

CHAPTER 1

THE STRATEGIC PROBLEMS OF ECONOMIC POLICY

Introduction

During the past decade the main features of the present economic situation – balance-of-payments deficit, low growth of output and income, high unemployment and inflation – have been interrelated factors in a cumulative process which was only intensified by the rise in oil prices and recession in international trade in the period since 1973. Under existing arrangements for managing the economy the situation is likely to get worse over the next few years, and by 1980 unemployment will probably be higher and real earnings lower, absolutely, than they are today. Neither of the two recognised alternative macro-economic strategies – devaluation and import restriction – can be undertaken on a sufficient scale to reverse the process without major changes in economic institutions.

The 'existing arrangements' under which progressive deterioration is to be expected may be summarised in terms of the macro-economic instruments available to the government (fiscal and monetary policy, 'managed' depreciation of the sterling exchange rate, and prices and incomes policy) and the institutional framework within which these are used. The most important characteristics of this framework are the commitment to free trade within the EEC and, more loosely, with other industrialised countries; free convertibility of sterling and Britain's obligations to creditors and the IMF; and at home, the system of wage determination through bargaining between employers and trade unions. It is our contention that existing instruments in combination with these institutions will make it impossible to achieve in coming years a reversal of the trend loss of export and home markets to foreign competitors and the slow growth of real income, rising unemployment and inflation which this entails.

Restriction of imports is clearly a radical strategy since it would involve going back on British acceptance of the Treaty of Rome, GATT Articles, etc., and would constitute a fundamental change in economic relationships between Britain and neighbouring countries in Europe and, to a lesser extent, with the USA and other industrialised countries.

£(1975) figures

Inflation-adjusted (or 'real') values in this chapter and in Appendix A are generally denominated in £1975 units calculated as follows:

- (a) Volume of expenditure: volume series rebased on 1975 market price values
- (b) Real disposable income: money values deflated by 1975-based deflator for expenditure financed by the given category of income
- (c) Other series (balance of payments, income from abroad, etc.): money values deflated by 1975-based deflator for total domestic expenditure.

(See Appendix B, p. 93 for detailed definitions.)

But the break-up of the fixed-exchange rate system since 1971 has not made devaluation a more orthodox and acceptable strategy. Indeed a large, step devaluation, designed to achieve a permanent reduction of UK labour costs in terms of foreign currency, cannot be undertaken under existing institutional arrangements. The 'managed' floating exchange rate for sterling allows free convertibility to continue only so long as holders of sterling funds still have some confidence that sterling will be managed in their interests. If it were thought that the British government intended to use the exchange rate as an instrument of large-scale devaluation, the entire £7,000 million of sterling balances would be put at risk (to say nothing of banking outflows) and free convertibility could well *de facto* come to an end. An attempted large devaluation would thus be unacceptable, not only to other manufacturing-export countries (who would see it as 'beggar-my-neighbour' policy) and to oil-export countries with sterling investments, but also to the IMF (and the same countries in their capacity as IMF members) because it would threaten the security of the international monetary system as a whole. Even if international agreement, and assistance, for a large UK devaluation *could* be secured, there would still be no guarantee that a large fall in sterling would be effective unless stringent and permanent limits on money wage settlements were then enforced in Britain to prevent the higher cost-of-living feeding back into labour costs. Thus for external as well as internal reasons, large-scale devaluation is just as difficult a measure to undertake as direct restriction of imports.

Both radical alternatives, devaluation and restriction of imports, are in principle capable of restoring full employment and achieving high rates of growth. Assuming both to be possible the main difference between them in their macro-economic effects is that devaluation would necessarily imply lower real wages, higher profits and, in the first year or two, higher unemployment than restriction of imports. Whether either strategy should be attempted, and if so which, is a fundamental political issue involving other considerations besides the economic effects discussed here.

The analysis on which our conclusions are based is deployed in the following sections.¹ The main line of argument is that the entire nexus of inter-related problems stems from loss of export and home markets to foreign competitors, which has meant insufficient export earnings to finance the level of imports which

¹The verbal argument is reinforced by the simulations of a comprehensive econometric model, the structure and assumptions of which are set out in Appendix B.

would be purchased at full employment. Since growth of domestic demand and output had to be low enough, on average, to avoid excessive balance-of-payments deficits, unemployment has risen from one cycle to the next.

The issues at stake go far beyond what is or is not a 'tolerable' level of unemployment. Even if it were true that the amount of individual hardship caused by there being registered unemployment between one and two million is too small to matter, it would still be the case that with unemployment at this level about £10 billion worth of output would be lost each year. At the same time a rapid expansion of demand and output is essential for the recovery of profits and investment – far more important than relaxation of price control or concessions on company taxation, neither of which have been very effective in recent years. Furthermore high unemployment and low capacity utilisation reduce the purchasing power of standard hourly earnings because (given public expenditure) higher average tax rates are required to compensate for the smaller flow of income and expenditure on which taxes are levied. With a system of taxes and grants designed to provide a safety net for low-income families and unprofitable businesses, the adverse effect on real wages is substantial. Recession may thus directly raise prices in that the government is forced to levy higher taxes (net of subsidies) for a given level of public expenditure. Unless unemployment is a strong deterrent to effective wage-bargaining (which it has not been so far),² the erosion of real wages will lead to large money wage settlements. Recession thus causes *permanently* higher inflation than would otherwise have occurred.

