# CHAPTER 2
# THE EFFECTS OF DIFFERENT STRATEGIES FOR THE UK ECONOMY

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The purpose of this chapter is to set out quantitative estimates[1] of what is likely to occur during the next decade or so if present policies continue and to compare these prospects with those under strategies which include low unemployment as a primary objective.

## 1. Orthodox policy and strategies for reducing unemployment

Projections under 'orthodox policies' throughout this chapter are intended to represent as closely as possible the consequences of the strategy which the government is following at present with widespread approval. The strategy consists of pursuing a cautious fiscal policy and restraining wage demands, the principal objective being to bring down inflation, which also makes necessary the achievement of balance-of-payments surpluses to prevent depreciation of sterling. The strategy includes tight restraint on public expenditure to enable taxes to be reduced and average real wages to be increased. This strategy does not permit independent targets to be set for employment, although the level of unemployment which results can be influenced by palliative measures like the temporary employment subsidy. The only instrument aimed at raising the growth of output and employment on a permanent basis is an 'industrial strategy' consisting of tripartite sectoral discussions.

The main strategy for reducing unemployment examined below is one which includes restriction of imports of manufactured goods to permit faster growth of GDP and also incorporates higher industrial investment to improve trade performance in the long term. Projections are also made for a strategy of devaluation as an alternative method for achieving similar objectives.

All three strategies are assumed to have the following targets in common:[2]

(*i*) a gradual reduction in money wage settlements to 5% a year after 1980 (enforced if necessary by some form of wage control);

**Table 2.1. Base assumptions for projections** [(a)]

| | 1978 | 1979 | 1980 | 1981-85 | 1986-90 |
|---|---|---|---|---|---|
| *Policy assumptions common to all strategies* | | | | | |
| Money wage settlements (% increase per year) | 10 | 8 | 6.5 | 5 | 5 |
| External official financing [(b)] (£ billion) | –2.9 | –1.5 | –1.0 | –0.3 | 0 |
| Relative costs in common currency (% change per year) (except devaluation) | 8.6 | –0.9 | 0 | 0 | 0 |
| *Import controls* | | | | | |
| Unemployment target (millions) | 1.4 | 1.4 | 1.3 | 1.0 [(c)] | 0.5 [(c)] |
| Additional investment (£1978 billion) | 0.3 | 0.6 | 1.2 | 3.0 | 3.0 |
| *Devaluation* | | | | | |
| Relative costs in common currency (% change per year) | 6 | –4 | –4 | –4 | –4 |
| *World trade and prices* | | | | | |
| Growth of world trade (% per year) | 5 | 6 | 6 | 6 | 6 |
| World terms of trade for food and raw materials (% change per year) | –5 | 0 | 0 | 0 | 0 |
| World terms of trade for oil (% change per year) | –5 | 0 | 0 | 4.2 | 6 |

*Notes:*
(a) For variants see especially p. 9 below.
(b) Negative figures indicate net reductions of foreign debt outstanding or increases in exchange reserves.
(c) Final-year figure.

[1] Tables of estimates calculated up to 1990 using the CEPG model are given in some detail in the Appendix at the end of the *Review*.

[2] See Appendix, p. A1, and Table 2.1 for details.

(*ii*) repayment of part of the outstanding foreign debt while maintaining exchange reserves at their present level;

(*iii*) maintenance of the cost competitiveness of UK producers (costs of production relative to those of overseas competitors denominated in a common currency) at the 1970 level - except under devaluation, where cost competitiveness is made to improve.

The instruments for achieving these targets comprise fiscal policy and wage restraint. Fiscal policy is assumed to be regulated through variation in personal income tax allowances and taxes on consumption; the growth of public expenditure on goods and services is assumed to be varied with growth of domestic output to ensure that the public sector absorbs about the same proportion of total resources as implied by the latest government expenditure plans. The balance of fiscal policy is determined by the need to fulfil balance-of-payments constraints.

The import control strategy has the additional target of reducing unemployment to 1 million in 1985 and 500,000 in 1990. Imports of manufactures are restricted to the extent necessary to achieve this. The projections under this strategy incorporate an eventual improvement in underlying trade propensities because of government-financed additions to public and private investment, rising to around £3 billion a year at 1978 prices from 1982 onwards.

The projections under a devaluation strategy assume a steady 4% a year improvement in the cost competitiveness of UK producers, achieved by means of a falling exchange rate. By 1985 this leaves relative costs of production 25% lower than they were in 1970.

The base assumptions common to every strategy are that world trade continues to be depressed, growing by 6% a year after 1978; that prices of food and raw materials imported by the UK, including those from the EEC, are constant relative to world prices of manufactures from 1979 onwards; and that the price of oil relative to manufactures rises after 1980 at a gradually accelerating rate, reaching a level about 50% higher in 1990 than it was in 1977. The effects of varying these are considered in section 3 below.

Apart from assumptions about world trade and commodity prices, the main uncertainty under any strategy is whether the government could successfully restrain wage demands to the levels assumed, given the pent-up demand for pay rises and for rectification of distortions which now exist after three years of a fairly crude wages policy.

There is also considerable uncertainty about the future course of import growth after the abnormal increase in import penetration which occurred in 1977. In the projections it is assumed that the increase in import penetration in 1977 was once-and-for-all and that future increases in import penetration will conform to previous relationships, but the implications of a worse outcome are considered in section 3.

## 2. Summary of results

Table 2.2 presents the summary results of solving the CEPG model for the three strategies identified above. Various aspects of the projections are analysed in the remainder of this chapter and more detailed tables of results are given in the Appendix at the end of this *Review*.

The most important implication of the whole analysis is that under orthodox policies the future growth of GDP would probably have to be held down to below 3% a year up to 1980, below 2% a year in the early 1980s, and zero in the late 1980s, because of balance-of-payments constraints. Without signficant

**Table 2.2. Main results of each strategy**

| | Index of GDP (1973=100) | Unemployment (millions) | Index of average real earnings after tax (1973=100) |
|---|---|---|---|
| *Historical* | | | |
| 1973 | 100 | 0.6 | 100 |
| 1977 | 100 | 1.4 | 95 |
| *Projected under orthodox policies* | | | |
| 1980 | 108 | 1.8 | 101 |
| 1985 | 116 | 2.9 | 113 |
| 1990 | 116 | 4.6 | 124 |
| *Projected under devaluation strategy* | | | |
| 1980 | 111 | 1.5 | 102 |
| 1985 | 133 | 1.5 | 109 |
| 1990 | 154 | 1.4 | 119 |
| *Projected under import controls strategy* | | | |
| 1980 | 114 | 1.3 | 101 |
| 1985 | 139 | 1.0 | 119 |
| 1990 | 167 | 0.5 | 144 |

*Note:*
Calculated from Appendix, Tables 2 and 3.
See text and Appendix, p.A1, for assumptions.

emigration this would lead to unemployment of about 1¾ million in 1980, nearly 3 million in 1985, and 4½ million in 1990 (see Table 2.2). However, wages could rise throughout the period by about 2% a year in real terms after tax. North Sea oil, superimposed on Britain's trend of relative industrial decline, would have made a period of severe recession tolerable since this would be accompanied by rising living standards for those who remained in employment.

The strategy of import restriction combined with industrial investment would fulfil its objective of gradually reducing unemployment to ½ million by stimulating GDP growth of 4% a year. The degree of restriction of imports of manufactures would rise gradually until it stabilised at about 25% in the late 1980s. During the first few years real wages would rise at about the same rate as under other strategies, but in the 1980s they would rise much faster, averaging over 3½% a year. In these circumstances control of inflation should be made easier.

A strategy of continuous devaluation, assuming it could be maintained without intolerable inflation, would raise the average growth of GDP to about 3½% a year, holding unemployment at about its present level. But the strategy appears impractical because, even with strict control of money wages, it would require the exchange rate for sterling to be reduced to 1 US dollar by 1985 and to a mere 65 US cents by 1990 (measured at the end-1977 rate for the dollar against other currencies). Moreover, average real wages would have to rise slightly less than under orthodox policies while the share of post-tax profits increased by almost 10% of national income, making low wage settlements very difficult to enforce.

Even when account is taken of the many uncertainties (see section 3), there is almost no possibility that orthodox policies can yield reasonable results in the long term. Large-scale industrial investment, even if it could be carried out without import restrictions, would not on its own begin to solve the main problem until the late 1980s (see section 6 below). Since continuous devaluation at the rate needed to stabilise unemployment appears impractical, the conclusion is that import restrictions will be essential.

The results under each strategy are given in more detail in Tables 2.3, 2.4 and 2.5.

