pace of new lending, governments were not always averse to soliciting the participation of banks in export-related project financing.

Perhaps the clearest sign of a tightening of market conditions was to be seen in the evolution of the banks' undisbursed international credit commitments. Expressed in relation to outstanding credits, these started to decline quite sharply in the second half of 1979, and continued to fall fairly steadily until the middle of 1982, the last date for which figures are available. Here again the downward movement was particularly pronounced in the case of the three largest Latin American borrowers. In the case of Brazil, for example, unused credit facilities declined from 30 per cent. of the country's outstanding indebtedness to banks in the BIS reporting area in June 1979 to 12 per cent. in mid-1982. On the other hand, there was no evidence of a general shortening of the maturity of developing countries' outstanding

bank debt. However, Mexico engaged in particularly heavy short-term borrowing from 1979 onwards, with the result that the short-term component of its debt to the BIS reporting banks rose from 34 per cent. to around 50 per cent. in mid-1982, although part of the increase may have been related to oil export finance. Brazil, too, which in order to maintain its access to international credit was willing to concede much wider spreads to the banks, increased the short-term component of its total banking debt from 28 per cent. in mid-1979 to around 34 per cent. in mid-1982, although this was still well below the average for non-OPEC LDCs.

Despite some greater selectivity in bank lending policies and an increase in the cost of borrowing, the economically more advanced non-OPEC developing countries continued to prefer covering their external payments deficits through bank credit rather than by having recourse to the International Monetary Fund. For one thing, bank credit was free from economic policy conditions. Secondly, at any rate until after the introduction of the Fund's enlarged access policy in September 1980, member countries' maximum possible use of the Fund's resources looked, particularly to the major deficit countries, small in comparison both with their total external financing needs and with the amounts they could borrow from the banks. It was therefore only when recourse to conditional IMF credit became a *sine qua non* for further access to bank credit that use of the Fund's resources became an essential part of debtor countries' external financial strategies. By that time, however, the external situations of some important debtor countries had already become critical.

The first serious blow to market confidence came towards the end of 1980, when the deterioration in the economic situation of Poland, coupled with political disturbances, resulted in that country being unable to meet its debt-service obligations without an across-the-board rescheduling. The banks reacted by adopting more restrictive policies with respect to other eastern European countries whose underlying economic situation was in part quite different. New credits to eastern European countries, which had expanded to \$6.8 billion in 1980, slowed down to \$4.8 billion in 1981 and there were actual credit withdrawals of \$4.7 billion in 1982. The principal victim of this "regionalisation syndrome" was Hungary which, unlike other eastern European countries, had been financing the bulk of its foreign trade in the Euro-market and had therefore run up very substantial debts to the banks, a significant proportion of them at short term. Despite the fact that the authorities had embarked on an adjustment programme in 1979 which by 1981 had turned the foreign trade account from deficit into surplus, increased interest payments produced a marked deterioration of the current-account balance, compounded by very large withdrawals of short-term banking funds in the first quarter of 1982. In order to stabilise the situation, emergency credits were granted by the BIS to the National Bank of Hungary, and this was followed by further domestic adjustment measures and an IMF credit, with the result that Hungary was able to obtain some new financial accommodation from the banks.

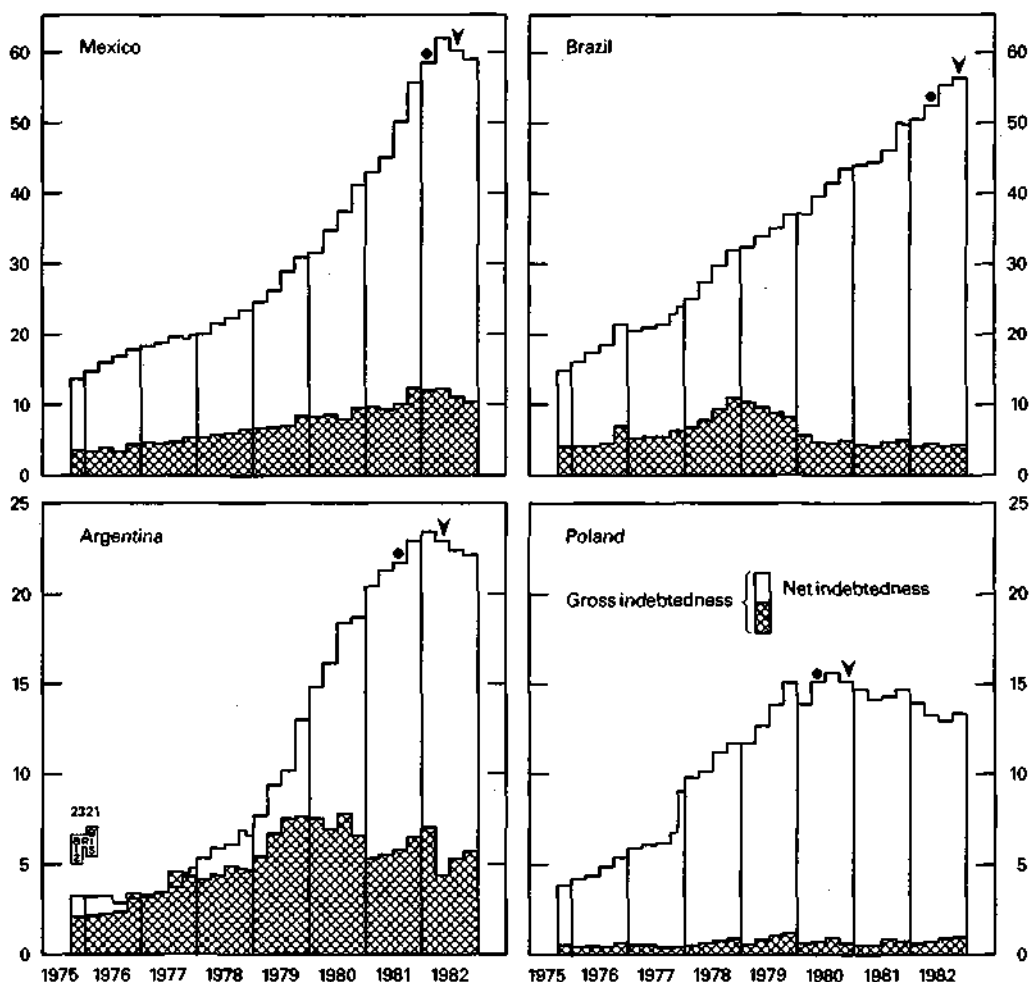
The second jolt to market confidence came from the Falklands crisis in April 1982. Although Argentina stressed its willingness to stand by its financial obligations, the Falklands war did, of course, have consequences for its debt-servicing capacity. Moreover, by heightening the banks' awareness of their risk exposure in Latin America generally, it prepared the way for a regionalisation

syndrome in that part of the world, too, so that other Latin American countries saw their access to international bank credit becoming more difficult and more expensive.

Another unfavourable influence on market sentiment during 1982 was the unexpected depth and persistence of the economic downswing in the industrial countries, and in particular its increasing impact on the banks' domestic loan-loss experience — especially with regard to some large corporate borrowers — and on the export performance and external payments position of developing countries in general. In addition, some spectacular failures of financial institutions, although due largely to special factors such as fraud and the weakness of the oil market, added to uncertainties about the soundness of the international financial system.

#### Evolution of gross and net banking indebtedness of selected countries, 1975–82.

In billions of US dollars.



Note: The arrows at the top of the columns show the quarters in which financial problems arose, while the dots indicate the latest figures on banking debt which were available at that time. The figures include valuation changes resulting from exchange rate movements, but exclude positions vis-à-vis banks in Switzerland. Despite these imperfections, the graphs demonstrate very clearly that in all of these four cases it was possible to observe a strong build-up of debt over a number of years prior to the outbreak of the external payments crises.

The final blow to the morale and the smooth working of the international credit market came in the late summer of 1982 with the outbreak of Mexico's external payments and debt crisis, triggered by a massive flight of Mexican capital to the United States. Strictly speaking, what happened should not have come as a surprise to the market. In anticipation of steadily rising oil revenues, Mexico had embarked some years earlier on policies of economic expansion which would probably not have been sustainable even in a more propitious world economic environment. Moreover, in order to avoid having to accept more onerous terms for longer-term bank loans, Mexico had been covering an increasing part of its very large external financial requirements at short term, a policy which had been clearly visible well before the outbreak of the crisis — for example, in the international banking statistics published by the BIS. Nevertheless, because of the country's oil wealth and its importance to the lending banks as a source of balance-sheet growth and of profits, banks had still been adding strongly to their Mexican exposures as late as the second quarter of 1982.

Once the Mexican crisis broke out, emergency official international support was arranged swiftly and effectively. In early August 1982 the Bank of Mexico drew \$700 million on its swap line with the Federal Reserve Bank of New York, and in mid-August the US Government made an advance payment of \$1 billion to Mexico in respect of future oil imports, as well as arranging financial guarantees for \$1 billion of food exports. At the same time negotiations began between the Bank of Mexico, the US monetary authorities and the BIS for a bridging credit, pending agreement between Mexico and the International Monetary Fund on a drawing under the Fund's Extended Facility. On 30th August 1982 a \$1,850 million bridging credit was extended to the Bank of Mexico, half of it by the US monetary authorities and half by the BIS. In December Mexico drew \$0.2 billion under the first credit tranche of its Fund quota and received a \$3.8 billion credit, drawable over three years, under the Extended Fund Facility.

The Mexican crisis immediately produced a regionalisation syndrome in Latin America, as well as threatening to make life difficult for a number of heavily indebted countries elsewhere in the world. In September the Central Bank of Argentina approached the BIS for a bridging loan and opened negotiations for an IMF credit. In January 1983 the BIS granted Argentina a \$500 million credit facility, while the IMF approved the use by Argentina of Fund resources totalling \$2.2 billion, including \$1.6 billion under a standby arrangement.

The most prominent country affected by the regionalisation syndrome in Latin America was Brazil, which towards the end of 1982 applied for large-scale official international assistance. In December 1982 the BIS granted the Central Bank of Brazil a \$1.2 billion bridging loan, later increased to \$1.45 billion, while in February 1983 the IMF approved the use by Brazil of Fund resources totalling \$5.4 billion, including \$4.6 billion under the Extended Fund Facility.

In some respects the most difficult aspect of these international rescue operations was the arrangement of fresh bank credits for the countries concerned, without which the total financing packages would have been inadequate. The difficulties in arranging for new bank money, on a basis that would be perceived by

the banks themselves as equitable, stemmed from the fact that so many different banks from such a wide range of banking systems had existing exposures to these countries and that these exposures varied greatly in extent and nature from bank to bank and from banking system to banking system. New bank credits were in fact arranged for Mexico and Brazil, in the amounts of \$5 billion and \$4.4 billion respectively, and in both these cases the availability of Fund credit was made dependent on the provision of new bank credit, and vice versa. In the case of Argentina the banks agreed in December 1982 to provide a bridging loan of \$1.1 billion and made the provision of additional money dependent on Argentina's obtaining access to the Fund's resources; new bank credit lines of \$1.5 billion are still under negotiation.

By the spring of 1983 some twenty-five non-OPEC developing countries, accounting for two-thirds of this group's total end-1982 debt to the BIS reporting banks, had entered into rescheduling negotiations with the banks, and many of them were cut off from spontaneous flows of new banking funds. Fourteen of these countries were making use of IMF credit, or had applied to do so. Elsewhere, some OPEC countries, including Venezuela and Nigeria, were experiencing severe external financial difficulties, as was also Yugoslavia, which received substantial governmental assistance from a number of countries, as well as a credit from the BIS. In addition, the access of most eastern European countries to new bank credit has remained very difficult. However, notwithstanding a virtually complete drying-up of voluntary new bank credit to Latin America and eastern Europe, as well as substantial withdrawals of funds from the Euro-currency market by OPEC countries and by the monetary authorities of some other countries, prime borrowers continue to have easy access to international bank credit.

*Evaluation and conclusions.* Viewing the 1974-82 growth of international indebtedness in macro-economic terms from the borrowers' angle, it is of course true not only that there is nothing wrong with international borrowing in itself but that it can be, and often is, beneficial, provided that it does not unduly mortgage the borrowing country's future. This condition is fulfilled so long as: (i) the funds obtained are used to increase investment; (ii) the investment benefits export and/or import substitute industries sufficiently to allow the resulting external debt to be serviced without a drastic deterioration in the country's terms of trade; and (iii) the productivity of the investment is, taking into account (ii) above, commensurate with its real interest cost. It is obvious that international borrowing over the past nine years fell short of these requirements in some important respects. For one thing, the oil-price-induced current-account deficits, unavoidable as they were, meant that much borrowing did not have a domestic investment counterpart but was merely additional balance-of-payments financing. Moreover, much of the borrowing that was done at or near zero real interest rates would have appeared unsound if the more recent levels of interest rates had been foreseen. And even to the extent that investments were directed to building up the borrowing countries' export potential, the present weakness of world demand and the spreading protectionist tendencies in the industrial countries mean that for the time being some of these investments cannot bear fruit. Thus, with the benefit of the hindsight provided by the present world economic situation, it is not easy to escape the conclusion that international

borrowing since 1974 has not always been very advantageous to the debtor countries, although a good part of it was an inevitable product of the two major rounds of oil price increases.

Looking at developments since 1974 from the standpoint of the banks, the fact that so many countries have had to have recourse to rescheduling operations and/or official assistance has given rise in some quarters to the view that in the past nearly all bank lending to certain groups of countries was misdirected and irresponsible. This view is, to say the least, far too sweeping. It appears almost entirely to overlook the extent to which the functioning of the world economy and the international financial system has since 1974, and in particular following the successive oil shocks, depended on the rôle of intermediary played by international banks.

One charge that is sometimes levelled at the banks is that their unwillingness to increase their international exposure further and, in some instances, their efforts to reduce it, are tantamount to admissions that their past lending policies in that area were wrong. To put this view into perspective, it may be useful to imagine what would happen in a national context if during a recession banks were suddenly to cut off the flow of new credits to the corporate sector and to begin closing off existing short-term credit lines. The inevitable result would be a financial collapse which would threaten to engulf even soundly managed firms, including banks, not to speak of the second-round effects on aggregate demand and the state of the economy as a whole. Such a financial collapse would therefore not permit any easy inferences with respect to the quality of the pattern of bank lending and of corporate investment before the outbreak of the crisis, whereas the conclusion could safely be drawn that something had gone seriously wrong with the macro-economic management of the economy.

This, of course, is not to deny that banks have made some serious mistakes in their international lending, not least in supposing that sovereign lending is somehow less risky than, say, lending to corporations. However, the present state of world recession and lack of confidence is an indiscriminate judge of past behaviour. Moreover, while individual credits must be serviced, repaid and not always necessarily renewed, in a macro-economic sense the granting of credit is necessarily a one-way street. Attempts to unwind it in aggregate terms, or even to stop it growing, would, if not forestalled, undoubtedly have even more serious financial and economic consequences at the international level than in a single economy.

Finally, while it is undeniable that since 1974 there has at times been overlending by banks and overborrowing by deficit countries, these developments have to be seen in the context of the evolution of the world economic situation. During the nine-year period from the end of 1973 to the end of 1982 there was, firstly, a phase of rather high inflation and this was followed, after the second round of major oil price increases, by a widespread process of disinflation in the industrial world. In these circumstances it was not always easy to exercise sound judgement about real economic prospects. In particular, the expansionary policies pursued by industrial countries in 1977-78 and, most importantly, the stance of US monetary policy at that time, were largely responsible for the borrowers' market in international banking funds which began to emerge in 1977 and which made it hard

for both borrowing countries and the banks to exercise appropriate restraint. The emergence of the borrowers' market, in combination with the subsequent renewed increases in oil prices, helped pave the way for the present international debt problems.

In dealing with the debt problems that arose in 1982, the order of the day for the authorities, both national and international, has been to prevent a reversal of international credit flows to problem countries and to ensure the provision of an adequate flow of new credits to them. This has in some instances meant the use of measures which under normal circumstances would be unthinkable and which, from a longer-term point of view, have some drawbacks; other elements of the official strategy used to maintain international credit flows may, however, point the way to longer-term solutions.

Since, in view of the amounts involved, there was no question of simply substituting official for private funds, the strategy adopted in the main problem cases has been to make official assistance, mostly in the form of IMF credit, dependent on continued lending by the banks. The conditional nature of Fund credit, linked to the adoption of thorough-going economic adjustment programmes by the debtor countries themselves, opens up the prospect that these countries' payments difficulties will be overcome and makes it acceptable for the banks to continue lending to them. The most difficult aspect of this strategy is to find the right balance between, on the one hand, imposing excessively onerous adjustment programmes on the debtor countries that would be in the interests neither of their own economic or political stability nor of the world economy as a whole, and, on the other hand, being too lenient and thereby merely postponing the day of ultimate reckoning. Since the elaboration and negotiation of Fund-sponsored adjustment programmes usually requires a certain amount of time, while the debtor countries' need for support was very pressing, the monetary authorities of the industrialised countries, mostly through the BIS, provided short-term assistance to bridge this time-gap. Moreover, some central banks have exerted direct suasion on the banks under their jurisdiction to maintain their short-term credit lines to the debtor countries, and in particular to the foreign agencies of banks from these countries that have used the international money market as a source of balance-of-payments finance. This suasion has even included asking banks to reconstitute short-term interbank credit lines that had been drawn down earlier.

The vigorous support operations undertaken by governments, central banks and the international monetary institutions have succeeded in keeping the international financial system afloat, largely because the banks themselves are aware that in order to safeguard the integrity of their assets there is no alternative to continued lending, the main problem for the banks being to achieve a fair sharing of this burden and solidarity of behaviour among themselves. At the same time, it is clear that this kind of "induced" lending by banks can only be regarded as a holding operation. A real improvement in the international credit climate can come only from an improvement in the external payments positions of the debtor countries, the key to which lies both in these countries' own adjustment policies and in a world economic climate, including appropriate trade policies in the industrial world, that will permit sustained growth of their exports.



### **The international bond markets.**

In 1982 the international bond markets experienced an unprecedented boom, with the total volume of new issues rising by nearly 50 per cent. from \$48.8 billion to a record \$71.7 billion. The expansion was largely concentrated in the Euro-bond sector, where new issues grew by almost \$20 billion to reach \$46.5 billion; the volume of foreign issues, by contrast, expanded only moderately, by \$3.6 to 25.2 billion.

Issuing activity in the Euro-bond market was particularly buoyant in the first half of the year, when the strength of the dollar on the exchanges and the continuing high level of — and also, in part, expectations of a decline in — dollar interest rates boosted the demand for Euro-dollar bonds. This pushed Euro-dollar rates for first-quality borrowers well below corresponding yields in the United States. As a result, borrowers tended to shift their issuing activity from the US market to the Euro-bond market. This was true in particular of US corporations, which in the first half of the year floated an unusually large proportion — over 40 per cent. — of their issues in the international bond markets.

In the third quarter of the year, the pronounced recovery of the US domestic capital market and the temporary narrowing of its interest rate premium over the Euro-bond market brought a substantial part of this business back to the United States. Whereas the volume of Euro-bond issues contracted sharply, foreign issues in the United States picked up strongly and US corporations did the bulk of their bond financing in their home market. In the fourth quarter of the year the interest premium that had to be offered for issues in the United States rose once more, with the result that some borrowing was again shifted to the Euro-bond market.

All in all, investors' demand for Euro-bonds and especially dollar bonds was at a considerably lower level in the second half of the year, when interest yields came down sharply, than in the first half. This appears to have been due both to the peaking-out of the dollar in the exchange market, which reduced expectations of further exchange rate gains, and to the lower interest rate levels, which apparently dampened hopes of continued capital gains. On the other hand, the restoration of a normal term structure, with the sharp drop of short-term interest rates, facilitated restocking by professional bond traders.

The lower level of bond yields in the latter part of 1982 did, of course, give a greater incentive to borrowers, but, as in the case of US corporations in particular, the pick-up in issuing activity was in large measure concentrated in the domestic markets. Moreover, the sharp slowdown in international bank lending reduced banks' own refinancing needs. This, together with the downward trend of interest rates, was one of the main factors leading to a marked contraction between the first and second halves of the year in the volume of variable interest bond issues.