To put the argument another way, it has frequently been noted that real wages have, in the last year or two, risen much too fast in relation to the real national income and the conclusion drawn, explicitly or implicitly, is that a cut in real wages is an essential prerequisite for slowing down inflation. The view taken here is that a better way of solving the problem is not so much to cut real wages as to increase the growth of real national income. But let not this plea for measures which will generate a sustained recovery in the British economy be confused for one moment with the kind of 'growthmanship' which, preposterously, has become associated with the name of Keynes. Over the whole of the last five years, ever since the CEPG has been in existence, we have consistently, emphatically and publicly opposed the kind of fiscal laxity which in 1954/5, 1958/9, 1963/4 and – the most exaggerated manifestation of all – in 1972/3, generated consumption-led expansions which encountered inevitable and insuperable constraints leading, in turn, to reversals of policy at the cost, not only of recession, but of progressive structural distortion of the economy.

So far from proposing fiscal expansion, it remains our view that a necessary condition for the sustained recovery of output and the reduction of inflation is that the public sector deficit should be progressively reduced and with it the share of available resources preempted by domestic demand. It is essential to the sustainable growth strategy which we have always advocated that the agent of expansion should be rising exports or reduced import penetration.

²See Chapter 2.

The first part of this chapter shows how the trend loss of markets, slow growth, rising unemployment and inflation continued over the past ten years despite a widening 'inflationary gap' between the availability of resources and claims on them which has temporarily cushioned real incomes from the full effects of slow growth.

This 'inflationary gap' now presents a huge problem for the future. Favourable factors – anticipated faster export growth and rising North Sea revenues – will not provide enough growth of real income to avert a fall in real wages this year and next as the inflationary gap is reduced. Nor will these two factors alone generate the growth of output needed to bring down unemployment, particularly since this growth rate is higher than in the past because of the government's decision to halt increases in public service employment (implicit in this year's White Paper on Public Expenditure) at a time when, for demographic reasons, labour supply will be expanding.

Later sections consider the possibility of solving the problems of high unemployment and the 'inflationary gap' under existing arrangements for management of the economy and examine the effects and difficulties of resort to large-scale devaluation or restriction of imports.³

The immediate situation is not conducive to the taking of radical measures because the very short-term prospect is relatively favourable. Output will rise fast as destocking ends and world trade recovers; unemployment will probably stabilise soon and may even for a while fall; and the acceptance of £6 wage settlements will make it possible for the rise in retail prices to be held down to about 13% between the beginning and end of the year.

The two signs of trouble for the future will be accelerating growth of imports and a decline in the purchasing power of average earnings. The balance-of-payments deficit will start to widen again and any new norm for wage settlements low enough to reduce the inflation rate will have to be lower than the previous increase in prices. At this point the enduring medium-term structural problems of the economy are likely to come back into focus.

Trends since 1965

This section examines the nature of the present predicament by reference to the underlying trends in the past.

The progressive increase in unemployment during the past decade (each peak and trough exceeding each previous one) and the permanent nature of the recession now developing can be displayed in terms of a deterioration which has been taking place in the 'full-employment' balance of payments, defined as the balance of payments that there would have been had world trade been on trend and had unemployment been held constant, but with everything else (in particular relative cost movements and the terms of trade)⁴ as it actually was.

³Illustrative projections for 1976-80 are tabulated (together with comparative historical series) in Appendix A.

⁴It is recognised that it would, ideally, have been better to correct the terms of trade for the effect of fluctuations in world production and trade.

(a) *The full-employment balance of payments 1965-75*

Table 1.1 shows trend movements of export and import volumes, the latter subdivided into main categories.

Table 1.1 *Cyclically-adjusted growth rates of volume of exports and imports (%p.a.)*

	1965-70	1970-75
Exports of goods and services*	5.5	6.6
Imports: food and raw materials†	3.0	-0.2
semi-manufactures†	11.1	10.5
finished manufactures†	18.2	19.8
Imports of goods and services†	6.6	8.4

*Adjusted for fluctuations in world trade.

†Adjusted for fluctuations in home demand.

Adjusting for cyclical fluctuations in world trade, the trend volume of UK exports of goods and services rose only about 6% a year on average from 1965 to 1975, while world trade expanded at 8.5% a year. The index of costs of UK producers relative to world market prices of manufactures (allowing for exchange rate changes and for time-lags in the reaction of export volume) fell over the same period by 0.5% per annum on average.

trade, have caused a very large deterioration in the balance of payments at a fixed level of unemployment. The net balance of exports (abstracting from fluctuations in world trade) less the 'full employment'⁵ volume of imports of goods and services declined from a surplus of nearly £(1975) 1 billion⁶ in 1965 to zero in 1970 and a deficit of some £2.5 billion in 1975.

But after having been roughly stationary for many years, the UK terms of trade deteriorated sharply between 1972 and 1975. Already by 1973 the terms-of-trade deterioration (compared with 1970) was costing about £(1975) 500 million and after the oil price increase was, in 1975, costing some £2.5 billion. Including this terms-of-trade effect and all invisibles, the 'full-employment deficit' on the current balance was £4 billion⁷ in 1975.

There is no evidence of any change in underlying trends in 1975 itself. The observed share of UK exports performed relatively well and there was an absolute fall in imports of manufactures for the first time for very many years. But this apparent improvement has no permanent significance; the changes are only what was to be expected in view of the depression in world trade, when the share of UK exports always tends to

Table 1.2 *The full-employment* balance of payments 1965-75 (£1975 billion)*

	1965	1970	1973	1975
1. Trend volume of exports	15.9	20.7	25.0	28.6
2. 'Full-employment' volume of imports	15.1	20.8	25.7	31.2
3. Trend <i>volume</i> of exports less imports (1 - 2)	0.8	-0.1	-0.6	-2.6
4. Terms of trade effect	0.0	0.0	-0.5	-2.6
5. Trend <i>value</i> of exports less imports (3 + 4)	0.7	-0.1	-1.1	-5.2
Effect of cyclical demand				
6. domestic shortfall from 'full employment'	-1.3	0.3	-2.3	4.6
7. cyclical component of world trade	-0.1	0.5	0.8	-2.1
8. Total of cyclical effects (6 + 7)	-1.4	0.8	-1.5	2.5
9. Actual value of exports less imports (5 + 8)	-0.7	0.7	-2.6	-2.7
10. Net income and transfer receipts	0.6	0.7	1.4	1.0
11. Actual balance on current account (9 + 10)	-0.1	1.4	-1.2	-1.7
'Full-employment' balance on current account				
12. with world trade on trend (11+ 8)	1.3	0.6	0.3	-4.2
13. with actual level of world trade (12 + 7)	1.3	1.1	1.1	-6.3

* Arbitrarily defined to correspond to 650,000 unemployed.