(*a*) *Orthodox policies*

The figures for 1978 shown in Table 2.3 represent forecasts on the assumption that tax cuts worth around £2 billion for 1978/9 will be made in the April budget and that the nominal exchange rate falls slightly from its present level in the remainder of the year. Under these assumptions, output, excluding the North Sea, is forecast to increase by less than 2%, unemployment to continue rising and the balance of payments on current account to be in surplus by around £2 billion. Although inflation is predicted to return to double figures, average earnings after tax will increase in real terms by over 2%.

If orthodox policy, defined in terms of the targets and instruments specified above, continues to be implemented over the medium term, GDP is projected to increase at around 1½% a year, excluding output from the North Sea, which directly provides very few additional jobs. This rate of growth is much less than the average rate over the decade up to 1973 and is not sufficient to prevent unemployment increasing to

**Table 2.3. Past performance and projections under orthodox policies**

| | Growth of GDP at 1975 factor cost (% per year) | North Sea contribution to GDP growth rate[a] (% per year) | Unemployment (thousands) | Growth of average real earnings after tax (% per year) | Increase in consumer prices[b] (% per year) | Current account balance of payments (£1975 million) | North Sea contribution to current account (£1975 million) | Weighted exchange rate (1977 US $)[c] | Public sector borrowing requirement (% of GNP at market prices) |
|---|---|---|---|---|---|---|---|---|---|
| *Historical* | | | | | | | | | |
| 1964-73 | 2.7 | – | 562 (average) | 2.2 | 5.9 | +88 (average) | −30 (average) | 3.06 (average) | 2.7 (average) |
| 1974 | −0.8 | – | 606 | 1.0 | 16.0 | −4448 | −390 | 2.46 | 7.7 |
| 1975 | −1.3 | +0.1 | 929 | 1.7 | 24.0 | −1647 | −800 | 2.27 | 10.2 |
| 1976 | 2.4 | +0.2 | 1265 | −1.9 | 16.4 | −1060 | −390 | 1.92 | 7.8 |
| 1977 | 0.1 | +0.8 | 1378 | −5.5 | 15.7 | +45 | +890 | 1.83 | 4.2 |
| *Projected* | | | | | | | | | |
| 1978 | 2.8 | +0.9 | 1460 | 2.2 | 11.8 | +1315 | +1640 | 1.88 | 4.5 |
| 1979 | 1.8 | +0.7 | 1656 | 1.8 | 12.2 | +1127 | +2510 | 1.72 | 4.3 |
| 1980 | 2.5 | +0.6 | 1809 | 2.4 | 10.6 | +864 | +3040 | 1.60 | 4.9 |
| 1985 | 1.5[d] | +0.1[d] | 2930 | 2.2[d] | 5.3[d] | +580 | +5780 | 1.49 | 1.2 |
| 1990 | −0.1[e] | 0[e] | 4623 | 1.8[e] | 5.8[e] | +224 | +7530 | 1.35 | 2.6 |

*Notes:* Series are defined in the Appendix at the back of this *Review*.

[a] Measured as the number of percentage points of GDP growth attributable to the direct impact of North Sea activities.

[b] Includes a relative price effect, worth about +1% a year in recent years (see Appendix).

[c] The weighted average rate for sterling in terms of other currencies, converted into dollars at the end-1977 rate for the dollar in terms of other foreign currencies.

[d] Average for 1980-85.

[e] Average for 1985-90.

around 1.8 million by 1980. Thereafter the growth of output slows down and unemployment consequently increases at a faster rate. The figures in the table assume that there would be no significant change in migration trends and no intensification of job creation programmes and the like. Changes such as these would be likely to occur if unemployment threatened to reach 3 or 4 million, especially since this would imply local unemployment rates of staggering proportions in some areas.

Despite low output growth, average real take-home pay is projected to increase steadily in future at a rate similar to that experienced in the 1960s. This is made possible by reductions in taxation, the resources being provided by North Sea revenue, depression of investment and tight restraint on public current expenditure.

The projected fall in inflation in the early 1980s under orthodox policy is only achieved by assuming continuous wage restraint. It might be doubted whether money wage settlements could be brought down to 5% a year in 1981 as assumed with price inflation remaining above 10% up to 1980.

The balance of payments on current account is kept in surplus by cautious fiscal policy. The North Sea contribution is worth well over £2 billion in 1978 and rises to around 4 times this in real terms by the mid-1980s. But non-oil exports are projected to rise by only 3-4% a year, while import penetration continues as in the past. With higher inflation in the UK than in other competitor countries, the exchange rate has to depreciate to $1.60 by 1980 and then more gradually to $1.30 in 1990 (measured at the end-1977 rate for the dollar in terms of other currencies). This depreciation is necessary to prevent further deterioration of the cost competitiveness of UK producers. It would have to be much more rapid if wage restraint broke down.

If inflation is reduced, the PSBR has to be brought down to around 2% of GNP at market prices by the early 1980s, compared with just over 4% in 1977. So far as the immediate future is concerned, tax cuts of £2 billion for 1978/9 in the April budget, combined with public expenditure plans already announced, are estimated to give rise to a PSBR in 1978 of £7 billion at current prices, or 4½% of GNP. Further tax cuts of £2 billion each year would be possible in 1979 and 1980.

(*b*) *Import controls*

As is indicated in Table 2.4, GDP growth averaging over 4% a year from now onwards is required to bring unemployment below 1 million by 1985. The achievement of growth at this rate, while meeting balance-of-payments targets, would necessitate reducing imports of manufactures by 16% in 1980 and by 25% in 1985 below what they otherwise might have been. This would entail restricting their growth to about 8% a year. From 1985 onwards, the degree of restriction need not rise further, if the programme of industrial investment which forms part of the strategy has the assumed effect on exports and competitive import substitution.

The high rate of output growth made possible by import restrictions would make it easier to bring down inflation, because it enables a faster growth of real wages to be sustained. But some form of wage restraint would still be required for many years if the object were to reduce inflation permanently to single figures. The high growth of GDP would enable public expenditure to increase again at an annual rate similar to the average for the postwar period, as compared with the minimal increase possible under orthodox policies.

(*c*) *Devaluation*

Table 2.5 summarises the results of a strategy aimed at pushing the exchange rate down in order to improve the cost competitiveness of UK producers.

It is assumed that the cost competitiveness of UK producers is improved by 4% a year from mid-1978 onwards. The exchange rate is brought down to about $1.40 by 1980 by means of expansionary fiscal policy, starting with tax reductions in April worth over £3 billion for 1978/9. When continuing devaluation comes to be anticipated, the exchange rate might need to be protected against over-rapid decline by reversion to a more cautious fiscal stance. The projection minimises the adverse effects on inflation by postulating gradual depreciation of the exchange rate rather than periodic large falls, and by assuming that incomes policy prevents higher import prices feeding through into wage costs.

Such a strategy could raise the rate of GDP growth to around 3½%, though this is not sufficient to reduce unemployment. But the effect on income distribution between wages and profits is dramatic. Total income from profits, rent and self-employment, now under one-third of income from employment, would rise to about two-thirds by 1990. The shift in post-tax income distribution would be smaller because of the scope for tax reductions concentrated on wage earners, the corresponding post-tax ratio rising from 50% now to about 85% in 1990.

**Table 2.4. Projections under import controls strategy**

| | Growth of GDP at 1975 factor cost (% per year) | Unemployment (thousands) | Growth of average real earnings after tax (% per year) | Increase in consumer prices (% per year) | Current account balance of payments (£1975 million) | Weighted exchange rate (1977 US $) | Public sector borrowing requirement (% of GNP at market prices) |
|---|---|---|---|---|---|---|---|
| 1978 | 3.7 | 1393 | 2.0 | 12.0 | +1335 | 1.88 | 4.5 |
| 1979 | 4.3 | 1381 | 2.0 | 12.2 | +1201 | 1.72 | 4.3 |
| 1980 | 4.6 | 1321 | 1.6 | 10.6 | +966 | 1.61 | 4.3 |
| 1985 | 4.2 | 973 | 3.5 | 3.8 | +637 | 1.60 | 0.5 |
| 1990 | 3.6 | 497 | 3.8 | 3.7 | +153 | 1.59 | 1.7 |

*Notes:* see Table 2.3

**Table 2.5. Projections under devaluation strategy**

| | Growth of GDP at 1975 factor cost (% per year) | Unemployment (thousands) | Growth of average real earnings after tax (% per year) | Increase in consumer prices (% per year) | Current account balance of payments (£1975 million) | Weighted exchange rate (1977 US $) | Public sector borrowing requirement (% of GNP at market prices) |
|---|---|---|---|---|---|---|---|
| 1978 | 3.4 | 1414 | 2.9 | 11.8 | +1089 | 1.82 | 5.0 |
| 1979 | 2.9 | 1516 | 1.7 | 12.9 | +821 | 1.60 | 5.1 |
| 1980 | 4.1 | 1521 | 2.1 | 11.7 | +629 | 1.42 | 5.8 |
| 1985 | 3.7 | 1477 | 1.3 | 6.8 | +2712 | 1.00 | 0.6 |
| 1990 | 2.9 | 1370 | 1.8 | 8.1 | +3506 | 0.65 | 2.9 |

*Notes:* see Table 2.3

### 3. Effects of varying the assumptions

This section examines the effect of varying some of the most important assumptions.