Considering the year as a whole, one important reason for the very strong performance of the Euro-bond market was once again its flexibility and innovativeness. Zero coupon bonds met with a very good reception by investors in the early part of the year, before changes in tax regulations narrowed the market for this kind of paper. Another technique that gained prominence, largely in the second

International bond issues.<sup>1</sup>

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 . . .	1980	9,070	4,860	2,110	1,510	5,930	610	3,380	2,110
	1981	7,580	5,230	860	660	5,440	640	3,070	1,390
	1982	16,550	12,690	1,920	1,160	5,250	760	2,350	1,350
	1983/I	7,290	5,870	750	510	2,090	150	1,030	990
Canada . . . . .	1980	1,440	1,150	60	100	1,740	1,500	160	320
	1981	5,010	4,060	130	20	5,950	4,800	870	1,040
	1982	6,920	5,600	100	160	4,440	2,700	1,330	790
	1983/I	940	600	80	40	1,020	730	290	100
United States . . . . .	1980	4,390	3,980	120	280	1,370		200	110
	1981	5,850	5,700	30	70	700		700	470
	1982	13,020	12,340	530	70	1,790		1,470	890
	1983/I	2,050	1,910	100	60	500		500	400
Other developed countries <sup>2</sup> . . . . .	1980	2,260	1,220	780	170	2,620	-	2,310	1,950
	1981	3,260	2,520	230	200	3,040	320	2,370	1,920
	1982	3,860	3,050	480	270	5,740	400	4,440	3,200
	1983/I	1,440	980	370	-	2,550	-	2,380	1,840
Rest of the world . . .	1980	1,180	750	390	-	570	80	140	130
	1981	2,300	2,040	90	210	1,120	440	80	350
	1982	2,820	2,510	220	-	520	-	200	310
	1983/I	40	-	40	-	140	-	-	40
International institutions . . . . .	1980	2,170	1,710	-	530	6,700	900	1,340	3,230
	1981	3,180	2,000	40	1,150	5,330	1,380	1,080	870
	1982	3,280	2,490	-	150	7,460	2,150	1,530	1,010
	1983/I	990	600	-	60	1,820	400	170	120
Total issues placed . . . . .	1980	20,510	13,650	3,460	2,570	18,930	3,090	7,530	7,850
	1981	27,180	21,550	1,380	2,310	21,580	7,580	8,170	6,040
	1982	46,450	38,680	3,250	1,830	25,200	6,030	11,320	7,550
	1983/I	12,750	9,960	1,340	670	8,120	1,280	4,370	3,490

<sup>1</sup> Based on OECD sources. <sup>2</sup> Australia, Japan, New Zealand and South Africa.

half of the year, was the so-called interest rate swap, under which the banks swapped their own fixed-interest bond debts against floating-interest debts of their customers, thus obtaining long-term funds at variable interest rates without having to pay a premium over LIBOR. Other popular devices last year were bonds with warrants, partly-paid and deferred-payment bonds, bonds with currency swaps and extensible bonds offering investors the opportunity of prolonging the maturity. On the other hand, in early spring 1982 an easing of registration requirements by the US Securities and Exchange Commission tended to facilitate the access of foreign issuers to the US market, thereby reducing the comparative advantage of the Euro-bond market.

As regards the currency structure of international bond borrowing, 1982 was above all the year of the dollar. The currency's strong exchange-market performance, its high interest yield and premium over other currency denominations, which persisted even after interest differentials in the short-term

International bond issues, by types of instrument.

Items	1980	1981	1982					1983
			year	first quarter	second quarter	third quarter	fourth quarter	first quarter
	in millions of US dollars							
Total issues .....	39,440	48,760	71,650	19,880	18,720	17,290	15,760	20,870
of which:								
fixed rate straight issues* ..	30,710	36,900	57,630	14,380	14,330	15,550	13,370	16,350
floating rate notes .....	4,820	7,450	11,390	4,130	4,070	1,360	1,830	3,140
convertible bonds .....	3,910	4,410	2,630	1,370	320	380	560	1,380

\* Including zero coupon bonds and private placements.

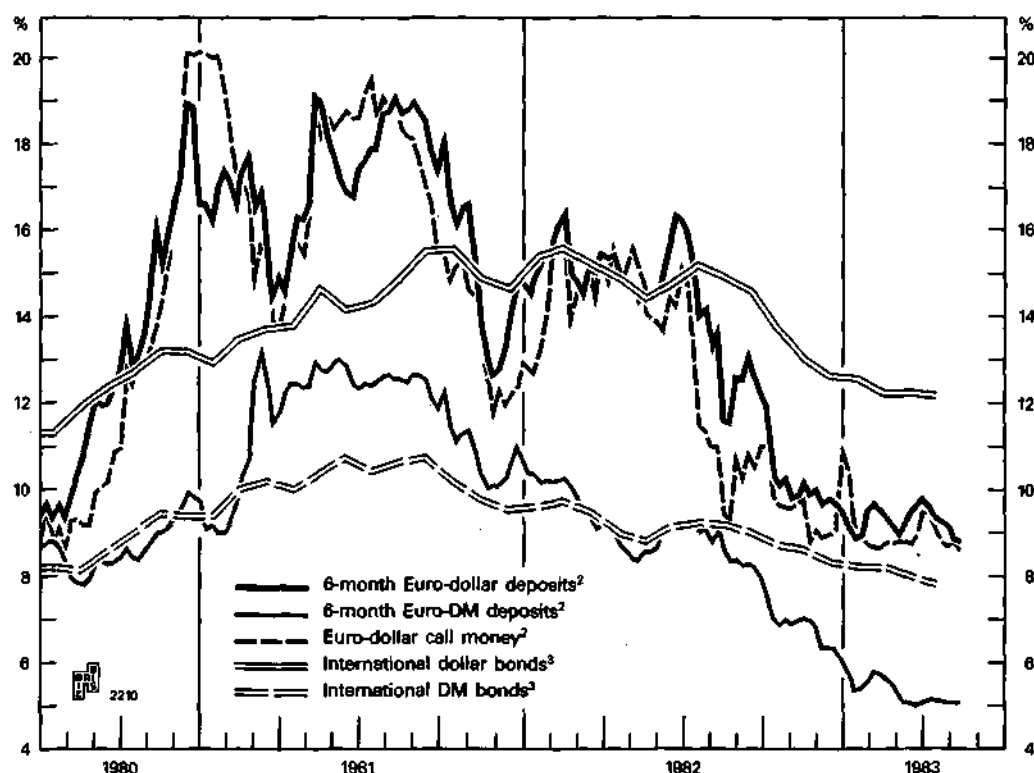
markets had narrowed considerably, and the prominent rôle of US borrowers, meant that an unusually large portion of Euro-bond issues was denominated in dollars. For the year as a whole, the share of the dollar in total Euro-bond issues increased from \$21.6 to 38.7 billion. Foreign issues in the US market, despite the temporary spurt during the third quarter, declined from \$7.6 billion to \$6 billion, largely as a result of higher interest costs.

Deutsche Mark issues in the Euro-bond and foreign bond markets, which had been at a particularly low ebb in 1981, expanded by \$2.8 to 5.4 billion last year, but remained below the levels attained in the late 1970s. Foreign issues in Switzerland rose by \$3.2 to 11.3 billion. In addition to the traditional borrowing by international institutions, which rose from \$1.1 to 1.5 billion, the market saw a surge from \$2.0 to 3.7 billion in offerings by Japanese borrowers, who were attracted by the relatively modest level of interest rates and the apparently low level of exchange rate risk.

Towards the end of 1982 and early in 1983 the temporary recovery of the European currencies, in addition to sustained efforts by public entities to promote the market, encouraged a sharp expansion in issues denominated in European currency units (ECUs), which totalled nearly \$1 billion in 1982. Borrowers found these issues a convenient vehicle for diversifying exchange risks, while investors, especially in European countries where exchange control regulations were strict but purchases of these bonds were nevertheless allowed, were attracted by the weight of the Deutsche Mark in the basket of currencies composing the ECU.

As regards groups of borrowers, one outstanding characteristic of the market last year was its increased risk awareness and pronounced preference for first-class borrowers. This was reflected in a widening of the yield premia that individual groups of borrowers had to concede. The principal beneficiaries of this trend were the large US corporate borrowers, which stepped up the volume of issues by \$8.3 billion to \$14.8 billion last year. In addition to private borrowing motivated partly by efforts to improve balance-sheet structures, governments and other public agencies tapped the markets for budgetary and balance-of-payments purposes. With new takings of \$11.4 billion, Canadian entities were the second largest borrowers; the higher cost of borrowing in the US market throughout most of 1982 meant that,

Euro-currency deposit rates and yields on international markets  
for US dollar and DM bonds.<sup>1</sup>



<sup>1</sup> The bond yields are calculated to average maturity. <sup>2</sup> Weekly averages of daily quotations. <sup>3</sup> Monthly averages.

in contrast to 1981, the major part of these funds was raised in the Euro-bond market. The third largest borrowers were French public entities, whose total new issues in the international markets amounted to \$7.9 billion, up from \$2.9 billion in 1981. And among other borrowers in the industrial countries, Japanese companies also turned increasingly to the international markets, issuing a total of \$6.2 billion, a substantial part of which was in the form of private placements.

The problems which major non-OPEC developing countries faced in their external payments situation resulted in their virtual disappearance from the international bond markets in the course of the second half of the year. For the year as a whole, the share of new takings by non-OPEC developing countries (excluding offshore centres) amounted to less than 4 per cent., as against 6 per cent. in 1981; and of \$2.8 billion of new issues, nearly 60 per cent. was accounted for by Mexico. International development institutions barely maintained their market share at 10 per cent., with an increase in their issue volume from \$5 to 7.3 billion. The bulk of this amount was, as usual, raised in the domestic markets.

In January 1983 issue activity in the international bond markets picked up sharply. Although there was subsequently some let-up when the decline in dollar interest rates seemed to peter out, for the first quarter as a whole the issue volume

reached a new record level of \$20.9 billion, which was \$5.1 billion, or nearly one-third, more than in the fourth quarter of 1982. The greater uncertainty surrounding future dollar interest rate trends was reflected in a renaissance of floating rate issues, which increased from \$1.8 to 3.1 billion. And the strength of the share markets was the main influence behind an expansion in convertible bond issues, from \$0.6 billion in the preceding quarter to \$1.4 billion.

## VII. THE INTERNATIONAL MONETARY SCENE.

### Highlights.

This chapter focuses on two main areas, exchange markets and international liquidity, covering both recent developments and some longer-term perspectives.

The dominant feature of exchange rate developments since the end of 1981 has been the continued strength, except for a short period towards the end of 1982, of the US dollar against other major currencies. Despite a considerable deterioration in the US current-account balance, the dollar appreciated in effective terms by nearly 14 per cent. between end-1981 and early May 1983, largely under the combined influence of favourable interest rate differentials and of concern about the effects of some major borrowing countries' external debt problems on the international banking system. The Japanese yen, although fluctuating in value quite considerably against the dollar, remained basically weak during the period under review because of large net outflows of capital caused mainly by the relatively low level of domestic interest rates. The pound sterling depreciated quite strongly in the last months of 1982 and in early 1983, partly because of the weakening of oil prices, but subsequently recovered part of its losses when oil prices stabilised after March 1983.

In Europe the relative weakness of the Deutsche Mark against the dollar could not, in view of the persistent inflation differentials between the EMS countries, prevent recurrent tensions within the EMS exchange rate mechanism over the past year and a half, and there were three further realignments of participants' central rates between February 1982 and March 1983. A review of the workings of the EMS exchange rate mechanism since March 1979 suggests that its existence has contributed to greater, though still insufficient, convergence of economic policies in member countries than would otherwise have been the case, and has shielded exchange rate relationships between member countries from short-term volatility.

A survey of movements in bilateral exchange rates of the US dollar against the Deutsche Mark, the Japanese yen and the pound sterling since 1977 concludes that the fluctuations that have occurred were undesirably large in both nominal and real terms. While there may be little that the authorities can do to prevent exchange rates deviating significantly from purchasing power parities in the face of major external shocks, the case is different when policies themselves cause uncertainties about equilibrium rates. Given the downward convergence of inflation rates in the main industrial countries, a better co-ordination of exchange rate policies, including some concerted intervention in the exchange market, could help to reduce some of the uncertainties that have materially contributed to exchange rate instability in recent years.

Developments during 1982 in the field of international liquidity were in some respects similar to those of the preceding year, with a decline in countries' aggregate non-gold reserves (including, for the first time since 1978, a fall in OPEC countries' aggregate reserves), transfers of exchange holdings from the international markets to

the United States and a further increase in many countries' international indebtedness. These developments came after a period of phenomenal growth of global reserves during the 1970s, which in a large number of countries, notably in the Third World, was accompanied by an even larger increase in their international banking indebtedness. However, with last year's sharp deterioration in the international credit-market climate, a number of developing countries saw their access to new international credit blocked. As a result, 1982 witnessed a sharp increase in countries' recourse to the IMF, and the eighth general review of Fund quotas was completed earlier than originally scheduled, with agreement on a 47 per cent. increase in total quotas. While there is no worldwide shortage of international liquidity at present, the situation of many developing countries will remain very tight for the foreseeable future.

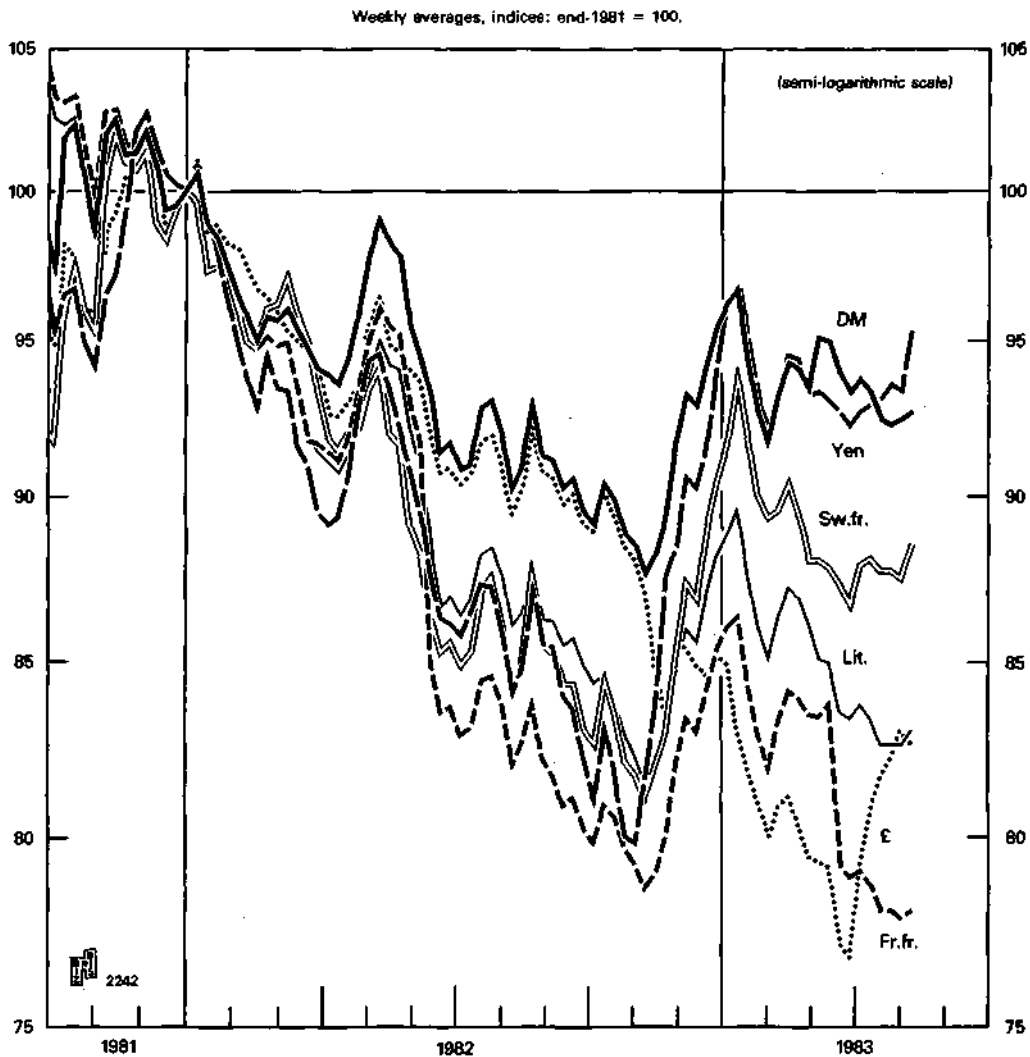
#### Exchange rate developments.

*The floating currencies.* Developments in the markets for the main currencies were dominated during most of the period under review by the continued strength of the US dollar. Despite a marked weakening in late 1982, its cumulative appreciation between end-1981 and early May 1983 amounted to nearly 14 per cent. on an effective basis. Its strength persisted despite a major decline in short-term dollar interest rates from mid-1982, accompanied by a marked deterioration in the current-account balance of payments of the United States.

The dollar, which had gone through a period of relative weakness over the preceding four months, began to move up during December 1981, and continued to strengthen until mid-April 1982. By then its effective exchange rate stood about 12 per cent. above its end-November 1981 level. The main cause of this renewed appreciation was the pronounced widening of interest rate differentials in favour of the dollar, resulting both from the renewed rise in US interest rates and from further interest rate reductions in some other major industrial countries. The differentials between the three-month Euro-dollar rate and corresponding Deutsche Mark and yen rates, which had stood at 1½ and 4½ percentage points respectively in November 1981, widened to 6¼ and 8¾ percentage points by mid-April 1982. The yen, affected by large-scale capital outflows, was particularly weak during this period and by April its rate against the dollar had fallen 14 per cent. below its end-November 1981 level. The depreciation of the other major currencies was somewhat less: at their April 1982 low points the Deutsche Mark, the pound sterling and the Swiss franc had declined against the dollar by 9.2, 10.9 and 11 per cent. respectively.

The upward trend of the US dollar was briefly interrupted in the spring, under the influence of an easing of US interest rates and expectations of official measures to cut the Federal budget deficit. Although several continental European countries took advantage of this change in market sentiment to relax their monetary policies further, the dollar lost nearly 5 per cent. in effective external value between mid-April and mid-May. The decline of US short-term interest rates was halted in May and slightly reversed in June. The dollar quickly began to regain ground and, despite a renewed marked narrowing of short-term interest rate differentials in its favour — between mid-year and mid-August short-term dollar interest rates fell by over 6½

Selected industrial countries: Movements of bilateral exchange rates against the US dollar, 1981-83.

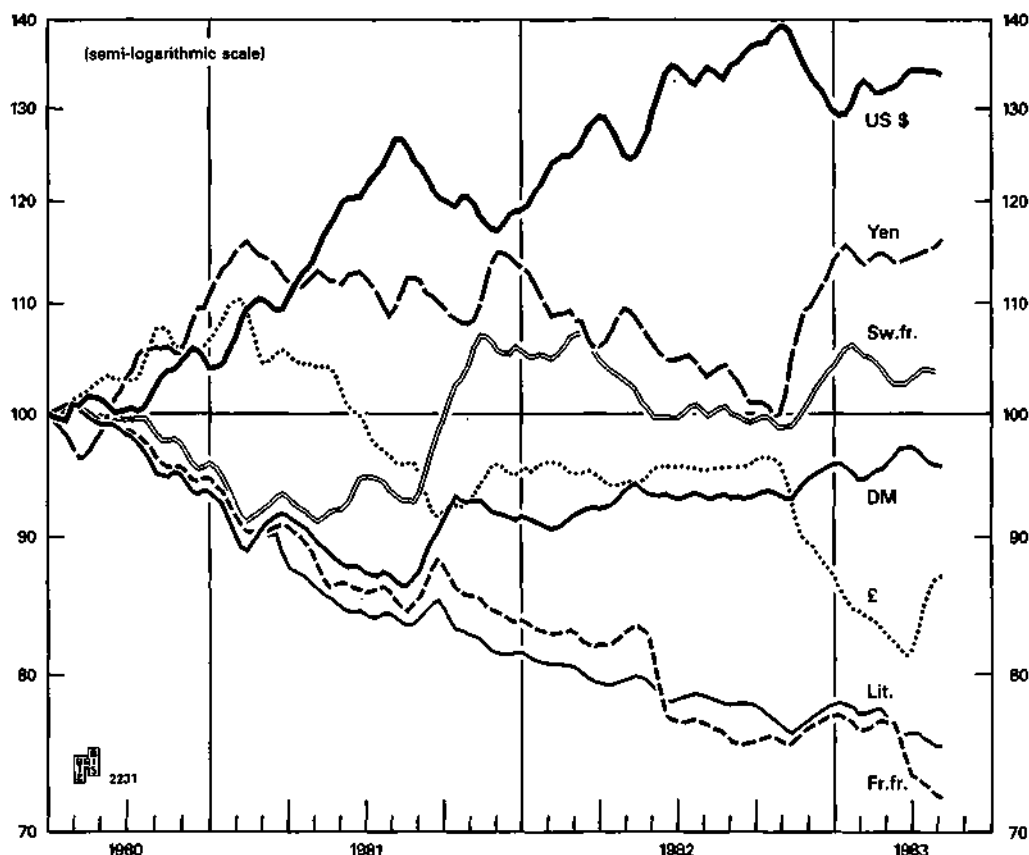


percentage points — it continued to appreciate until early November. At that point its effective exchange rate was 14 per cent. higher than in mid-May and almost 50 per cent. above the October 1978 low point. This huge appreciation could not be said to reflect changes in fundamentals — the US current-account balance moved into substantial deficit in the second half of 1982 after two and a half years of surplus — so that by November 1982 the dollar was vulnerably high. Among the factors that contributed to its strength were rapidly falling inflation in the United States and the perception that the scope for further declines in dollar interest rates, after their sharp fall in July and August, was limited, not least because of the prospect of still higher Federal Government budget deficits. Moreover, demand for the dollar was stimulated by concern about the stability of the international financial system in the wake of the acute external financing problems of Mexico and some other developing countries.



