Economic commentary

Total output and manufacturing output

Total output is still below the previous peak reached in 1974.



[a] Affected by strikes in the first quarters of 1972 and 1974.

Industrial production in the main industrial countries^[a]

Industrial output has continued to expand only slowly.



b] United States, Canada, Japan, France, Italy, and Western Germany. Slow world economic growth in recent quarters has not been favourable to an expansion of UK output, which on this occasion has depended particularly heavily on the growth of exports. The domestic economy remains relatively depressed (see chart): the recovery which began towards the end of 1975 was checked during 1976, and growth is still hesitant.

Public expenditure in the past year or so has, by design, been tightly constrained. At the same time, in some contrast to previous cycles, the authorities have found the constraints imposed by the balance of payments and inflation so great that they have been able to do little to stimulate demand in the private sector. Although the Government's job-creating measures have helped to contain the rise in unemployment, both fiscal and monetary policy had to be increasingly restrictive. The sharp decline in the exchange rate last year – now partly reversed – raised the cost of imports, and this year has caused retail prices to rise for a while more rapidly.

The pound has been kept fairly close to \$1.72 in recent months, after recovering strongly late last year. The current account of the balance of payments has moved into surplus, where it should remain for a considerable time, because of growing supplies of North Sea oil – the trend of trade other than in oil is less favourable (see page 141).

Given the authorities' determination to prevent a large expansion of money incomes, the Chancellor announced in March that he expected sterling M_3 to rise by between 9% and 13% in 1977/78 – similar to the range previously set for 1976/77 (though sterling M_3 actually increased by only 7% in that year). Some issues concerning monetary targets, which may deserve to be discussed more widely, are set out in the concluding assessment (page 149).

International developments

In the main industrial economies as a whole, output continued to grow slowly (see chart). Nevertheless, governments remain cautious in expanding demand, for fear of rekindling inflation. There has in fact already been an acceleration in consumer prices, though not yet apparently in wages.

The US economy has recovered strongly from the disruption to activity caused by the exceptionally severe weather earlier in the year. In the first quarter, gross national product rose by $1\frac{1}{2}$, in real terms - much faster than in the second half of last year: fixed investment remained weak, government expenditure was again lower than planned, and the balance of trade deteriorated; but consumers' expenditure and stockbuilding each increased strongly. Unemployment had fallen to 7% by May. The US Administration decided that any further stimulus to the rate of growth would produce overrapid expansion and faster inflation: they accordingly abandoned the proposed personal and business tax reliefs (together worth \$12 billion), which formed the greater part of the reflationary measures planned for this year (and which might have added $\frac{10}{2}$) or more to GNP). The Administration now expect the economy to grow as fast without the tax cuts as they had previously expected it to do with them (i.e. by around 6% from the fourth quarter of 1976 to the fourth quarter of 1977). However, the measures provisionally intended for 1977/78 (worth nearly \$16 billion) are so far little changed. Although the present rate of economic recovery appears to be broadly in line with previous cycles, the last recession was so

deep that output took a long time to pass the previous peak in 1974.

Elsewhere, there are fewer signs of recovery. In Japan, industrial output has remained little changed since the middle of last year; domestic demand has been stagnant, but exports have continued to rise. Some modest reflationary measures have recently been adopted: a tax cut announced in the Budget has been increased, expenditure on public works is being accelerated, and bank rate has been reduced twice. In Western Germany, industrial output appears to have risen a little faster in the first quarter than in the fourth. Exports have picked up a little this year, after falling back around the turn of the year, but domestic orders have declined. Consumption remains weak, and fixed investment is unlikely to recover while the present low capacity utilisation persists. The authorities have introduced a modest medium-term public investment programme (worth $\frac{10}{4}$ of GNP in each of the years 1977 to 1980), together with measures to support employment in particular areas. They are still intending to increase the rate of value added tax from the beginning of next year, but by less than originally planned. The French economy has also remained sluggish: industrial production rose only slightly in the first quarter, and official forecasts are now for a lower rate of growth in GNP this year $(3\% - 3\frac{1}{2}\%)$. Nevertheless, here too only minor reflationary measures are in prospect, in particular a series of subsidised loans for private investment in 1977, equivalent to $\frac{1}{4}$ % of GNP, and selective measures to reduce unemployment. In Italy, the deflationary measures adopted towards the end of last year appear now to be taking effect: after rising by 4% in the fourth quarter, industrial production rose more slowly in the first and appears to have fallen subsequently. The conditions attached to the \$530 million loan arranged with the International Monetary Fund imply that restrictive policies will be continued, and the Government expect GNP to grow by only 2% this year, compared with $5\frac{10}{2}$ in 1976.

On the commodity markets, there were further large increases in the first quarter in the prices of tea (which more than doubled), coffee and cocoa. In April and May, however, the price of cocoa rose more slowly, while tea and coffee prices fell back : the last two may now in fact have passed their peak. If so, food prices generally may rise rather more slowly than during the last two years.

In contrast to food prices, raw material prices are on average no higher than they were last summer. But by the end of May, *The Economist* all-items dollar index of commodities was 20% higher than its previous peak in July last year.

Consumer prices in general have been rising faster recently particularly in countries with relatively low inflation rates (see chart) - largely because of dearer food. In the United States, consumer prices were over $l\frac{1}{2}$ higher in the first quarter than in the fourth - a faster increase than at any time during the previous eighteen months; and wholesale prices have also been rising steeply - in both cases, partly because of the effect of the bad weather on food prices. The Administration have introduced a programme of anti-inflationary measures, most of which are voluntary, and monetary policy has been tightened slightly. In France, consumer prices also rose by about $l_{\frac{1}{2}}^{10}$ in the first quarter compared with the fourth, even though VAT rates were reduced in January. In Italy, increases in VAT have added to price inflation this year: in the first quarter, consumer prices were $4\frac{10}{2}$ higher than in the previous three months. In Western Germany, the rate of price inflation remains lower than in the other main industrial countries, but even there the rise in

Consumer prices in the main industrial countries

In recent months, dearer food has raised the average rate of price inflation.





The growth of trade has slowed down even further in recent months.



consumer prices accelerated to nearly 2% in the first quarter. In Japan, on the other hand, the rise in both consumer and wholesale prices slowed down during the quarter.

Wage settlements so far this year appear to be either much the same as in 1976, or slightly lower – except in Western Germany, where they have been a little higher. Real earnings rose last year in all the main industrial countries apart from the United Kingdom, but are likely to rise less this year if consumer prices go on increasing at the present rate.

The earlier rise in exports by these industrial countries almost came to an end around the turn of the year (see chart). Trade with the oil-exporting countries continued to expand strongly, but elsewhere demand has been subdued, and exports to non-oil developing countries may even have fallen. At the same time, imports by the main industrial countries have also risen more slowly, partly because oil imports fell back after heavy stockpiling ahead of the price increase on 1st January; in the first quarter, the group as a whole had a slightly smaller trade deficit than in each of the previous two. Within the total, the US deficit widened considerably, partly because of the severe weather, while Japan's surplus was larger than in any quarter last year.

The continuation of large imbalances on current account between the stronger and weaker industrial countries, and the persistence of high unemployment and inflation, formed part of the background to last month's summit meeting in London. There was also concern about the OPEC surplus which, contrary to earlier hopes, remains obstinately high, at around \$40 billion a year.

In the declaration issued after the meeting, the major countries gave a firm commitment to achieve their existing growth targets or stabilisation programmes; to seek additional financing facilities for the IMF; to reject protectionism in international trade; and to increase aid to developing countries. They also agreed on the need to reduce their dependence on imported oil.

The domestic economy

The balance of payments

Towards the end of 1976 there was a marked revival of external confidence, which was reflected in heavy demand for sterling. Sizable capital inflows took place, and the exchange rate recovered from a low point of $1.55\frac{1}{2}$ in late October to 1.70 by the end of the year. The improvement in sentiment was maintained in the first quarter, when a further substantial net inflow of capital and heavy official borrowing abroad together far outweighed a continuing, though smaller, current account deficit. The authorities intervened frequently, buying foreign exchange to keep the exchange rate close to 1.72;[1] the reserves increased by a massive $55\frac{1}{2}$ billion.

The pattern was much the same in April, but sterling was less in demand during May. In the two months together, the reserves rose by \$280 million, after further official borrowing abroad of \$380 million (mainly a second drawing under the IMF stand-by arranged in December). The exchange rate changed little during the period and was just below \$1.72 at the end of May.

Much of the upward pressure on sterling since November stemmed from the once-for-all repayment of sterling lending to finance third-country trade (which had been prohibited in November) and also, probably, from the unwinding of leads and lags. Rather than allow a short-term appreciation of the rate that

[1] Developments in the foreign exchange market are described on page 165.

UK export competitiveness and profitability

UK price-competitiveness has deteriorated somewhat since the exchange rate stopped declining.



[d] Sterling's effective exchange rate index.

Current account of the balance of payments

The current account deficit narrowed a little further in the first quarter.

£ millions: seasonally adju	sted									
				19	76				19	77
	1	st tr	2 q	nd tr	3 q	ird I tr	4	lth 1 tr	1	st I tr
Exports of goods Imports of goods		5,610 5,150	6	,210 ,130	6	,400 ,550	7	2,070 8,060	7	,420 ,380
Visible balance Invisible balance	+	540 420	- +	920 520	- 1 +	.150 610	+	990 580	- +	970 640
Current balance	_	120	_	400	_	540	_	410	_	330
Percentage changes from preceding quarter (goods): Volume of exports Volume of imports Unit value of imports Unit value of imports Terms of trade	+ - + + +	1.5 1.0 4.2 3.3 0.9	+ + + -	4.3 6.7 6.9 8.7 1.6	- + + + +	2.1 2.4 5.6 5.3 0.2	++++-	4.9 0.1 5.8 7.4 1.5	- + + +	0.1 3.1 4.9 3.2 1.6
Effective exchange rate	-	1.3	_	8.6	_	2.6		7.1	+	3.7

Components may not sum to totals owing to rounding

North Sea oil

North Sea oil is now making a major contribution towards improving the current account.