Similarly, notwithstanding the improvement in cost competitiveness, the trend growth in the volume of imports of goods and services accelerated from 6.5% a year in 1965-70 to 8.5% a year in 1970-5. The acceleration in the total is entirely explained by changes in the composition of imports which are still continuing. The trend growth rate of each of the main categories of imports remained roughly constant, 1.5% a year for food and raw materials, 10.5% a year for semi-manufactures and 18% a year for finished manufactures.

The trend growth in the volume of imports relative to exports would, even with no change in the terms of

improve, and the unprecedented fall in demand and output at home.

The full employment deficit together with its components is shown for selected dates in Table 1.2. Line 13 indicates the size of the deficit which would have occurred had full employment at home been maintained through the recent recession of international trade.

⁵Arbitrarily defined to correspond to 650,000 unemployed.

⁶See note on p. 1 and Appendix A, p. 65 for the definition of series measured at 1975 values.

⁷The full employment deficit in 1975 excluding the effect of the oil price increase was £2 billion.

Table 1.3 Real national income and claims on it, 1965-70 and 1970-75 (increases over five years, £1975 billion; figures in brackets denote annual average percentage growth rates)

	1965-70	1970-75
<i>Sources of real income</i>		
1. 'Full-employment' output*	14.0 (3.3)	14.3 (2.9)
2. Actual output	9.8 (2.2)	7.3 (1.5)
3. Terms-of-trade effect†	0.6	-2.5
4. Income from abroad	0.1	0.4
5. Real national income (2 + 3 + 4)	10.4 (2.3)	5.2 (1.1)
<i>Claims on real income</i>		
6. Household grants‡	1.5 (5.1)	2.2 (5.8)
7. Public expenditure on goods and services	2.9 (2.3)	4.5 (3.2)
8. Property income (incl. stock appreciation) ‡ §	1.8 (1.8)	4.6 (3.8)
9. Real disposable pay	2.8 (1.4)	5.2 (2.3)
10. Total claims (6 + 7 + 8 + 9)	8.9 (1.9)	16.4 (3.1)
11. Inflationary gap (10 - 5) = (12 + 13 + 14 + 15)	-1.5	11.2
<i>Sources of inflationary finance</i>		
12. Balance-of-payments deficit	-1.5	3.1
13. Reduction in stocks	0.5	3.2
14. Private surplus	-1.8	3.0
15. Stock appreciation	1.3	1.9

* At constant unemployment.

† Relative to 1975 actual terms of trade.

‡ Real disposable income.

§ All private income other than wages and salaries and household grants.

|| Saving (excluding stock appreciation) less fixed capital formation.

(b) Growth of real national income 1965-75

The actual balance-of-payments deficit has deteriorated much less than the full employment deficit only because real output and the real national income have continuously grown less than they could have done if full employment had been maintained.

Yet despite low growth of national income, disposable wages and salaries, property income, household grants (such as pensions, benefits and grants to students) and public expenditure on goods and services have all risen comparatively fast in real terms. The discrepancy between the growth of national income and these various claims on it has given rise to a large 'inflationary gap', met in part by a balance-of-payments deficit and destocking, and for the remainder by an acceleration in the overt inflation of money incomes and prices.

There is a familiar rule of thumb which says that the condition for zero inflation is that average money earnings rise no faster than average productivity, since this would normally imply that real resources are sufficient to make the real wage change with the money wage. But the rule of thumb is only an approximation which becomes misleading if, as has recently been the case, the terms of trade deteriorate so that real national income rises less than real national output and if other claims on the national income such as household grants, public expenditure and property income take a rising share of available resources. Under these circumstances the growth of money wages has to be less - perhaps far less - than the growth of average productivity if it is to be non-inflationary. Over the

past decade, real output per employee rose 29% and real national income per employee increased by 26.5% while household grants, public spending and property income per employee rose 42.5%, absorbing the whole of the addition to real national income per employee. The non-inflationary change in average money earnings was thus *roughly zero*, requiring a ten-year freeze. But it should be noted that if net export demand had risen enough to allow output to grow at its 'full-employment' rate from 1965. to 1975 the additional national income would have been sufficient to accommodate the whole of the increase in private income and public expenditure which actually occurred without any recourse to inflationary finance or balance-of-payments deficit.

Table 1.3 gives a detailed analysis of changes in the real national income and the claims which have been put upon it.

Between 1965 and 1975 productivity growth (adjusted for changes in unemployment) was nearly 3.5% a year but the labour supply (corrected for composition changes) declined and after 1972 the terms of trade worsened significantly. The rising 'full-employment' deficit on the balance-of payments meant that actual growth of output and national income averaged 1% a year less than the full-employment potential - a short-fall rising to some £11 billion per annum by the end of the decade. From 1965 up to the 1973 boom actual growth of national income averaged 2.5% a year. The 3.5% fall since then (due to the terms of trade and the present recession) has reduced the net increase in national income over the whole decade to a mere 18%

(1.75% a year). Even if full employment had been maintained, the potential growth of national income in Britain over the past decade, given productivity trends, only averaged 2.7% a year.