Selected industrial countries: Movements in effective exchange rates, 1980-83.

Three-week averages, indices: end-June 1980 = 100.



Of the other major currencies, the Japanese yen was both the weakest and the most volatile. From mid-May to early July its exchange rate against the dollar fell by about 11 per cent., from Yen 232 to nearly Yen 260. After a short-lived recovery it resumed its downward course and in mid-August reached a low of Yen 265. It then appreciated by 5½ per cent. in eight days, only to decline by early November to Yen 278.10, its lowest point since May 1977 and almost 17 per cent. below its mid-May 1982 level. This pronounced weakness, at a time when the inflation rate in Japan was lower than elsewhere and the current-account balance remained in surplus, reflected very heavy net outflows of long-term capital, mainly related to the low level of domestic interest rates.

After the yen, the Swiss franc showed the greatest weakness during this period. With the domestic inflation rate relatively high by Swiss standards, and interest rates the lowest among the industrial countries, the franc weakened against the dollar between early May and the second week of November by 15.2 per cent. Moreover, its rate against the Deutsche Mark, which had fallen to Sw.fr. 0.837 in late April from the high of Sw.fr. 0.785 in mid-March, showed a further decline, to Sw.fr. 0.863, in the first week of November. The Deutsche Mark weakened against the dollar during this period by 12.2 per cent., but appreciated against other

currencies, in particular those of its partners in the EMS exchange rate mechanism, so that its effective exchange rate remained very stable. The DM rate against the dollar was not only affected by the interest rate differentials, but also by domestic political uncertainties and the increasing international credit strains. Against other currencies, the Mark benefited from the further improvement in Germany's current-account balance of payments, as well as from the country's comparatively low inflation rate.

The pound sterling was least affected by the dollar's strength between mid-May and mid-November 1982. Against the dollar it fell by about 10 per cent., but the effective exchange rate remained stable. Sterling was underpinned by the continuing UK surplus on current external account, by market confidence in the Government's anti-inflationary policies — which had brought the inflation rate down to single figures — and by the temporary firming of oil prices brought about by developments in the Middle East.

In late 1982, however, market sentiment about the dollar temporarily changed, and its effective exchange rate fell by nearly 9 per cent. in the two months from early November 1982 to early January 1983. A number of factors contributed to this development. Firstly, there was evidence of a sharp deterioration in the US current-account balance, as well as official projections of a very large deficit in 1983. Secondly, successive cuts in the official discount rate, combined with fairly rapid growth of the monetary aggregates, were interpreted by the market as evidence of a relaxation in the stance of US monetary policy. Thirdly, concerns about the international financial system receded as various steps were taken to deal with the debt problems that had arisen.

The extent to which other major currencies appreciated against the dollar during these two months differed quite considerably. The largest rise, of 22 per cent., was recorded by the Japanese yen. The narrowing of the dollar/yen interest rate differential, combined with the market's perception of the unrealistically low level to which the yen had fallen, caused a quick reversal of earlier capital outflows from Japan. The Deutsche Mark and the Swiss franc appreciated by 11.3 and 16.3 per cent. respectively in this period, with the German and Swiss authorities taking advantage of the greater strength of their currencies to ease domestic monetary conditions further.

Sterling, on the other hand, weakened against the dollar and, therefore, even more against other major currencies. The main reasons for its weakness were the prospect of lower oil prices and growing concern about the level to which it had previously risen. By early January 1983 sterling stood 3.5 per cent. below its early-November 1982 level against the dollar, while on an effective basis it had fallen by 9.5 per cent.

Exchange rate movements in early 1983 were on balance characterised by renewed strength of the dollar. With hopes of a further decline in US interest rates fading in the face of continued rapid growth of the US monetary aggregates, most major currencies declined against the dollar by around 6 per cent. between early January and early February. Expectations of an adjustment of EMS central rates

subsequently induced a strengthening of the Deutsche Mark. Although this movement was partially reversed after the realignment, the Deutsche Mark recouped some of the ground as the reflow of speculative capital subsided and in mid-May was traded at around DM 2.46, some 5 per cent. below its early-January level. The Japanese yen declined from its early-January 1983 high point by  $5\frac{3}{4}$  per cent. in the space of two weeks. After showing no particular trend during the following three months, the yen picked up against the dollar in early May. Sterling continued to weaken, and in late March, when it came under pressure in connection with the cut in official OPEC crude oil prices, was quoted at around \$1.46, or 10.5 per cent. below its early-January level. However, as expectations of further cuts in oil prices diminished it recovered strongly, to \$1.56 in mid-May. Reflecting these movements and the realignments within the EMS, the appreciation of the effective exchange rate of the US dollar between early January and mid-May amounted to 5 per cent.

Daily volatility of selected spot dollar exchange rates.\*

Years or quarters	Deutsche Mark	Japanese yen	Pound sterling
1973-79 average .....	0.40 (0.36)	0.29 (0.25)	0.30 (0.27)
1980 .....	0.47 (0.42)	0.52 (0.45)	0.37 (0.35)
1981 .....	0.73 (0.67)	0.55 (0.52)	0.65 (0.57)
1982 .....	0.55 (0.53)	0.64 (0.61)	0.46 (0.40)
1982 1st quarter .....	0.51 (0.40)	0.65 (0.45)	0.45 (0.33)
2nd quarter .....	0.57 (0.54)	0.61 (0.56)	0.44 (0.40)
3rd quarter .....	0.63 (0.59)	0.61 (0.53)	0.52 (0.47)
4th quarter .....	0.49 (0.39)	0.68 (0.46)	0.45 (0.38)
1983 1st quarter .....	0.62 (0.59)	0.62 (0.59)	0.46 (0.32)

\* Volatility is measured by the average absolute value of day-to-day percentage changes. Figures in brackets are adjusted for the trend factor during the period and thus indicate the degree of "excessive" movements.

In addition to the major movements of rates described above, the exchange markets were again affected by a high degree of day-to-day volatility in the period under review. This was particularly true of the yen/dollar spot rate, the average day-to-day changes in which, at over 0.6 per cent., were higher during 1982 than in any year since the transition to floating. In the case of the Deutsche Mark and the pound sterling, the volatility of spot dollar rates was considerably lower last year than in 1981 but still well above the average for 1973-79.

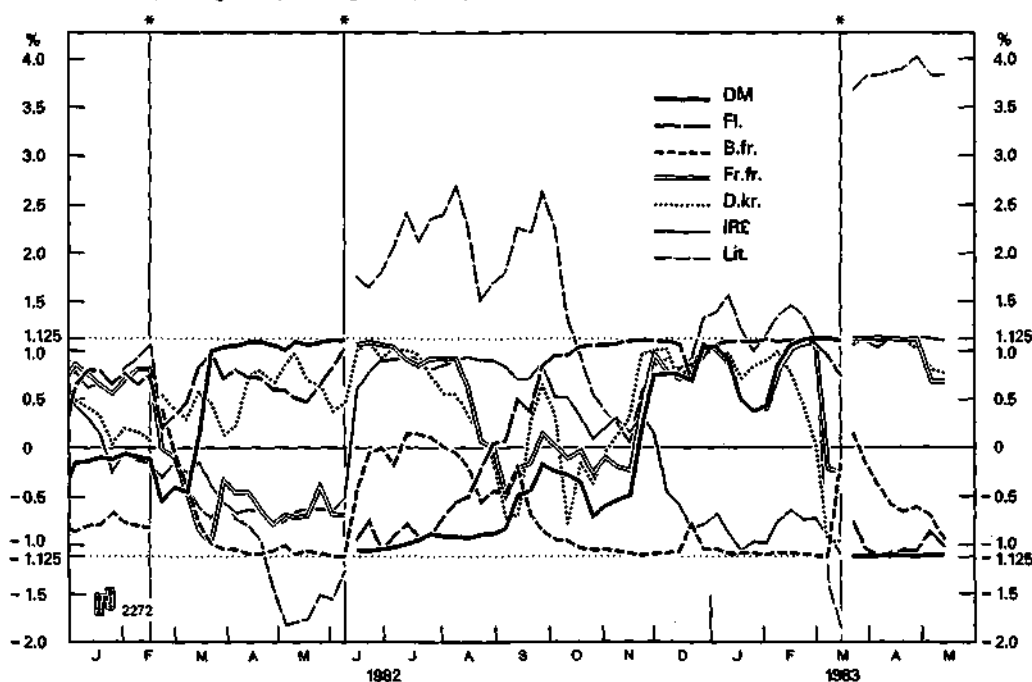
*Exchange rate developments within the EMS.* The period under review saw repeated tensions in the exchange rate mechanism of the European Monetary System, reflecting continued divergences in member countries' economic performance. As a result, there have been three further realignments of exchange rates since the beginning of 1982. 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 participating currencies; with effect from 14th June 1982 the Deutsche Mark and the Dutch guilder were revalued by  $4\frac{1}{4}$  per cent., while the French franc and the Italian lira were devalued by  $5\frac{3}{4}$  and  $2\frac{3}{4}$  per cent. respectively, against all other participating currencies; and with effect from 21st March 1983 the Deutsche Mark, the Dutch guilder, the Danish krone and the Belgian franc were revalued by

5.5, 3.5, 2.5 and 1.5 per cent. respectively, while the French franc and the Italian lira were devalued by 2.5 per cent. and the Irish pound by 3.5 per cent.

In early 1982 the Belgian franc was the weakest currency in the system. Nevertheless, its February devaluation was not in response to immediate market pressures, but formed part of a longer-term economic stabilisation package; the devaluation of the Danish krone, which before the realignment had been in the middle of the band, was a precautionary move. However, after a temporary pick-up, the Belgian franc had again weakened by mid-March to its lower limit, where it stayed for most of the time until the June realignment. The Deutsche Mark and the Dutch guilder re-emerged as the strongest currencies, with the former repeatedly touching its upper intervention point. The French franc fell to its lower limit in mid-March, then recovered somewhat with the aid of a further increase in domestic interest rates and a tightening of exchange controls, but came under pressure again in early June and was only prevented from falling to its lower limit by heavy official intervention.

#### Spot exchange rates in the EMS exchange rate mechanism, 1982-83.

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



\* Realignments of central rates with effect from 22nd February 1982, 14th June 1982 and 21st March 1983.

Immediately following the June realignment, the Deutsche Mark and the Dutch guilder were pushed to the lower limits of their exchange rate bands, while the French franc stood at its upper limit and the Belgian franc was near the centre. However, this situation did not last very long. In the second half of August both the French and Belgian francs began to lose ground as the Deutsche Mark strengthened temporarily vis-à-vis the US dollar. Cuts in official discount rates in Germany and

the Netherlands brought only temporary relief, and in the second half of September the Belgian franc once more became the weakest currency in the system, subsequently remaining close to its lower intervention point. The renewed weakness of the French franc was not reflected fully in its market quotations, as it was held near to the centre of the band by heavy intra-marginal intervention.

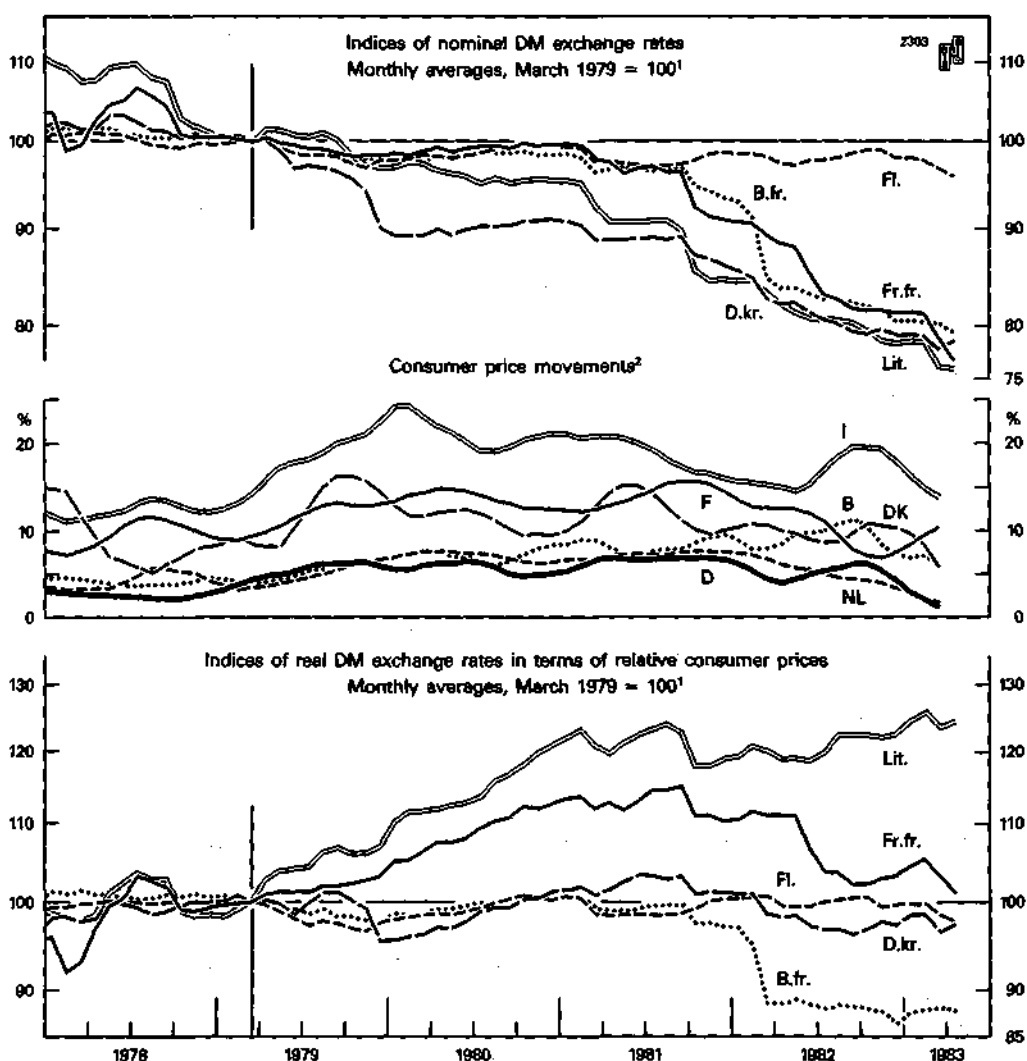
The tensions within the EMS increased significantly with the weakening of the US dollar in late 1982. The firming of the dollar price of the Deutsche Mark was accompanied by a rapid improvement in the latter's position within the band, and in December, when rumours of a further realignment started up, the Mark joined the Dutch guilder at the upper edge of the band. The pressures subsided somewhat after the turn of the year, when the dollar strengthened again and interest rates were further reduced in Germany and the Netherlands. By mid-February, however, the Deutsche Mark had returned to its upper limit and, following the German and French elections in early March, a fresh realignment was clearly only a matter of time. The French franc, which, with the aid of heavy official intervention, had moved in tandem with the Deutsche Mark since December 1982, was allowed to fall to its lower limit and, despite a further cut in discount rates in Germany and the Netherlands, other currencies regarded as candidates for devaluation — the Belgian franc, the Danish krone and the Irish pound — also came under pressure.

The negotiations which led to the March realignment were prolonged and difficult, with trading on the official foreign exchange markets of the EMS countries being suspended for one day, on 21st March, for the first time since the establishment of the system. Immediately after the realignment the situation within the system changed drastically and earlier speculative flows of funds were reversed. In the case of Germany, for example, between mid-February and the end of the third week of March there had been speculative inflows of about DM 12 billion, some DM 7 billion of which was reversed before the month was out. The Deutsche Mark fell immediately after the realignment to the lower edge of the new exchange rate band, where it was subsequently joined by the Dutch guilder. On the other hand, the French franc, the Danish krone and the Irish pound all stood at, or near, their upper limits, while the Italian lira jumped to the upper half of its wider band. However, in early May, when the reversal of speculative capital flows lost momentum, the French franc and the Danish krone began to detach themselves from the top of the band.

The March 1983 realignment was the seventh in the four years of the European Monetary System's existence. It meant that by late April 1983 the Italian lira, the French franc, the Belgian franc and the Danish krone were being traded at more than 20 per cent., and the Irish pound at about 16½ per cent., below their central rates against the Deutsche Mark at the time of the system's establishment in March 1979. As the upper third of the following graph shows, the changes in nominal exchange rates within the system took place mostly in the period of about one and a half years between October 1981 and March 1983. One reason for this was that during most of the two and a half years after March 1979 the Deutsche Mark was very weak against the dollar. This effectively dampened the impact that Germany's relatively low inflation rate might otherwise have had on the structure of nominal

exchange rates within the EMS. Between August 1981 and March 1983, on the other hand, the Deutsche Mark on balance appreciated modestly against the dollar, while Germany's current external balance had moved back into surplus by late 1981. In these circumstances the renewed weakness of the Deutsche Mark against the dollar after November 1981 was no longer sufficient to hold it down within the EMS exchange rate mechanism in the face of persistent divergences between Germany's overall economic situation and policies and those of some other countries in the system.

Movements of nominal and real exchange rates of other currencies in the EMS exchange rate mechanism vis-à-vis the Deutsche Mark and of consumer prices in member countries, 1978-83.



<sup>1</sup> Semi-logarithmic scale.

<sup>2</sup> Annualised percentage changes over six months of three-month moving averages, seasonally adjusted.

The frequency and extent of realignments in the EMS exchange rate system since October 1981 were thus also attributable in part to the relative stability in earlier years of nominal exchange rate relationships between the member currencies. This stability had been accompanied by changes in real exchange rate relationships which had generally meant that the currencies of those countries with higher domestic inflation rates became overvalued. Such changes in real exchange rate relationships are not necessarily incompatible with relative stability of nominal exchange rates, provided that they are only temporary and that they exert — through their impact on competitive positions and balance-of-payments positions — a “disciplinary” influence on policies in the countries with higher inflation rates. If, however, this influence is not sufficient, central rate realignments become inevitable. Moreover, the longer such divergences in inflation rates persist, the greater the cumulative adjustment of nominal exchange rates that is needed, with a consequent progressive undermining of market confidence in the stability of the system. In order to succeed, EMS realignments have to be underpinned by adequate domestic adjustment programmes in the countries whose currencies are devalued, and the real burden of such adjustments is bound to be greater the longer they are postponed.

While the exchange rate mechanism of the European Monetary System has had only limited success in promoting a downward convergence of participating countries’ inflation rates, it has shielded exchange rate relationships between the member currencies from short-term volatility such as has occurred in exchange rates vis-à-vis the US dollar. For example, during the four years from the start of the exchange rate mechanism to March 1983 the average day-to-day movement of the Deutsche Mark against the French franc amounted to 0.16 per cent., compared with a corresponding movement of 0.53 per cent. against both the US dollar and the Japanese yen.

In conclusion it can be said that the existence of the EMS exchange rate mechanism has contributed to greater (though still insufficient) convergence of economic policies, and to lesser variability of exchange rates, among member countries than would otherwise have been the case. While it is hard to quantify these macro and micro-economic benefits of the system and to compare them with the costs incurred in keeping the system in being, if progress is made towards greater convergence of economic performance, the cost/benefit balance will improve. It remains to be seen whether the recent adjustments in the policy stances of certain member countries will succeed in bringing this about.