*Faster growth of world trade*

The direct effect of world trade expanding at the historically high rate of 10% a year instead of the 6% assumed above would be to raise the growth of exports by 3% a year (see Table 2.6). This allows an increase in import volumes of a similar magnitude and permits the growth rate of GDP to be about 1% a year higher under orthodox policies. Unemployment is thereby reduced below what it otherwise would be by 1 million in 1985 and 2 million in 1990. This is nowhere near sufficient, however, to prevent unemployment from rising significantly throughout the period. Moreover, rapid growth of world trade would be bound to lead to rises in the prices of food and raw materials, offsetting at least part of the benefits mentioned above.

*Higher world commodity prices*

If world prices of food and raw materials imported by the UK increase relative to world prices of manufactures, the volume of imports has to be reduced. Table 2.6 shows the effect on projections under orthodox policy if world commodity prices (including oil) were to rise 5% a year faster relative to prices of manufactures. It becomes necessary to cut GDP growth by about ½% a year, with consequent increased unemployment of some 350,000 in 1985 and 600,000 in 1990. Assuming no relaxation of control on wage settlements, the rate of price inflation would be 1¾% higher and growth of real wages after tax would be reduced by 1¼% a year.

*More rapid import penetration*

The projections given so far incorporate the assumption that the abnormal increase in the market share of manufactured imports in 1977 was a freak occurrence which will not be repeated. If this supposition were wrong, however, and 1977 marked the beginning of an accelerated trend of import penetration, then the consequence for output growth, unemployment and real income would be serious indeed, as indicated in Table 2.6. The assumption of an increase in the trend growth of imports of finished manufactures of 5% a year reduces growth of GDP under orthodox policies by about 1% a year, implying that unemployment would reach 2 million in 1980 and nearly 4 million as early as 1985.

**Table 2.6. Effects of variant assumptions**

| | Growth of exports (% per year) | Growth of imports (% per year) | Growth of national income (% per year) | Growth of GDP (% per year) | Unemployment in final year (thousands) |
|---|---|---|---|---|---|
| *Faster world trade growth* [a] | | | | | |
| 1977-80 | +2.0 | +1.8 | +1.0 | +1.0 | −261 |
| 1980-85 | +2.5 | +2.4 | +1.3 | +1.3 | −1025 |
| 1985-90 | +2.7 | +2.5 | +1.5 | +1.5 | −1963 |
| *Higher commodity prices* [b] | | | | | |
| 1977-80 | 0.0 | −0.8 | −0.7 | −0.4 | +101 |
| 1980-85 | 0.0 | −1.0 | −0.9 | −0.4 | +368 |
| 1985-90 | 0.0 | −1.1 | −1.1 | −0.4 | +604 |
| *Faster import penetration* [c] | | | | | |
| 1977-80 | 0.0 | +0.1 | −0.7 | −0.8 | +224 |
| 1980-85 | 0.0 | +0.1 | −0.9 | −1.1 | +845 |
| 1985-90 | 0.0 | +0.2 | −0.6 | −0.9 | +1409 |

*Notes:* All figures are shown as differences from the base projection under othodox policies (see Table 2.2).

[a] Volume of world trade grows by 1% more in 1978, and by 4% a year more thereafter.

[b] World prices of food, raw materials and oil rise by 5% a year more from 1979 onwards.

[c] Trend growth of imports of finished manufactures is raised by 5% a year for given final demand and relative prices.

*Higher wage settlements*
If money wage settlements are significantly higher than the targets specified above and the other objectives of orthodox policies remain the same, the higher rate of inflation will give rise to higher private saving and therefore enable bigger tax cuts to be made in the medium term. If higher inflation did not alter the required trade balance, neither GDP nor unemployment need be affected. However, higher inflation and the fall in the exchange rate associated with it are likely to make sterling less attractive and cause capital outflows. This means that the trade balance has to be improved to maintain the same target real exchange rate. In the long run wage settlements 10% higher could reduce the level of GDP by 2½% on this account.

Nevertheless higher wage settlements would yield larger increases in real earnings until price inflation caught up. The permanent gain to the level of real earnings resulting from money wage settlements 10% higher is about 6%. It lasts only so long as the higher pace of wage and price inflation is maintained.

## 4. The underlying analysis

The remainder of this chapter sets out the analysis which underlies the results presented above.

Section 5 examines productive potential to see how much output could be expanded, given prospective trends in productivity and the labour supply, and to infer the levels of unemployment likely to result from given output growth.

Section 6 examines balance-of-payments constraints, the purpose being to identify what rate of output growth would be consistent with those constraints under orthodox policies or under a devaluation strategy, as well as to determine the severity of restriction of imports which would be necessary under an import control strategy.

Section 7 examines how different rates of growth of output under each strategy would affect the growth and distribution of real national income, the growth of private consumption and average real wages.

Section 8 examines growth of public expenditure and revenue to infer the scope for lower tax rates. This leads on to an assessment of the prospects for reducing inflation of wages and consumer prices, and finally to a discussion of the required rate of expansion of the money supply and domestic credit.

## 5. Productive potential

The main question examined here is what rate of growth of output is likely to be possible in future, given the trends of labour supply and productivity. This leads to a consideration of the level of unemployment which may result if output does not in fact grow so fast.

*(a) Labour supply and productivity*
It is well known that the labour supply, having increased very slowly between the mid-1960s and early 1970s, is now rising faster, partly because of a 'bulge' of young people entering the labour force, and partly because of the growing proportion of women seeking work. From now until 1985 the labour supply is expected to rise each year by about 0.8%, or about 200,000 people. Thereafter the rate of growth may slow down because of lower birth rates in the 1970s. It should be noted, however, that if unemployment continues to rise this is likely to encourage emigration, which would reduce the increase in the labour supply.

The likely trend of productivity, or average output per person employed, is open to doubt. Actual productivity, having increased fairly steadily at nearly 3% a year up to 1973, has not risen at all over the past four years. Indeed, when corrected for the contribution of North Sea oil and gas to the growth of output, it has fallen. The shortfall in productivity is much greater than can be explained in terms of normal cyclical effects observed in previous postwar recessions. The main reasons are probably, in industry, the effects of job-saving measures and, in services, the availability of abnormally large numbers of young people seeking work (see Chapter 3). These factors are unlikely to continue reducing productivity indefinitely, but, on the other hand, the shortfall in productivity growth which has already occurred might not be reversed rapidly or fully even if there is a recovery of output.

*(b) Targets for growth of output*
Assuming future trend productivity growth of just under 3% a year, the rising labour supply means that up to 1985 the growth of output consistent with constant unemployment would be about 3½% a year excluding the North Sea, and nearly 4% a year (at 1975 prices) if North Sea output is included. After 1985 the corresponding output growth, with or without the North Sea, would be 3% a year.

Before specifying a target for future output growth, account must be taken of the scope for reducing unemployment. Each 1% reduction in registered unemployment allows about 1¾% extra employment and, because of higher productivity, may involve nearly 3% extra output. Thus if unemployment were to be reduced to 2% from the present level of 5½%, over whatever period, the target level of output at the end of the period could be 10% higher on that account. If it were planned to achieve a reduction of unemployment to 2% by the mid-1980s, GDP (including the North Sea) should therefore grow by over 5% a year. To achieve the same reduction by 1990 the average GDP growth rate could still be over 4% a year.

*(c) Implications for unemployment*
These growth rates of non-North Sea output are much higher than what was achieved in the 1950s and 1960s, let alone more recently. The target suggested in Table 2.7 for the import control strategy involves growth of output, excluding the North Sea, at 3½%-4% a year. Although this might achieve only a gradual reduction in unemployment, it is still very ambitious in terms of capacity, investment and the balance of payments, as will be shown below.