	1975	1976	19	77
	Year	Year	l st q tr	Year (forecast)
Production (million tonnes) Benefit to visible balance in	1.1	11.5	7.5	40-45
oil (£ millions)	50	650	480	2.500-3.500

was liable to be reversed when such inflows came to an end, the authorities preferred to aim for stability at around \$1.72, and to this end were prepared to intervene as appropriate in both directions.

Although this stability has partly eroded the United Kingdom's price-competitiveness, which had been exceptionally favourable last autumn (see chart), it should help towards a sustained reduction in the pace of inflation. The intention remains as set out in the Chancellor's letter of intent to the IMF in December – to ensure that UK manufactured goods are competitive at home and abroad. In his Budget speech, the Chancellor pointed out that price-competitiveness was critical, but stressed that it would be better achieved through increased productivity and pay restraint rather than by depreciation, which worsens price inflation. He also emphasised the importance of other aspects of competitiveness, such as quality, delivery dates, and after-sales service.

Current account[1]

The current account deficit in the first quarter, at some £330 million, was somewhat smaller than in the fourth, thanks to an improvement on both visible and invisible accounts (see table). The visible deficit would probably have narrowed further between the two quarters if the seasonal adjustments to imports in December and January had been able to allow more fully for the change in the pattern of holidays.[2] In April, the trade deficit was smaller still, at little more than £100 million, implying a sizable surplus on current account.

The volume of imports rose by 3% in the first quarter. But a comparison of February to April with the previous three months – which would eliminate any distortions arising from the seasonal adjustment to imports in December and January – shows a decline of 4%. Imports of crude oil fell sharply, by over 25\%, while other categories together fell slightly to 2% above the average in 1976.

The volume of exports was virtually unchanged in the first quarter, after rising by 5% in the fourth. A sharp increase in April raised the average for the first four months of the year to some 5% higher than in 1976 – probably rather faster than the growth in UK export markets over the same period.

The firmer exchange rate since the autumn has helped to contain import prices which, in sterling terms, have recently been rising only half as fast as in 1976, in spite of the steep increase in many commodity prices earlier this year. The rise in export prices has also slowed down, particularly in April. Much of the improvement in the terms of trade between November and January has since been reversed. In spite of wide fluctuations in the pound, the terms of trade have moved within a fairly narrow range throughout the past two years, largely because export prices in sterling have tended to move inversely with changes in the exchange rate.[3]

North Sea oil has begun to make a major contribution towards improving the current account. The table shows the net benefit to the visible balance in oil: by the end of this year, output should be equivalent to about half of domestic requirements, and by 1980 to all of them.[4]

The surplus on invisibles increased to £640 million in the first

-] This section is in seasonally-adjusted terms.
- [2] Export figures relate broadly to shipments from mid-month to mid-month, and were thus probably much less distorted.
- [3] Particularly when the goods are invoiced in foreign currency a practice which is now thought to apply to over one quarter of UK exports.
- [4] The North Sea programme also affects the overall balance of payments in other ways, for example through imports of related goods and services, capital inflows, and interest and profits due abroad.

Summary of the balance of payments

There was a massive rise in the reserves in the first quarter, when capital inflows and official borrowing were both heavy.

£ millions: not seasonally adjusted	1				
			1976		1977
	l st q tr	2nd qtr	3rd qtr	4th qtr	lst qtr
Current balance	- 250	- 43	- 420	- 380	- 450
Sterling holdings of: Central monetary institutions International organisations Other holders Non-official gilt-edged holdings UK banks' external sterling claims: [a] UK export credit Other UK banks' net external liabilities in foreign currencies Other capital flows and the balancing item	$ \begin{array}{r} - 90 \\ + 10 \\ + 10 \\ - 220 \\ - 250 \\ + 160 \\ - 50 \\ - 680 \end{array} $	-92 -1 +1 -23 -21 -16 -1,96	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{r} -130 \\ +70 \\ +50 \\ +50 \\ +50 \\ +240 \\ +130 \\ +70 \\ \hline -130 \end{array}$	$\begin{array}{r} + & 200 \\ - & 10 \\ + & 200 \\ + & 370 \\ - & 200 \\ + & 190 \\ + & 190 \\ + & 400 \\ + & 1,210 \\ + & 1.910 \end{array}$
Official financing: Drawings on the IMF Drawings on other monetary authorities(+) HMG loans Other borrowing[b] Decrease (+) in reserves	+ 580 	+ 44 + 58 + 58 + 35	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- 920 - 440 + 620	+ 680 + 580 + 20 - 3,200

Components may not sum to totalsowing to rounding.

[a] Increase (-). Also includes lending by a few financial institutions other than banks, and export credit refinanced by the Export Credits Guarantee Department.

[b] Borrowing in foreign currencies by the central government, and by public sector bodies under the exchange cover scheme. quarter, because of higher net earnings from services - in particular, from travel, insurance, and construction work abroad.

The current account has now moved into surplus, where it should remain for a considerable time (apart from monthly fluctuations), thanks to the North Sea programme. Imports other than oil are at present being held down by weak demand, but must be expected to pick up again when domestic activity recovers more strongly. Meanwhile, exports have been restrained by slow growth in demand abroad (see previous section), although the UK share in overseas markets has probably increased in recent months.

Capital flows and official financing

As already noted, there was a very heavy net inflow of capital in the first quarter (see table). Outstanding lending abroad in sterling by UK banks, other than credit for UK exports, declined by £170 million, reflecting the repayment of finance for third-country trade; this brought the total fall since the exchange control restrictions were announced last November to £310 million. Where such lending was extended directly by UK merchants, repayments are recorded elsewhere in the balance of payments accounts, for example under suppliers' export credit, or, if unrecorded, they form part of the balancing item - both of which did, in fact, show an inflow in the quarter. However, in many cases merchants may have replaced sterling with foreign currency credit, borrowing such currency themselves from UK banks; the latter in turn raise the funds mainly from abroad - such borrowing in fact rose substantially in the first quarter (though this will have been partly for other reasons as well). Most of the direct benefit to the balance of payments from these exchange control measures - perhaps amounting in all to around £1 billion - had probably worked through by the end of the first quarter; but there may be some offsetting effects (such as smaller earnings from merchanting), which would spread over a longer period.

Overseas private sterling holdings rose by £200 million in the first quarter. There were also large purchases of British government stocks by private investors abroad : gilt-edged yields appeared attractive in conjunction with the general improvement in confidence.[1] But these purchases represented only a small proportion of total official sales of gilt-edged during the quarter. Official sterling holdings of overseas countries also rose by about £200 million. This was largely accounted for by one country whose balances had been exceptionally low at the end of last year. Changes in the holdings of oil-exporting countries were relatively small.

There was an official financing surplus of £1.8 billion in the quarter; and a total of £1.3 billion was drawn from the IMF and on the Government's euro-dollar facility.[2] On the other hand, public sector bodies borrowed very little under the exchange cover scheme. The official reserves rose by the equivalent of £3.2 billion.

In April, the Government offered foreign currency bonds to overseas official holders of sterling, in exchange for their sterling holdings. The offer – for subscription on 14th April – was designed to promote an orderly further reduction in the international reserve currency role of sterling. To this end, the bonds, which have maturities ranging from five to ten years, were offered on attractive terms in relation to prevailing yields. Bonds equivalent to £395 million were allotted (representing about 17% of total exchange reserves in sterling), of which 45% was denominated in

^[1] Private holdings of gilt-edged are not included in sterling holdings, but are classified instead within overseas investment in the UK public sector (see Table 25 in the statistical annex).

^[2] See the March Bulletin (pages 8-9).

US dollars, 23% in deutschemarks, 21% in Swiss francs, and 11% in yen.

Output and demand[1]

The growth of output remains hesitant. A fairly sharp rise in the fourth quarter was followed by a much smaller increase in the first three months of this year, when the output measure of GDP is provisionally estimated to have risen by $\frac{1}{2}$ %, and was only about $1\frac{1}{4}$ % higher than a year earlier. Manufacturing output rose by $3\frac{10}{2}$ % over the same twelve-month period (see table). The growth rates of GDP and industrial production will in future be strongly influenced by output of North Sea oil, even though the indices are at present based on 1970, when oil was relatively much cheaper.

The expenditure measure of GDP was probably much the same as in the fourth quarter; but within the total, some of the main components of demand changed quite appreciably. There was a particularly sharp fall (of about $2\frac{10}{2}$) in consumer spending, reflecting a further decline in real personal incomes; and the balance of payments probably absorbed fewer real resources than in the fourth quarter. On the other hand, private industry[2] rebuilt stocks on a very large scale: this may have been partly involuntary - reflecting the steep decline in consumers' expenditure - but the rise in stocks of raw materials and work in progress may also indicate a modest improvement in business confidence (such as emerged from the Confederation of British Industry's quarterly survey in April). The course of stock building is particularly difficult to forecast, but total demand is unlikely to be buoyant in the months ahead. The increase in manufacturing investment this year, which had earlier been forecast at up to 20%, now seems likely to be much smaller: investment by manufacturing industry actually fell by 3% in the first quarter, and the Department of Industry's investment intentions survey in June suggests a rise of only 6% - 10% this year (but a much larger increase, of over 20%, in 1978).

The volume of exports is expected to rise fairly strongly in the next year or so, but perhaps not all that much faster than imports, and the net increase in demand for domestic output could be quite small.

Unemployment[3]

Contrary to most expectations, unemployment has not continued to rise in recent months. In May, the number of unemployed in the United Kingdom (excluding school-leavers and adult students) fell for the third time this year, to 1,315,900 – rather less than last September. Notified vacancies rose by more than 30,000 in this period, to 161,200 – the highest for two years. Overtime working has also been increasing for several months.

These changes are surprising in a period when demand has been weak – the Government's job-creating schemes can provide only part of the explanation – and may possibly indicate that the economy is more buoyant than other indicators suggest. It may also be that the length and severity of the recession have altered the previous relationship between output and employment; and low investment in recent years may have slowed down the long-term rate of growth of productivity.

Labour productivity in the United Kingdom has improved only slightly since 1973, suggesting that employment may have been

Domestic activity

Output grew little in the first quarter.