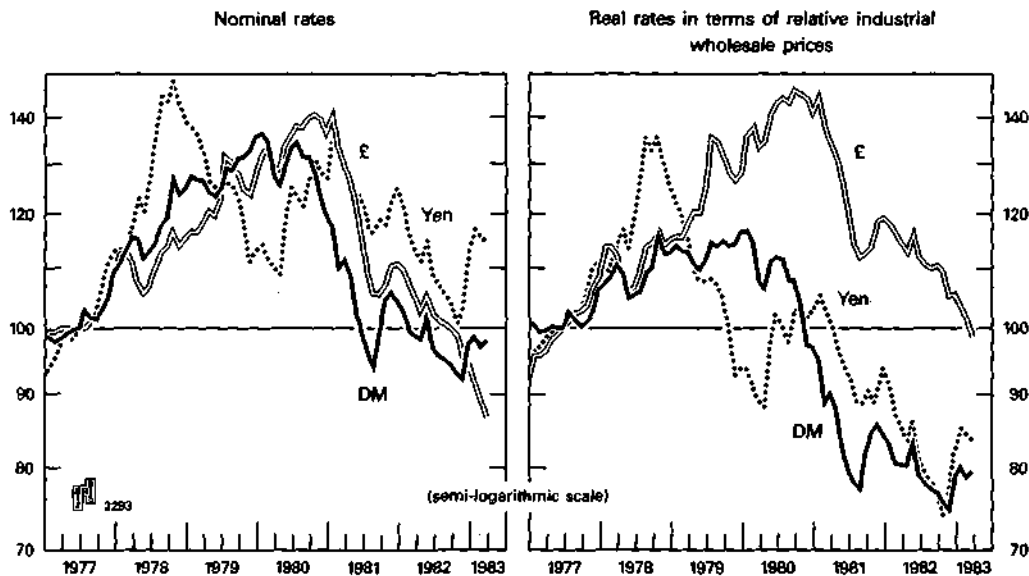
#### **Exchange rate fluctuations: a review of developments in the dollar exchange market during 1977–83.**

In March 1983 the major currencies had been floating for precisely ten years. Broadly speaking, exchange-market developments over this decade can be split into three phases. The first, which lasted for about two and a half years, was one of considerable unrest in the markets. It was followed, in 1976 and 1977, by a phase of relative calm, illustrated, for example, by the fact that, whereas in 1973 the Deutsche Mark/dollar spot rate moved by more than 1 per cent. on forty-one working days,

in 1976 this happened only once. However, in the second half of 1977 a third phase began, in which both the amplitude and the frequency of fluctuations in exchange rates have been even more pronounced than in the first, post-March 1973, phase. What have been the principal characteristics of this recrudescence of exchange rate instability since 1977, to what is it chiefly to be attributed and what lessons does it hold for the future?

**Movements in nominal and real exchange rates of the Deutsche Mark, the yen and the pound sterling against the US dollar, 1977-83.**

Monthly averages, indices: June 1977 = 100.



As in earlier years, exchange rate instability since 1977 has centred on relationships between the US dollar and other major currencies. Taking mid-1977 as 100, the Deutsche Mark rose against the dollar to 137 within two and a half years, then fell to 94 between early 1980 and summer 1981 and has since fluctuated around its mid-1977 level. In the case of the yen, volatility has been even more pronounced. Again taking mid-1977 as the base, its dollar price shot up from 93 at the beginning of 1977 to nearly 150 in October 1978, then dropped to below 110 in the spring of 1980, appreciated to nearly 135 in early 1981 and fell back close to its mid-1977 level in autumn 1982. Up to late 1982 the behaviour of sterling was quite similar to that of the Deutsche Mark. However, whereas the Deutsche Mark and the yen experienced a short-lived recovery against the US dollar in December 1982 and early January 1983, sterling continued to depreciate.

These fluctuations in nominal exchange rates were not systematically related to inflation differentials, with the result that the movements of real exchange rates were at times as large as or even larger than those of nominal rates. Adjusted, for example, to take account of bilateral inflation differentials in terms of industrial wholesale prices, the "real" exchange rates of the Deutsche Mark and the yen against



the dollar had fallen in late 1982 below 75 per cent. of their mid-1977 level. In comparison with its October 1978 peak, in late 1982 the yen's real exchange rate against the dollar was down by 45 per cent., which, in other terms, amounted to a real appreciation of the dollar vis-à-vis the yen of 82 per cent. Moreover, massive changes in real exchange rate relationships also occurred between currencies other than the dollar.

What influences were responsible for these very large movements in nominal and real exchange rates? For purposes of analysis, the period from mid-1977 to late 1982 can itself be divided into three main phases: the first, lasting until autumn 1978, was one of distinct dollar weakness; in the second, from late 1978 until autumn 1980, the performance of the dollar was mixed; while the third phase was marked by two years of pronounced dollar strength.

One cause of the 1977-78 weakness of the dollar was a sharp, largely cyclical, deterioration of the US current-account balance. In 1977 the US economy was experiencing its third year of vigorous recovery from the 1974 recession, whereas in most other industrial countries the revival was petering out. The rapid expansion of US imports and the emergence of a US current-account deficit were at first welcomed as a stimulus for the world economy. However, with forecasts of a US current-account deficit of \$20 billion in 1977, and of a possibly still higher one in 1978, the dollar weakened sharply. Its weakness was accentuated by heavy capital outflows, and the downward movement, as it went on, tended to become self-sustaining. Its impact on US domestic prices accentuated inflation differentials with other countries and this, together with the outflows of funds from the United States, which were perceived by the market as an indication of too easy a monetary policy, contributed to fears of a new surge of US inflation. Market participants did not, therefore, have a firm or stable view about the longer-term equilibrium level of the dollar and were not willing to take positions in its favour, so that there were no built-in stabilisers capable of halting the dollar's decline.

The authorities of the other countries mainly concerned had sought almost from the outset to mitigate the decline of the dollar. The measures they took — including exchange-market intervention, the widening of interest rate differentials in favour of the dollar and direct controls on capital flows — achieved some temporary successes but did not reverse the underlying trend. On the contrary, in the autumn of 1978, despite signs of an improvement in the US current external account and tighter US domestic policies, market sentiment towards the dollar took a further turn for the worse.

On 1st November the US authorities announced a new strategy of forceful and co-ordinated intervention in the exchange market, to be backed up by facilities totalling \$30 billion in Deutsche Mark, Swiss francs and yen. At the same time, the US official discount rate was raised by a full percentage point and minimum reserve requirements for banks were increased. Even this dramatic shift to a more active exchange rate policy on the part of the US authorities, at a time when the dollar was clearly undervalued, failed to produce quick results. After an initial sharp recovery of the dollar, it took two months of further heavy support operations to change market sentiment.

The dollar recovered earliest and most strongly against the yen, which was unfavourably affected by the renewed oil price increases and by memories of Japan's balance-of-payments and inflation problems after the first oil price shock. The ensuing fall of the yen was even more dramatic than its previous rise: despite heavy intervention and various policy measures aimed at influencing capital flows, its real exchange rate against the dollar at one point in the spring of 1980 was 35 per cent. below the autumn 1978 peak and 12 per cent. below its mid-1977 level.

Against the Deutsche Mark and the Swiss franc the recovery of the dollar was much more modest and short-lived. When, towards mid-1979, interest rate differentials in favour of the dollar began to narrow, it was again given substantial official support in the exchange markets. The strongest currency during this second phase was sterling, which benefited from the oil price increases and rising domestic interest rates. Despite a sharp acceleration in UK inflation, the announcement by the new Government of a tight fiscal and monetary package in mid-1980 pushed sterling's exchange rate against the dollar to a new peak in September of that year. As a kind of side-effect of these movements, the Deutsche Mark, the Swiss franc and sterling appreciated markedly in 1979 and early 1980 against the yen, a development which subsequently had unwelcome consequences for relative international competitive positions.

In early October 1979 the Federal Reserve, partly responding to external pressures, announced a far-reaching change in its monetary policy procedures which gave it much tighter control over the development of the domestic monetary aggregates. This change, which resulted in a sharp increase in both the volatility and the average level of US interest rates, ushered in a new phase of exchange-market instability. An unprecedented increase in US interest rates caused the dollar to strengthen sharply from early January to early March 1980, only to plummet again in the spring when US interest rates took one of the steepest plunges yet recorded.

In the second half of 1980 a renewed sharp rise of US interest rates marked the beginning of the third phase, which saw a more permanent recovery of the dollar. By that time the effects of the dollar's earlier depreciation, in combination with cyclical weakness of the US economy, had produced a sizable surplus on the current account of the US balance of payments, while the current external balances of Germany and Japan had moved from surplus into deficit in 1979. In addition, certain international political developments at that time made the United States more attractive as a safe haven for longer-term funds. The decisive factor, however, was the high level of dollar interest rates, acting both through the resulting interest rate differentials which emerged in the dollar's favour and through the signal that it gave to the markets of the determination of the US authorities to fight inflation. Heavy official intervention by other countries, together with partial subordination of their domestic monetary policies to exchange rate requirements, became the order of the day. Nevertheless, once the dollar started to appreciate, its upward movement again acquired a momentum of its own.

The combined result of these influences was a spectacular recovery of the dollar which in real terms more than made up for its earlier weakness. The first currencies to ease against the dollar — in the summer of 1980 — were the Deutsche

Mark and the Swiss franc. By August 1981 the Deutsche Mark had fallen in real terms 23 per cent. below its mid-1977 level. The 1980-81 decline of the Deutsche Mark against the dollar was also influenced by the fact that in Germany the monetary targets set by the Bundesbank were overshoot. The perceived contrast between monetary policy in the United States and Germany led to a fundamental reappraisal by the markets of the outlook for the dollar and the Deutsche Mark.

In the case of sterling, the turn-round came in early 1981. Despite clear signs that policy had finally succeeded in slowing down inflation and the emergence of a very sizable surplus on the UK current external account, the development of an interest rate differential in favour of the dollar was enough to turn the market, given that there seemed little prospect of a further appreciation of the UK currency. By March 1983 sterling was in real terms back to below its mid-1977 level against the dollar and 32 per cent. down from its 1980 peak.

The yen began to weaken at about the same time as sterling, although its situation was in certain respects quite different. It was by no means clear that the yen was overvalued against the dollar, since in the second half of 1980 it was, in real terms, only a few percentage points above its mid-1977 dollar level. In addition, Japan's inflation rate was significantly lower than that of the United States, and the recovery of its current-account balance was more advanced than that of Germany. Despite these positive factors, the influence of unfavourable interest rate differentials vis-à-vis the dollar prevailed and the yen began to move down in line with the other main currencies, falling in real terms at one point in late 1982 to 25 per cent. below its mid-1977 level.

Summing up experience since 1977, it is hard to avoid the conclusion that the movements which have occurred in the real exchange rates of the four major currencies have been excessive, in the sense that they have led to unjustifiably large deviations from purchasing power parities. Given the importance of the exchange rate for the allocation of resources in almost all economies, such deviations are bound to have adverse economic consequences. When sharp declines occur in real effective exchange rates, they put upward pressure on domestic prices in the countries concerned and tend to reinforce inflationary expectations, regardless of the stance of domestic policy. In order to counteract such imported inflation, countries in this situation — as the example of Germany showed in 1980-81 — have to raise interest rates in order to support the exchange rate at times when there is slack in the domestic economy. Equally, as the example of the United States has shown, a sharp enough appreciation of the real exchange rate, which brings in its wake a deterioration of a country's competitive position, is apt to reinforce protectionist pressures. In these ways floating exchange rates, which, at the outset in 1973, many observers had believed would both enlarge the scope for countries to pursue independent monetary policies and help to maintain free international exchanges of goods and services, have in practice sometimes had the opposite effects.

What can be done in the future to avoid excessive movements of real exchange rates? Markets can only act in a stabilising way if participants form reasonably firm expectations about the longer-run equilibrium level of exchange rates. A number of factors have made it very difficult for market operators to do so in recent years.

These have included external events, such as the major oil shocks and international political disturbances, and also certain policy measures and their consequences. The extent of the dollar's appreciation after 1980 was in large measure the result of a prolonged period of very high dollar interest rates. Moreover, the dollar's continuing strength against, for instance, the Deutsche Mark certainly reflects the fact that, with roughly equal rates of inflation in the United States and Germany, dollar interest rates are still well above corresponding DM rates.

There may be little that the authorities can do to prevent exchange rates deviating significantly from purchasing power parities in the face of major external shocks, since it is difficult to evaluate the longer-run impact of such shocks on equilibrium rates of exchange. But the case is different when policies themselves are the cause of uncertainties about equilibrium rates. The authorities in the main countries concerned can try to avoid policies that lead to excessive movements of exchange rates and they can also, on the basis of a better knowledge of their own policies than is possessed by the market, sometimes act directly on exchange rates through market intervention. Broadly speaking, if official intervention is to have a stabilising influence on the exchange market, the most important requirement is that it should be convincing. This means, firstly, that it should be consistent with, or backed up by, other policy measures. The experience of the United States in 1978-79 is instructive in that respect. The various steps taken in November 1978 produced their effects only with some delay, and these effects did not last, the reason being that the concerted official intervention in the exchange market was not strongly enough supported by flanking measures. Had the more restrictive US monetary policy introduced in late 1979 been adopted earlier, the lasting recovery of the dollar would have set in earlier too. Moreover, the present high level of the dollar in the exchange markets could not be moderated by intervention alone, since it is to a large extent the result of the still high level of dollar interest rates, which itself is related to the mix of fiscal and monetary policy in the United States. Secondly, intervention should not aim at freezing exchange rates at unrealistic levels, but should seek to discourage the exchange rate from moving outside reasonable equilibrium zones; and, thirdly, there needs to be a measure of international co-ordination of exchange rate policies.

The precondition for exercising some control over avoidable excesses in exchange rate movements is that all major countries should make it clear that they are concerned about the evolution of their exchange rates. This means putting into practice a minimum co-ordination of exchange rate policies, including intervention policies. It is not an easy task for the authorities in the countries concerned to agree on a co-ordinated approach to those policies that often form the background to exchange rate movements. In the first place it is not easy to agree on a co-ordinated stance of monetary policies, although the recent downward convergence of inflation rates in a number of leading industrial countries should help in that respect. Moreover, differences between countries' monetary policy techniques can lead to the emergence of interest rate differentials that do not accurately reflect the relative stance of policy in different countries. Nor, given the extent of official neglect of exchange rates since March 1973, will it be easy to influence exchange markets through direct intervention, although the experience with co-ordinated intervention

after November 1978 shows that the task is not an impossible one. But the attempt to co-ordinate exchange rate policies is worth making in order to remove at least some of the uncertainties that have contributed to exchange rate instability in recent years.

### Gold production and the gold market in 1982.

There were two salient features of developments in gold during the period under review: a significant increase in western gold production, related to the very large rise in the gold price at the end of the 1970s; and a partial reversal of the major decline in the market price that had begun in 1980 and continued until mid-1982. Since last summer market demand for gold has been supported by the decline in short-term dollar interest rates and by the disturbances that have occurred in the international financial system. In addition, there has been an increase in the short-term volatility of the gold price, probably related to the opening of new physical markets and the increasing importance of futures markets.

Estimated world gold production.

Countries	1929	1940	1946	1953	1970	1979	1980	1981	1982
	in metric tons								
South Africa .....	323.9	436.9	371.0	371.4	1,000.4	705.4	675.1	656.9	664.2
Canada .....	60.0	165.9	88.5	126.1	74.9	51.1	50.6	52.0	62.5
United States .....	64.0	151.4	49.0	60.9	54.2	29.8	30.2	42.9	43.5
Brazil .....	3.3	4.7	4.4	3.6	9.0	25.0	35.0	35.0	34.8
Australia .....	13.3	51.1	26.6	33.4	19.3	16.3	17.0	18.4	27.4
Philippines .....	5.1	34.9	—	14.9	18.7	16.7	20.4	23.4	25.4
Chile .....	0.8	10.4	7.2	4.1	1.6	4.3	6.5	12.2	18.9
Papua New Guinea ..	—	—	—	—	0.7	19.7	14.3	17.2	17.8
Colombia .....	4.3	19.7	13.6	13.6	6.3	10.0	17.0	17.7	15.5
Zimbabwe .....	17.4	25.7	16.9	15.6	15.6	11.8	11.3	11.3	13.0
Dominican Rep. ....	—	—	—	—	—	11.0	11.5	12.8	11.8
Ghana .....	6.4	27.6	18.2	22.7	22.0	11.1	11.0	10.4	10.3
Peru .....	3.6	8.7	4.9	4.4	3.3	4.7	5.0	7.2	7.2
Mexico .....	20.4	27.4	13.1	15.0	6.2	6.3	5.9	5.2	5.2
Total listed ....	522.7	964.4	612.4	685.7	1,232.2	925.2	910.8	922.6	957.5
Other countries ....	47.3	200.6	53.6	68.3	38.8	31.3	37.2	43.4	52.5
Estimated world total* ..	570.0	1,165.0	666.0	754.0	1,271.0	956.5	948.0	966.0	1,010.0

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

At 1,010 metric tons, world gold production (excluding that of the USSR, other eastern European countries, China and North Korea) increased by 44 tons in 1982 to its highest level for eight years. South Africa's gold production, after eleven years of almost uninterrupted decline, recovered by about 7 tons, to 664 tons, and in addition there were output increases of some 10 tons each in Canada and Australia.

Gold sales by communist countries are estimated to have declined from 300 tons in 1981 to 200 tons last year. The effects of this on market supplies, however, were broadly offset by the fact that total gold reserves as reported to the

International Monetary Fund (but excluding South Africa's gold reserve, the movements in which are believed to reflect essentially swap transactions with commercial banks) fell by 105 tons in 1982, after having risen by 65 tons in 1981. Among identified declines in gold reserves last year, the largest were in Latin America (80 tons, of which Brazil accounted for 64 tons) and Hungary (32 tons). Additions to the reported gold reserves of OPEC countries fell between 1981 and 1982 from 50 to 10 tons. As a result of these various movements in production, communist countries' sales and official gold stocks, the total volume of gold available for non-monetary absorption last year may be estimated to have increased by some 115 tons, to a figure of 1,315 tons.

Estimated market sources and uses of gold.

Items	1979	1980	1981	1982
	in metric tons			
Production .....	955	950	965	1,010
Estimated sales by communist countries .....	290	90	300	200
Estimated changes in western official gold stocks through market transactions* (- = increase) .....	620	- 55	- 65	105
Total (= estimated non-monetary absorption) .....	1,865	985	1,200	1,315

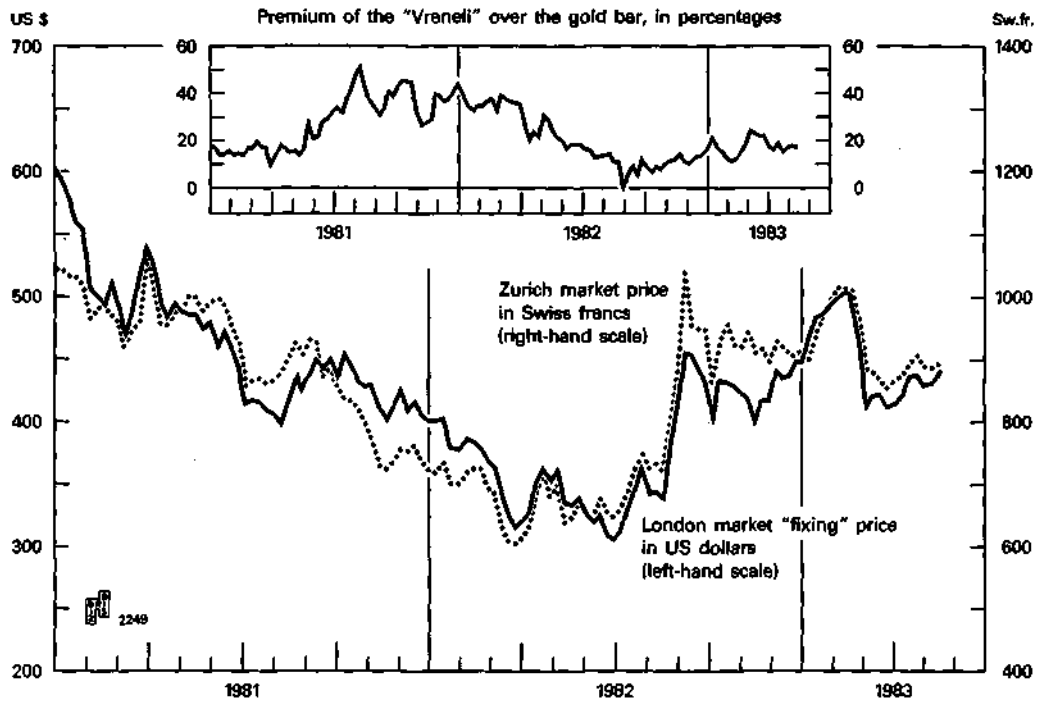
\* Changes in South Africa's gold reserves have been excluded from the movements of official gold stocks in all the years covered in the table, since they are believed to have largely reflected the execution or unwinding of gold swaps between the South African Reserve Bank and commercial banks in other countries.