The table also shows the projected effects of slow growth under orthodox policies (reasons for expecting slow growth are set out in section 6 below). Without a massive and continuing expansion of job-saving measures, total employment would fall at an accelerating rate; in the absence of higher emigration, unemployment would rise to nearly 3 million by 1985 and about 4½ million by 1990.

*(d) Possible capacity constraints*

Any attempt to maintain fast growth of output starting from a recession is bound to involve various types of shortages and bottlenecks. Most of these are unlikely to be critical. Shortages of skilled labour, for example, always occur in an upturn, but there is no evidence that they significantly impede growth of output in aggregate for more than brief periods.

The most likely effect of supply constraints would be to cause diversion of exports and an abnormal level of imports, but this has not happened on a significant scale in the past. However, in view of the depth and duration of the present recession, pressure on capacity may be more severe in the future. To allow for this in an impressionistic manner, a hypothetical series for 'capacity' has been extrapolated from past levels of 'business' output (i.e. excluding the North Sea and public services), allowing a 5% margin. In the past actual output never reached more than 100% of notional capacity calculated in this way.

The recession since 1973 means that notional capacity is calculated to fall slightly between now and 1980. Even with the very slow growth expected under orthodox policies, output would temporarily reach about 100% of notional capacity in 1982. With fast growth, such as the target set out above for an import control strategy, output would exceed notional capacity by up to 5% in the four years from 1980 to 1983.

This calculation suggests the possibility that any fast recovery of output could run into abnormal supply constraints in the early 1980s. It is for this reason that the target for the import control strategy was not set high enough to achieve a rapid fall in unemployment. It is assumed tentatively that with fast growth of output there would be diversion of exports (2½% in 1982) and a substantial increase in demand for imports of manufactures (7½% in the same year), requiring more stringent restrictions to keep total imports down. By the mid-1980s, however, notional capacity is calculated to be growing fast enough for supply constraints to disappear.

*(e) Conclusions*

Consideration of trends in labour supply and productivity suggests that GDP growth averaging 4% a year may be necessary to reduce unemployment at all. It is rather likely that even this rate of growth would run into abnormal supply constraints in the early 1980s. On the other hand slow growth, such as that expected under orthodox policies, is likely to cause steady and substantial increases in unemployment throughout the next decade, bringing total unemployment up to levels as high as those experienced in the 1930s unless there is large-scale emigration.

## 6. The balance-of-payments constraint

The potential future expansion of GDP is limited not only by the available labour supply and trends in productivity, but also by constraints associated with the balance of payments. The task of this section is to consider how severe these constraints are likely to be in future under different strategies, and to infer the rate of growth of GDP which might be achieved under each.

Balance-of-payments constraints arise from problems which may be caused by deficits. The ultimate danger is that large deficits, whether on current or capital account, might exhaust official exchange reserves and borrowing facilities, forcing an undesired, and possibly uncontrollable, fall in the exchange rate. Short of this, the government may have to adopt a deflationary fiscal and monetary policy, reducing domestic output, as a condition of drawing on external borrowing facilities.

There are several measures which can be taken to help avoid these risks. The balance on capital flows may be improved by a tight monetary policy with high interest rates, or by a low rate of domestic inflation.

**Table 2.7. Output, employment and unemployment**

| | GDP [a] | Output [a] excluding North Sea | Productivity [b] | Employment | Unemployment in final year of period (millions) |
|---|---|---|---|---|---|
| | (growth rates, % per year) | | | | |
| *Historical* | | | | | |
| 1964-73 | 2.7 | 2.7 | 2.8 | –0.1 | 0.6 |
| 1973-77 | 0.1 | –0.2 | –0.1 | –0.1 | 1.4 |
| *Projected under orthodox policies* | | | | | |
| 1977-80 | 2.4 | 1.7 | 1.8 | –0.1 | 1.8 |
| 1980-85 | 1.5 | 1.4 | 1.8 | –0.4 | 2.9 |
| 1985-90 | –0.1 | –0.1 | 1.5 | –1.6 | 4.6 |
| *Target for import control strategy* | | | | | |
| 1977-80 | 4.2 | 3.5 | 2.6 | 0.9 | 1.3 |
| 1980-85 | 4.2 | 4.2 | 2.9 | 1.3 | 1.0 |
| 1985-90 | 3.6 | 3.6 | 2.8 | 0.9 | 0.5 |

*Notes:*

[a] Measured at 1975 prices

[b] Non-North Sea output divided by total employment.

But whatever can be achieved on capital flows, deficits on current account must also be kept within limits. The need to limit current account deficits, and trade deficits in particular, imposes a fairly direct constraint on the potential expansion of GDP.

The approach followed below is to estimate the likely order of magnitude of capital flows and income transfers in order to arrive at targets for the balance of trade in goods and services. Then, in the light of export and import propensities, estimates are made of the rate of growth of GDP which would yield trade balances matching these targets.

Expected foreign exchange benefits from North Sea oil and gas are set out first.

*(a) The contribution of North Sea oil and gas*

The pattern of foreign exchange benefits from North Sea oil and gas is indicated in Table 2.8. The gross value of sales of oil and gas (which displace net imports) will rise to about £5 billion (at 1975 values) by 1980. Other items - associated imports, profits due to foreign companies and net capital flows - yield a relatively small net debit. The overall net benefit, whether to the current account alone or to the current and capital accounts combined, will rise fast between now and 1980, contributing the equivalent of an extra 1 - 2% growth of total export earnings each year. The table shows continuing increases in net benefits after 1980. These mainly reflect a probable rise in the real price of oil. The importance of North Sea oil in the 1980s and beyond is that it provides an insurance against costs which Britain might otherwise have to pay because of world scarcity of cheap sources of energy. The insurance is only temporary because North Sea oil and gas fields will eventually approach exhaustion, probably during the 1990s. Nevertheless the benefit to the balance of payments in the 1980s will be a real one, compensating for the loss incurred when world oil prices quadrupled in 1973-4. The impact on the balance of payments will be particularly evident during the present period when North Sea oil production is building up fast, and this is reflected in projections of the current and capital account to which we now turn.

*(b) The capital account and income transfers*

Table 2.9 suggests targets for the balance of trade in goods and services based on projections of capital flows and income transfers. Recent historical figures are given for comparison.

The targets are uncertain because capital flows are not very predictable, as well as being sensitive to assumptions about inflation, interest rates, and objectives for the exchange rate. The main feature of the table is that a surplus on trade in goods and services of about £2 billion a year is judged to be necessary in future (this corresponds to a smaller surplus on the current account as a whole). One reason for this is the policy assumption that repayment of official debt is financed in part by surpluses rather than by drawings on reserves or new borrowing. Other reasons are that long-term capital inflows will fall now that the main wave of overseas investment in the North Sea has passed, and that income transfers are turning negative because of a rising net contribution to the EEC budget and rising North Sea profits due to overseas companies. Although the estimates are speculative, neither income transfers nor any of the capital account items distinguished in the table seems likely to be significantly positive, and some are bound to be negative. The conclusion must be that there will be a need for at least small surpluses on trade in goods and services.

*(c) Growth of exports, imports and GDP*

If fuels are excluded, it will be possible for the volume of imports to grow 3-4% a year faster than the volume

**Table 2.8. The direct contribution of North Sea oil and gas to the balance of payments[a] (net benefits, £1975 billion)**

| | | 1977 | 1980 | 1985 | 1990 |
|---|---|---|---|---|---|
| *Balance on goods and services* | | | | | |
| | Sales of oil and gas[b] | 2.1 | 4.9 | 7.6 | 9.9 |
| *less* | Imports for North Sea | –0.9 | –0.6 | –0.2 | –0.2 |
| *equals* | Net benefit | 1.1 | 4.3 | 7.4 | 9.6 |
| *less* | *Income transfers* | | | | |
| | Profits and interest due to foreign oil companies | –0.2 | –1.3 | –1.6 | –2.1 |
| *equals* | *Balance on current account* | | | | |
| | Net benefit | 0.9 | 3.0 | 5.8 | 7.5 |
| *plus* | *Capital account* | | | | |
| | Net inflow associated with North Sea activity | 0.9 | 0.1 | –0.8 | –0.7 |
| *equals* | *Basic balance* | | | | |
| | Net benefit | 1.8 | 3.1 | 5.0 | 6.8 |

*Notes:*

(a) Implicit assumptions about inflation and the exchange rate are those made for the 'orthodox policies' projection. The real price of oil is assumed to rise by 6% a year after 1983.

(b) These figures do not include any allowance for the fact that oil imports displaced by North Sea gas would have cost more than gas which is sold by North Sea producers at very low prices. The additional benefit due to displacement of higher cost oil is however taken into account in analysis of the balance of trade as a whole (Table 2.10 below).