Up to 1970 claims on the national income (wages, public spending, property income and grants) increased relatively slowly and the inflationary gap (in the form of recourse to additional short-term sources of finance) was actually reduced as compared with 1965. This was achieved mainly by an extremely severe fiscal and monetary policy after 1967 for a time reinforced by a relatively effective prices and incomes policy.

The period from 1970 to 1973 was one of large increases in property income, public spending and real take-home pay so that the inflationary gap widened rapidly; and when real national income fell in 1974–5 private income and public expenditure were largely maintained by a further increase in recourse to short-term finance. Indeed from 1970 to 1975 the increase in national income was only one-third as large as the rise in total claims on it.

(c) Inflation 1965–75

The direct way in which claims for higher private income and public spending are transmitted into overt inflation of costs and prices is through increases in taxes and money wages which raise business costs and are then fed through into prices.

Profits (inclusive of stock appreciation) have largely been a passive element in the inflationary process because businesses generally set prices as a mark-up on previous increases in costs. In the past ten years gross private trading income varied between a peak of 22% of national income in the 1973–4 boom and 18% in the 1970–1 slump, most of the fluctuation having been the result of differences in capacity utilisation. Within this total, income from self-employment gained at the expense of company trading profits, but higher grants and tax allowances to some extent made up for the fall in pre-tax profits.

The proximate sources of variation in the rate of inflation are primary costs – ‘normal’ unit labour costs,⁸ taxes and import prices.

The items listed in Table 1.3 as ‘sources of inflationary finance’ have either or both of two characteristics in varying degrees. On the one hand they may represent a supply of real resources to meet the excess claims placed on the real national income; this is particularly the case for the first two items – changes in the balance of payments and stocks.

The other two items, private ‘savings’ and stock appreciation, are sources of flexibility which help to bridge the inflationary gap but which are themselves largely the consequence of inflation. When money incomes rise fast, the lag between receipts of cash income and its subsequent expenditure causes a rise in the private sector’s surplus of savings over fixed investment. The excess saving generated by inflation becomes available to finance public expenditure and permits a lower level of taxation than would otherwise have been possible. The total of private income and public expenditure is in this manner cushioned against

the effects of a fall in national income. In 1975 the private sector surplus was 5% of national income, compared with a normal non-inflationary level of little over 1%.

The table is in a sense unconventional in showing profits inclusive of stock appreciation as a ‘claim’ on real income together with stock appreciation itself as a ‘source of inflationary finance’. But during most, if not all, of the period profits as known to and reported by businesses did indeed include stock appreciation; and ‘profits’ so defined will be a constant share of the value of sales *whatever the rate of inflation* so long as the mark-up on historical costs is held constant. The practice of historical cost pricing, which appears to have been very generally followed through the recent period of greatly accelerated inflation, has meant that other incomes have gained an advantage equivalent to stock appreciation, which is by definition the difference between conventional and ‘cash’ profits. This gain has notoriously been at the expense of the internal cash flow of businesses and has caused serious financing problems for them. In 1974 private stock appreciation amounted to 7% of national income and was therefore a major factor cushioning real earnings from the effects of the fall in national income that year. On the other hand the difficulties which companies experienced over the financing of stock appreciation and the associated sharp fall in asset values have been one of the factors causing fixed investment to be so low; so in a real sense the inflation has meant that the maintenance of real earnings has partly been at the expense of the expansion of industrial capacity on which the future critically depends.

While the categories of inflationary finance have different characteristics, they have one important property in common; they can only be sources of finance for a short time, at least if the inflation is to be brought under control. They are at present providing a 10% supplement to the national income, so several years of fast growth would be needed to finance even present levels of real earnings, property income, grants and public spending in an entirely non-inflationary manner. But such rapid growth of national income is not possible unless the constraint imposed by the large ‘full-employment’ balance-of-payments deficit can be removed.

The magnitude of the deterioration in Britain’s economic situation since 1965 is well illustrated by the huge size of this inflationary gap; it is a succinct way of demonstrating simultaneously our poor performance in terms of productivity and competitiveness together with an unwillingness to accept the consequences in terms of lower living standards. The gap has arisen in large part because of the failure to secure growth of production at its ‘full-employment’ potential, while the failure to maintain full employment has in turn been the result of an excess trend growth of imports relative to exports which has left Britain with a very large ‘full-employment’ balance-of-payments deficit. Worse still, the trend growth of total full-employment imports has been accelerating relative to the trend of exports. As a result the drift to higher unemployment has become more rapid and inexorable, and the inflationary gap between available income and acceptable levels of wages, profits and public spending has started to widen more quickly.

⁸Labour costs per unit of output at normal capacity utilisation.

Table 1.4 Estimated labour supply at 650,000 unemployment*

	1965	1975	1980	Growth rates (% per year)	
				1965-75	1975-80
(thousands of persons)					
Men	16,812	16,924	17,326	0.1	0.2
Single women	4013	3671	3772	-0.9	0.5
Married women,	5163	5224	5296	0.1	0.3
Total at constant participation rates	25,988	25,819	26,394	-0.1	0.2
Changes in participation and residual error	144	638	967
Total at trend participation rates	25,844	26,457	27,361	0.2	0.7
less Registered unemployed	- 650	- 650	- 650
Unregistered unemployed	- 650	- 650	- 650
Self-employed	- 1702	- 1977	- 1977
Labour supply	22,842	23,180	24,084	0.1	0.8
(per cent)					
Composition effect	79.65	76.39	74.74	-0.4	-0.4
(thousand full-time male equivalents)					
Labour supply	18,194	17,707	18,001	-0.3	0.3