The period under review saw the end of the major decline in the gold price which had begun in 1980, with the London market fixing price standing at about \$440 per ounce in mid-May 1983, after having gone briefly below \$300 per ounce in mid-1982. The first six months of 1982 witnessed a continuation of the 1981 fall in market gold prices, from \$399 per ounce at the beginning of the year to \$297 per ounce on 21st June, the lowest level since August 1979. The major factors behind this further drop in prices were the continued high level of dollar interest rates and the related strength of the dollar in the exchange markets. The subsequent sharp decline in short-term dollar interest rates during July and August, together with the Mexican debt crisis and concern about the international banking system, led to a sharp recovery of quotations. The London market fixing price reached \$488.50 on 7th September, and two days later gold was quoted at over \$513 per ounce in the Far East.

There then followed a sharp downward reaction, associated with significant market sales by producers and official action to deal with international debt problems, to \$387 per ounce in October, after which the price recovered to nearly \$450 per ounce in the middle of that month before falling again just below \$400 per ounce in the second week of November. An apparent easing of the stance of US monetary policy caused demand for gold to strengthen again in December. By 15th February 1983 the price had reached \$511.50 per ounce, before falling back to below \$410 per ounce at the end of the month as a result of the weakness of oil prices. In late April it recovered to \$440 per ounce.

# Market prices of gold in US dollars and Swiss francs, 1981-83.

Friday figures, per fine ounce.



## Reserves and international liquidity.

*Developments in 1982.* The evolution of global reserves in 1982 was, in a number of respects, similar to that in the preceding year. Measured in current dollars, countries' aggregate holdings of non-gold reserves declined by a further \$26.3 billion, of which exchange reserves accounted for \$21.7 billion, while the volume of their gold reserves showed a further fall of 4.8 million ounces. As in 1981, the decline in aggregate non-gold reserves has to be seen in the light of changes in their purchasing power. Last year's fall of 6.6 per cent. in these reserve assets, measured in current dollars, compared with a 4 per cent. drop in the dollar unit value of world exports. Furthermore, the continued strengthening of the dollar over 1982 as a whole against other categories of non-gold reserves (excluding ECU reserves) meant that, as in 1981, part of the decline — about \$8.5 billion — in total non-gold reserves was the result of a fall in the dollar value of these other assets. On the other hand, the 12 per cent. increase that occurred last year in the market price of gold meant that total gold reserves shown in the following table increased in market value by \$43.6 billion, after having declined by no less than \$180.8 billion in 1981.

These reserve movements have also to be seen in the light of the further increase in many countries' external indebtedness last year. Taking reserves and indebtedness together, there is no doubt that, despite the fact that the fall in the gold

Changes in global reserves, 1980-82.

Areas and periods	Gold		Foreign exchange	IMF reserve positions	SDRs	ECUs	Non-gold total
	in millions of ounces	in billions of US dollars <sup>1</sup>					
<b>Group of Ten countries and Switzerland</b>							
1980 .....	- 1.1	47.9	9.8	3.1	- 0.9	20.7	32.7
1981 .....	- 0.5	- 140.4	- 11.1	2.3	2.3	- 13.6	- 20.1
1982 .....	- 0.3	35.3	- 10.8	3.3	1.8	- 8.4	- 14.1
Amounts outstanding at end-1982 .....	739.2	331.1	96.6	17.7	14.3	41.0	169.6
<b>Other developed countries</b>							
1980 .....	2.8	7.9	3.4	0.6	- 0.1	- 0.1	3.8
1981 .....	- 3.1	- 19.9	- 2.6	- 0.2	0.4	- 0.2	- 2.6
1982 .....	- 2.8	3.3	0.7	- 0.5	- 0.2	-	-
Amounts outstanding at end-1982 .....	92.4	41.4	37.3	1.2	1.4	0.4	40.3
<b>Non-OPEC developing countries<sup>2</sup></b>							
1980 .....	2.9	6.2	- 0.9	1.0	- 0.6	-	- 0.5
1981 .....	1.1	- 13.4	1.0	- 0.3	0.8	-	1.5
1982 .....	- 2.0	2.8	- 0.5	- 0.2	- 1.3	-	- 2.0
Amounts outstanding at end-1982 .....	72.6	32.6	70.5	1.7	1.5	-	73.7
<b>Total oil-importing countries</b>							
1980 .....	4.6	62.0	12.3	4.7	- 1.6	20.6	36.0
1981 .....	- 2.5	- 173.7	- 12.7	1.8	3.5	- 13.8	- 21.2
1982 .....	- 5.1	41.4	- 10.8	2.6	0.3	- 8.4	- 16.1
Amounts outstanding at end-1982 .....	904.2	405.1	204.4	20.8	17.2	41.4	283.6
<b>OPEC countries<sup>3</sup></b>							
1980 .....	3.4	4.5	19.5	1.3	0.2	-	21.0
1981 .....	1.6	- 7.1	- 0.2	1.5	0.5	-	1.8
1982 .....	0.3	2.2	- 11.1	0.7	0.2	-	- 10.2
Amounts outstanding at end-1982 .....	42.6	19.1	78.7	7.5	2.4	-	88.6
<b>All countries</b>							
1980 .....	8.0	66.5	31.8	6.0	- 1.4	20.6	57.0
1981 .....	- 0.9	- 180.8	- 12.9	3.3	4.0	- 13.6	- 19.4
1982 .....	- 4.8	43.6	- 21.7	3.3	0.5	- 8.4	- 26.3
Amounts outstanding at end-1982 .....	946.8	424.2	283.1	28.1	19.6	41.4	372.2

<sup>1</sup> Gold reserves valued at market prices. <sup>2</sup> Including (unlike Chapter V) China, Israel and (unlike Chapter VI) the offshore centres. <sup>3</sup> Including Bahrain, Brunei, Oman and Trinidad and Tobago.

price came to an end and was subsequently partly reversed, the international liquidity situation as a whole deteriorated again last year.

By types of reserve asset, last year's decline in total non-gold reserves was largely concentrated in foreign exchange reserves, the total of which fell by \$21.7 billion. About 30 per cent. of this decline may be estimated to have resulted from the appreciation of the dollar against other reserve currencies. The fall in total exchange reserves was shared about equally between the Group of Ten countries and Switzerland (-\$10.8 billion) and the OPEC countries (-\$11.1 billion). The aggregate exchange reserves of non-OPEC developing countries, despite some large



losses in individual countries of the group, showed only a marginal decrease over the year as a whole, largely as a result of a substantial rise in China's exchange reserves.

In addition to the decline in exchange reserves, EMS member countries' holdings of ECUs fell by \$8.4 billion. This was mostly the result of a decline in the price at which gold from these countries' reserves was swapped against ECUs.

On the other hand, countries' total holdings of SDRs, and their reserve positions in the International Monetary Fund, rose during 1982 by \$0.5 and 3.3 billion respectively. The increase in Fund reserve positions, measured in SDRs, amounted to SDR 4.1 billion, most of which was accounted for by the United States and Saudi Arabia. This was substantially less than the SDR 7 billion total of member countries' net new drawings, as SDR 2.1 billion of these took place in SDRs rather than in members' currencies. Of total net drawings on the IMF in 1982, SDR 4.8 billion was by non-OPEC developing countries. India obtained SDR 1.5 billion, Brazil SDR 0.5 billion, Mexico, Morocco and Pakistan SDR 0.4 billion each, and Peru SDR 0.3 billion. Developed countries' net drawings totalled SDR 1.9 billion, of which South Africa accounted for SDR 0.9 billion, Yugoslavia for SDR 0.5 billion and Hungary, Rumania and Australia for SDR 0.3 billion each.

As well as the substantial rise in members' drawings last year, there was also an increase, from SDR 15.2 to 17.5 billion, in the Fund's total agreed lending commitments during 1982, and these rose further, to SDR 24.8 billion, at end-March 1983. At that date undrawn balances under these credit facilities amounted to SDR 16 billion. The largest new credits arranged were those of SDR 3.4 billion for Mexico, SDR 4.2 billion for Brazil and SDR 1.5 billion for Argentina.

The increased demands on the Fund's resources led to the eighth general review of quotas being completed earlier than originally scheduled. At a meeting in February 1983 the Interim Committee of the Board of Governors of the Fund agreed on an increase in total Fund quotas of about 47 per cent., from SDR 61 billion to SDR 90 billion. It is aimed to bring this general quota increase into effect before the end of 1983. Parallel with the increase in Fund quotas, the countries participating in the General Arrangements to Borrow agreed to increase their aggregate credit commitments under the GAB from SDR 6.4 billion to SDR 17 billion and to make GAB resources available not only to participants but also for conditional drawings on the Fund by any of its members in circumstances where the Fund is faced with an inadequacy of resources arising from an exceptional situation associated with requests from countries with balance-of-payments problems of a character or aggregate size that could pose a threat to the stability of the international monetary system.

Looking at the breakdown of last year's changes in non-gold reserves by groups of countries, the \$10.2 billion decline in the non-gold reserves of the OPEC countries was related to the movement into deficit of the current-account balances of payments of some countries in this group. There were reserve losses of \$2.3 billion in Nigeria, \$1.9 billion each in Indonesia and Libya, \$1.6 billion in Venezuela and \$1.3 billion in Algeria. Saudi Arabia's reported non-gold reserves, too, declined by \$2.7 billion, although its balance of payments on current account was certainly still

in surplus. The only oil-exporting country whose non-gold reserves rose significantly last year was Kuwait, which recorded a gain of \$1.8 billion.

In the Group of Ten countries and Switzerland, the \$14.1 billion decline in non-gold reserves during 1982 was made up of a \$25.1 billion decrease in the first nine months of the year, followed by a \$11 billion gain in the fourth quarter. The largest reserve declines last year were recorded by Italy (\$6 billion), France (\$5.7 billion), Japan (\$4.9 billion) and the United Kingdom (\$2.8 billion). In these countries there was at times substantial intervention by the monetary authorities to support their exchange rates.

In the rest of the developed world, whose aggregate non-gold reserves showed no change, there was a \$4.7 billion increase in Australia's non-gold reserves and a \$3.2 billion decline in those of Spain. Smaller, but still significant, losses were recorded by Yugoslavia, Hungary and Turkey, where non-gold reserves fell by \$0.8, 0.5 and 0.4 billion respectively.

The aggregate decline of only \$2 billion in the non-gold reserves of non-OPEC developing countries was very modest, considering the payments situations of many of these countries and their reduced access to the international banking market. In Latin America there was an overall decrease of around \$9 billion. This included identified losses of \$2.9 billion in Mexico, \$2.7 billion in Brazil, \$1.4 billion in Chile, \$0.9 billion in Colombia and \$0.8 billion in Argentina. On the other hand, China's non-gold reserves increased last year by \$6.3 billion, out of a total rise of \$6.7 billion in Asian non-OPEC developing countries' non-gold reserves.

A salient feature of developments in exchange reserves during 1982 was a continued, and accelerated, reduction in identified official holdings of foreign exchange outside the United States, accompanied by some further increase in the volume of dollar reserves held in the United States. The following table shows a drop, from \$127 billion at the end of 1981 to \$95.2 billion at the end of 1982, in official deposits with banks in those countries covered by the BIS quarterly statistical surveys. Most of this \$31.8 billion decline was in official deposits held in the Euro-currency market. Official Euro-dollar deposits were reduced by \$14.3 billion, and there were also declines in official deposits in other Euro-currencies measured in current dollar terms, notably one of \$6.9 billion in Euro-DM deposits. While a part, estimated at \$2½ billion, of the fall in non-dollar Euro-currency deposits resulted from the appreciation of the dollar against other reserve currencies, the main reasons for these withdrawals were reserve losses in countries outside the Group of Ten, a large proportion of whose exchange reserves is held in the Euro-market, and shifts of reserves from the international banking market to the United States, related both to international political developments and to the concern that arose during the year about the international banking system.

These shifts of reserves to the United States are not fully reflected in the \$2.8 billion increase in exchange reserves held in the United States last year, since that figure also includes the effects of last year's \$11.2 billion decline in the exchange reserves of other Group of Ten countries and Switzerland, by far the greater part of

The pattern of investment of exchange reserves, 1979-82.

Items	End-1979	End-1980	End-1981	End-1982
	amounts outstanding, in billions of US dollars			
1. Deposits with banks in European countries, <sup>1</sup> Canada and Japan:				
(a) In national markets .....	8.8	17.6	16.2	12.8
Deutsche Mark .....	3.4	4.8	3.2	2.4
Swiss francs .....	0.6	1.6	2.7	1.4
Yen .....	0.9	4.6	5.4	5.0
Pounds sterling .....	1.9	3.0	2.2	2.4
French francs .....	0.8	1.5	0.7	0.6
Other currencies .....	1.2	2.1	2.0	1.1
(b) In Euro-markets .....	115.8	123.3	105.8	79.2
Dollars .....	74.1	80.3	71.6	57.3
Deutsche Mark .....	24.1	24.5	19.1	12.2
Swiss francs .....	6.0	8.0	6.9	3.9
Yen .....	4.2	2.2	2.2	1.4
Pounds sterling .....	1.5	2.2	1.1	0.5
French francs .....	1.2	2.6	1.8	0.4
Other currencies .....	4.7	3.5	3.1	3.5
2. Deposits with certain offshore branches of US banks <sup>2</sup> .....	6.4	5.6	5.0	3.2
Total 1+2 .....	131.0	146.5	127.0	95.2
of which: in dollars .....	79.8	85.3	76.1	60.1
in other currencies .....	51.2	61.2	50.9	35.1
3. Exchange reserves identified as being held in the United States (= reported US liabilities to foreign official institutions), excluding dollars swapped against ECUs ...	134.8	149.7	154.4	157.2
4. Other .....	20.1	21.5	23.4	30.7
Total exchange reserves .....	285.9	317.7	304.8	283.1

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

<sup>1</sup> Austria, Belgium-Luxembourg, Denmark, France, Germany, Ireland, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom. <sup>2</sup> In the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore.

which will have been drawn on dollar reserves held in the United States. Probably, therefore, there was an increase of over \$10 billion in exchange reserves of non-Group of Ten countries held in the United States. In particular, Venezuela shifted a substantial volume of dollar reserves from the United Kingdom to the United States in the second quarter of last year, when Euro-currency deposits held by oil-exporting countries in the United Kingdom declined by \$5.4 billion.

*Longer-term perspectives.* On the face of it the 1970s witnessed a phenomenal growth in international liquidity. Between end-1969 and end-1978 the official non-gold reserves of oil-importing countries increased sevenfold; and the expansion continued, although at a much reduced pace, in 1979-80, after the renewed oil price increases. Moreover, this reserve growth occurred at a time when the shift to floating exchange rates should, in theory, have lessened the need for international reserves. On the other hand, the main function of international liquidity is to enable countries to bridge temporary external payments shortfalls, without having to subject their economies to excessively onerous adjustment policies. Looked at from

this point of view, the rapid growth of reserves during the 1970s would not appear to have produced a situation of excessive reserve ease. On the contrary, an increasing number of countries have recently been experiencing severe external payments constraints, which in the aggregate are acting as a brake on world economic recovery.

There are a number of reasons for this apparent paradox. The most important is that, while reserves are a very important element of the international liquidity position of each individual country and certainly the most amenable to quantitative measurement, there are others whose significance has greatly increased in the past ten years or so: the size of the country's external debt, its maturity structure, the amount of unutilised credit facilities and, most importantly, the country's ability to borrow internationally. Secondly, global reserve totals are of limited significance; equally — or even more — important for the general state of reserve ease is their country distribution. Thirdly, the results of any review of reserve developments over time can be strongly influenced by the choice of the base period, and the picture looks very different if end-1973 is taken as the reference point. Finally, reserve growth has to be viewed in relation to reserve needs; the 1970s saw a huge increase, particularly in value terms, in international exchanges of goods and services, as well as in the volume and volatility of international capital flows.

To illustrate the distribution of international reserves, the table on page 161 distinguishes between five groups of countries. Firstly, the United States, whose balance of payments has an important influence on reserve creation but which for international payments purposes is less dependent on international reserves since its currency is the principal international reserve asset. Secondly, a small group of countries — Germany, Japan and Switzerland — which at times added heavily to their reserves through market intervention during the 1970s in order to moderate the appreciation of their currencies. Thirdly, the rather heterogeneous group of other developed countries for which reserve adequacy was quite often a major policy preoccupation. Fourthly, the non-OPEC developing countries, which rely on adequate international liquidity for sustaining their economic development. And, finally, the OPEC countries, which, as a result of the oil price increases, experienced a very steep growth in their external assets. For some of these countries the dividing line between investments held primarily for income motives and international reserves held primarily for precautionary purposes is a rather fluid and arbitrary one.

Because of their special situations, the following survey will largely leave aside the international liquidity positions of the United States and the OPEC countries and will focus primarily on developments in the other three groups of countries.

In its Annual Report for 1969 the International Monetary Fund expressed the view that "while any evaluation of the reserve situation at a particular moment of time is a question on which reasonable judgements may differ, a case can be made for the view that by 1968 global reserve ease had not only been declining for a number of years, but had also become less than adequate". 1969 was itself a year of slow reserve growth, and fears about inadequate future supplies of international liquidity were responsible for the decision taken in that year to activate the newly created SDR facility and to proceed with a major IMF quota increase. The

impression of relative reserve tightness at the end of the 1960s is confirmed by looking at reserve/import ratios. These ratios have been calculated excluding gold reserves, since by end-1969 the usability of these reserve assets had been greatly reduced. While the US Treasury remained the buyer of last resort for monetary gold, its reluctance to sell gold to other monetary authorities, and the fact that its buying price was below the market price, meant that official transactions in gold were very limited.

In the case of Germany, Japan and Switzerland non-gold reserves amounted to little more than two months of imports; in the case of the other developed countries they were as low as 1.3 months of imports. In the non-OPEC developing countries aggregate reserves were equal to about three months of imports. However, with a much less diversified export structure, and with export prices highly sensitive to cyclical influences, these countries could rely much less on a steady flow of export revenue than the industrial countries.

The 1969 situation of relative reserve tightness was emphatically reversed in the years that followed, when a sharp deterioration of the US current-account balance, coupled with capital outflows from the United States — including substantial shifts of exchange reserves out of the US to the international banking market — led to huge increases in liquidity in the rest of the world. Mainly as a result of these developments, global non-gold reserves more than tripled, from about \$40 billion to \$142 billion, in the space of only four years. These reserve accruals were in large measure concentrated on the industrial countries. Germany, Japan and Switzerland alone added \$36.5 billion to their non-gold reserves, raising their combined holdings of such assets by 450 per cent. and more than doubling their reserve/import ratio, from 18 to 42.5 per cent. Other developed countries, too, experienced a strong increase, of 290 per cent., in their non-gold reserve holdings, but here the reserve gains were in large measure needed, and these countries' end-1973 overall reserve/import ratio, at 20.9 per cent., could not be regarded as unduly high. The growth of non-OPEC developing countries' non-gold reserves during this period was much more modest and reflected increased borrowing from the international banking sector. Their combined non-gold reserves expanded by \$17 billion, or 177 per cent., to a total of \$26.6 billion, and their overall reserve/import ratio improved to 34.5 per cent. At the same time, however, by the end of 1973 these countries' total liabilities to banks in the BIS reporting area had risen to an estimated \$35 billion.

What gave cause for concern about the 1969-73 reserve growth was not so much the reserve levels to which it gave rise as the mechanisms through which it occurred and the unsustainably high speed at which it proceeded. There can be little doubt that this rapid reserve growth contributed importantly to world inflation during this period and to the final breakdown of the Bretton Woods system in early 1973.

Towards the end of 1973 the oil price explosion brought a sudden change in the situation. Reserve growth in the oil-importing countries came to a halt, and their ample reserve gains during the preceding years acted as a shock-absorber against the constraints imposed on their economies by the deterioration in their current-account balances. With the help of the international banking sector, and using their existing

Global non-gold reserves,<sup>1</sup> reserve/import ratios and liabilities vis-à-vis banks reporting to the BIS, end-1969 to end-1982.