**Table 2.9. The overall balance of payments (£1975 billion)**

| | Balance on goods and services | Income transfers | Balance on current account | Long-term capital and trade credit | Short-term capital | Official financing[a] |
|---|---|---|---|---|---|---|
| *Historical* | | | | | | |
| 1973 | –2.6 | 1.3 | –1.4 | –0.1 | 0.4 | 1.1 |
| 1974 | –5.6 | 1.1 | –4.4 | 0.5 | 1.9 | 2.1 |
| 1975 | –2.1 | 0.5 | –1.6 | 0.1 | 0.1 | 1.5 |
| 1976 | –1.4 | 0.4 | –1.1 | –0.8 | –1.3 | 3.1 |
| 1977 | 0.7 | –0.7 | 0.0 | 1.9 | 3.5 | –5.5 |
| *Projected targets*[b] | | | | | | |
| 1978-80 average | 2.4 | –1.3 | 1.1 | 0.0 | 0.1 | –1.1 |
| 1981-85 average | 1.9 | –1.6 | 0.4 | –0.1 | –0.1 | –0.1 |
| 1986-90 average | 1.8 | –1.2 | 0.5 | –0.1 | –0.5 | 0.0 |

*Notes:*
(*a*) A negative sign in this column (in accordance with standard conventions) denotes a reserve inflow, and *vice versa.*
(*b*) Assumptions about inflation, interest rates, repayment of overseas debt, objectives for the exchange rate and management of reserves are those of the 'orthodox policies' projection (see Appendix, p.A1).

of exports between 1977 and 1985 while maintaining a surplus on trade in goods and services as a whole (see Table 2.10). The main reason for this is that North Sea oil and gas will move the UK from being a net importer of fuels to being a net exporter. An additional factor is that world prices of raw materials have recently fallen sharply relative to prices of manufactures, reducing the unit cost of UK imports relative to the purchasing power of exports.

But the permissible growth of imports will still depend largely on the volume of exports, and here prospects are exceptionally poor. It is likely that world trade, and hence UK export markets, will grow relatively slowly in future. Worse still, the recent recovery of sterling combined with inflation of home costs has made the competitive position of UK exporters, measured in terms of relative costs and prices, much less advantageous than it had been previously. If the conjunction of a high 'real' exchange rate and slow growth of world trade persists, the volume of exports (excluding fuels) will on past relationships grow by little more than 3% a year on average up to 1985. The calculations summarised in Table 2.10 indicate that the volume of imports (excluding fuels) might then be able to grow by 6-7% a year over this period (see Appendix, p. A18, for the projected trade accounts on which this table is based).

By the standards of the 1960s 6-7% a year would be a high import growth rate, providing the opportunity for quite rapid growth of GDP. But the composition of imports has altered since then to such an extent that the fast-growing categories, imports of manufactures in general and finished manufactures in particular, now have to grow more slowly than in the 1960s and early 1970s in order to keep growth of total imports within this figure. Moreover imports of manufactures have risen by an average of 10% a year since 1970, while GDP has only grown by 1½% a year. Up to 1985 they should be able to grow at nearly 10% a year without causing current account deficits. But on the basis of past trends in import penetration, and allowing for the erosion of UK competitiveness resulting from a high real exchange rate, GDP growth would have to be held down below 2% a year in order to keep growth of imports of manufactures within this figure. On the same basis, constraints on the balance of

**Table 2.10. Growth rates of exports, imports and GDP[a] (% per year)**

| | Volume of exports[b] excluding fuels | Total volume of exports[b] | Volume of imports of manufactures | Volume of imports[b] excluding fuels | Total volume of imports[b] | GDP |
|---|---|---|---|---|---|---|
| *Historical* | | | | | | |
| 1964-73 | 6.4 | 6.4 | 11.1 | 5.5 | 5.7 | 2.7 |
| 1973-77 | 4.0 | 4.1 | 4.5 | 1.4 | –0.3 | 0.1 |
| *Projected under orthodox policies*[c] | | | | | | |
| 1977-80 | 2.5 | 5.3 | 10.3 | 7.0 | 6.0 | 2.4 |
| 1980-85 | 3.7 | 4.5 | 8.4 | 5.9 | 5.7 | 1.5 |
| 1985-90 | 3.9 | 3.4 | 6.0 | 4.5 | 4.2 | –0.1 |

*Notes:*
(*a*) Growth rates calculated from past and projected balance-of-payments accounts in Appendix Table 5.
(*b*) Including services.
(*c*) Calculated to meet target balances on goods and services given in Table 2 above. The most important assumptions are that the exchange rate, adjusted for relative inflation, is held 7½% above its average level in 1977 (slightly *below* the level in February 1978), and that the volume of world trade grows at 6% a year after 1978. See Appendix, p. A1, for details.

trade between 1985 and 1990 would prevent any growth of GDP at all.

These results depend on assumptions about world developments and trends in the UK's trade propensities as well as on policies adopted by the government. The crucial policy assumption made above was that the 'real' exchange rate is maintained at a high level. The sensitivity of the results to exogenous assumptions will be considered briefly before alternative policies are examined.

(*d*) *Sensitivity of the constraint on GDP growth*
Table 2.11 gives growth rates of exports, imports and GDP under variant assumptions to indicate the magnitude of uncertainty about the severity of future balance-of-payments constraints. Growth of world trade at 10% a year (faster than in the 1960s) would raise GDP growth between 1977 and 1985 to 3% a year, still well below productive potential, and this only on the assumption that it did not provoke a boom in world prices of primary commodities. A progressive improvement in the world terms of trade for primary commodities by 5% a year would itself depress GDP growth by about ½% a year. A shift of 5% a year in the trend penetration of imports of finished manufactures would raise or lower GDP growth by about 1% a year.

All in all, the uncertainties cannot overturn the conclusion that, even on optimistic assumptions about world trade, the balance-of-payments constraint under the policy assumption made above will prevent GDP from growing at anything like the rate which is possible and desirable from the point of view of labour supply and productive potential.

(*e*) *Alternative policies*
Policies aimed at easing the balance-of-payments constraint in the medium term must, if they are to have a major effect, increase the growth of exports or reduce the rate of import penetration. Capital flows or income transfers can be important in the short run, but to add permanently to GDP growth by this means, net inflows would have to rise continuously, soon reaching levels which could not in practice be sustained. For example, to add even ½% a year to GDP growth up to 1985 without altering exports or import propensities would require additional net inflows of capital or income transfers rising to about £4 billion a year by the end of the period.

The alternative policies examined here are therefore all designed to increase exports or reduce import penetration. They comprise devaluation, industrial investment, and restriction of imports. In each case the assumptions are deliberately extreme in order to indicate the maximum improvement which might conceivably be achieved and to bring out the problems associated with each as starkly as possible.

(*i*) *Devaluation* The objective of devaluation is to stimulate exports and import-substitution by reducing the costs of production of UK producers relative to those of their foreign competitors. This is achieved if the exchange rate for sterling falls by more than the amount needed to compensate for any excess inflation in the UK relative to that in competitor countries. The government can certainly make the exchange rate for sterling fall, but it is not easy to ensure that it falls in a controlled manner, nor to prevent the acceleration of domestic inflation which tends to occur as a by-product of devaluation.

The methods open to the government for causing a fall in the exchange rate include direct intervention in the foreign exchange market (purchases of foreign currency in exchange for sterling), lower domestic

**Table 2.11. Growth of exports, imports and GDP under variant assumptions (% per year)**

| | 1977-80 | 1980-85 | 1985-90 |
|---|---|---|---|
| *Growth of exports of goods and services* | | | |
| A. Base assumptions | 5.3 | 4.5 | 3.4 |
| B. Fast growth of world trade | 7.4 | 7.1 | 6.2 |
| C. Rising commodity prices | 0.0 | 0.0 | 0.0 |
| D. Fast import penetration | 0.0 | 0.0 | 0.0 |
| *Growth of imports of goods and services* | | | |
| A. Base assumptions | 6.0 | 5.7 | 4.2 |
| B. Fast growth of world trade | 7.9 | 8.2 | 6.8 |
| C. Rising commodity prices | 5.1 | 4.6 | 3.1 |
| D. Fast import penetration | 6.1 | 5.8 | 4.4 |
| *Growth of GDP* | | | |
| A. Base assumptions | 2.4 | 1.5 | –0.1 |
| B. Fast growth of world trade | 3.4 | 2.9 | 1.4 |
| C. Rising commodity prices | 2.0 | 1.1 | –0.5 |
| D. Fast import penetration | 1.6 | 0.4 | –1.0 |

*Notes:*
GDP growth is assumed in each case to be determined by balance-of-payments constraints under the same policy assumptions, including maintenance of the real exchange rate at a predetermined level.
*Base assumptions:* see Table 2.1 above and Appendix, p. A1.
*Fast growth of world trade:* growth at 10% a year after 1978 (compared with 6% a year as the base assumption).
*Rising commodity prices:* world prices of food, raw materials and oil rising 5% a year faster than base assumptions after 1978.
*Fast import penetration:* trend growth of imports of finished manufactures 5% a year faster than the base assumption.

interest rates so as to encourage net capital outflows, and expansion of domestic demand so as to increase imports and push the current account into deficit. The safest and surest course would seem to be a combination of demand expansion and direct intervention. The latter would permit accumulation of exchange reserves which could be used to support sterling if the fall in the exchange rate threatened to get out of hand.