* These estimates of labour supply are based on population data by sex and age group, adjusted in the first instance by participation rates as recorded in the 1966 census of population. The final line of the table gives figures for employment in full-time male equivalents at a constant (650,000) level of unemployment. This involves the following adjustments to labour supply in numbers of persons estimated from population data:

- allowance for trend changes in participation rates (mainly reflecting the rise in numbers in full-time further education and the increasing tendency of married women to seek employment);
- the 'residual error' between census of population estimates and census of employment estimates of labour supply;
- subtraction of the assumed number of unemployed (650,000 registered, and an estimated equal number 'unregistered' of whom the majority are married women and pensioners);
- subtraction of the estimated number of self-employed;
- the composition effect of employees in employment, measured as the ratio of labour supply denominated in full-time male equivalents to that denominated in persons, resulting from weighting the employment series (on the basis of relative earnings) to allow for changes in the proportions of full-time/part-time and male/female employees.

The strategic issues 1975-80

In view of the large inflationary gap that exists at the moment, the first questions to consider are how fast the real national income could grow between 1975 and 1980 if full employment were restored and what claims on this growth would be likely.

(a) Growth of output and income

Productive potential⁹ will probably grow quite a lot faster in the immediate future than in the past; there should be an average increase of about 4% per annum between 1975 and 1980 against an increase of about 3% per annum during the past decade. Most of the acceleration is the consequence of a change of trend in the labour supply (see Table 1.4). Between 1965 and 1975 the labour supply (measured in male full-time equivalent units) fell 0.3% per annum because of the fall in births after the immediate post-war 'bulge', a large rise in the number of full-time students, an increase in the school-leaving age, and net emigration (particularly in the late 1960s). Now the various demographic tendencies have started to work in the opposite direction so that between 1975 and 1980 the labour supply (measured in the same units) is likely to rise about 0.3% per annum.

⁹Defined as real GDP, excluding output from the North Sea, at given levels of unemployment.

The relative increase in the labour supply of employees after 1975, simply counting heads, is the result of the increased demographic contribution, particularly of women, while there is no further increase in self-employment. The 'composition effect' in the period 1965-1975 was negative, giving a decline in the labour supply of employees measured in full-time male equivalent units, because the favourable composition of demographic effects was more than offset by increased participation (mainly part-time) among married females and the absorption of males into self-employment. The composition effect remains negative in the forecast period because the demographic contributions and increased participation are heavily weighted towards female employment. Thus the turnaround in labour supply of employees, measured in full-time male equivalent units, is as large as the turnaround of the supply of persons for employment.

In addition the faster growth of output made possible by the reversal of trend in labour supply should itself induce some acceleration of 'full-employment' productivity. ¹⁰Also, under the convention which attributes

¹⁰The equation in the model described in Appendix B produces this effect only as a consequence of strictly short-term dynamic properties although we believe it should hold also as a long-term proposition.

Table 1.5 Increase in real national income, 1975-80

	(1) Unemployment falling to 900,000	(2) Unemployment rising to 1,600,000
	(% per year)	
Labour supply*	0.3	0.3
Productive potential	4.1	4.1
Actual output†	4.8	2.9
Real national income‡	4.8	2.9
	(£1975 billion)	
Productive potential	24.0	24.0
Actual output†	26.7	15.5
Terms of trade effect‡ § ¶	- 1.3	- 2.5
Income from domestic output	25.5	13.0
Income from North Sea‡ § ¶ ¶¶	2.1	2.4
Income from abroad§ ¶	- 0.7	0.3
Real national income	26.9	15.7

* Full-time male equivalents.

† Assuming progressive reduction of unemployment to 900,000 in 1980 in column (1) and to 1,600,000 in column (2).

‡ Net current purchases from North Sea are included in imports and are partly offset by revenue accruing to the UK under the item 'Income from North Sea'.

§ North Sea profits (less PRT and Corporation Tax) due to foreign companies are deducted from the item 'Income from North Sea' rather than 'Income from abroad' (as would be the usual convention).

¶ This treatment of the North Sea is designed to show the net contribution it makes to national income (which would not be made apparent by conventional national accounting definitions).

¶¶ The magnitude of these items depends on the depreciation of sterling and the rate of domestic inflation. Both columns assume wage settlements at 10% a year after 1976; column (1) assumes 15% less depreciation of sterling than column (2).

zero productivity growth to public services, the planned future standstill in public service employment (which has hitherto risen quite fast) implies a further gain in average productivity growth. Full employment productivity will, for both reasons, rise nearly 0.5% faster per year than in the past and the growth of full employment output will be about 1% a year higher in 1975-80 than it was between 1965 and 1975. While such fast growth of full-employment output provides a greater opportunity for expansion of real income, it also makes the problem of unemployment more difficult to solve.

Potential real national income¹¹ may rise slightly less than output. The North Sea will contribute significant additional income (although up to 1980 about half the gross revenue will be attributable to foreign oil companies while their tax liabilities are offset against capital allowances on past expenditure on exploration and development of the oil fields).¹² Against this, net income from abroad (excluding North Sea remittances) will tend to fall because of the rising interest due on Britain's external debt and a higher outflow of profits to foreign companies with investments in Britain. It is also probable that the terms of trade will deteriorate as world trade recovers, the full extent of the terms-of-trade loss depending also on how much the level of costs in Britain is devalued relative to world prices of manufactures. Allowing for all these effects the potential growth of real national income will be some 3.5-4% a year.

Starting from a position of high unemployment, the

feasible growth of output should be higher than this. There must be some doubt as to how fast industrial capacity can expand within the space of a few years. It seems improbable that there will be sufficient plant, equipment and organisation to provide for a reduction in unemployment to as low a level as, say, 500,000 in four years' time. But if unemployment were to come down only to 900,000 by 1980, the growth of output would still be 5% a year, providing a cumulative increase in national income of about £27 billion (over one-quarter) compared with 1975 (see Table 1.5).