Areas and items	End-1969	End-1973	End-1975	End-1978	End-1980	End-1982
	amounts outstanding, in billions of US dollars; reserve/import ratios in percentages					
United States: non-gold reserves .....	5.1	2.7	4.6	7.0	15.6	22.8
Japan, Germany and Switzerland: non-gold reserves .....	8.1	44.6	45.2	98.8	76.1	71.8
reserve/import ratio .....	18.0	42.5	30.9	43.7	20.6	22.8
Other Group of Ten and other developed countries: non-gold reserves .....	14.0	54.7	54.3	89.9	105.3	83.8
reserve/import ratio .....	11.1	20.9	14.3	18.8	12.6	11.4 <sup>a</sup>
liabilities to foreign banks <sup>2</sup> ...	.	25.0 <sup>a</sup>	33.1	71.3/68.9	77.6	157.7
Non-OPEC developing countries: non-gold reserves .....	9.6	26.6	26.8	64.8	74.2	73.7
reserve/import ratio .....	24.2	34.5	20.6	33.7	23.1	23.2 <sup>a</sup>
liabilities to foreign banks <sup>2</sup> ...	.	35.0 <sup>a</sup>	82.5	148.1/147.3	215.2	265.7
Total oil-importing countries: non-gold reserves .....	36.8	128.6	130.9	260.1	271.2	261.9
reserve/import ratio .....	14.7	24.8	17.2	22.9	15.2	15.6 <sup>a</sup>
OPEC countries: non-gold reserves .....	3.0	13.4	56.5	61.5	96.9	88.6
reserve/import ratio .....	31.3	61.5	102.0	60.9	68.7	53.5 <sup>a</sup>
liabilities to foreign banks <sup>2</sup> ...	.	6.5 <sup>a</sup>	14.5	57.2/56.4	69.9	78.6
All countries: non-gold reserves .....	39.8	142.0	187.4	321.8	368.1	340.5
reserve/import ratio .....	15.3	26.3	22.9	26.0	19.2	19.1 <sup>a</sup>

<sup>1</sup> For end-1980 and end-1982, data on non-gold reserves have been adjusted to include dollars swapped against ECUs. <sup>2</sup> For countries which report to the BIS, liabilities vis-à-vis banks located in other reporting countries are offset against corresponding claims; for all other countries, with the exception of offshore centres, such liabilities are on a gross basis, i.e. they represent reporting banks' aggregated gross claims vis-à-vis the groups of countries concerned. In the case of the offshore centres, liabilities are calculated on a net basis.

<sup>a</sup>=estimates.

reserves as an informal kind of collateral, most oil-importing countries managed to avoid major reserve losses. Nevertheless, in real terms their international liquidity position deteriorated sharply in the first two years following the oil price increases. The combination of roughly constant non-gold reserves, expressed in current dollars, and rapidly expanding import bills led to declines in reserve/import ratios. These declines were particularly pronounced in the case of the developing countries, where the ratio dropped back to 20.6 per cent., well below its end-1969 level. Moreover, reserve losses were avoided only with the aid of a sharp increase in external banking indebtedness. By the end of 1975 the liabilities of non-OPEC developing countries to the international banking sector were three times as large as their non-gold reserve assets. Similar developments occurred, although on a smaller scale, in many industrial countries.

From 1976 to 1978 the situation changed once more. Vigorous and successful adjustment efforts by the debtor countries, notably those in the developing world, facilitated by the sustained recovery of the US economy, led to a substantial

improvement in the international banking climate, which had temporarily worsened in the aftermath of the 1974 US credit crunch and the Herstatt crisis. The banks became more optimistic and aggressive in their international lending policies and, despite temporarily shrinking current-account deficits in the oil-importing countries, the volume of international bank lending continued to expand strongly. With capital outflows from the United States gradually replacing the OPEC surpluses as the main source of new international banking funds, and with the US current account moving into substantial deficit, oil-importing countries registered large reserve gains. As before, these additions to reserves were particularly significant in Germany, Japan, and Switzerland, which at times experienced heavy speculative capital inflows and whose reserve/import ratios in 1978 even exceeded their high end-1973 levels.

Other oil-importing countries, too, achieved large reserve gains and resultant improvements in their reserve/import ratios. This was particularly true in the case of the non-OPEC developing countries, where the ratio recovered almost to its 1973 level. However, the 1976–78 reserve gains of the non-OPEC developing countries were, in one very important respect, fundamentally different from those of 1970–73, in that, at \$38 billion, they were much smaller than the simultaneous \$66 billion increase in their international banking indebtedness, much of which was in short-term form. But this circumstance does not seem to have acted as a major constraint on those countries' domestic economic policies. The easy access which they enjoyed to international bank credit at very low real interest rates meant that the rôle of actual reserve assets in underpinning their external payments capacity had been largely reduced to that of providing collateral for external borrowing. External liabilities seemed to matter little so long as new credit was readily available on easy terms. And the same applied to many industrial countries, too.

In the aftermath of the 1978 and 1979 oil price increases, this philosophy at first still seemed to be a viable one. With the help of international bank borrowing, and despite sharply widening current-account deficits, most groups of oil-importing countries showed further reserve gains in 1980. Only the traditional surplus countries of the industrial world, owing to a temporary sharp deterioration in their current-account balances, suffered some reserve losses and, with their reserve/import ratios returning to more normal levels, they may have felt that their earlier massive reserve gains were perhaps after all not quite as unneeded as they had appeared at the time. However, even in other oil-importing countries reserve gains from external borrowing could not prevent a sharp fall in reserve/import ratios to, or even below, their 1969 levels. Moreover, these ratios did not fully reflect the extent of the deterioration in countries' international liquidity positions, since the vast increase in banking indebtedness and the unprecedentedly steep rise in US interest rates had by the end of 1980 greatly added to the burden of external debt-service obligations (see Chapters V and VI).

The situation became more serious in the following two years, when the world economy moved into recession. Many countries were faced with shrinking export volumes, falling export prices and high real interest rates on external banking indebtedness that was still expanding at a rapid pace, while the growth of their reserves came to a halt or was actually reversed. The crunch came in the second half of 1982 when, in the wake of the Mexican debt crisis, many debtor countries saw

their access to new international bank credit blocked or were even faced with withdrawals of short-term banking funds. The concept of international liquidity on which these countries' policies had been based since the mid-1970s proved to be no longer applicable, and their international liquidity was re-scaled downwards to the level of their international reserves. In many cases these reserves were only a fraction of their external indebtedness or even simply of their short-term international banking debts. Their ability to roll over their maturing credits, let alone to attract net new banking funds, was gravely impaired.

As a result of these developments, the present international liquidity situation can be summarised as follows: on the one hand, there is a fairly large number of heavily indebted countries, notably in the Third World, whose access to international bank credit has become difficult and which are acutely short of reserves; on the other hand, there are a few traditional surplus countries, such as Germany, Japan and Switzerland, which have ample reserves and no reserve problems for the foreseeable future; and in between these two groups are numerous countries, most of them in the developed world, whose reserves are just adequate but which continue to find access to international bank credit.

Thus, it would be inappropriate to speak at present of a global liquidity shortage; nor is that problem likely to pose itself in the foreseeable future. With the US current-account balance in large deficit, and banks in the United States apparently still eager to lend within the OECD area, it is unlikely that industrial countries as a group will be faced with a dollar shortage in the near future. However, even if there should be large balance-of-payments outflows from the United States, it is highly improbable that this time international bank lending would be able to spread out the resultant reserve gains towards the heavily indebted countries in the Third World. Even more so than in the 1970s, therefore, the problem of global reserve growth over the next few years will be overshadowed by that of the worldwide distribution of current-account imbalances and the need for an appropriate mix of adjustment and financing.



## VIII. ACTIVITIES OF THE BANK.

### 1. Financial assistance to central banks.

The financial year under review was characterised by BIS financial assistance to central banks on an unprecedented scale and in some novel directions.

For many years, indeed virtually since its inception, the Bank has been a provider of short-term liquidity to central banks in urgent need. On a number of past occasions, particularly when the amounts at stake were rather large, but also where the wider interests of the central-banking community seemed to be affected, the Bank's operations in favour of individual institutions were undertaken with the co-operation and financial support of other central banks. More often than not these operations received little or no publicity, although there have been times when a public demonstration of BIS and central-bank support for a key borrower was judged desirable.

Chapter VI of this Report describes developments on the international financial markets and the difficulties encountered by some major debtor countries in meeting the payment obligations resulting from their very large earlier borrowings. The Bank played its part in a number of rescue operations which were designed to prevent a widespread deterioration in market confidence. In many cases the facilities made available provided essential finance while adjustment programmes were being worked out with the International Monetary Fund. What follows is a chronological summary of those bridging facilities which were granted and announced during the financial year under review and which involved the co-operation of a number of central banks.

The first case is that of the Bank's assistance to the National Bank of Hungary - a member central bank since the earliest days of the BIS with which a long-standing business relationship exists. In the wake of the political and financial problems which affected Poland so severely towards the end of 1981, Hungary was faced with large-scale withdrawals of short-term funds on which it had relied for a substantial proportion of its external financing. The unforeseen nature of these withdrawals and the speed with which they occurred made it natural for the National Bank of Hungary to seek assistance from the BIS in March 1982. Hungary was in the process of applying to join the IMF, and the prospect of membership was seen as a probable key to the re-opening of the international capital markets to Hungary as a borrower, despite the general market nervousness about all eastern European country risks. With the support of a small group of central banks, the BIS was able to offer the Hungarian National Bank a facility for US\$ 100 million. This relatively modest operation proved insufficient in the evolving conditions of the market, and in May, the month in which Hungary actually became a member of the IMF, a much larger circle of central banks supported an additional US\$ 110 million facility; both these facilities were repaid before the end of the Bank's financial year. In September 1982, however, with market conditions still

unfavourable to Hungarian borrowers despite the adoption of a severe programme of domestic adjustment, further BIS/central-bank assistance was seen to be desirable, and a new facility for US\$ 300 million was made available; this, too, has since been repaid.

Meanwhile, the summer of 1982 had seen a very rapid deterioration in the external position of Mexico which threatened market confidence. By early August the US authorities had taken unilateral emergency action to provide resources to prevent a cessation of Mexican payments. The assistance of other leading central banks was then sought through the BIS, and in a very short space of time it was possible to put together a facility in favour of the Bank of Mexico of US\$ 925 million, which paralleled a credit of a similar amount provided by the US monetary authorities direct. These facilities were made available concurrently in three tranches – the first one on conclusion of the agreements at the end of August, the second from mid-November 1982, when it was clear that the process of working out a stabilisation programme by the Mexican authorities in conjunction with the IMF was well advanced, and the final tranche from mid-December 1982, when the IMF had approved its loan to Mexico.

The efforts of the central banks and of the IMF to stave off the crisis arising from Mexico's problems, while providing a welcome and essential respite, did not prevent the markets from becoming increasingly anxious about other Latin American countries with high levels of international indebtedness. Attention became focused on Brazil, whose liquidity needs became increasingly difficult to satisfy in the nervous conditions prevailing after the Mexican shock. The Brazilian authorities decided that a programme supported by the IMF was essential and opened negotiations with the Fund in the autumn. By November 1982 the situation had deteriorated sharply, and the US authorities again stepped in to meet the emergency. At the same time the BIS was asked if it would pre-finance some of the drawings which Brazil expected to be able to make on the IMF during 1983. In conjunction with a large group of central banks, including this time the US monetary authorities, a bridging facility for an initial amount of US\$ 1,200 million, which was shortly afterwards increased to US\$ 1,450 million, was granted to the Central Bank of Brazil. The first repayments took place before the end of the Bank's financial year.

The liquidity problems of Argentina had not arisen quite as suddenly as those of Mexico or Brazil, but were nevertheless a source of considerable anxiety to the markets and thus also to the IMF and to central banks. With the support of a number of central banks, in particular the US Federal Reserve, a standby facility for US\$ 500 million was established by the BIS in December. It was expected that any drawings under this facility (which expired on 31st May 1983) would be repaid out of the proceeds of IMF loans.

The last example of central-bank financial co-operation through the BIS which should be mentioned here is the US\$ 500 million facility in favour of the National Bank of Yugoslavia negotiated towards the end of the financial year under review. Yugoslavia's external position had been deteriorating gradually for some time, and new financing became virtually impossible to obtain from a market which had grown very cautious in the light of recent experience in eastern Europe and in Latin

America. Yugoslavia's financing problem seemed, however, to be not so much of a temporary as of a medium-term nature. The IMF was already in regular contact with the Yugoslav authorities and had in fact made a standby agreement, but implementation of the Yugoslav programme had become very difficult. A fresh initiative was taken at government level to make a concerted effort to provide medium-term assistance to Yugoslavia. Meanwhile the National Bank of Yugoslavia had approached the BIS with a view to obtaining bridging finance in advance of future IMF disbursements and in advance of some financial credits to be included in the inter-governmental assistance package. The US\$ 500 million facility is backed in part by a group of central banks, including the US monetary authorities, and in part by a gold deposit made by the National Bank of Yugoslavia in favour of the BIS.

\* \* \*

Amounts outstanding under these facilities appear in the Balance Sheet under the item "Time deposits and advances". They are not identified separately, nor is it intended that they should be in future.

## **2. 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. The Euro-currency Standing Committee has continued, in accordance with the mandate given to it by the Group of Ten central-bank Governors in 1980, its regular monitoring of international banking developments. During the past year the meetings of the Committee have assumed an increased importance following the appearance of acute external debt problems in major borrowing countries, which heightened the need for official surveillance because of the impact of these debt problems on the functioning of the international banking system. The Bank also continued to assemble, survey and distribute statistical data on international banking developments and to provide 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 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.

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 (EMS), for example, and at other times extended to include participants from other industrialised countries such as Canada, Japan, Norway, Sweden, Switzerland and the United States); and 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 1982, the current practice of EEC countries with regard to quantitative monetary targets.

As in previous years, these committees and groups held a large number of meetings in 1982–83, 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 1982–83 a major part of the activity of the Committee of Governors, and consequently of its sub-committees and groups of experts, was concerned with the administration of the EMS established on 13th March 1979. 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.

In addition, given the repercussions on member states of the exchange rate and interest rate developments outside the EEC, the Committee of Governors paid close attention to the policies pursued in these spheres by certain non-Community countries.

In the year under review, the work of the Group of Computer Experts of the central banks of the Group of Ten countries and Switzerland, for which the Bank

has provided the Secretariat since its inception, was focused on three major topics. Firstly, the Group compiled an inventory of the applications implemented or projected by its members, as well as of the hardware and software used. Secondly, it undertook a study of trends in data processing over the coming four to seven years with a view to providing central banks with information on changes likely to result from these developments. Finally, the Group completed the revision of the book on "Security and reliability in electronic systems for payments" and commenced a study of national telecommunication networks handling financial operations, with particular reference to questions of security.

The Bank continued to provide the Secretariat for the Group of Payment System Experts, which in the autumn of 1982 completed its initial mandate to report on the repercussions that new technologies applied to domestic and international payments may have on the structure of banking systems and on central banks themselves. The Group's mandate was recently renewed, its remit being to review and monitor future developments in the field of payments.

The development of the BIS data bank has advanced further over the past year. All participating central banks in the Group of Ten countries and Switzerland have now taken the necessary steps to establish telecommunication links with the BIS Computer Centre. In due course, this will permit the timely exchange of monetary and economic data between the central banks and the BIS, one of the principal aims of the data-bank project. Most central banks have expanded their reporting of statistical series and some are preparing to transmit Euro-currency data over the telecommunication links. Under the guidance of the central-bank Group of Experts on Monetary and Economic Data-Bank Questions, for which the BIS provides the Secretariat, plans were also initiated to improve user handbooks, other user-oriented aids and access capabilities in anticipation of the data bank's becoming fully operative.

### 3. Operations of the Banking Department.

The Balance Sheet of the Bank and the Profit and Loss Account at 31st March 1983, certified by the auditors, are reproduced at the end of this Report; both are expressed in gold francs.\*

\*       \*       \*

At 31st March 1983 the balance-sheet total	
amounted to	GF 20,357,855,817
On 31st March 1982 it had stood at	GF 19,056,758,395
There was thus an increase of	GF 1,301,097,422

\* The gold franc (abbreviated to GF) is the equivalent of 0.290 322 58... grammes fine gold — Article 4 of the Statutes. Assets and liabilities in US dollars are converted at US\$ 208 per ounce of fine gold (equivalent to 1 gold franc = US\$ 1.941 49...); all other items in currencies are converted on the basis of market rates against the US dollar.

following declines in the two previous financial years, especially in 1980-81. This increase would, moreover, have been slightly more pronounced but for the depreciation in terms of gold francs of most of the currencies other than the US dollar in which part of the Bank's resources is held.

An analysis of the development of the balance-sheet total during the past financial year shows that it fell progressively during the first six months, to reach its lowest level, viz. GF 18,497 million, at the end of September, after small monthly fluctuations.

This decline was accentuated by the depreciation of currencies other than the US dollar, whose value by the end of September was approaching the lowest level recorded during the financial year — actually reached in October.

During the second six months, by contrast, this movement was reversed, and the total of the monthly statement of account reached its highest level of the financial year, viz. GF 20,781 million, at the end of December, owing to the receipt of substantial funds over the year-end.

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

Financial years ended 31st March	Total of Balance Sheet	Movement over the year	
	in millions of gold francs	in percentages	
1980	24,409	+ 5,308	+ 28
1981	19,726	- 4,683	- 19
1982	19,057	- 689	- 3
1983	20,358	+ 1,301	+ 7

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 as described in Section 6 below;
- (iv) gold under earmark held by the Bank for the account of depositors; this item had amounted to 1,290 million gold francs on 31st March 1982 and stood at 1,641 million gold francs at the end of March 1983, showing a relatively substantial increase of 351 million.

LIABILITIES (COMPOSITION OF RESOURCES).

BIS: Development of the composition of resources  
over the past four 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 gold francs			
1980	887	23,239	283	24,409
1981	937	18,539	250	19,726
1982	987	17,778	292	19,057
1983	1,037	18,987	334	20,358

A. Capital, reserves and miscellaneous liabilities.

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

The Bank's authorised capital remained unchanged at 1,500 million gold francs; there was likewise no change in the issued capital, which is made up of 473,125 shares paid up to the extent of 25 per cent.

(b) Reserves

The movements in the various reserve funds, commented upon below, are shown in the table at the end of this Report, under Item I.

(1) *Legal Reserve Fund* GF 30,070,313

The total of this Fund showed no change; it has in fact remained unchanged since 1971, when it reached 10 per cent. of the then paid-up capital, this being the proportion laid down in Article 51(1) of the Statutes.

(2) *General Reserve Fund*

after allocation of the net profit for 1982-83 GF 457,152,793

This compares with 437.2 million gold francs on 31st March 1982; 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*

This Fund stood at GF 21,530,055

unchanged compared with the end of the previous financial year.

(4) *Free Reserve Fund*

after allocation of the net profit for 1982-83 GF 232,730,236

This compares with 202.7 million gold francs on 31st March 1982, the amount it is proposed to transfer to this Fund from the net profit being 30 million gold francs.

The total amount of the Bank's reserves, after allocation of the net profit for 1982-83, thus stands at GF 741,483,397 against 691.5 million gold francs at the beginning of the financial year, giving an increase of 50 million. An identical amount had been appropriated from the profit at the end of the previous financial year.

(c) The item "Miscellaneous" stood at GF 317,761,879 against 274.6 million gold francs on 31st March 1982, showing a rise of 43.1 million.

(d) Profit and Loss Account, *before* allocation GF 65,826,173

This figure represents the net profit for the financial year 1982-83.

Details of the proposed allocation of the net profit, in accordance with the provisions of Article 51 of the Statutes, are given in Section 4 below. A sum of 15,826,173 gold francs, compared with 16,938,821 gold 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 1983; it appears on the liabilities side of the Balance Sheet. 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
	1982	1983	
	in millions of gold francs		
Deposits of central banks .....	17,396	18,474	+ 1,078
Deposits of other depositors .....	382	513	+ 131
Total .....	17,778	18,987	+ 1,209

The increase in the balance-sheet total was mainly the result of the receipt of new deposits, both from central banks and from other depositors.

This movement may be said to have been entirely accounted for by new funds in US dollars, offset to a small extent by an overall reduction in resources in other currencies, particularly in Deutsche Mark, and in gold.