The risk of a sudden collapse of the exchange rate is closely associated with the rate of domestic inflation. If speculators see not only that the government has a long-term policy of devaluation but also that there is likely to be rapid domestic inflation, they must expect a large fall in the nominal exchange rate. There will then be immediate large-scale capital outflows. To ensure that devaluation is stable, it must therefore be accompanied by effective controls on domestic inflation.

The projections of a devaluation strategy here and in the Appendix assume that the exchange rate is brought down steadily by expansionary fiscal policy. At the same time money wage settlements are assumed to be controlled. The rate of depreciation of the real exchange rate is held at 4% a year right through to 1990 giving a massive cumulative reduction in domestic costs of production (expressed in foreign currency) relative to those of competitors. By 1980 the index of relative costs is brought down to its previous lowest level (that at the end of 1976). From then on the degree of real devaluation is far greater than has ever been managed in Britain before.

Table 2.12 shows the calculated effects of such a policy on exports, imports and GDP. Although the growth rates are very much higher than those forecast under the orthodox policy of maintaining a high real exchange rate, the calculated growth of GDP is still not enough to secure a fall in unemployment. Moreover, as is shown below, this strategy would cause a very large change in the distribution of income in favour of profits (despite a radical shift in taxation in the opposite direction). It is most unlikely that the assumed control on wage settlements could in fact be maintained under such circumstances, and without effective wage control devaluation would require even larger falls in the nominal exchange rate to offset inflation of money wages.

(*ii*) *Industrial investment* In recent years much stress has been placed by the government and others on the role of industrial investment in facilitating growth. Here estimates are given of the conceivable effects of a very large programme of additional industrial investment, supposing that some means were found of bringing this about. The assumptions made for this exercise are that investment is undertaken, additional to that forecast on the basis of past relationships, at a rate building up to £3 billion a year (at 1978 prices) in 1982 which is then maintained to 1990. This extra investment is assumed to yield additional output at the rate of £100 a year for each £150 of investment, with a mean gestation lag of two years. As each £100 of output comes on stream it is assumed to raise the UK share of home and world markets by £50 a year (the benefit expanding subsequently in line with exports and home sales as a whole). The investment is thus assumed to provide a dynamic gain to the balance of trade which starts at the equivalent of 50% of the additional output capacity generated. These are deliberately optimistic assumptions, designed to test whether a massive investment programme could conceivably ease balance-of-payments constraints to

**Table 2.12. Growth of exports, imports and GDP under variant policies (% per year)**

| | 1977-80 | 1980-85 | 1985-90 |
|---|---|---|---|
| *Growth of exports of goods and services* | | | |
| A. Orthodox policies | 5.3 | 4.5 | 3.4 |
| B. Devaluation | 6.9 | 8.4 | 8.1 |
| C. Industrial investment | 5.4 | 5.5 | 7.0 |
| D. Import restrictions | 5.0 | 5.7 | 7.0 |
| *Growth of imports of goods and services* | | | |
| A. Orthodox policies | 6.0 | 5.7 | 4.2 |
| B. Devaluation | 7.1 | 7.8 | 7.3 |
| C. Industrial investment | 6.0 | 6.5 | 7.0 |
| D. Import restrictions | 5.5 | 6.6 | 6.8 |
| *Growth of GDP* | | | |
| A. Orthodox policies | 2.4 | 1.5 | –0.1 |
| B. Devaluation | 3.5 | 3.7 | 2.9 |
| C. Industrial investment | 2.4 | 2.5 | 3.5 |
| D. Import restrictions | 4.2 | 4.2 | 3.6 |

*Notes:*

The same assumptions about world conditions and domestic trends are made in each case and correspond to the base assumptions in preceding tables. See Appendix, p. A1, for details of various policies. The principal characteristics of each are as follows.

*Orthodox policies:* maintenance of a high real exchange rate.

*Devaluation:* real exchange rate falling by 4% a year from now on.

*Industrial investment:* additional investment in manufacturing capacity, building up to £2 billion a year at 1975 prices by 1982, from which 50% of output produced either adds to exports or displaces imports.

*Import restrictions:* industrial investment as above, together with direct restriction of imports of manufactures so as to achieve the GDP growth shown.

an extent which allows fast growth of GDP.

The calculated results shown in Table 2.12 are very small in the period up to 1985. From then on, the cumulative benefits are significant and growing. Thus in the very long term, a sustained programme of additional industrial investment could conceivably provide the means for reducing unemployment. But it could not of itself secure much improvement in the prospective growth of GDP between now and the mid-1980s.

(*iii*) *Import restrictions* Direct control of the volume of imports removes the balance-of-payments constraint on growth of GDP, provided that restrictions do not have to be tightened to the point where lack of imports causes serious bottlenecks in domestic production. To avoid this danger, a strategy of import restrictions should be designed not only to remove the balance-of-payments contraint in the short term, but also to stimulate expansion of competitive industrial capacity, which in the longer run will raise exports and displace imports without the need for increasingly severe restriction.

The projections for such a strategy (given in detail in the Appendix) therefore assume a programme of additional industrial investment as set out above. The prospects for securing additional investment should be better than under other strategies because import restrictions could be operated so as to provide some assurance of a market for the output generated.

On these assumptions and in the absence of significant retaliation, total imports could be allowed to rise by about 6% a year with imports of manufactures rising by 8% a year. The degree of restriction of imports of manufactures (i.e. the percentage reduction compared with unrestricted demand) would rise rapidly to about 16% in 1980 and 24% in 1985. After 1985 dynamic benefits of additional investment would mean that the degree of restriction might have been stabilised at about that level.

(*f*) *Conclusion*

If it is desired to hold the real exchange rate at about its present level, balance-of-payments constraints will probably require that GDP growth should be held down to less than 2% a year up to 1985 and may prevent any further growth thereafter. A policy of continuous devaluation of the real exchange rate, even if it could be maintained, would not succeed in bringing GDP growth up to the rate at which unemployment would fall. Additional industrial investment, even if on a massive scale, can only conceivably provide a remedy in the very long term. To maintain GDP growth of about 4% a year, sufficient to reduce unemployment gradually, it would be necessary to restrict imports directly, the degree of restriction rising to the equivalent of about one-quarter of total imports of manufactures.

## 7. Real income and its distribution

This section examines the prospective growth of real incomes on the assumption that growth of GDP will be limited by balance-of-payments constraints.

(*a*) *Growth of real national income*

Before 1973 real national income grew very much in line with output. Since then changes in the terms of trade have caused variations in purchasing power which have disturbed the relationship. In 1973-74 the rise in prices of oil and other imports cut national income by 6%; since then the terms of trade have swung back, restoring about half of the cut.

Under orthodox policies output (excluding the North Sea) will have to grow slowly in future because of balance-of-payments constraints. But as Table 2.13 indicates, real national income may increase reasonably fast, at least in the first few years, as Britain benefits from the contribution of the North Sea. If output could be expanded fast (for example, under the import control strategy) real national income could rise by nearly 50% in the period up to 1985.

**Table 2.13. Growth of GDP, national income and private consumption [a] (% per year)**

| | Output excluding North Sea at market prices | GDP at market prices | National income | Private consumption |
|---|---|---|---|---|
| *Historical* | | | | |
| 1964-73 | 2.7 | 2.8 | 2.7 | 2.6 |
| 1973-77 | –0.1 | 0.1 | –0.7 | –1.2 |
| *Projected under orthodox policies* | | | | |
| 1977-80 | 2.1 | 2.8 | 3.2 | 3.5 |
| 1980-85 | 1.8 | 1.9 | 2.3 | 3.2 |
| 1985-90 | 0.2 | 0.2 | 0.5 | 0.9 |
| *Projected under import control strategy* | | | | |
| 1977-80 | 3.8 | 4.4 | 4.8 | 4.1 |
| 1980-85 | 4.4 | 4.4 | 4.6 | 5.3 |
| 1985-90 | 3.9 | 3.7 | 3.7 | 4.1 |

*Note:*

[a] Measured at 1975 prices.
Calculated from Appendix, Tables 2 and 4.