Percentage changes on previous of	quarter,	1970 p	rices: s	easona	lly adju	sted
	1975		19	76		1977
	4th qtr	lst qtr	2nd qtr	3rd qtr	4th qtr	lst qtr
GDP (output measure) Industrial production[a] of which, Manufacturing	+ 1 + 1 1	$+ \frac{1}{2}$ + 2	- 1 - 1	- 1	$+ 1\frac{1}{4}$ + $2\frac{1}{4}$	$+ \frac{1}{2} + 1$
GDP (expenditure measure) Consumers' expenditure	$+ 1\frac{1}{3}$ + $1\frac{3}{3}$ - $\frac{1}{2}$	$+2\frac{1}{4}$ +2\frac{1}{4} +1 $\frac{1}{2}$	$+\frac{1}{2}$ -21 -1	$+\frac{3}{4}$ + 1	$+ 2\frac{1}{2} + 2 + 1\frac{1}{3}$	$+ \frac{3}{4}$ $- 2\frac{1}{2}$
Retail sales Exports (goods and services) Imports (goods and services)	$+ \frac{1}{4} + 4\frac{1}{2} - 1$	$+ / \frac{1}{2} + \frac{1}{4} - \frac{3}{4} $	$+ \frac{1}{3}$ + $3\frac{1}{3}$ + $5\frac{1}{2}$	$+ / \frac{1}{4} + \frac{3}{4} + 2$	- ½ +4 -	$-3\frac{1}{4}$ - $\frac{1}{4}$ [b] + $2\frac{3}{4}$ [b]

... not available. – nil or less than 4%

[a] Adjusted to allow for the fact that some components are based on deliveries rather than output.

[b] Goods only.

^[1] Figures in this section are seasonally adjusted and at constant (1970) prices

^[2] Manufacturing and the distributive and service industries (excluding shipping).

^[3] Figures for unemployment and vacancies are seasonally adjusted.

Output and employment in manufacturing industry

Employment in manufacturing industry probably recovered a little in the second half of last year.



[[]a] The broken line indicates provisional figures

Rate of increase of average earnings during stages one and two of the present incomes policy

As in stage one, average earnings may rise more slowly towards the end of stage two.



kept abnormally high. Employment in manufacturing industry has risen a little since the middle of last year (see chart), perhaps indicating that firms planned for a higher level of demand than in fact occurred – the large increase in stockbuilding in the first quarter (see above) lends some support to this view. An improvement in companies' financial position – partly associated with a decline in the real cost of holding labour, as prices continued to rise faster than wages – may also have prompted companies to retain labour, or to go on using old plant requiring more labour than modern equipment. A further shake-out of labour might still take place, particularly if wage rates were to rise much faster than prices later in the year.

Unemployment among the young remains a serious problem. With the number of unemployed school-leavers expected to rise from 45,000 in May to around 200,000 by July, competition for jobs is likely to remain intense throughout the year.

Costs and prices

Settlements notified to the Department of Employment suggest that the formal limits of the second stage of incomes policy have been well observed. However, the rise in average earnings during the eight months to March (7.9%) was larger than had been originally expected for the whole of stage two (see chart). As occurred during stage one, the rate of increase in earnings – at present 12\% at an annual rate – may decline before the end of the current year of the policy, because settlements tend to be concentrated in the earlier part of the year. Such a fall would be more pronounced if some employees were not to settle until after the end of stage two.

Payments-by-results schemes and overtime have each added to the rise in average earnings. Between July 1976 and March this year, higher overtime (up by a fifth in manufacturing industry) may have accounted for over one percentage point of the rise in earnings. Overtime may have risen partly because the economy has been more buoyant than most statistics suggest (see above), but probably also because employees have become more eager to work longer hours since their real incomes have been squeezed. Moreover, overtime rates have not fully reflected the increase in basic wages over the past two or three years, so that the relative cost of overtime to employers is less than it was. Mobility of labour and the implementation during stage two of pay increases agreed during stage one may also have contributed to the rise in earnings.

Since July 1975 (when the first stage of incomes policy was announced), gross average earnings have declined by about 3°_{0} in real terms. This largely reflects earlier domestic cost pressures, which were greater in the United Kingdom than elsewhere, and which influenced prices not only directly, but also indirectly (through the fall in the exchange rate). Most of the fall in real wages has taken place during stage two.

The table overleaf shows that, although imports amount to only about 25% of total final expenditure, higher import costs (mainly reflecting the depreciation of sterling last year) can be identified with over 40% of the increase in final prices in the second half of 1976 – almost twice as much as can be directly associated with higher labour costs (which had their largest direct effect on inflation in the second half of 1974 and the first half of 1975).

More recently, the rate of inflation has continued to rise as the effects of dearer food, tax changes in the Budget, larger national insurance contributions by employers, and cost increases already

Factors contributing to the general rise in UK prices[a]

Import costs contributed much more than labour costs to inflation in 1976.

Percentage increase on previous period(b)

rereentage mercase e	in previous	period(o)					
	General	of which, attributable to:					
	[c]	Labour costs [d]	Net tax es on expendi- ture	Other factor incomes [e]	Import costs		
	(1)	(2)	(3)	(4)	(5)		
Shares of total final expenditure in 1976 (percentage)	100	49.5	8.4	19.1	23.1		
1972 1st half	2.8	1.8	- 0.2	0.2	0.9		
2nd half	4.3	2.4	0.3	0.2	1.4		
1973 1st half	4.5	0.6	- 0.4	2.1	2.2		
2nd half	6.6	3.1	0.2	- 0.9	4.1		
1974 1st half	10.2	3.9	- 0.1	0.4	6.1		
2nd half	10.6	7.8	- 0.4	1.7	1.5		
1975 1st half	12.0	8.9	0.9	2.0	0.3		
2nd half	11.4	5.4	1.8	2.2	2.0		
1976 1st half	6.2	2.2	0.7	1.2	2.1		
2nd half	7.6	1.7	0.8	1.9	3.3		

[a] The value of each cost component was divided by total final expenditure to give costs per unit of expenditure; these were then expressed as percentages of the implicit price index of total final expenditure in the preceding year to give increases in total costs attributable to particular components. No time-lags were incorporated.

[b] Figures in columns 2-5 may not sum to those in column 1 because of rounding.

[c] The implicit price index of total final expenditure.

 Incomes from employment per unit of total final expenditure at 1970 market prices.

[e] Self-employment incomes, profits and trading surpluses of public corporations (all net of stock appreciation), rent and the residual error - all per unit of total final expenditure at 1970 prices.

Personal income, consumption and saving

The decline in income since the autumn has been accompanied by lower saving and, more recently, by a fall in consumption.



in the pipeline (including those resulting from sterling's depreciation) have worked through to retail prices, which in April were $17\frac{10}{2}$ higher than a year earlier. However, if the exchange rate remains stable and wage inflation does not accelerate, prices should – after a period – begin to rise much more slowly.

Personal incomes and spending[1]

A fall of around 3% in real personal disposable income in the fourth quarter of 1976 was followed by an estimated further decline of over $1\frac{10}{2}$ in the first quarter of this year. Income from employment fell in real terms, and tax payments continued to grow faster than taxable income. On the other hand, total income was partly sustained by a further rise in current grants from central and local government. Even though disposable incomes fell in the fourth quarter, consumption increased in real terms by over 1%: much more was spent on wines and spirits (in anticipation of larger revenue duties from 1st January 1977), consumer durables, and fuel. The saving ratio accordingly fell very sharply, by almost four percentage points, to about $1 \frac{12}{2}$. In the first quarter of 1977, however, consumption fell by over $2\frac{10}{2}$ sales of food, drink and tobacco in particular were well down (by more than 5%), after the burst of spending in the previous quarter; and the saving ratio is estimated to have risen to about $12\frac{10}{2}$ (see chart).

Prices appear recently to have gone on rising faster than income from employment, implying that consumer spending has fallen further in the current quarter: the volume of retail sales in April was below the average for the first quarter. The sharp decline in both real personal disposable income and consumers' expenditure in the first quarter reflected the impact of incomes policy and the depreciation of sterling last year, most of which has probably worked through by now. The decline is likely to be checked in the second half of the year, particularly if the Chancellor is able to implement the conditional tax cuts announced in the Budget.

Housebuilding[1]

Fixed investment in housing is estimated to have been unchanged between the third and fourth quarters of 1976, with a fall of 7%in the private sector offset by a similar rise in the public sector. Total housebuilding activity was also little changed in 1976 as a whole, when there was a moderate decline in the private sector, but a small increase in the public sector. However, as a percentage of GDP, investment in housing fell slightly in 1976, to 3.7%, and is likely to do so again this year : public spending is subject to tight cash limits, and private new investment may respond only slowly to the recovery in receipts by the building societies.

After falling sharply (by 30%) in the fourth quarter of 1976, public sector starts declined a little further in the following three months as a whole, but entirely because of an unusually small number in February: starts recovered strongly in March, and although they fell back in April, a further (modest) rise would be quite consistent with the cash limits imposed on public housebuilding this year. Even so, on present policies the rate of starts is unlikely to reach the peak of the first quarter of last year, either this year or in 1978.

More finance has recently become available for private sector housing. Net receipts by building societies rose by 25% in March,

[1] This section is in seasonally-adjusted terms.

Building society funds

New commitments have begun to rise in response to a



Industrial and commercial companies' profits

Gross trading profits at current prices recovered substantially in 1976; but for the year as a whole, the share of net profits in net domestic income was little higher than in 1975.

r millions, cu	rrent pric	es: seasor	ially adjus	rea		
	Gross trading profits	Stock appre- ciation	(1)-(2)	Capital consump- tion[a]	Net trading profits (3) (4)	Share of net profits in net domestic income[b]
	(1)	(2)	(3)	(4)	(5)	(6)
						Per cent
1965[c] 1969[c] 1972[c] 1974 1975 1976	5,050 5,800 8,350 11,800 11,740 14,810	250 590 1,070 4,910 4,110 5,400	4,800 5,210 7,280 6,890 7,630 9,410	1,150 1,510 2,210 3,140 4,190 5,170	3,650 3,700 5,070 3,750 3,440 4,240	12.9 10.4 10.3 5.8 4.2 4.5
1975 1st qtr 2nd qtr 3rd qtr 4th qtr	2,960 2,820 2,810 3,150	1,270 980 910 940	1,690 1,840 1,900 2,210	950 1,020 1,080 1,140	740 820 820 1,070	3.9 4.1 3.9 4.9
1976 Ist qtr 2nd qtr 3rd qtr 4th qtr	3,400 3,510 3,710 4,180	1,090 1,300 1,410 1,590	2,310 2,210 2,300 2,590	1,210 1,270 1,330 1,370	1,100 940 970 1,220	4.9 4.1 4.1 5.0

Quarterly figures may not sum to annual totals owing to rounding.