As far as "Deposits of other depositors" are concerned, it should be pointed out that this item comprises not only conventional deposits, such as those received from international organisations, but also short-term borrowings made on the market. As a proportion of total borrowed resources, deposits of central banks declined slightly, falling from 97.9 to 97.3 per cent.



BIS: Borrowed funds, by nature and term to maturity.

Term	Deposits in gold			Deposits in currencies			Total		
	Financial years ended 31st March		Move- ment	Financial years ended 31st March		Move- ment	Financial years ended 31st March		Move- ment
	1982	1983		1982	1983		1982	1983	
	in millions of gold francs								
Sight .....	4,662	4,355	- 307	362	1,096	+ 734	5,024	5,451	+ 427
Not exceeding 3 months .....	29	145	+ 116	11,122	12,049	+ 927	11,151	12,194	+1,043
Over 3 months .....	-	-	-	1,603	1,342	- 261	1,603	1,342	- 261
Total .....	4,691	4,500	- 191	13,087	14,487	+1,400	17,778	18,987	+1,209

As the above table shows, deposits in gold declined, whereas deposits in currencies increased. The ratio of deposits in gold to total borrowed funds thus decreased from 26.4 to 23.7 per cent., while that of deposits in currencies rose to 76.3 per cent. from 73.6 per cent.

As a proportion of total deposits received, sight deposits increased slightly from 28.3 per cent. to 28.7 per cent., while time deposits fell to 71.3 from 71.7 per cent.

(a) Deposits in gold GF 4,500,209,288

Since the fall in sight accounts was far greater than the rise in time accounts, there was a decline in the total volume of these deposits.

(b) Deposits in currencies GF 14,486,871,955

This item increased by 10.7 per cent., whereas a reduction of 5.6 per cent. had been recorded at the end of the previous financial year. Looking at the maturity distribution, it may be seen that there has been a tendency towards a shortening of terms. Sight deposits and deposits at not more than three months increased, while there was quite an appreciable contraction in the amount of funds received at over three months: these now represent only 9.3 per cent. of total deposits in currencies, compared with 12.2 per cent. previously.

ASSETS (EMPLOYMENT OF RESOURCES).

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

(a) Gold GF 5,184,447,789

Compared with 5,479 million gold francs on 31st March 1982, this represents a decrease of 295 million gold francs, or 5.4 per cent. The movement was due to net withdrawals of gold, together with repayments at maturity to various central banks of certain quantities of gold previously purchased from them spot in connection with swaps against currencies. These outflows of gold were, however, partly offset by the maturing of various fixed-term placements (see item (d) below).

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

Nature	Financial years ended 31st March				Movement	
	1982		1983			
	in millions of gold francs					
Sight assets						
Gold .....	5,479		5,184		- 295	
Currencies .....	11	5,490	17	5,201	+ 6	- 289
Treasury bills						
Currencies .....		417		474		+ 57
Time deposits and advances						
Gold .....	58		21		- 37	
Currencies .....	11,561	11,619	12,751	12,772	+ 1,190	+ 1,153
Securities at term						
Currencies .....		1,471		1,884		+ 413
Total						
Gold .....	5,537		5,205		- 332	
Currencies .....	13,460	18,997	15,126	20,331	+ 1,666	+ 1,334

(b) Cash on hand and on sight account with banks GF 16,549,485

At the end of the previous financial year this item had shown a balance of 11 million gold francs.

(c) Treasury bills GF 473,813,075

This compares with holdings of 417 million gold francs at the end of the previous financial year, giving an increase of 57 million, or 13.7 per cent. In 1981-82 this item had increased by 191 million gold francs as a result of repurchase agreements concluded with a central bank. On 31st March 1983 the volume of operations of this type outstanding was greater than that at the end of the previous financial year. In addition, purchases were made of short-term paper issued by the German Government, with a resale option in the Bank's favour to assure liquidity. The increase in the item "Treasury bills" is the net result of these two movements and of a slight decline in holdings of US Treasury bills.

(d) Time deposits and advances GF 12,772,419,034

This compares with a figure of 11,619 million gold francs at the end of the previous financial year, to give an increase of 1,153 million, or 9.9 per cent., which, however, represents the difference between a rise in investments in currencies and a reduction in placements in gold in the form of fixed-term deposits.

As in the case of new deposits received in currencies, the great bulk of placements made were in US dollars. Similarly, it may be noted that there was a reduction in investments in Deutsche Mark. During the financial year placements were made for the first time in SDRs (special drawing rights) as units of account.

The volume of facilities made available to central banks has risen sharply, as already mentioned at the beginning of this chapter.

(e) Securities at term

GF 1,884,131,957

This compares with 1,471 million gold francs at 31st March 1982, giving a rise of 413 million, with increases in holdings of certificates of deposit issued by banks located in the United States, US Treasury securities and public-sector securities.

A breakdown according to residual term to maturity of investments in time deposits and advances and securities at term is given in the following table.

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

Term	Financial years ended 31st March		Movement
	1982	1983	
	in millions of gold francs		
Not exceeding 3 months .....	8,988	11,275	+2,287
Over 3 months .....	4,102	3,381	- 721
Total .....	13,090	14,656	+1,566

This table shows a general shortening of the maturities of placements. In fact, the increase in funds invested at not more than three months was far greater than all new placements made. The table also reveals a shift out of investments at over three months into shorter-term placements.

It may, however, be noted that the decrease in investments at over three months was entirely in time deposits and advances.

Whereas operations in the first category — at not more than three months — had accounted for 68.7 per cent. of the total at the end of March 1982, they now constitute 76.9 per cent., while those in the second category have fallen from 31.3 per cent. to 23.1 per cent.

(f) Miscellaneous

GF 26,494,476

This item, which stood at 60 million gold francs on 31st March 1982, recorded a decline of almost 34 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 GF 42,871,313 compared with a negative balance of 184 million at the beginning of the financial year.

The difference of 141 million was attributable, in particular, to the maturing of operations in the form of swaps of gold (received spot) concluded with central banks.

#### 4. Net profits and their distribution.

The accounts for the fifty-third financial year ended 31st March 1983 show a net operating surplus of 66,643,810 gold francs, compared with 67,796,486 gold francs for the preceding financial year. Notwithstanding an increase in the volume of funds available to the Bank for investment, both the yield on its own funds held in currencies and the margins obtained on its borrowed resources were lower than in 1981-82 as a result of the decline in interest rates on most markets.

The net operating surplus is shown after deduction of 15,869,433 gold francs in respect of costs of administration, the relatively small increase over the previous year's figure of 15,751,675 gold francs reflecting 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 by some 7 per cent.

The Board of Directors has decided to transfer 817,637 gold francs to the Provision for Exceptional Costs of Administration. As a result of this transfer the net profit amounts to 65,826,173 gold francs, against 66,938,821 gold francs for the previous financial year. The allocation of this amount is governed by Article 51 of the Statutes.

On the basis of this article, the Board of Directors recommends that the net profit of 65,826,173 gold francs be applied by the General Meeting in the following manner:

- (i) an amount of 15,826,173 gold francs in payment of a dividend of 135 Swiss francs per share;
- (ii) an amount of 20,000,000 gold francs to be transferred to the General Reserve Fund; and
- (iii) an amount of 30,000,000 gold francs, representing the remainder of the available net profit, to be transferred to the Free Reserve Fund. This Fund can be used by the Board of Directors for any purpose which is in conformity with the Statutes.

If the above proposals are accepted, the dividend will be paid on 1st July 1983 to the shareholders whose names are contained in the Bank's share register on 20th June 1983.

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 1983 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.

**5. 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.**

With one exception, all the secured loans issued by the European Coal and Steel Community for which the Bank has been performing the functions of Depositary in accordance with the provisions of the Act of Pledge concluded between itself and the Community on 28th November 1954 had been redeemed by 1st April 1983.

During the financial year 1982-83 the amounts received by the Bank for the service of the secured loans came to the equivalent of about 26,000 gold francs in respect of interest and about 293,000 gold francs in respect of redemption. The amount due in respect of the one outstanding loan, namely the L.fr. 100,000,000 5¼ per cent. Secured Loan (15th Series) 1961-86, had by the end of the financial year been reduced to the equivalent of approximately 231,000 gold 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.

**6. 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 EMS; 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. During the period from 1st April 1982 to 31st March 1983 such interventions amounted to approximately ECU 5.5 billion in all;

- 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, which does not participate in the EMS) 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. At 31st March 1983 the Fund had issued in this way a total of approximately ECU 47 billion, corresponding to a little over US\$ 43 billion at the rate of exchange prevailing at that date;
  - 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, of voluntary transactions between the central banks participating in the EMS, and of the payment of interest calculated on the central banks' net positions in ECUs. In the period under review the gross amount of such transfers totalled approximately ECU 10.7 billion;
- (c) The Bank enters in the Fund's books the operations carried out in the context of the short-term monetary support arrangements. This facility has, however, not been activated since 1974, when it was used by the Bank of Italy.
- (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 1982-83 the Bank in its capacity as Agent for the Fund effected the payment of accrued interest and commission, as well as various repayments totalling US\$ 630 million and DM 500 million. As a result of these repayments, together with those made in preceding years, the greater part of the loans placed by the European Economic Community in 1976 and 1977 has now been redeemed. Of the initial operations totalling US\$ 1.6 billion and DM 0.5 billion, the balance outstanding now amounts to no more than US\$ 300 million. This represents the second tranche of a US\$ 500 million loan contracted in 1976, the proceeds of which were lent to Italy. This tranche carries a fixed rate of interest of 7.75 per cent. and will fall due on 1st June 1984.

## **7. Changes in the Board of Directors.**

Mr. Lars Wohlin relinquished his post as Governor of the Bank of Sweden in October 1982 and at the same time gave up his seat on the Board of Directors of the BIS. At the Board Meeting held on 9th November 1982 the Chairman thanked Mr. Wohlin for the valuable services he had rendered to the Bank during his term of office of nearly three years.

At the same meeting the new Governor of the Bank of Sweden, Mr. Bengt Dennis, was elected under Article 27(3) of the Statutes to be a member of the Board for a period of office expiring on 31st March 1984.

Also at the November Board Meeting M. Bernard Clappier, whose mandate as a member of the Board was due to expire on 27th November 1982, was re-appointed by M. Renaud de la Genière, Governor of the Bank of France, for a period of three years under Article 27(2) of the Statutes.

The mandate of Dr. Fritz Leutwiler as a member of the Board being due to expire on 31st March 1983, he was re-elected under Article 27(3) of the Statutes at the meeting of the Board held on 8th March 1983 for a further period of three years ending on 31st March 1986.

## CONCLUSION.

The world today faces two major, immediate policy challenges: how to enable the emerging recovery in the western industrial countries to proceed smoothly, and how to keep the international debt situation within manageable bounds. And beyond each of these pressing current problems loom equally difficult long-term ones: firstly, how to manage policies in such a way that the recovery will usher in a period of lasting, non-inflationary growth; and, secondly, how to deal with the genuinely "systemic" problems brought to the surface by the recent developments in the international financial markets.

That the western industrial world needs a broadly based and sustained economic revival for its own sake is beyond any doubt. Unemployment has reached unacceptable levels in all but a few countries. Given the foreseeable development of the labour supply and of productivity, only a resumption of growth can prevent it from rising even further — and even such a modest objective will be attainable only after one or two years of expansion. Although the corporate sector's financial position is beginning to improve somewhat, domestic financial fragility can be overcome only slowly. Finally, without growth prospects, and so long as real interest rates remain relatively high, business firms may wish to use their improved cash flow to reduce indebtedness rather than to undertake capital investment.

But it should also be stressed that there is a close interrelation between the prevailing economic situation in the western industrial world and the difficulties experienced by a great number of debtor countries in servicing their external debt. Admittedly, as early as 1978 some eastern European and Latin American countries were already beginning to accumulate external debt at a rate that would have proved unsustainable in all but exceptionally favourable worldwide economic circumstances. But the debt-servicing problems would not have taken on such acute proportions and affected so many countries without the dramatic worsening of debt-service ratios in the wake of deteriorating terms of trade, shrinking export markets and, most of all, sharply higher interest rates. Conversely, although the industrial countries' many years of near-stagnation can in no way be attributed to any falling-off in demand from the rest of the world, declining import orders more recently from eastern Europe and the LDCs have certainly helped to retard the long-awaited business upswing. And, looking ahead, it is hard to envisage a broadly based and lasting recovery in the western world as long as the fear of the potentially damaging financial consequences of a world debt crisis is not fundamentally allayed.

There is also a temporal interrelation between these challenges that does not make policy decisions any easier. The way the debt problems are handled today could determine what avenues will be left open for future balance-of-payments financing. Policies put into effect today to accelerate the business revival could mortgage the future by putting at risk the long-run objective of steady, non-inflationary growth. Policy-makers will thus have to avoid a double pitfall: that of adopting measures dictated by the need to deal with an emergency situation, yet



neglecting their longer-run impact; and that of concentrating so much on longer-term objectives that the dictates of what still is an emergency situation — continued international financial fragility — are simply pushed into the background.

With these broad considerations in mind, what are the policy recommendations that can be put forward by the BIS?

Economic revival could, and should, be led only by those countries which have already succeeded in large measure in bringing inflation under control and which enjoy a certain degree of freedom from balance-of-payments constraints. The unequivocally good news is that four of the largest industrial countries — the United States, Japan, the Federal Republic of Germany and the United Kingdom, with an aggregate GNP of \$5,300 billion (i.e. nearly half of world output) — find themselves in this situation. Both the United States and the United Kingdom have achieved a dramatic decline in their inflation rates; Japan is close to absolute price stability; and Germany, with a good historical record in this field anyway, has also begun moving in the same direction. The current-account positions of Japan, Germany and the United Kingdom are, to say the least, comfortable. This is not so in the case of the United States, but given the world political situation, and even with a highly desirable reduction in the current interest rate differentials in favour of the dollar, the United States should be able to afford to run a sizable current-account deficit for some time. The recent decline in the price of oil can only improve the anti-inflationary performance of all four countries, and also the current payments positions of three of them.

The sort of economic revival that is needed in these countries is one propelled by the expansion of domestic demand. The rest of the world, with relatively few exceptions, is running current-account deficits and is clearly in no position at this stage to contribute to the growth of world trade. On the contrary, a number of highly indebted countries are, by force of circumstances, simultaneously obliged to undertake adjustment policies — policies which cannot bear fruit without an upturn in foreign demand for their export products. It is in everyone's interest that the counterpart of these inevitable domestic restraint efforts should be domestic expansion in the four leading industrial economies. Otherwise we run the risk that the elimination of the OPEC surplus will bring little relief to those countries that need it most. A debt-ridden world fraught with financial fragility requires not only "lenders of last resort" but also "buyers of last resort" — and this imposes on those countries that can afford it a duty to put aside, for the time being, whatever longer-term concern they might harbour about their preferred balance-of-payments position.

At the time of finalising this Report there are signs of an upswing in domestic expenditure taking hold in the United States and the United Kingdom, and to a lesser extent in the other two countries as well. There are many "ifs" concerning the potential strength of consumer and business responses, but the single most powerful obstacle in the way of a sustained business upswing is the high level of US interest rates — which remain particularly high when set against the low current inflation rate. In the United States, such rates could inhibit spending on consumer durables, slow down the recovery of residential construction and prevent any vigorous pick-

up in business capital outlays. Internationally, their influence is equally damaging. They continue to keep interest rates in other industrial countries at levels unnecessarily high from the point of view of domestic balance — especially at the long end of the market — thus putting a brake on growth in these countries. They keep the dollar overvalued (and by the same token some other currencies undervalued), thereby creating a pattern of current accounts which could prove unsustainable in the longer run and at the same time provoke protectionist pressures in the United States. Last but not least, they mean the persistence of an excessive interest burden on all those countries whose external debt is mainly in dollars. From every conceivable angle, the most important and most urgent task for policy is to exert downward pressure on US interest rates.

This task clearly falls on the US authorities — and, in the view of this Report, fairly and squarely on the shoulders of those in charge of fiscal policy. This view is based on two considerations. Firstly, it has become increasingly evident that the current policy mix in the United States is the major factor in the high level of interest rates: a prospectively high and rising structural public-sector deficit colliding with a monetary policy designed to keep the growth of the monetary aggregates on a stable path. Secondly, it would be dangerous, in a longer-run perspective, to begin altering this policy mix by sharply relaxing the stance of monetary policy. Even bearing in mind the considerable difficulties in interpreting the strong increase in the demand for financial assets, monetary accommodation in the face of growing public-sector borrowing requirements could well create the impression that the US authorities do not care about the future course of inflation — a sure recipe for a revival of inflationary expectations. With an unchanged course of fiscal policy, the Federal Reserve could no doubt push down short-term interest rates — but it is highly improbable that it could keep them low. And it could do only little for long-term rates. To avoid mortgaging the future, and to create conditions for a lasting recovery, the burden of initiative lies on fiscal policy: to take measures, preferably in the field of expenditure, but also, if necessary, in that of taxation, to eliminate the prospect of a sharply growing structural component of the public sector's borrowing requirement.

A US initiative of this nature could increase the scope for policy manoeuvre in the other three countries, should it appear that their own domestic recovery is faltering. Any policy initiatives would, of course, have to take into account the special circumstances of each of these countries. All three of them, however, share some common features that distinguish their current position from that of the United States. Moreover, their degree of policy freedom could be significantly enhanced by a prior change in the US fiscal policy stance. In none of these countries is there a structural fiscal deficit of the prospective dimensions of that of the United States; indeed, it could even be argued that in the United Kingdom there is now a structural surplus. To varying degrees, this could open up the way to modest doses of selective fiscal stimuli to private capital spending, provided great care is taken that such stimuli do not become a permanent feature of the public finances. Nor would an acceleration of public-sector investment outlays from their present low levels come amiss, but only where this could be offset by reductions in planned public expenditure of other kinds, in particular in transfer payments. In monetary policy,

too, these countries seem to enjoy a certain operational flexibility that the US Federal Reserve Board does not yet possess. For many years, Germany has had a far better record than the United States in its fight against inflation; and so, more recently, has Japan. Neither of these countries has adhered to rigid near-term monetary targeting; and their financial markets have not misled themselves into believing that the short-term observance of a particular money supply figure is what really matters. As for the United Kingdom, its monetary policy has achieved a degree of freedom precisely because of the strongly restrictive stance of its fiscal policy.

There is little doubt that a recovery originating in the four large industrial countries would bring welcome relief to the debt-ridden economies of the rest of the world. There are also growing indications that such a recovery is getting under way. And, because of the faster-than-expected decline in inflation rates and the recent fall in oil prices, there is greater hope than at any time since the first oil shock that this recovery can be nurtured into lasting, non-inflationary expansion. But will it be sufficiently quick, strong and widespread to help improve the current accounts of the deficit countries during the coming months? This is far from certain; and, viewed in terms of the broader stabilisation interests of the world as a whole, it is even desirable that the business upswing should be gradual and therefore sustainable.

If the scenario of slow recovery is both the most likely and the most desirable, conclusions follow that put a heavy burden of international responsibility on policy-makers as well as on the banks. The starting-point is the recognition that while an international debt crisis has so far been averted — in the sense that the debt-servicing problems have been sufficiently contained to prevent them from having a globally crippling influence on bank lending and on world trade — the world's financial system remains basically fragile. In this respect, a vital breathing space has been provided by the combined firefighting actions of lender governments and central banks, international organisations, lending banks and the debtor countries themselves. The first, most urgent task is now to preserve these gains until such time as the business upswing in the western industrial world brings more fundamental relief to the debtor countries. The second, less immediate but probably even more formidable task is to look beyond the next six to twelve months and to try to resolve the systemic problems thrown up by the recent events.

Before outlining how the first task could be tackled, it may be useful to respond briefly to doubts that have been expressed recently about the wisdom of the rescue packages that were put together in 1982 and early 1983. The philosophy on which these doubts are based could be summed up as follows: it would have been (or it would still be) wiser, for the sake of preserving the normal functioning of markets, to let those countries that are unlikely to be able to repay interest and principal be declared in default, and leave the resulting losses to be borne by the imprudent lenders. In this way both borrowers and lenders would think twice before again engaging in such imprudent credit arrangements.