After the early 1980s,further growth of national income will depend on growth of non-North Sea output.

(*b*) *Growth of private consumption*
Growth of private consumption, also shown in Table 2.13, depends both on resources available and on resources allocated for investment and for public services. When the economy is constrained by the balance of payments or by shortage of industrial capacity, not by shortage of labour, investment competes for scarce resources (foreign exchange or industrial output) much more strongly than public services. Under orthodox policies investment would be low, allowing private consumption to grow by 3-3½% a year in real terms up to 1985, although the growth rate would have to be reduced to a very low figure thereafter. Under any fast growth strategy investment would have to be high. Growth of private consumption would at first be little faster than under orthodox policies, but it could be maintained at a high rate throughout the 1980s. So far as private consumption is concerned, the penalty for failure would be paid, mainly, from the mid-1980s onwards.

(*c*) *The distribution of national income*
Table 2.14 gives projections for 1985 of the post-tax distribution of real national income between wages, welfare benefits, private property income and public sector, with some past figures for comparison.

The public sector's share of national income (net of grants and subsidies) is calculated to remain almost constant under all strategies shown in the table (this assumes that present public expenditure plans will be revised up or down at some future date, depending on the growth of GDP and national income as a whole). The share of post-tax profits and other property income may be expected to recover from its present depressed level, the rise in the profit share being most marked under a strategy of devaluation. Welfare benefits will account for a rising share of income under orthodox policies, mainly because of rising unemployment.

The share of wages will fall irrespective of whether growth is fast or slow, since in the first case the government has to ensure that sufficient finance is made available for higher investment and in the second provision has to be made the the larger numbers unemployed. The fall in the share of wages is most marked under devaluation, since the purpose of devaluation is to stimulate exports and import substitution by increasing profits relative to wages.

(*d*) *Growth of the average real wage*
From the early 1950s up to 1972 the average real wage after tax increased continuously, although the size of year-to-year increases varied depending on the size of money wage settlements and tax changes. In 1973 it failed to rise for the first time, and after small increases in 1974-75, it fell by 7½% between 1975 and 1977.

From now on the average real wage should start rising again at roughly the same rate as productivity. By 1981 it should recover to the level reached in 1975 and by the end of the 1980s it could be anywhere between 20% and 40% higher than in 1975, depending on whether the growth of output and productivity is fast or slow.

Table 2.15 gives indices for employment income after tax in real terms under slow and fast growth assumptions. With the lower growth expected under orthodox policies, nearly half the improvement in the average real wage in the 1980s is offset by the declining numbers in employment. With the faster growth projected under an import control strategy, total employment income after tax is calculated to rise by no less that 60% in real terms between 1980 and 1990; under a devaluation strategy the calculated increase over the same period is 25%.

## 8. Fiscal policy, inflation and credit expansion

This section examines the prospects for reducing taxation, inflation and credit expansion.

(*a*) *Fiscal policy*
Table 2.16 gives projections of public expenditure and revenue, under slow and fast GDP growth assumptions corresponding to those predicted under orthodox policies and an import control strategy respectively. Expenditure on goods and services (public consumption and public investment) is based on existing government plans modified to take account of differences in the actual growth of GDP from that

**Table 2.14. Post-tax shares of real national income[(a)] (% of total national income)**

| | Wages and salaries | Welfare benefits | Income from property and self-employment[(b)] | Net income of public sector (receipts less transfers) |
|---|---|---|---|---|
| *Historical* | | | | |
| 1964 | 48 | 6 | 23 | 24 |
| 1973 | 45 | 7 | 25 | 23 |
| 1977 | 44 | 9 | 22 | 24 |
| *Projected for 1985* | | | | |
| Orthodox policies | 42 | 11 | 24 | 23 |
| Import control strategy | 42 | 9 | 24 | 25 |
| Devaluation strategy | 39 | 8 | 28 | 25 |

*Notes:*
(*a*) Calculated from Appendix, Table 4.
(*b*) Excluding stock appreciation.

assumed in the Public Expenditure White Paper. Under orthodox policies slow growth of GDP would mean little expansion of public expenditure on goods and services. Under the import control strategy it would rise much faster, partly on account of the investment programme needed under that strategy. Expenditure on transfers (welfare benefits, other subsidies and grants, and debt interest) will tend to rise faster under conditions of slow growth because of rising unemployment. The projected growth rate of total public expenditure ranges between 1.4 and 2.7% a year up to 1980 and between 1.7 and 3.8% a year between 1980 and 1985.

These projected growth rates of total public expenditure are in all cases significantly less than the projected growth of government revenue at constant real tax rates (adjusted for inflation). If inflation remains at around 10% a year, the public sector deficit (expenditure *less* revenue) should remain roughly constant in real terms in order to keep GDP growing in line with balance-of-payments constraints. In this case, the whole of the difference between growth of revenue at constant real tax rates and the projected growth of expenditure would become available for reducing real tax rates, the amount available up to 1980 being about £3 billion at 1975 prices whether under fast or slow growth assumptions, with a further £6-8 billion becoming available between 1980 and 1985. To the extent that inflation can be reduced, the public sector deficit would have to be smaller and the finance available for reducing real tax rates would be less. The assumption in the table is that inflation is brought down to around 5% a year between 1980 and 1985; this would reduce the finance available for

**Table 2.15. Index of the average real wage after tax [a] (1973 = 100)**

| | Total wages and salaries after tax in real terms | Total employment | Average real wage after tax per employee |
|---|---|---|---|
| *Historical* | | | |
| 1964 | 82.6 | 101.0 | 81.9 |
| 1973 | 100.0 | 100.0 | 100.0 |
| 1977 | 94.7 | 99.6 | 95.2 |
| *Projected under orthodox policies* | | | |
| 1980 | 100.6 | 99.3 | 101.4 |
| 1985 | 110.0 | 97.3 | 113.3 |
| 1990 | 111.5 | 90.0 | 124.1 |
| *Projected under import control strategy* | | | |
| 1980 | 102.9 | 102.3 | 100.6 |
| 1985 | 130.1 | 109.1 | 119.4 |
| 1990 | 164.2 | 114.2 | 143.8 |
| *Projected under devaluation strategy* | | | |
| 1980 | 102.7 | 101.1 | 101.7 |
| 1985 | 114.9 | 105.8 | 108.7 |
| 1990 | 128.6 | 108.4 | 118.7 |

*Note:*
[a] Calculated from Appendix, Tables 2 and 4.

**Table 2.16. Growth of public sector revenue and expenditure [a] (% per year)**

| | Expenditure on goods and services | Transfers | Total expenditure | Required revenue | Revenue at constant real tax rates [b] |
|---|---|---|---|---|---|
| *Historical* | | | | | |
| 1964-73 | 3.6 | 5.3 | 4.1 | 4.2 | n.a. |
| 1973-77 | 1.4 | 4.6 | 2.6 | 2.6 | n.a. |
| *Projected under orthodox policies [b]* | | | | | |
| 1977-80 | 0.7 | 2.4 | 1.4 | 1.3 | 3.9 |
| 1980-85 | 1.5 | 2.1 | 1.7 | 3.5 | 4.0 |
| 1985-90 | –0.6 | 2.5 | 0.8 | 0.1 | 0.9 |
| *Projected under import control strategy [b]* | | | | | |
| 1977-80 | 2.8 | 2.6 | 2.7 | 3.1 | 5.1 |
| 1980-85 | 5.0 | 1.8 | 3.8 | 5.7 | 6.6 |
| 1985-90 | 4.3 | 1.7 | 3.4 | 2.9 | 4.5 |

*Notes:*
[a] Including relative price effects.
[b] See Appendix, p. A1 for assumptions.

cutting real tax rates to £2-4 billion (at 1975 prices) over that period.

The scope for reducing taxation evidently depends on future public expenditure, which might be different from what we have assumed. So far as investment is concerned, the need for expenditure is partly governed by the rate of growth of GDP. But in the case of current expenditure there is wider discretion. However, variations in current expenditure have a net cost in terms of variations in tax rates, which is much less than one for one. About two-thirds of current expenditure consists of wages and salaries of public employees, and much of the cost of any increase in direct public employment returns straight to the government in the form of tax revenue and savings in social security benefits. This means that changes in planned future current expenditure are unlikely to have a large effect on the scope for reductions in tax rates. It may therefore be concluded that sums averaging at least £1½ billion a year at present-day prices will become available each year between now and the early 1980s for financing lower real tax rates.