¹²Estimates of production and income from the North Sea incorporated into our projections are based mainly on the work of Martin Lovegrove (of Wood-Mackenzie, Edinburgh) whose assistance is most gratefully acknowledged, and Paul Atkinson of CEPG (the results are entirely CEPG's responsibility). The estimates are sensitive to future inflation and exchange rates, and to allow for this in our model rather drastic simplifications were employed. Thus although the projections derive from a field-by-field analysis of likely production and capital investment, they only approximately represent the complex effects of the tax system on the sharing of gross revenue between the government and UK and foreign companies. Estimated income accruing to the UK from 1978-80 under conventional assumptions (see Appendix A) is as follows:

	(£1975 billion)		
	1978	1979	1980
Proceeds of sales of oil and gas	2.8	4.1	5.8
less Operating costs	0.4	0.6	0.8
Gross revenue	2.5	3.6	5.1
less Profits due abroad after tax	1.2	1.7	2.5
Income due to UK	1.3	1.9	2.5
of which royalties	0.4	0.5	0.7
PRT and Corporation Tax	0.0	0.5	0.7
profits due to UK after tax	0.9	0.9	1.1

¹¹Defined in a way exactly comparable to potential output, i.e. at constant unemployment.

(b) Claims on the growth of national income

The inflationary gap which now exists between claims on national income and the income available will have to be reduced in coming years and thus represents a large prior charge on any increase in national income actually achieved in the future.

A recovery of output and slowing down of inflation involves unavoidable prior claims on the increase in national income which limit the finance available for profits and real wages (Table 1.6).

Table 1.6 Prior claims on the increase in real national income 1975–1980 (£1975 billion)

	(1) Unemploy- ment falling to 900,000	(2) Unemploy- ment rising to 1,600,000
Resource claims:		
Balance of payments	2.7	2.7
Stockbuilding	4.8	3.8
	7.5	6.5
Reduction of inflation:		
Private surplus	2.6	1.8
Stock appreciation	0.2	0.0
	2.8	1.8
Other claims:		
Household grants	2.5	2.0
Public expenditure	-0.1	0.2
	2.4	2.2
Total prior claims	12.7	10.5

See footnote ¹³ to Table 1.5 and footnotes to Table 1.3 above.

The main components of claims are:

(a) From the balance of payments. Britain has already been forced to have recourse to borrowing from the IMF and faces liabilities for repayment of accumulated debts totalling some £6,000 million which begin to fall due in 1979–80, as well as £7,000 million outstanding sterling balances.¹³ At a minimum the balance-of-payments deficit cannot be allowed to increase significantly. More likely it will have to be restored to surplus on current account by 1980 so that at least some net repayment of debt can then be made.

(b) From stockbuilding. Destocking on last year's scale cannot continue and indeed is already coming to an end. Even with slow growth of output some net stockbuilding is required. At a minimum the reversal of destocking will absorb some £2.5 billion between 1975 and 1977 – up to half of the prospective increase in national income in these two years. Adding the need for balance-of-payments improvement, the claim on increased national income up to 1980 would be in the range £6.5–7.5 billion. This means that growth of national income averaging over 1% a year is needed to meet these claims alone.

(c) From a putative reduction of inflation. As the rate of inflation is brought down from over 20% a year,

stock appreciation and, probably, abnormal private saving, will fall, diminishing the additional finance for public expenditure and real earnings. Assuming that inflation were to slow down to the 5–10% range by 1980, the finance available from these two sources would be reduced by £1.5–£4.5 billion. The total cost of lower dependence on an inflationary gap – whether in the form of balance-of-payments deficit and destocking, or in the form of overt price and wage inflation – lies in the range of £5–8 billion by 1977 and £8–12 billion by 1980. The growth of national income pre-empted in this way will be 2–3.5% a year up to 1977 and 1–2% a year over the whole period up to 1980.

(c) Real wages and inflation

Total availability of prior claims on resources taken from the two previous tables are set against one another in Table 1.7 together with (conditional) forecasts of disposable property income to show the resources available on each assumption for real wages.

Table 1.7 Resources available for real wages in 1980 (£1975 billion)

	(1)	(2)
Total availability of resources	26.9	15.7
Prior claims	12.7	10.5
Disposable property income*	9.6	7.6
Balance = resources for real wages	4.5	-2.4

*The difference in property income reflects higher capacity utilisation assumed under (1), partly but not fully offset by higher export margins under (2) resulting from the additional depreciation assumed in the latter case. The assumptions of the two calculations have been chosen to illustrate the maximum range of outcomes for real wages (given the same taxation of profits, the same money wage settlements and the same balance-of-payments target).

These estimates of the resources needed to reduce the inflationary gap make it clear how urgent the need for more rapid growth has now become. Although no increase at all is now planned for public expenditure on goods and services, national income will have to rise quite fast simply to prevent a fall in real private incomes. The prospect is worst of all for wage and salary earners. For even if the actual future growth rate remains low, disposable household grants and property income will continue to rise. Trading profits will benefit from any substantial recovery in capacity utilisation. Property income is also being increased by the rise in public sector debt interest and by lower taxation of profits (through recent tax concessions and depressed past profits on which taxes this year and next will be paid). The effect is that property income will rise at least 10% between 1975 and 1977 and would rise more if there were very fast growth of output. Real wages will almost certainly fall between these two years however fast the recovery of national income. If real wages are to regain even their 1975 level by 1980, sustained growth of national income by at least 3–4% a year will be needed from now on. The figures in Table 1.7 imply at best (column 1) a 7½% increase, and at worst (column 2) a 2½% fall, in average real take-home pay between 1975 and 1980.