[a] Figures for all quarters, and the year 1976, have been estimated by the Bank

[b] Total domestic income less stock appreciation and capital consumption.
 [c] These years correspond, broadly, to cyclical peaks.

to £430 million, and improved again in April, to £550 million (see chart). The very large inflow in April can be explained partly by a further decline in competing short-term interest rates (particularly on bank deposits), which widened the differential in favour of the societies, and partly by the termination of the highly competitive sixteenth issue of national savings certificates at the end of March. Against this background, the Building Societies Association recommended on 15th April that members' share rates should be reduced from 7.8% to 7% (net of income tax at the basic rate) as from 1st May, thereby allowing mortgage rates to fall from $12\frac{10}{4}$, to $11\frac{10}{4}$. Since that recommendation was made, competing interest rates have again declined, leaving the societies with a differential which should ensure further substantial inflows and enable them to rebuild their liquidity. In response to the recent rise in net receipts, new commitments rose by some 20% in March to £470 million, and remained nearly as high in April. They were then some £45 million below the monthly average for 1976, but are expected to rise further. These increases will take a few months to work through to gross advances which, at £455 million in April, were some 10% below the monthly average for last year.

Confidence now appears to be reviving a little in the private housebuilding industry. Many more houses were started in March and April, and the latest three-monthly comparison (February/April with November/January) showed a rise for the first time for nearly a year. The number of starts in April (12,000) was still some way below the monthly average for 1976, but the recovery is likely to continue. Even after the reduction in rates to investors, the building societies should be well placed to meet a strong demand for loans. A larger supply of mortgages would stimulate demand for houses; and the associated rise in sales, combined with firmer house prices, would provide some further encouragement to the building industry.

Company spending and finance[1]

Profits recovered strongly in money terms last year, particularly in the fourth quarter. Trading profits of industrial and commercial companies were some 25% higher than in 1975, both before and after deducting stock appreciation and providing for depreciation (at replacement cost). Nevertheless, with the written-down value of companies' assets (at current prices) also rising rapidly during the year, the improvement in profits did no more than maintain the average rate of return, which has now been extremely depressed for several years. Moreover, about one fifth of the increase in profits was attributable to a relatively small number of companies with interests in the development of North Sea oil. (A fuller discussion of profitability and some other aspects of companies' recent financial position is contained in the supplementary note on page 156.) Nor did the rise in profits do much to restore their share of domestic income: there was a marked improvement in the fourth quarter, but for the year as a whole the share was almost the same as in 1975, at about $4\frac{10}{2}$ (see table). The share of profits in net domestic income is now only about a third as large as it was in the mid-sixties: most of the corresponding rise elsewhere has been in pre-tax income from employment.

Industrial and commercial companies' cash flow[2] improved from just under £5 billion in 1975 to about $\pounds 6\frac{1}{2}$ billion last year. But their financial deficit actually widened slightly, because of an increase in fixed investment (in money terms), together with a

[2] Defined as undistributed income before providing for depreciation, *plus* net capital transfers, *less* stock appreciation.

^[1] This section is in seasonally-adjusted terms

Industrial and commercial companies' cash flow[a] and financial surplus

Cash flow improved last year, but capital formation was larger, and net borrowing increased.

£ millions, current prices: seasonally adjusted

	rent pri		inter			
	Cash flow	Gross domestic fixed- capital forma- tion	Physical stock- building	Net acquisition of financial assets (1)-(2)-(3)	srithin Liquid assets [b]	which: Bank borrow- ing[b]
	(1)	(2)	(3)	(4)		
1974 1975 1976	3,900 4,950 6,640	5,910 6,990 7,540	1,180 -1,720 - 240	- 3,190 - 320 - 660	+ 90 + 1,840 + 1,920	4,410 420 2,490
1975 Ist qtr 2nd qtr 3rd qtr 4th qtr	1,070 1,130 1,250 1,490	1,620 1,750 1,930 1,690	- 450 - 490 - 550 - 240	- 100 - 130 - 130 + 40	+ 540 - 280 + 1,330 + 250	- 200 - 270 + 240 - 180
1976 Ist qtr 2nd qtr 3rd qtr 4th qtr	1,670 1,700 1,560 1,710	1,660 1,970 2,040 1,880	$ \begin{array}{rrrr} - & 90 \\ - & 230 \\ - & 80 \\ + & 150 \end{array} $	+ 100 - 40 - 400 - 320	+ 460 + 670 + 640 - 30	+ 270 - 810 - 910 - 860

Quarterly figures may not sum to annual totals, partly because of rounding (see also page 187).

[a] See footnote [2] on page 145.

[b] Assets increase + /borrowing increase - ; see Table E on page 178.

much reduced rate of de-stocking; and towards the end of the year, companies' liquidity position appeared to be worsening (see table). The volume of fixed investment by private industry[1] now seems likely to increase much less in 1977 than had been earlier expected. In the first quarter, investment by manufacturing companies fell by about 3%, while investment by the distributive and service industries declined by some 2%. According to the Department of Industry's investment intentions survey in June, the rise in private industrial investment this year may be little more than 5% (of which 6%-10% for manufacturing, and 3%-5% for distribution and services). This is not surprising, given the prospect of a slow growth in output and considerable spare capacity in many firms.

On the other hand, private industrial stockbuilding in the first quarter was very large (see page 142). Manufacturing companies increased their stocks by some £210 million (at 1970 prices), and wholesalers and retailers by £50 million and £80 million respectively.

The public sector

The public sector borrowing requirement in the last financial year is provisionally estimated at $\pounds 8.7$ billion – some $\pounds 3$ billion less than forecast at the time of the 1976 Budget. Expenditure (including debt interest) was lower, and revenue appreciably higher, than originally expected (see below).

At the time of the April Budget, there was room for a much larger reduction in taxation than had seemed likely during the negotiations with the International Monetary Fund last December. The Chancellor was able to announce a net reduction in taxation of £1.5 billion (in a full year), designed partly to redress the balance of direct and indirect taxation, and partly to ease the burden of marginal tax rates on higher incomes. (Part of the cut in income tax is conditional upon a satisfactory agreement being reached on a third stage of incomes policy.) Even so, the whole package is likely to do little more than offset the effects of fiscal drag last year. The volume of public expenditure on goods and services was forecast to fall by 2% between the first halves of 1977 and 1978; and the public sector borrowing requirement in 1977/78 was expected to fall slightly in money terms (to £8.5 billion – a little less than the limit agreed with the IMF), but quite substantially as a proportion of GDP. Thus, fiscal policy remained restrictive, though it will be slightly less so after the latest increase in petrol tax has been cancelled in August, and after the rebate to telephone users.

In spite of the high rate of inflation, expenditure at current prices during 1976/77 appears to have been £1 billion less than forecast. Local authorities may have spent slightly more, and public corporations a little less, than expected; but central government spending was well below forecast. This partly reflects the stringency with which the new controls over public expenditure were exercised. First, the volume of total expenditure was, in fact, accommodated within the plans published in the White Paper on public expenditure in February 1976, even though the unforeseen depth of the recession generated additional spending, for example on the job-creation programme and on temporary employment subsidies. Thus, local authorities appear to have cut back on the volume of their investment in order to leave room, within the spending guidelines, for the higher rate of current expenditure which they originally expected to undertake. Second, the cash limits announced at the time of the 1976 Budget were not raised significantly during the year, even though prices in general rose faster than had been expected when the limits were calculated.

[1] Manufacturing and the distributive and service industries (excluding shipping).

Public corporations' gross trading surpluses in real terms[a]



Monetary objectives

Although rising in April, sterling M_3 and total M_3 each remained below the guidelines for the year. Percentage increase since mid-April 1976 Seasonally adjusted Range of sterling M₃ consistent with DCE commitment[a] 14 Target for M [b] 12 10



As announced in December 1976.

[b] As first announced in July 1976.

The incomes policy enabled the Government to estimate pay rises with considerable accuracy; but with average earnings in public administration rising by only $7\frac{10}{2}$ in the year to March 1977, compared with about $11\frac{10}{2}$ for the labour force as a whole, cash control may have helped to prevent wage drift. Among forms of expenditure other than pay, financial constraints on spending departments have doubtless increased efficiency, but they have also led to greater caution. In order to avoid exceeding their limits, some departments seem to have reduced the volume of spending below the amount planned. Local authorities have responded in a similar fashion to indirect cash control - via the rate support grant – over their current spending, which was clearly lower than had been planned last summer. On the other hand, a better trading performance by nationalised industries made the cash limits on their external financing requirements superfluous in almost every case. Public corporations reduced their investment by £300 million below forecast, probably in the light of a weaker long-term outlook for demand.

Public sector revenue in 1976/77 was some £2 billion higher than forecast in the 1976 Budget. Most of the broad categories of receipts were unexpectedly buoyant, especially revenue from expenditure taxes (more than £550 million above forecast - only a small part of which reflected higher rates of excise taxes on drink and tobacco, introduced in January) and the gross trading surpluses of public corporations (some £500 million higher). Some of the nationalised industries were accordingly able to finance more of their capital requirements from internal resources.

The chart shows how sharply the trading position of public corporations improved last year. Among the reasons for this better performance, much more gas and electricity were consumed, after a cyclical low point in the previous year, and production of crude steel recovered slightly. More importantly, the full effects of the decision taken in November 1974 to phase out price restraint were also felt during the year. Energy tariffs were raised by 35% in 1975 and by a further 18% in 1976; and postal and telephone charges, although unchanged in 1976, rose by 75% in the previous year. Finally, the first two stages of incomes policy slowed down the growth in unit costs, which had risen rapidly in the previous five years, particularly in the industrial groups containing the National Coal Board and the British Steel Corporation, where labour costs per unit of output were some 170% and 150% higher in 1975 than in 1970 (compared with 105% for production industries as a whole).