This reasoning, though perhaps superficially attractive, misses some essential points. It does so because it extends by analogy to the world a principle that is (within certain limits) defensible when applied to private borrowers and lenders

operating in the framework of a market economy within the boundaries of a sovereign country. The first of these points is that when a whole continent runs into debt-servicing difficulties, a problem of worldwide proportions emerges. Large-scale defaults could have unforeseeably damaging effects not only on the financial system as a whole, but on the economies of the lending countries and of the other borrowing countries as well. Size, incidentally, also limits the validity of the "default principle" within the national economy — but then, at least, the government can be held accountable for taking counter-measures to limit the extent of the damage. There is no world government. Secondly, when the debt-servicing difficulties are the combined result of domestic mismanagement, a serious worldwide recession, high interest rates and bank lending policies contaminated by the "regionalisation syndrome", it is in practice impossible to know which of the countries is likely to be unable in the future to service its debt. Such ability is not necessarily a function of the degree of past mismanagement, but much more of future policies — on which the international community can exert an influence through the IMF. Thirdly, a sovereign country is not a private corporation. Even in default it cannot be wound up like a bankrupt private entity: it will continue to exist; its domestic assets cannot be taken over by the creditors or sold off profitably to another country; in other words, it cannot be cut into pieces, "reorganised", "restructured".

It is for these reasons that holding operations have a rôle to play in trying to sort out the current difficulties encountered by both debtors and creditors. The continued success of these operations depends on the concerted action of all the major actors on the international monetary scene.

The International Monetary Fund must be in a position to pursue its policy of substantial, but tightly conditional lending to deficit countries — and the emphasis is as much on "substantial" as on "tightly conditional". Large amounts are necessary on two grounds. Firstly, because the days are gone when small Fund disbursements could be expected to trigger an immediate favourable market response. Today, the Fund's leverage is much weaker, in the sense that larger amounts of financial support are necessary to induce additional private financing flows. Secondly, because the adjustment efforts that have to be shouldered by most of the deficit countries are very severe indeed, as the combined result of earlier policy mistakes and the adverse world economic climate. For governments to impose the necessary cuts in living standards, there must be a carrot, i.e. a sufficient incentive to accept the political opprobrium of unpopular measures. The only carrot the Fund can offer (in addition to its technical advice, which may be fair enough but which carries little that is politically persuasive) is that its financing is large enough to pull the country through its current difficulties. At the same time tight conditionality is necessary because debtor countries must realise (a) that part — a variable part — of these difficulties is due to their own policy errors and (b) that, in any case, the world is unlikely to return to high rates of growth, and surely not to negative real interest rates.

To enable the Fund to carry out such a policy, two conditions have to be satisfied. The more obvious one is that its total resources must be adequate to meet its total needs. If the agreed quota increases can be implemented swiftly, and if the enlarged GAB facility is in fact ratified, it is likely that in the short run this condition can be met. Both "ifs" depend to a large extent on the attitude of the US

Administration and on that of the US Congress. But it is arguable that, even should these hurdles be overcome, the Fund might face a liquidity problem, in the short run or even in the longer run. It should be given the capacity to solve such a potential problem, preferably by borrowing from official lenders. The second condition is that the Fund should be able to meet the borrowing needs of individual countries. It would be difficult to satisfy this condition if the increase in countries' borrowing facilities as a result of the quota revisions were to be fully offset by a reduction in the multiple of quotas that can be drawn under the Extended Fund Facility.

As regards the countries in need of external finance, their best contribution to ensuring the orderly functioning of the financial markets is acceptance of a domestic adjustment process. This is the necessary, exact counterpart to a continued Fund policy of substantial but conditional lending. For some — perhaps the majority — of the deficit countries, domestic adjustment would have become unavoidable in any case, even under favourable worldwide economic circumstances. But even those which have incurred their external debt as a counterpart of additional — even export-oriented — investment rather than consumption will simply have to acknowledge that it is beyond the power of the industrial countries to achieve growth rates in the near future that would in all cases validate their own investment programmes. A reduction of domestic absorption should therefore be accepted even by these countries. On the practical level, nothing could more quickly undermine the effectiveness of concerted international holding operations than the failure of the borrowing countries to comply with the performance criteria accepted in their negotiations with the Fund. Any such failure could gravely endanger the multilateral financing packages that have been put together, often after protracted negotiations, under the auspices of the Fund.

The international debt situation cannot be kept within manageable bounds without the effective participation of the banks — the third group of major actors on the international financial scene. Such effective participation should be guided by three principles. In the case of actual "problem countries", banks should continue to keep steady nerves — as they have done by and large so far — despite the large number of standstills, unilateral moratoria and protracted rescheduling or "restructuring" negotiations. Secondly, they should resist succumbing to the regionalisation syndrome — something they have done much less successfully. Neither Latin American nor eastern European countries deserve the same blanket treatment. Thirdly, they should not withdraw from new international lending indiscriminately and on a worldwide scale, since such action would be the surest way of adding new names to the list of problem countries and of jeopardising their own interests. For the western banking community, accustomed as it is both to hard competition and (perhaps because of this) to a certain gregariousness, the second and third recommendations represent a very serious challenge. One may hope that it will be able to respond with as much efficiency and objective self-interest as it has displayed in handling the cases of actual problem countries.

The other major participants in the co-ordinated strategy for averting an international debt crisis have been the monetary authorities of a number of countries, operating largely through the BIS. Emergency central-bank credits have been extended over the past year to Argentina, Brazil, Hungary, Mexico and

Yugoslavia by way of bridging operations which buy time in situations in which countries experiencing acute external liquidity difficulties are seen to be seriously negotiating longer-term finance with the IMF to accompany appropriate adjustment policies. On this basis, and within the limits of the resources available to it, the central-banking community of the western industrial countries has thus demonstrated in the clearest possible way its collective determination and ability to take prompt action in the face of dangers to the functioning of the international financial system.

Despite the many difficulties, it is not unreasonable to assume that skilful financial management and effective co-operation between these four groups of actors on the international financial scene will effectively preserve the status quo until recovery in the western industrial countries improves the underlying "fundamentals". But, beyond that, we still have to face some genuinely systemic problems that have been highlighted, or indeed created, by the recent developments in the international financial markets. Three of these — very much interrelated — problems deserve to be singled out: the complex relations between authorities and banks; the maturity profile of the outstanding international bank debt; and, most importantly, the international capital flows available to finance future current-account deficits. Although the importance of these issues speaks for itself, the possible approaches to dealing with them depend so much on current developments that it would seem premature at this stage to put forward any formal recommendations for their solution. But it is vital that policy-makers, in their day-to-day handling of current problems, keep them in mind.

The first of these issues has to do with the potential impact of the rescue operations on future relations between international organisations, central banks, borrowing countries and the banks. The effectiveness of these emergency operations has depended in the past, as it would in the future, on close co-operation between all these major actors on the international financial scene — and like all co-operation, it has inevitably entailed a growing mutual dependence between them which, in turn, has somewhat curtailed their freedom of action. This has applied in particular to the banks, which in a number of instances have agreed to maintain, or even increase, their exposure vis-à-vis some of the problem countries. They did so because they rightly recognised that this represented the best chance of improving, in the longer run, the quality of currently doubtful claims. It must be acknowledged, of course, that both the IMF and some of the national authorities have played an active rôle in sharpening the banks' awareness of the macro-economic and macro-financial implications of their actions. At the same time it is essential that no doubt should be left that the banks remain, as they always have been, wholly responsible for their lending decisions. While this principle should not be forgotten, it is nevertheless arguable that the proper functioning of the international financial market may continue in the future to require novel types of co-operation between its participants. There is a great need for innovative thinking in this field — without the inspiration necessarily coming from the particular forms of co-operation used in the recent exceptional emergency actions. In any case, the latter should not be regarded as having set any precedent for the functioning of the markets in more normal circumstances.

The second problem area is that of the maturity profile of the outstanding external bank debt. At end-June 1982, of the total stock of external bank debt (US\$ 390 billion) of the twenty-four most important debtor countries outside the BIS reporting area, 44 per cent., i.e. US\$ 171 billion, was due to mature during the following twelve months. When the BIS started publishing maturity breakdown statistics — in 1978 — some lenders and borrowers questioned the usefulness of these figures, arguing that a high proportion of the short-term claims were being naturally rolled over, since they were basically trade-related. There is no need today to demonstrate the volatile nature of a very substantial proportion of short-term bank claims. As long as a maturity profile heavily biased towards the short run persists, any external shock that might occur in the future — and such shocks are inevitable — could well exert a destabilising influence on the world financial system. A number of consolidation schemes are being aired at present; most of them comprise elements of burden-sharing between debtors, creditors and, often, the IMF or western governments. In any assessment of the pros and cons of such proposals, the prime consideration that should be borne in mind — quite apart from their technical or political feasibility — is to what extent their acceptance could alter the market mechanism, i.e. the future behaviour of both borrowers and lenders, in a direction that would render the solution of the prospective “flow” problems even more difficult.

For there is, thirdly, a “flow” problem, i.e. that of financing future current-account deficits. An expansion of domestic demand in industrial countries may for some time reduce external deficits in the rest of the world; with some luck and good management we may avoid a third oil shock and hence the re-emergence of huge oil deficits; but with its high degree of integration the world economy cannot function on the assumption of negligible current-account imbalances. Such imbalances are bound to persist, or to reappear, not only as a reflection of cyclical desynchronisation or differences in policy stances or as a result of external shocks, but also because there can be no transfer of real resources to developing countries without these countries — as a group — running sustained current-account deficits. It is one thing to impose on developing countries, in an emergency situation and for a couple of years, domestic adjustment policies that should result in a sizable trade surplus; it would be quite another matter, and unacceptable, if these countries were forced to live for a long period with a large aggregate trade surplus. Such a situation would fly in the face of the basic principle of the optimum allocation of resources; it would also be politically highly explosive. The question, then, is what capital flows could accommodate the lasting current-account deficit of the developing world.

It is this systemic problem that requires the most careful consideration in the light of recent experience. As was shown in Chapter VI, one of the most striking features of the international financial scene between the first oil shock and mid-1982 was the active participation of the industrial countries' commercial banks in the financing of balance-of-payments deficits. The aggregate estimated current-account deficit of the non-OPEC LDCs during this period — US\$ 294 billion — was covered to the extent of 45 per cent. — i.e. US\$ 132 billion — by net banking inflows. As for the industrial countries outside the Group of Ten area, they benefited from net bank credits of US\$ 60 billion, amounting to about 40 per cent.

of their accumulated current-account deficit (US\$ 153 billion). It may be granted that deficits of this order were, in the aggregate, excessive and unsustainable in the long run and should therefore not be repeated on the same scale. Nonetheless, these figures suggest that if the banks radically reduced their participation in these countries' balance-of-payments financing, and a fortiori if they froze their aggregate exposure, the current-account financing of future years would be likely to run into serious problems.

It is difficult, and probably not altogether useful, to speculate at this juncture about the longer-run international lending policies of the banks. Clearly, much will depend on the way things develop on the international financial scene during the coming twelve months. But a few considerations of principle are perhaps worth raising.

The first of these is based on the observation of what is already taking place. To the extent that banks are still granting net new loans outside the OECD area, a rising proportion is taking the form of trade-related credits, at the expense of purely "financial", general-purpose, i.e. balance-of-payments, loans. The clock is turning back to where it stood before the first oil shock. There may be advantages in this — not so much in terms of increased safety for the creditor country taken as a whole, since it has been clearly demonstrated that in the case of a balance-of-payments crisis *all* credits are at risk, but for the banks themselves, when their claims are backed by the exporter's signature or by government guarantee. Moreover, when these credits take the form of project-oriented financing, there is a presumption (but not more than a presumption) that the borrowing country increases its domestic capital formation *pari passu* with the growth of its external debt. But there are also dangers in this development which should be closely watched: trade and price distortions often accompany bilateral financial deals, which thus provide a ready vehicle for the protectionist pressures that are in any case very much alive in a sluggish world economy.

The second consideration concerns the way banks could play a positive rôle in future balance-of-payments financing, in addition to what they would provide in the form of trade or project-related credits. That the banks' contribution to external financing is essential for the proper functioning of the international payments system during the coming few years is beyond any doubt. That they should go on granting "pure" balance-of-payments loans in the longer run is quite another question, which deserves to be carefully considered both by the authorities and by the banks themselves. On the one hand, the figures given above suggest that in the absence of at least a modest continued participation by banks in balance-of-payments financing there might be a serious financing gap in the future. On the other hand, on the basis of past experience it is not easy to see, with competition being what it is, how banks could ever discipline themselves and make their lending conditional on the borrowing country undertaking adjustment commitments, so that the IMF would not again be "crowded out" from its business of conditional lending. Graduated conditionality properly adjusted to each case would be a vast improvement over the banks' behaviour during these past few years, when excessive unconditional lending was suddenly replaced by no lending at all or even by withdrawals of funds. But is it realistic to expect this to happen? There is not much hope to be derived from the



provision of better information to lenders. As is shown in Chapter VI, the eruption of debt-servicing difficulties had been preceded in all major cases by an accumulation of external banking debt over relatively long periods, or by changes in the maturity profile of this debt, on which data were publicly available. It would perhaps be possible to devise co-operative schemes between the IMF and private lenders, just as it is desirable that there should be even more co-financing between the World Bank and the banks.

This leads us to the third and most important consideration, which relates to the future rôle of the IMF and the World Bank. Any longer-term scenario that did not call for sharply increased resources to be put at the disposal of *both* institutions, well beyond what may be needed in any case in the short run, is virtually inconceivable. The case for the enlarged rôle of the IMF is by now familiar and does not need to be dwelt on. That for the World Bank, and perhaps for the regional development banks, deserves to be set out in a few sentences. The IMF — assisted, it is to be hoped, by the banks — could take care of those current-account deficits that, because they are unsustainable, should be adjusted away, in the short or medium term, by the application of appropriate domestic policy measures, whether such deficits are located in the industrial or in the developing countries. The external deficits corresponding to development needs are of a different nature. They are supposed to last for a great number of years; they are also supposed to reflect a domestic investment effort. Some of these financing needs can perhaps be covered by suppliers' credits for imports of capital goods. Some can be met by direct investment flows; but one would have to be very optimistic, or very myopic, to believe that in the kind of political situation in which the world finds itself cross-country equity investment could play a large rôle in development finance. On top of this, neither imports of capital equipment nor direct investment flows reply to the need for certain types of capital formation which are essential for development purposes. Bilateral aid or financing flows can, of course, and should help to meet these needs. But just like suppliers' credits, they tend to reinforce the prevailing trend towards protectionism and the fragmentation of the world economy. It is for such reasons that the World Bank deserves the support of all those who value its multilateral, worldwide nature. It should become the major channel through which long-term capital movements effect the transfer of real resources.

The major points made in this Report can be summed up quite briefly. With the strong deceleration of inflation, the disappearance of the OPEC surplus and the slowly emerging recovery in the major industrial countries, prospects for the world economy are at last beginning to brighten. Domestic financial fragility within the industrial world is diminishing. Effective co-operation between governments, the IMF, central banks and commercial banks has averted the disruption of the international credit and payments system. It is perhaps not too optimistic to hope that all major actors on the international scene will be able to display as much inventiveness, sense of responsibility and readiness to co-operate in the face of the fundamental, longer-term, challenges as they did when they were dealing with an obvious emergency situation.

GÜNTHER SCHLEIMINGER  
General Manager

**BANK FOR INTERNATIONAL SETTLEMENTS**

**BALANCE SHEET AND PROFIT AND LOSS ACCOUNT**  
**AT 31st MARCH 1983**

**BASLE**

**BALANCE SHEET**

(Before and after

**ASSETS**

		<u>Gold francs</u>
<b>Gold</b> ... ..		5,184,447,789
<b>Cash on hand and on sight account with banks</b> ... ..		16,549,485
<b>Treasury bills</b> ... ..		473,813,075
<b>Time deposits and advances</b>		
Gold		
Not exceeding 3 months ... ..	20,756,401	
Currencies		
Not exceeding 3 months ... ..	10,302,505,225	
Over 3 months ... ..	<u>2,449,157,408</u>	
		12,772,419,034
<b>Securities at term</b>		
Not exceeding 3 months ... ..	951,806,104	
Over 3 months ... ..	<u>932,325,863</u>	
		1,884,131,967
<b>Miscellaneous</b> ... ..		26,494,476
<b>Land, buildings and equipment</b> ... ..		<u>1</u>
		<u>20,357,855,817</u>

Note 1: The gold franc is the equivalent of 0.290 322 58... grammes fine gold - Article 4 of the Statutes. Assets and liabilities in US dollars are converted at US\$ 208 per fine ounce of gold (equivalent to 1 gold franc = US\$ 1.941 48...), and all other items in currencies on the basis of market rates against the US dollar.

Note 2: At 31st March 1983, gold payable against currencies on forward contracts amounted to 42,871,313 gold francs.

# AT 31st MARCH 1983

allocation of the year's Net Profit)

## LIABILITIES

		Before allocation	After allocation
		Gold francs	Gold francs
<b>Capital</b>			
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
<b>Reserves</b>			
Legal Reserve Fund	30,070,313		30,070,313
General Reserve Fund	437,152,793		457,152,793
Special Dividend Reserve Fund	21,530,055		21,530,055
Free Reserve Fund	202,730,236		232,730,236
		691,483,397	741,483,397
<b>Deposits (gold)</b>			
Central banks			
Sight	4,321,577,046		
Not exceeding 3 months	145,549,568		
Other depositors			
Sight	33,082,685		
		4,500,209,288	4,500,209,288
<b>Deposits (currencies)</b>			
Central banks			
Sight	1,084,632,764		
Not exceeding 3 months	11,687,042,967		
Over 3 months	1,234,977,718		
Other depositors			
Sight	11,768,817		
Not exceeding 3 months	361,393,556		
Over 3 months	107,056,133		
		14,486,871,955	14,486,871,955
<b>Miscellaneous</b>		317,761,879	317,761,879
<b>Profit and Loss Account</b>		65,826,173	—
<b>Dividend payable on 1st July 1983</b>		—	15,826,173
		<u>20,357,855,817</u>	<u>20,357,855,817</u>

### 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 1983 and of its profit for the year ended on that date. We have obtained all the information and explanations which we have required. The Bank has kept proper books, and the Balance Sheet and the Profit and Loss Account are in agreement with them and with the information and explanations given us.

Zurich, 29th April 1983

PRICE WATERHOUSE & CO.

# **PROFIT AND LOSS ACCOUNT** **for the financial year ended 31st March 1983**

	<u>Gold francs</u>
Net interest and other income ... ..	82,513,243
Less: Costs of administration:	
Board of Directors ... ..	195,483
Management and Staff ... ..	11,459,937
Office and other expenses ... ..	<u>4,214,013</u>
	<u>15,869,433</u>
Net operating surplus ... ..	66,643,810
Less: Amount transferred to Provision for Exceptional Costs of Administration ... ..	<u>817,637</u>
Net Profit for the financial year ended 31st March 1983 ... ..	65,826,173

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 ... ..	15,826,173
	<u>50,000,000</u>
Transfer to General Reserve Fund ... ..	20,000,000
	<u>30,000,000</u>
Transfer to Free Reserve Fund ... ..	<u>30,000,000</u>

---

# **MOVEMENTS IN THE BANK'S RESERVES** **during the financial year ended 31st March 1983**

in gold francs

## **I. Development of the Reserve Funds resulting from allocations for the financial year 1982-83**

	<u>Legal Reserve Fund</u>	<u>General Reserve Fund</u>	<u>Special Dividend Reserve Fund</u>	<u>Free Reserve Fund</u>
Balances at 1st April 1982, after allocation of Net Profit for the financial year 1981-82 ... ..	30,070,313	437,152,793	21,530,055	202,730,236
Add: Allocations for the financial year 1982-83 ...	—	20,000,000	—	30,000,000
Balances at 31st March 1983 as per Balance Sheet	<u>30,070,313</u>	<u>457,152,793</u>	<u>21,530,055</u>	<u>232,730,236</u>

## **II. Paid-up Capital and Reserve Funds at 31st March 1983 (after allocation) were represented by:**

	<u>Paid-up Capital</u>	<u>Reserves</u>	<u>Total</u>
Net assets in			
Gold ... ..	295,703,125	366,420,484	662,123,589
Currencies ... ..	—	375,062,933	375,062,933
	<u>295,703,125</u>	<u>741,483,397</u>	<u>1,037,186,522</u>

## 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  
Bengt Dennis, Stockholm  
Dr. W.F. Duisenberg, Amsterdam  
Jean Godeaux, Brussels  
Renaud de la Genière, Paris  
Karl Otto Pöhl, Frankfurt a/M.  
The Rt. Hon. Lord Richardson of Duntisbourne, London  
Dr. Johann Schöllhorn, Kiel  
Baron de Strycker, Brussels

### 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