¹³See Chapter 5, p. 44.

Table 1.8 Targets for the public sector deficit (£1975 billion)

	1975	1977	1980
Public sector financial deficit (before receipts of taxes on capital)	9.2	3.7	0.0
Financed by:			
balance of payments deficit	1.7	1.2	-1.0
private surplus	5.1	4.0	3.0
destocking	2.4	-1.5	-2.0
Public expenditure on goods and services	31.3	31.3	31.2
Required net revenue	22.2	27.6	31.2

Under conditions of slow growth wage settlements could only be held down, say, to about 10% a year if there were no attempted compensation for the cut in real earnings. It is unlikely, on past experience, that high unemployment would prove a sufficient deterrent. Therefore unless fast growth of output is achieved, a permanent incomes policy of a much tougher kind than has been enforced before would probably be needed to prevent an outburst of highly inflationary wage settlements.

(d) Fiscal policy

Since changes in taxation and public spending take time to implement, and still longer to have their full effect on domestic demand and the balance of payments, we have for a long time recommended that the public sector deficit should normally be set by reference to the medium-term target for the balance of payments. If, as seems likely, it is necessary to aim at a steady improvement in the balance of payments after this year with the intention of eliminating the deficit (or even securing a surplus) by 1980, the public sector deficit must be steadily reduced from now on.¹⁴ The size of the necessary reduction is the larger and the urgency with which it must be achieved the greater, in that short-term sources of finance (destocking and abnormal private saving) are likely to reverse themselves rather quickly during this year.

Plausible targets for the public sector deficit, compared with our estimate for the outturn in 1975, might be as shown in Table 1.8.

The implied target for net revenue could be different from that shown in the table if different balance-of-payments objectives were sought or if public expenditure plans were changed. It could *not* be varied to any significant extent by altering the assumptions about the private surplus and stockbuilding (unless an acceleration of inflation or a further deepening of recession were anticipated for 1977).

On present spending plans net sector revenue may thus have to be increased (in real terms) some 25% by 1977 and 40% by 1980. What this means for tax rates depends entirely on the speed and extent of recovery from recession which can be achieved. Our model of taxes and transfers¹⁵ implies that with 5% a year growth

¹⁴This point, which was emphasised in our *Review* last year (p. 8), is wrongly supposed by some commentators to have been falsified by the events of 1975, when a record public sector deficit was accompanied by an improvement in the balance of payments. This outcome was entirely due to short-term influences (abnormal private saving, heavy destocking and the impact effect of a terms of trade improvement). The full-employment public

¹⁵See Chapter 7.

of output the *real* buoyancy of public sector income (together with North Sea revenues) could just about provide the whole 40% increase in net revenue by 1980, although there would still be a shortfall of some £3 billion in 1977. This means that some increase in tax rates (or less than complete indexation¹⁶ of tax allowances) is probably needed in the short run and could be reversed later on.

But if the rate of growth of output averages, say, only 3% a year, real buoyancy would only provide a little over half the extra net revenue required. The gap would have to be filled by large, permanent tax increases or by further cuts in public expenditure.

Can fast growth be achieved?

From the point of view of labour supply, sustained 5% a year growth of output over the next four or five years is perfectly feasible (see above, p. 00). The main limitation on the supply side is more likely to be bottlenecks in capacity and organisation. If there were labour shortages, these would reflect short-term problems of recruitment and training rather than any lack of manpower *per se*.

Subject to the above provisos, the effective limit to expansion is bound to lie on the demand side. Here, as in the past, the issue is simply whether export markets can be held, or penetration of the home market resisted, on the scale required to permit fast expansion of home demand without the balance of payments going into large deficit.

(a) The required growth of exports

The scale of the problem is presented in Table 1.9 which shows the growth of imports which would be expected at different rates of growth of output, and the growth of exports required to finance them. Although the figures in the table are deduced from past relationships¹⁷ they are for the most part evidently hypo-

sector deficit (see Chapter 7, p. 53) was *not* increased last year but is still so large as to imply a deteriorating balance of payments this year. Thus while last year's *Review* did not fully anticipate the short-term factors, the conclusion about fiscal policy still appears correct. Nor is it a valid criticism of this view to point out that the large public sector deficit has been accompanied by severe recession. For it was strongly emphasised that reduction of the public sector deficit must be accompanied by measures to increase exports or reduce import penetration if recession was to be avoided while the balance-of-payments deficit was being reduced. Such measures are the essential counterpart of a reduction in the public sector deficit and have not so far been taken. (See p. 00 for a fuller 'post mortem' on the analysis presented last year.)

¹⁶Adjustment of nominal allowances to preserve their value in terms of real purchasing power.

¹⁷The equations for imports are described in Appendix B, p. 94.

Table 1.9 Expected growth of imports, and required growth of exports, for alternative output and unemployment targets in 1980 (average growth rates, % per year)

Unemployment in 1980 (millions)	GDP growth	Growth of volume of manufactured imports	Growth of volume of imports of all goods and services	Required growth of volume of exports
1. <i>Actual growth rates, 1965-75</i>				
	1.9	9.7	4.9	5.0
2. <i>Growth rates for 1975-80</i>				
(a) with 3% a year cost advantage and zero balance-of-payments in 1980				
2.00	1.9	7.3	5.1	6.7
1.75	2.6	9.4	6.5	8.0
1.50	3.2	11.6	8.0	9.4
1.25	4.0	14.7	10.0	11.4
1.00	4.8	17.4	11.8	13.1
0.75	5.6	20.7	14.1	15.3
(b) with no gain in relative costs of UK producers				
1.00	4.8	19.9	13.4	14.0
0.75	5.6	23.7	16.0	16.4
(c) with £2 billion balance-of-payments deficit in 1980				
1.00	4.8	17.4	11.8	12.4
0.75	5.6	20.7	14.1	14.6

thetical since there is no imaginable prospect of import growth at, say, 12% or more a year being financed. Indeed the effective limit on growth under existing trading arrangements, and the implied 1980 level of unemployment, can roughly be read off this table from the line where figures for growth of imports and exports begin to strain credulity.