Monetary developments

A fall in the money stock in the three months to February 1977 has subsequently been reversed. Nevertheless, the decline during December to February reduced the growth of the money stock in 1976/77 below the guidelines which, at the end of last year, the authorities had expected to meet (see chart). Domestic credit expansion was far below the limit for 1976/77 agreed with the International Monetary Fund. Meanwhile, interest rates have fallen rapidly from the peak reached towards the end of 1976: minimum lending rate was as high as 15% in October, but fell subsequently to 8%. On occasions, the decline in interest rates appeared to the authorities to be proceeding too rapidly, in view of continuing uncertainties about the future course of inflation, and the prospective public sector borrowing requirement for 1977/78. Accordingly, on 3rd February the normal market-related formula for calculating minimum lending rate was suspended, and although reactivated on 11th March, it was again suspended on several subsequent occasions (see page 163). Yields on long-dated

DCE and the money stock $(M_3)_{[a]}$

DCE was little changed in the three months to mid-April; but sterling M₃ and total M₃ each rose, after declining in the previous three months.

£ millions

Mid-month	Apr. 76– Apr. 77 Un- adjusted	Apr.– July 76	July- Oct. 76 Seasonally	Oct. 76- Jan. 77	Jan.– Apr. 77
Central government borrowing requirement Net purchases (–) of central government	+ 5,710	+ 1,950	+ 1,910	+ 1,030	+ 1,400
Debt by hon-bank private sector Other public sector[c] Bank lending in sterling to UK private sector and to overseas[d]	- 6,070 + 1,520 + 3,060	-990 + 440 + 1.140	- 1.120 + 410 + 1.310	- 2,870 + 620 + 820	- 1,090 - 200 - 180
Domestic credit expansion External and foreign currency finance Other	+ 4,220 - 800 - 720	+ 2,540 - 930 - 450	+ 2,510	- 4 00 + 260 - 200	- 70 + 740 - 70
Sterling M ₃ Percentage change in sterling M ₄ UK residents' foreign currency deposits	+ 2,700 + 7.2 + 1,200	+ 1,160 + 3.1 + 290	+ 1,620 + 4.2 + 590	- 340 - 0.9 - 190	+ 600 + 1.5 + 510
Total M ₃ Percentage change in total M ₃	+ 3,900 + 9.7	+ 1,450 + 3.6	+ 2,210 + 5.3	- 530 - 1.2	+ 1,110 + 2.6

Further details are shown in Table 11/3 in the statistical annex. The seasonal adjustments do not sum to zero in years ending in mid-April. [b]

[c]

Other public sector borrowing requirement, less purchases of other public sector debt by the private sector (other than banks). Including commercial bills bought by the Issue Department of the Bank (d) of England

DCE and sterling M₃

Domestic credit contracted appreciably on balance in the six months to mid-April.



government stocks have fallen by nearly $2\frac{1}{2}$ percentage points since the turn of the year; but those on shorter-dated stocks have declined by more than $4\frac{1}{2}$ percentage points, as interest rates returned to a more normal pattern after the liquidity shortage early in the year had eased.

After the sharp fall in nominal interest rates, the narrow version of money (M₁) rose by $4\frac{10}{2}$, after seasonal adjustment, in the three months to mid-April, bringing the increase over the year to about 10%. In the same year, total M₃ also rose by some 10%, slightly less than the figure of 12% indicated by the Chancellor last July which had seemed quite out of reach in the autumn. The sterling component of M₃ also fell short of the range indicated by the Chancellor in December, rising by around 7%, compared with a guideline of 9%-13%. Domestic credit expansion amounted to some £4,200 million in 1976/77 (see table), less than half the limit of £9,000 million agreed with the IMF in December – a much larger shortfall than in the money stock, which had been sustained by substantial inflows of funds from abroad associated with the strength of sterling in the first quarter. These inflows led to a rise of $1\frac{1}{2}$ (after seasonal adjustment) in sterling M₃ in the three months to mid-April, although domestic credit was little changed (see chart).

This unexpected lack of growth in domestic credit occurred mainly because the public sector borrowing requirement for 1976/77 was as much as £3 billion less than forecast in the 1976 Budget, and $\pounds 2\frac{1}{2}$ billion lower than forecast as recently as December 1976, during the negotiations with the IMF.

The authorities also sold more central government debt to domestic investors outside the banking system than had been forecast. In the three months to mid-January, these investors had bought more than £3 billion net of gilt-edged, and a further £400 million was purchased in the following three months. Sales of other forms of government debt were also unusually large. The sixteenth issue of national savings certificates - introduced in December - was particularly attractive to investors paying higher rates of income tax, especially when other interest rates subsequently fell; and total net sales of national savings amounted to as much as £550 million in the three months to mid-April. Domestic investors other than banks also bought some £150 million of Treasury bills, after several months of steady selling. In the twelve months to mid-April, total purchases of all forms of government debt outside the banking system amounted to just over £6 billion.

Around the end of the financial year, two new issues of government stock were made, each payable in three instalments (see page 163). These issues enabled the authorities to take advantage of the continued demand for gilt-edged and make a start with financing the Government's borrowing needs for 1977/78, without any undue further reduction in the money stock in the year to mid-April 1977. Towards the end of May, a variable rate stock was created (see page 164); and a third stock payable in instalments was announced – £800 million of $11\frac{30}{4}$ Treasury Stock 1991.

Bank lending to the private sector, which had contributed much to the rapid monetary expansion during the summer and autumn of 1976, fell back at the beginning of this year. After seasonal adjustment, such lending in sterling (including the Issue Department's transactions in commercial bills) actually fell by about £375 million in February and March, after increasing by nearly £1,600 million in the previous four months. The reasons for this reversal include the ban (imposed last November) on sterling finance of third-country trade, and the consequent

repayment of bank credit by UK merchants as well as by overseas residents; the unwinding of leads and lags in commercial payments, which improved companies' cash flow; and the high cost of bank borrowing in the latter part of last year and the beginning of this. The influence of the first two factors has probably ceased by now; and with bank lending rates having fallen rapidly since early in the year, lending may revive in the months ahead: indeed, sterling lending to the private sector rose in April by over £200 million (seasonally adjusted).

With so many factors affecting the course of bank lending to the private sector, it is difficult to assess the impact on such lending of the supplementary special deposits scheme, which was reintroduced in November to support other policy measures affecting the growth of the monetary aggregates. After the reintroduction was announced, the banks probably became even more cautious in their attitude towards requests from nonpriority borrowers - qualitative guidance on the direction of lending remained in force - but there is no evidence to suggest that lending to industry has been curtailed. Most banks appear to have had no difficulty in avoiding liability to supplementary special deposits. When the scheme was reactivated, the banks' total interest-bearing eligible liabilities were more than 6% higher than the average in the base period. They then fell in each of the next four months and rose only slightly in April, so that by then the banks as a whole were some $2\frac{10}{4.0}$ below the base, and the three-month moving average (at $2\frac{10}{2}$ % below the base) was $5\frac{10}{4}$ % below the specified upper limit to the growth in their interestbearing liabilities. On 12th May, the Bank announced that the scheme was to be extended for a further six months (see page 169).

In March, the Chancellor indicated that a rise in sterling M_3 of between 9% and 13% in 1977/78 would be consistent with the course of economic activity foreseen in the Budget, and with the limit of £7,700 million for domestic credit expansion agreed with the IMF last December. An increase in money supply of this size should leave room for a slightly faster growth in bank lending to the private sector than in 1976/77 as a whole, while the required amount of gilt-edged sales to domestic investors outside the banking system is likely to be much less than the record amount sold in the previous financial year.

Assessment

The present assessment concentrates, not on the immediate situation, but on two longer-term questions: the likely difficulties in restoring profits, and the lessons of recent monetary experience.

The economy is passing through a relatively uneventful phase. Financial confidence has been restored; but the imperative that it should not once more be undermined limits the freedom of manoeuvre for economic policy. The Budget measures necessarily provided only limited further stimulus to the economy; and the latest indicators continue to show slow growth in demand and output. The main point of uncertainty is how much price inflation can be brought down next year. To achieve faster growth, the rate of inflation will have to be reduced – as argued further below in connection with monetary targets.

Prospects for profits

Last year, the *Bulletin* published estimates of the real rate of return on the assets of industrial and commercial companies and

of the cost of their capital during 1960 to 1974.[1] These estimates showed the very low level to which profitability had fallen by 1974 and how small was the margin between the return on capital and its cost. Although the estimates relate to the average return on existing assets rather than to the expected return on new investment – a more appropriate but elusive measure – they indicated a rate of profitability clearly below that required as a reasonable basis for investment. The note on page 156 extends these estimates and shows a still lower real rate of return in 1975 and 1976, as well as very little improvement in the margin between this return and the cost of capital. The recent trend in profitability has been improved by the growth in profits from North Sea oil operations and, in 1976, by the effect of sterling's depreciation on profits from exporting. For the rest of industry, the decline must have been even steeper.

The current rate of real return is on average about one third of what it was some fifteen years ago. Apart from longer-run influences – probably more severe in the United Kingdom than in other countries – profitability tends to be heavily reduced in recessions; and the UK economy, like most others, is at a low point in the longest and most severe recession since the war. It is less clear than in most cycles that we can look forward to a quick and normal cyclical recovery.

Much will depend on the pace of world economic recovery. The present world recession began in 1973, since when unemployment has either remained large or grown further each year; and the reasons which so far have prompted countries to accept continued recession still remain powerful. One such reason has been the fear of inflation. Another has been disequilibria in international balance of payments, recently discussed by the Governor.[2] Unfortunately, these constraints may not be removed quickly. It would be reasonable to hope that world expansion will be fast enough to prevent a further growth of unemployment; but it must be uncertain how much faster than normal it will be, and how quickly a downturn in unemployment will be achieved.

The profitability of UK industry should improve when faster economic expansion again proves possible. But, if world economic recovery is delayed, it will be difficult for one country alone like the United Kingdom to make a full recovery. Internal constraints will also limit the pace of revival; since the recession has been deep, recovery is bound to take time. For all these reasons, the cyclical rebound of profits may well be less pronounced than might normally be expected.