(*b*) *Inflation*

Although the future course of money wage settlements cannot be predicted at all closely, it is at least possible to assess macroeconomic influences on wage settlements and to trace the likely relationship between wage and price increases.

Table 2.17 provides illustrative figures under orthodox policies on the assumption that money wage settlements are controlled so as to average 10% (in terms of basic rates) in 1978, falling progressively to 5% from 1981 onwards. The figures in the table may be used to judge the feasibility of settlements of this magnitude, as well as to examine the consequences for prices and average real wages.

Note first that average money earnings are likely to rise considerably faster than basic rates, not only because of normal wage 'drift' but also because of consolidation of increases under Phase I and Phase II of the counter-inflation policy into bonus and overtime payments. Earnings are expected to continue rising at over 10% a year until 1981.

Another important issue is whether prices will rise significantly less than earnings. This depends not only on import costs and indirect taxes, but also on the extent to which below-trend productivity is reflected in higher prices. Short-run reductions in productivity have in the past been absorbed in profits rather than prices, but if productivity remains relatively low for long periods, prices may eventually be marked up so as to restore profit margins. It is assumed that after four years of depressed productivity, the need to restore profit margins will push prices up relatively fast in the next two or three years. With continuing slow growth of productivity expected under orthodox policies, consumer prices will rise only 1½-2% less than average money earnings, despite the favourable effect of a high exchange rate in holding down import costs. With reductions in direct taxation, average earnings after tax may rise about 2% a year in real terms.

With consumer prices rising by more than 10% a year, it will not be easy for money wage settlements to be reduced progressively to 5% a year, as assumed in the table. Up to 1980, even allowing for tax reductions, the value of negotiated rates would have to *fall* substantially in real terms. Orthodox policies will only succeed in securing an eventual reduction in inflation if this degree of restraint is accepted in future wage bargaining.

Table 2.18 indicates that the prospects up to 1980 would be little different under strategies of import restriction or progressive devaluation. In the longer term fast growth of GDP and productivity, achieved by means of import restrictions, would reduce prices relative to money wages, making a lower rate of inflation easier to achieve; after 1980 money settlements of 5% imply improvements in the real value of negotiated basic rates. But the strategy of progressive devaluation would make low money wage settlements much more difficult to achieve in the early 1980s, because rising import costs would push up prices and erode the real value of negotiated basic rates. Moreover, the share of profits would be rising fast, especially in export industries. It seems most unlikely that wage settlements could in fact be held down to 5% in such circumstances.

**Table 2.17. Inflation of prices and wages (increases over previous year, %)**

| | Money wage settlements (basic rates)[a] | Real post-tax value of settlements (basic rates)[a] | Average earnings before tax | Consumer prices[b] | Average earnings after tax in real terms |
|---|---|---|---|---|---|
| *Historical* | | | | | |
| 1975 | 34.0 | 6.0 | 30.7 | 24.0 | 1.7 |
| 1976 | 16.8 | –2.6 | 15.4 | 16.4 | –1.9 |
| 1977 | 7.8 | –7.0 | 9.1 | 15.7 | –5.5 |
| *Projected under orthodox policies*[c] | | | | | |
| 1978 | 10.0 | –1.8 | 13.5 | 11.8 | 2.2 |
| 1979 | 8.0 | –3.2 | 13.7 | 12.2 | 1.8 |
| 1980 | 6.5 | –2.8 | 11.5 | 10.6 | 2.4 |
| 1980-85 average | 5.0 | –0.2 | 7.5 | 5.3 | 2.2 |

*Notes:*

[a] Excluding public services.

[b] Deflator for consumers' expenditure inclusive of relative price effect for total home sales.

[c] See Appendix p. A1, for assumptions.

The consequence of high money wage settlements, rising to 20% from 1980 onwards, would be to bring price inflation back up to much the same figure. Average real wages after tax would rise by nearly 5% a year in the first few years, benefiting not only from the lag in adjustment of prices but also from lower taxation (the public sector deficit would have to be increased to compensate for a higher savings ratio). The magnitudes illustrated in the table are very similar to those which occurred after the ending of incomes policy in 1970 at a time when unemployment was rising. A reversion to 20% inflation is therefore not implausible, judged solely by economic criteria.

(c) *Credit expansion*

It is difficult to reach a conclusion about the prospects for expansion of credit and the money supply after the remarkable experience of the past four years, when the money supply has fallen by about 25% relative to money national income without particularly tight restriction of credit or high interest rates. With inflation continuing at over 10% a year and the money national income rising by 15% a year up to 1980, it could be expected on the basis of earlier experience that the demand for money will rise by at least 15% a year for the next two or three years. But on the basis of what has happened recently the demand for money might conceivably rise by less than 10% a year over this period.

Assuming that the overall balance of payments (excluding monetary flows) will be in surplus, the total domestic demand for credit (see Table 2.19) could expand each year by as much as 12% of the money stock if the demand for money keeps pace with national income, or by only half this if the relative contraction of demand for money continues. The uncertainty about domestic demand for credit is greater still if account is taken of other possible uses, which recently have also been somewhat volatile.

**Table 2.18. Inflation of prices and wages under variant assumptions (increases over previous year, %)**

| | Money wage settlements (basic rates)[a] | Real post-tax value of settlements (basic rates)[a] | Average earnings before tax | Consumer prices[b] | Average earnings after tax in real terms |
|---|---|---|---|---|---|
| *Projected averages, 1978-80* | | | | | |
| 1. Orthodox policies | 8.2 | –2.6 | 12.9 | 11.6 | 2.1 |
| 2. Import controls strategy | 8.2 | –2.9 | 13.0 | 11.6 | 1.9 |
| 3. Devaluation strategy | 8.2 | –2.6 | 13.0 | 12.1 | 2.2 |
| 4. Orthodox policies with higher money wage settlements | 16.0 | 2.2 | 18.7 | 14.8 | 4.8 |
| *Projected averages, 1980-85* | | | | | |
| 1. Orthodox policies | 5.0 | –0.2 | 7.5 | 5.3 | 2.2 |
| 2. Import controls strategy | 5.0 | 1.0 | 7.3 | 3.8 | 3.5 |
| 3. Devaluation strategy | 5.0 | –1.0 | 7.4 | 6.8 | 1.3 |
| 4. Orthodox policies with higher money wage settlements | 20.0 | 0.7 | 22.7 | 19.1 | 2.6 |

*Notes.* see Table 2.17.

**Table 2.19. Money supply and domestic credit expansion**

| | Increase in money national income compared with previous year (%) | *Use of domestic credit expansion* Increase in domestic holdings of money within year[a] (% of money supply at start of year) | Deficit on basic balance of payments | Other | Total domestic credit expansion (% of money supply at start of year) |
|---|---|---|---|---|---|
| *Historical* | | | | | |
| 1974 | 13.4 | 10.2 | 9.8 | 1.5 | 21.5 |
| 1975 | 25.4 | 6.6 | 4.4 | 1.7 | 12.7 |
| 1976 | 17.5 | 9.5 | 5.6 | 4.9 | 20.0 |
| 1977 | 13.7 | 8.6 | –6.3 | –1.8 | 0.5 |
| *Projected*[b] | | | | | |
| 1978-80 average | 15.4 | 15.4 | –3.4 | 0.1 | 12.2 |
| 1981-85 average | 8.1 | 8.1 | –0.8 | 0.1 | 7.5 |

*Notes:*

(a) Sterling M3.

(b) Projection for orthodox policies (see Appendix, p. A1), but assuming growth of demand for money exactly in line with growth of money national income.

The scale of uncertainty makes it impossible to determine whether official targets for money supply and domestic credit expansion are likely to be met without the need for restrictive policies. If demand for money does rise in line with money national income, it is likely that the targets will be exceeded. The government will then have to decide whether to restrict credit or to abandon the targets.

(*d*) *Conclusions*

During the next few years there will be scope for continuing reductions in real tax rates, although the scale of these will be smaller the lower the rate of inflation. The prospects for reducing inflation are not good in the period up to 1980; prices are likely to rise by at least 10% a year, if not more. After 1980 control of inflation will remain difficult unless fast growth of GDP is achieved without devaluation. However, under an import control strategy it is much more plausible that inflation could eventually be reduced below 5% a year, because real wages would benefit from fast growth of productivity. Since it is impossible to predict what targets for the money supply and domestic credit expansion can be met without restrictive policies, it is quite conceivable that official targets will be exceeded.