Continued low profitability could seriously damage longer-run prospects. Already the rate of investment has been low in recent years; and a continuation of low rates of return, perhaps combined with a relatively high cost of capital, could seriously discourage new investment. Without an early move to higher profits, investment is therefore unlikely to be adequate to sustain a satisfactory rate of growth. A further period of rapid inflation would damage profits and investment both directly – by sustaining the present high cost of stock appreciation – and indirectly, by postponing the time when faster expansion (and the stimulus which this would give to investment) can be resumed.

The adoption of monetary targets

The announcement last year of quantitative aims for the rate of monetary expansion is likely to prove a major step in the

 Trends in company profitability', March 1976 (page 36); and 'The cost of capital, finance and investment', June 1976 (page 193).
 See page 204.

Velocity of circulation

The velocity of circulation of M_3 has risen sharply since the beginning of 1974, after falling in the previous two years.



evolution of monetary policy. This evolution has been paralleled in many other countries, for example, the United States, Canada, Western Germany, and France, all of which have now adopted the practice of announcing such monetary targets.

The public announcement of official quantitative aims for monetary expansion creates a different environment for policy. To achieve such aims, measures of control will on occasions be needed; if the aims have not been made clear, these measures may be harder to justify and so tend to be delayed. Prior announcement of targets may reinforce the purposiveness of monetary policy and provide reassurance that the authorities will not just accommodate pressures which may arise. Targets may therefore help to focus discussion of monetary policy and its implementation; and may raise new questions or old questions in a new form. It is too soon to make a definitive judgment about the usefulness of monetary targets and how they should be operated. But it may be helpful to set out some of the questions which deserve fuller public consideration and discussion.

The formulation of targets

The pace of monetary expansion has been moderate during the last three years – indeed, considerably below the rate of growth of incomes or of GNP at current prices. Precise figures depend on the exact period considered. But between the beginning of 1974 and the end of 1976, M_3 grew on average by some 10% a year and M_1 by a little more, but GNP at current prices by about 20% a year. In the previous two years, M_3 had risen much more rapidly. The ratio of national income to the stock of broadly-defined money (the 'velocity of circulation' of M_3), after falling in 1972 and 1973, has thus risen sharply over the last three years, and is now back where it was around 1970 (see chart).

Though monetary growth had in practice been kept to a moderate rate, it nevertheless appeared desirable last year to indicate in public the pace of expansion which was being aimed at. The principle of adopting a target may be more important than its precise form, or the particular magnitude to which the target relates. But the last two matters have some importance, and it may be useful to set out some questions which could arise.

Initially, the objective was expressed in terms of a figure for the percentage growth of the money stock (M_3) . Subsequently, the target, set in agreement with the International Monetary Fund, related to domestic credit expansion (DCE); but parallel with this, the equivalent range of growth for monetary expansion (sterling M₃) was also announced. As the balance of payments strengthens, the main emphasis should perhaps again be placed on a target for the money stock, rather than for domestic credit expansion. It may also be worth considering whether targets would not best be specified in terms of more than one monetary aggregate (e.g. M_1 as well as M_3 ; and whether they should continue to be declared in terms of a range - rather than a single figure - for the percentage rate of growth of the money stock. There might also be a case for updating targets at, say, quarterly intervals: if there is a risk that actual performance will exceed or fall below the target range, and if this arises towards the end of the target year, there may be pressure for extreme adjustments in the short time remaining. The US practice of 'rolling targets' – renewing each quarter the year to which the targets apply – avoids such last-minute pressure, while

preserving the function of targets to provide a precise indication of the intentions of monetary policy. This practice has, however, not been adopted by other countries.

Variability of monetary expansion, 1074-1076

Percentage changes at ani	nual rates		
	Stand	dard deviatio	ns of:
	3-month changes[a]	6-month changes[b]	12-month changes
Broadly-defined			
money stock :	20	1.0	1.4
Canada(M_)	2.8	1.9	1.4
Lapap(M)	2.7	23	17
France(M.)	14.1	6.0	3.6
Western Germany(M ₃)	4.2	2.9	1.7
United Kingdom(M ₃)	5.7	3.9	1.9
Narrowly-defined			
money stock (M ₄):			
United States	2.8	1.7	0.7
Canada	13.3	8.8	5.8
Japan	6.6	3.5	2.6
France	25.2	8.8	5.8
Western Germany	6.5	4.4	3.0
United Kingdom	7.3	4.1	2.1

Calculated as follows: mid-January – mid-April; mid-February – mid-May, etc. to mid-September – mid-December.

Calculated as follows: mid-January – mid-July; mid-February – mid-August, etc. to mid-July – mid-December.

Average rate of monetary expansion, December 1973–December 1976

Per cent per annur	n					
	United States	Canada	 Japan	France	Western Germany	United Kingdom
Broadly-defined money	9.0	17.2	13.2	15.5	8.4	11.2
Narrowly-defined money	4.9	9.7	12.1	11.5	9.3	12.9

Recent monetary experience

As already indicated, the pace of monetary expansion was moderate in each of the last three years. However, from quarter to quarter, monetary growth has fluctuated fairly sharply - as in several other countries, less so for the broad than for the narrowlydefined money stock (see tables). Indeed, such short-term fluctuations have become even more pronounced recently.

The circumstances in which the monetary aggregates rose sharply during the summer and autumn and then, for a few months, actually declined, have been described in this and earlier commentaries. Before discussing the general lessons, two more particular points need to be made about recent experience.

The first is that monetary conditions last year were heavily influenced by the changing state of confidence. The tide, first of waning, then of returning, confidence was exceptionally strong; and was affected by the changing evaluation on the part of many observers of the Government's ability and willingness to control their own financial position. The ability of monetary policy to stabilise the rate of growth of the monetary aggregates was, in these circumstances, thus put to a severe test.

Second, changes in trend do not become clear - to the authorities or to outside observers - until some time after the event. Striking though the acceleration in the summer was, it could not at the time be immediately obvious. (The July figures, available in mid-August, could have been an aberration, and the acceleration was not confirmed until mid-September, when the August figures became known.) In November, M₃ began to grow more slowly; and began to fall in December - though the figures became available only several weeks after the date. The decline continued in January, suggesting that the growth of M₃ might fall below the trend set for the financial year: this was confirmed when the February figures became available in mid-March. A new and important influence was the unexpectedly small public sector borrowing requirement in 1976/77, which turned out to be $\pounds 2\frac{1}{2}$ billion lower than was expected even as late as the final quarter of the financial year; this large shortfall thus became apparent only as the quarter elapsed.

Nevertheless, the authorities refrained from selling gilt-edged from the end of January until the latter part of March, and yields declined sharply. Indeed, during the financial year as a whole, as the state of market confidence passed rapidly from one extreme to the other, the authorities had to allow sharp changes in interest rates in their endeavour to keep monetary expansion within acceptable limits. Growing confidence in the determination of the authorities – despite inevitable short-run variations – to stick to their targets by and large may in future serve to allay such upheavals in financial sentiment, and thus allow the achievement of the monetary objectives in a more settled context.

The significance of short-term fluctuations

The recent fluctuations in DCE and the rate of growth of M₃ have attracted public comment and concern. A question remains, however, as to how much such short-term movements matter.

The evidence is incomplete and, moreover, is never static. Monetary policy affects real demand in a number of ways. The relationship between housing investment and the cost and availability of finance has always been obvious. There are a number of routes whereby monetary policy appears to affect personal consumption. On the other hand, the effect of financial conditions upon corporate expenditure on fixed investment and stocks - generally regarded as particularly important for policy consideration - is, curiously, the least easily observed by econometric techniques. The various studies undertaken, both in this country and even more in the United States, suggest that it takes a long time – one or two years, or even longer – for policy measures to affect real demand. It is largely for this reason that it seems reasonable to judge that a stimulus lasting only a few months, and then reversed, is unlikely to have a large effect either on the course of output and demand or, on that account, on prices.

While output probably takes time to be affected, and thus is probably little influenced by short-run monetary variations, prices in markets for financial and some other existing assets, including property and foreign exchange, can react more quickly. Particularly if short-run fluctuations in monetary growth should generate expectations of uncontrolled growth, the resulting changes in asset prices can be sharp and quick.

Many, perhaps most, short-run fluctuations in the pace of monetary expansion do not herald a change in trend. Some are purely statistical quirks in a naturally erratic series, in which adjustment for factors such as items in transit and seasonal variations is always uncertain. Others reflect timing changes – of a kind not picked up by seasonal adjustment – in the Government's cash flows and in the long-term investment of accruing funds by financial institutions. Yet others are due primarily to financial readjustments, associated with changing expectations of borrowers and lenders, which, while important in themselves, have no large or immediate implications for demand or output. The six-month pause in monetary growth during the winter probably reflected such short-term financial readjustments, not, as some commentators have feared, monetary stringency of a sort to cause a recession in the economy.

On the other hand, it is clear that if an unduly rapid (or slow) increase in the money stock continues for some time, there will indeed be effects on the economy. Moreover, if marked short-term fluctuations occur – even though, on the above reasoning, they should be ignored – they certainly make it difficult to tell what the underlying trend is. By the time the trend becomes fairly clear (and by the time that subsequent action by the authorities has had time to take effect), over-fast (or slow) monetary expansion could have been allowed to go on for more than a short period. Even if short-lived irregularities in the pace of money creation have no serious effects on the economy, they are likely to produce serious problems for monetary control. The conclusion appears to be that it is desirable on that account that they should be kept to a minimum.

One way of helping to meet this problem is to have more up-to-date and more frequent statistics on monetary developments. This may enable the authorities to observe changes in trends sooner and respond more promptly to them. For this reason, the Bank are now discussing with the banks the provision of weekly data. More rapid and more frequent information on monetary developments, and improved techniques, such as the adoption of part-paid and variable rate bonds, may help to ease the problem of controlling the path of the monetary aggregates. But even so, this is not likely to become completely smooth, and should not be expected to be so.

The current monetary situation

The conjunction this year of rapidly falling interest rates and of unexpectedly slow growth in the monetary aggregates may appear somewhat paradoxical. On one measure, monetary policy could appear easy; on the other, restrictive. In fact, neither measure can be taken as a fully satisfactory indicator of the stance of monetary policy in this period. As already noted, the lack of growth in the aggregates, after the earlier acceleration, probably reflected an unwinding of temporary financial dispositions as confidence recovered, rather than a strong brake on the course of spending. Similarly, the fall in interest rates was probably the result of changing expectations, and changing sentiment, with the return of confidence after the extreme pessimism of last autumn. Even so, the fall in rates is likely to have reduced significantly the real cost of capital to industry,[1] and has led to some revival in the equity and property markets.

The future course of policy

After the abnormal pressures affecting the course of the monetary aggregates in the last twelve months, it is hard to judge how difficult it will be in more normal times to keep their growth to target. Market sentiment this year may oscillate less than last year, and a smoother path of monetary expansion may prove possible. Clearly, however, it is not possible to predict in advance what will be required to keep domestic credit expansion within its target; and to keep - as will in practice also be important - the growth of sterling M_3 within the range of 9%–13%. Much will depend on price developments, actual and expected, and - as a main element - the course of domestic costs. The fall in interest rates this year has probably reflected expectations of lower price inflation, and could be validated by a satisfactory prospect for wages. A less satisfactory prospect might show that by May the market had over-reacted to improved expectations, and that an upward readjustment in interest rates was necessary.

If inflation were to continue unabated, this would harm the economy in various ways. In addition to damaging longer-run growth prospects, it would make it necessary to postpone the faster expansion that the economy needs. Policy may in effect have to aim at achieving some rough stability in the growth of national product at current prices – faster in real terms the lower the rate of inflation, and vice versa. A general understanding that this was necessarily the case might help to provide some barrier to inflation; and a resistance to inflation is needed.

A monetary policy geared to a public monetary target is a semi-automatic way of helping to achieve such an aim. It may not be completely sufficient, but it will work in the right direction. It does not rule out discretionary demand management; but it will help to make it less necessary. If inflation remained rapid, the

[1] See page 156.

more restrictive monetary conditions which would then develop would tend to reduce the rate of real growth. The risk of this happening could be regarded as a price worth paying to preserve a barrier to inflation. With an expected rate of monetary expansion of 9%-13% for the year, the rise in wage costs will need to be significantly below this in order to leave room for real growth.

valuation ratio[a]									
	Post-tax real cost of capital (%)	Post-tax real rate of return[b] (%)	Valuation ratio[c]						
1960	8.8	9.7	1.08						
1961 1962 1963 1964 1965	8.3 6.3 5.8 6.5 5.3	8.1 7.6 9.2 9.3 6.6	0.95 1.20 1.55 1.36 1.14						
1966 1967 1968 1969 1970	5.7 5.0 3.9 4.0 4.4	5.5 5.9 5.3 4.1 3.4	0.93 1.17 1.33 0.99 0.72						

4.6 5.1

6.1 6.6 5.9

6.8

Table A The cost of capital rate of return and

As defined in the article 'The cost of capital, finance and investment', June 1976 Bulletin. [a]

4.3

 $\frac{2.2}{3.3}$

29

0.90 0.99

0.69

0.30

0.50

0.40

Forward-looking. The treatment of tax relief on stocks is consistent with its treatment in the calculation of the cost of capital (see the appendix to the June 1976 *Bulletin* article, page 204: 'Tax relief on stocks'). [P]

End-year estimates. [c]

1971 1972

1974

1976[d]

[d] Provisional estimates.

Chart A Pre and post-tax rates of return, 1960-1976



Without allowance for stock relief. [b]

[c] Provisional

Industrial and commercial companies: profitability and the cost of capital

Articles published in the March and June 1976 issues of the Bulletin[1] examined changes in company profitability and the cost of capital between 1960 and 1974.[2] Some of the information on which they were based has since been revised. This note describes the effect of these revisions on the more important series presented in the articles and extends the estimates to 1976. It also considers recent trends in some other financial influences on investment discussed in the articles.

Rates of return, the cost of capital, and the valuation ratio

In spite of the revisions, which stem mainly from changes in the estimates of companies' gross trading profits,[3] the broad picture is not much changed. Rates of return are now thought to have been up to about one percentage point higher in the last few years than was originally estimated; but real rates of return are still shown to have declined appreciably throughout the sixties and early seventies, and the latest figures show a particularly sharp fall since 1973. The cost of capital has also been revised upwards and, as before, appears in recent years to have been well above rates of return obtainable on investment. However, these changes do not significantly affect the estimates of the valuation ratio, 'q', (discussed in more detail below): the figures for q shown in Table A are almost identical to the estimates in Table D of the June 1976 article.

Table **B**

Rates of return for industrial and commercial companies[a]

Per cent				
	Pre-tax	Prestay	Post-ta rates o	ax real of return
	cost rate	real rate	Forward-	Backward-
	of return	of return	looking	looking
1960	19.0	13.4	9.7	8.3
1961	16.5	11.5	8.1	6.9
1962	15.0	10.5	7.6	6.4
1963	16.1	11.4	9.2	7.3
1964	16.8	11.8	9.3	7.6
1965	16.0	11.2	6.6	6.1
1966	14.3	9.8	5.5	5.2
1967	13.6	9.8	5.9	5.5
1968	14.7	10.0	5.3	5.6
1969	13.8	8.8	4.1	5.0
1970	13.5	7.8	3.4	4.2
1971	14.3	8.3	4.3	5.4
1972	15.9	8.8	5.3	5.8
1973	18.2	7.8	7.5 (4.5)[b] 6.5 (4.9)[b]
1974	17.9	4.6	4.7 (0.2)	4.3 (0.9)
1975	15.1	3.5	3.3 (0.5)	2.8 (0.8)
1976[c]	16.8	3.5	2.9(0.2)	2.4(0.3)

As defined in the article 'Trends in company profitability', March 1976 Bulletin.

(b) [c] Figures in brackets exclude tax relief on stocks

Provisional estimates.

As noted above, real rates of return have been declining - though not consistently - for some time. In contrast, the latest figures for the historic cost rate of return[4] - a measure now seriously misleading because of rapid inflation – show a marked decline in 1975, when capacity utilisation fell sharply and industry's buying prices were rising more slowly, but a recovery in 1976 to slightly above the average during the previous fifteen years (see Table B and Chart A). The growing divergence between the historic and real measures of the rate of return partly reflects generally higher stock appreciation and, in recent years, the impact of faster

- 'Trends in company profitability', March 1976 (page 36); and 'The cost of capital, finance and investment', June 1976 (page 193). [1]
- The June 1976 article also included provisional estimates for 1975.
- The reason for the revisions is given on page 114 of *National Income and Expenditure*, 1965-1975 (the Blue Book'), published by the Central Statistical Office. [3]
- [4] Brief definitions of rates of return and the cost of capital are given in the appendix to this article.





Forward-looking. The treatment of tax relief on stocks is consistent with its treatment in calculating the cost of capital (see June 1976 *Bulletin*, page 204). [b] Provisional.





Industrial and commercial companies' gross do fixed-capital formation as a percentage of their fixed capital stock (at replacement cost). [b]

Ratio of financial valuation to the tax-adjusted replacement cost of the fixed capital stock. {c] Provisional.

inflation in increasing the ratio of the replacement cost to the historic cost valuation of the fixed-capital stock and capital consumption. By past standards, the real pre-tax rate of return was already very low in 1974, at only $4\frac{10}{2}$; but it fell even further in 1975, to $3\frac{10}{2}$, and widespread expectations of a recovery in 1976 were not fulfilled.

The decline in pre-tax rates of return has been accompanied by a similar fall in the two post-tax measures (the 'forward-looking' and the 'backward-looking'). But for the introduction of stock relief in 1974, post-tax real rates of return in the last three years would have been virtually nil.

During the sixties, the cost of capital[1] fell broadly in line with rates of return (see Table A and Chart B); but it has since risen quite sharply and in 1976 was about as high as fifteen years earlier. The recent increase partly reflects the depressed valuation of ordinary shares (which, on the measure used for these calculations, was lower in 1976 than in 1968), and partly the declining proportion of companies' income from UK assets. Share prices weakened for several reasons, including the rise in yields on government debt; and they were particularly volatile in the more recent years, which largely explains the uneven course of the measured cost of capital.

One of the aims of the earlier articles was to construct an alternative or additional explanatory variable for companies' fixed investment. It may be useful to repeat here the rationale for q in this role. If the rate of return which a project is expected to yield exceeds the cost of funds needed to finance the project, then prima facie there is an incentive to invest. The valuation ratio is simply the ratio of the rate of return to the cost of capital[2] (or alternatively, the ratio of the valuation put on a project by the financial markets to the cost of the physical assets required to undertake it). For various reasons, the dividing line which determines a decision whether or not to invest may not be exactly unity; and in any case, a comparison of average rates of return on existing assets with the average cost of capital (or the aggregate replacement cost with the financial valuation of companies' capital stock) will not yield the most appropriate measure of q. In principle, the relevant rate of return is the one expected by company management on new projects; and the relevant cost of capital is the one determined by the marginal supply of funds. But the information required to calculate q on this basis is not available. Nevertheless, it is reasonable to suppose that the incentive to invest will be more powerful when the 'average' valuation ratio is relatively high, and that investment will seem unattractive when the ratio is relatively low. To date, the results of econometric work in the Bank have not been particularly encouraging - in spite of the superficially close relationship shown in Chart C – though in some cases q has proved to be just as successful as conventional accelerator models in explaining the behaviour of investment. However, even if the relationship between 'average' q and investment is not very strong, the exceptionally low valuation ratios in the last few years probably go some way towards explaining the recent decline in investment.

Method and sources

With one minor exception,[3] the method and sources used to construct the new figures are the same as in the earlier articles. Some necessary assumptions and, hence, qualifications to the results are set out below.

- The measure of the cost of capital in this note and in the original articles is broader than many of the measures commonly used elsewhere. It is defined in the appendix (but see also the June 1976 article, pages 195-7). However, the relationship is not exact in, e.g. Table C, because the valuation ratio is calculated for end-years whereas the rates of return are averages during the year. [1]
- Figures for bank advances used in calculating the financial valuation (see Table C) are now, like those for liquid assets, derived from Table 9.3 in *Financial Statistics* rather than, as before, from the *Bulletin*. [3]

First, in calculating post-tax profits, all tax allowances for which companies qualified by virtue of their fixed investment, changes in stocks, etc. are assumed to be usable in the year in which they accrued. This may have been broadly true until 1974, but probably much less so in the latest years. The same applies to calculations of the tax-written-down value of the capital stock, though the effects are proportionately much smaller. To the extent that tax allowances have not been fully usable during the year in question, post-tax rates of return and the post-tax cost of capital will each have been overstated. Second, in deriving the cost of capital, expected future income is taken to be the same as current income, and the market is assumed to discount UK and overseas income at the same rate. There are also some purely statistical problems[1] in calculating the ratio of companies' income from domestic assets to their total income. So the financial valuation of companies' UK assets (see Table C) and, hence, the post-tax real cost of capital, should not be regarded as precise. Finally, the latest figures in several important series (for example, gross trading profits) may well be revised in due course. Thus, while the broad picture is likely to remain much the same, some of the details could change appreciably.

Table C Financial valuation of industrial and commercial companies

£ millions								
	Market value of companies' liabilities					Companies' liquid	Proportion of income	Financial valuation of
	<pre>ordinary shares</pre>	Preference shares	Debentures	Bank advances	Total	assets	United Kingdom [a]	UK assets [b]
End-year								
1960	20,120	1,710	1,669	1,997	25,496	3,220	0.799	17,799
1961 1962 1963 1964 1965	18,967 23,995 30,524 29,303 31,537	1,631 1,814 1,863 1,829 1,797	1,710 2,440 2,936 2,909 3,153	2,275 2,562 3,059 3,672 4,177	24,583 30,811 38,382 37,713 40,664	3,212 3,196 3,731 3,706 3,669	0.768 0.760 0.778 0.771 0.768	16,413 20,987 26,958 26,219 28,412
1966 1967 1968 1969 1970	26,023 34,945 46,302 40,383 33,209	1,610 1,533 1,279 1,006 752	4,532 4,968 4,936 4,671 5,232	4,358 4,519 4,923 5,549 6,389	36,523 45,965 57,440 51,609 45,582	3,559 4,026 4,283 4,078 4,223	0.773 0.761 0.734 0.691 0.670	25,481 31,916 39,017 32,844 27,711
1971 1972 1973 1974 1975	47,119 57,631 51,844 22,233 44,000	933 754 640 499 586	6,312 6,132 5,283 3,772 4,516	6,949 9,892 14,132 18,037 19,564	61,313 74,409 71,899 44,541 68,666	5,249 7,472 9,820 9,690 12,249	0.690 0.682 0.567 0.507 0.548	38,684 45,651 35,199 17,669 30,917
1976[c]	40,434	507	4,501	23,121	68,563	13,586	0.537	29,523

[a] Ratio of UK trading income to UK trading income plus overseas earnings.

The financial valuation of earnings on UK assets is equal to the total market value of liabilities less liquid assets, multiplied by the proportion of income arising in the United Kingdom. (b)

[c] Provisional estimates.

Other influences on investment

The June 1976 article also mentioned other important financial influences on investment. One of these - cash flow[2] - is discussed briefly in the commentary (page 000). The flow of internal funds improved in money terms in the last two years, but only sufficiently to cover the relatively small amount of fixed investment which took place - and even then, only because stocks had been run down heavily. Cash flow will almost certainly continue to improve in 1977 – because of a further rise in profits (in nominal terms), smaller stock appreciation, and lower interest charges; but the prospective recovery is unlikely to be strong enough to finance more than a moderate increase in fixed investment.

Companies are also concerned with prospective variations in their cash flow. Such variations normally arise from fluctuations in

 For example, figures of foreign income do not show stock appreciation separately (see footnote [1] on page 204 of the June 1976 article).
 Defined as undistributed income before providing for depreciation, *plus* net capital transfers, *less* stock appreciation. stock appreciation.

Table D Debt ratios for industrial and commercial companies

Per cent			
	Ratio of borrowing capital emp	to bloyed[a]	Ratio of bank advances to total
	Nominal	Market	borrowing[b]
1960	14.7	10.3	31.6
1961 1962 1963 1964 1965	14.9 18.7 19.7 21.0 21.6	10.7 15.3 16.6 17.4 17.7	34.7 33.6 35.4 39.2 40.5
1966 1967 1968 1969 1970	24.6 24.9 25.4- 23.7 24.6	21.2 21.0 19.3 18.5 18.8	37.5 36.7 37.0 41.9 43.0
1971 1972 1973 1974 1975	20.4 20.3 23.5 26.6 20.7	18.9 17.9 17.9 18.4 15.9	46.6 54.8 60.7 64.6 68`8
1976[c]	20.1	16.0	72.6

[a] Ratio of outstanding debentures, loan stocks, preference shares and bank borrowing net of liquid assets, to the (backward-looking) tax-adjusted capital stock at replacement cost. Debentures, loan stocks and preference shares are at nominal or market values as indicated.
[b] Ratio of bank advances to total nominal indebtedness.

[c] Provisional estimates.

Chart D The distribution of appropriations and net capital spending, 1960–1976



[a] Including dividends on preference shares.

- [b] Net of capital consumption and stock appreciation.
- [c] In 1976, taxes on distributions exceeded total company tax accruals by £193 million.
- [d] Taxes on distributions (at the basic rate of income tax) and advance corporation tax (since the introduction of the imputation system).
- [e] Net of tax. Gross dividends are obtained by adding taxes on distributions.
- [f] Provisional.

gross income; but if the latter is largely pre-empted by unavoidable interest charges – i.e. if the company is highly geared – the residual cash flow will vary proportionately more. Gearing is an important aspect of any company's financial strength; and many companies would give high priority to restoring a 'satisfactory' gearing ratio – sometimes, no doubt, at the expense of physical investment – when they have been under financial pressure. But the June 1976 article showed that the path of company gearing over the last few years depended on whether it was measured in terms of capital or income.

In a period of inflation, liabilities which are fixed in money terms – mainly loan stocks and bank borrowing – will normally decline as a proportion of a stock of assets which, in nominal terms, will increase with the rise in prices.[1] Such an improvement in capital-gearing seems to have taken place in the United Kingdom since 1974 (see Table D) – although equity issues amounting to some $\pounds 1\frac{1}{2}$ billion during 1975 and 1976 were also partly responsible. At the same time, as explained in the June 1976 article, high and uncertain rates of inflation are likely to induce companies to change the composition of their monetary liabilities, in view of the risks of fixed-interest borrowing at high nominal rates (see the last column of Table D, which shows a marked shift towards bank borrowing, especially during the seventies).

The path of income-gearing has been very different. When inflation is accelerating, as it was between 1973 and 1975, a company's income-gearing is likely to deteriorate if it has a large amount of floating-rate debt and, of course, improve if most of its debt is at fixed rates. However, assuming that most bank borrowing is at variable rates, floating-rate debt now far exceeds fixed-rate debt for industrial and commercial companies as a whole (see Tables C and D). Thus, during the above period, nominal interest rates rose sharply, and interest charges on outstanding borrowing increased proportionately more than income, reaching almost half of appropriations in 1975 (see Chart D). In 1976, interest rates were on average a little higher than in 1975, but cash profits increased sharply, and income-gearing fell slightly.[2] This improvement in income-gearing has almost certainly continued into 1977, because of the steep decline in interest rates. However, in a period of rapid inflation, part of the high nominal interest payments may be regarded as a repayment of capital; and if such payments can be met without further borrowing, this repayment of capital - and the deterioration in income-gearing - can be considered as the 'real' reason why capital-gearing improves.

Conclusion and outlook

For industrial and commercial companies as a whole, the figures presented in this note do not suggest an encouraging outlook for investment. Rates of return are still extremely low, with little prospect of any marked recovery in the near future. Meanwhile, the cost of capital, which until the early seventies moved broadly in line with the decline in rates of return, subsequently seems to have risen sharply (though it has almost certainly fallen in the early part of 1977). There are, no doubt, significant variations within the company sector, e.g. companies heavily engaged in exporting may have been among the better placed,[3] and

 Unless, of course, this is offset by new borrowing - such as apparently occurred in 1974. But if the rate of inflation is high, its impact on the money value of physical assets will generally outweigh the effects of any new borrowing

- 2] Income-gearing is more usually defined as interest payments divided by total pre-tax profits; but the chart, which reproduces one of the charts in the June 1976 article, illustrates essentially the same point.
- [3] Even this may be optimistic: the slow growth of world trade has probably made many export markets unusually competitive.

construction companies mainly concerned with domestic housebuilding among the worst. But rates of return will need to recover appreciably before a rapid or sustained rise in investment by the sector as a whole becomes likely. Gearing appears to be improving, as does cash flow (but only in nominal terms); and as in the recent past, much of the prospective improvement will accrue to the relatively small number of companies connected with North Sea oil development.[1]

Appendix

Definitions of rates of return, the cost of capital, and the valuation ratio

Detailed explanations are given in the March and June 1976 articles

Rates of return take the general form of earnings (i.e. gross trading profits plus rent less capital consumption) divided by capital employed (i.e. written-down capital stock plus stocks and work in progress). The pre-tax historic cost rate of return values both capital consumption and the written-down capital stock at historic cost. The pre-tax real rate of return deducts stock appreciation from total earnings, and values both capital consumption and the written-down capital stock at replacement cost. Post-tax real rates of return deduct tax due on companies' earnings and allow for the impact of tax on the measure of capital employed. The 'backward-looking' measure takes account of capital allowances in force when the capital was installed; but the 'forward-looking' measure assumes that current allowances remain in force. Where relevant, two estimates are shown of pre-tax rates of return, one including, and the other excluding, tax relief on stocks.

The cost of capital is the rate at which the capital market discounts future earnings. It is estimated by dividing 'forward-looking' post-tax profits (after allowance for stock relief) by the financial valuation of the capital stock.

The valuation ratio is the ratio of the financial valuation to the 'forward-looking' tax-adjusted replacement cost of the capital stock (calculated at end-years). It is also roughly equal to the ratio of the 'forward-looking' post-tax rate of return to the cost of capital – but not precisely, because the rate of return is calculated on the average capital stock during the year, rather than on the amount outstanding at the end of the year.