On this basis alone it is hard to conceive of sustained growth of exports exceeding 10% a year and it is then impossible to see how unemployment can be reduced by 1980 from its present level.

(b) *Prospects for financing imports under existing arrangements*

Factors other than growth of export volume which affect the finance available for imports – income from the North Sea, net income from abroad and the terms of trade – have already been mentioned above in terms of their contribution to real national income. At best their net contribution by 1980 will be a small one and, to the extent that sterling depreciates enough to give UK producers a further cost advantage, could easily be adverse. To secure a balance-of-payments improvement, exports must therefore grow at least as fast as imports in volume terms.

The trend¹⁸ growth of exports before the 1975 fall in world trade was just under 6% a year with costs of UK producers relative to world prices of manufactures falling 0.5% a year on average. Provided growth of world trade now resumes, and taking account of the gain in competitiveness afforded by recent falls in sterling, exports should grow faster – perhaps as much

as 8% a year if the cost advantage can be maintained. On one side is the risk that growth of world trade may be slower, or that there may be another rise in world prices of raw materials relative to manufactures which would reduce the purchasing power of UK exports. On the other side there is the possibility that skilful managed floating of sterling can secure further steady improvements in cost competitiveness, although this involves the risk of accelerating domestic inflation which might negate the cost advantage already achieved.

At the very best, with continued depreciation of sterling, export growth might be pushed up to 9–10% a year average from 1975 to 1980. But this, as Table 1.9 indicates, would only be enough to finance 8% a year growth of imports, 3% a year growth of output and a limitation of the trend of unemployment to 1.5 million by 1980. With even a little bad luck output growth would have to be held down to 2–2.5% a year and unemployment would rise to 1.75–2 million.

Not merely is there no longer any margin of safety, The best that could be hoped for fails to meet an acceptable target for unemployment.

(c) *The implications of failure*

An output growth rate of 3% a year, even if the consequences for unemployment were disregarded, is not enough to secure a return to prosperity after the recession of 1974-5. Table 1.10 shows implied growth rates of expenditure and real income averaged over the period up to 1973, and from the 1973 peak up to 1980. For all items but one the average growth achieved from 1973 to 1980 would be lower – in many cases less than half – than between 1965 and 1973. The exception,

¹⁸Trends fitted to data for 1962-74.

Table 1.10 Implications of 3% growth of output from now to 1980* – a comparison of expenditure and income 1965-73, with 1973-80 (average growth rates, % per year)

	1965-73	1973-80	1975-80
Domestic output	2.5	1.9	2.9
National income	2.6	1.5	2.9
Consumers' expenditure	2.5	1.0	1.5
Public expenditure	2.4	1.2	0.1
Private investment	4.3	3.0	6.3
Total domestic expenditure	2.7	1.3	2.4
Disposable household grants	4.8	5.2	4.1
Disposable property income (including stock appreciation)	5.6	1.4	5.2
Disposable wages and salaries	2.1	-0.6	-1.0
Average real take-home pay	2.9	0.0	-0.5

*Assuming 3% a year gain in relative costs and a £1 billion surplus on the balance of payments in 1980.

household grants, reflects in part the cost of maintaining one million extra unemployed in 1980 as compared with 1973.

A comparison of the second and third columns of the table shows that relatively fast growth of property income and private investment from now on would serve mainly to make up for large falls since 1973 rather than to establish a genuinely faster trend in the future.

Average real take-home pay, which rose 3% a year from 1965 to 1973, would show no increase at all from 1973 to 1980. As was seen above,¹⁹ fast growth is needed from now to 1980 to provide any improvement in real wages simply because of the size of the present inflationary gap.

The best conceivable outcome under existing arrangements – 3% a year growth – is thus inadequate to provide the resources which would be needed to close the inflationary gap in a permanent manner. This, and the prospect of rising unemployment, suggests that alternative strategies which hinge on changing existing institutional arrangements must now be taken very seriously indeed.

The radical alternatives – devaluation and protection

Devaluation and protection, conceived as major economic strategies, both raise fundamental political issues which include, but are much wider than, the economic aspects discussed in this chapter.

The trends of exports and imports are now so adverse that either strategy, to be effective, would have to be operated on a scale so large that it would be incompatible with what we have called 'existing arrangements'. The government does not have the power to fix the exchange rate for sterling and money wages at *whatever* level might be required to promote sufficient growth of exports regardless of the consequences for foreign holders of sterling, competitor countries and the domestic real wage. Nor does it have the right, under the Treaty of Rome and other international

commitments, to impose substantial long-term restrictions on imports, whether by means of quotas, tariffs, multiple exchange rates or any other analogous device.

In this section devaluation and protection are compared at a theoretical level. The considerations discussed here are, for the most part, those which Messrs. Corden, Little and Scott (CLS) raised last March²⁰ when they strongly criticised the view we had just put forward that 'restriction of imports by quotas or high tariffs now appears to be the only way in which the trade deficit can be reduced without either very high unemployment or very large falls in the exchange rate' with 'extremely serious' implications for domestic inflation.²¹

The problem is best set up by initially comparing devaluation and protection as alternative ways of achieving given targets, both for output and for the balance of payments in some future year.²²

First consider the problem as one of comparative statics and compare the outcomes of devaluation and protection on the assumption that in each case it has been possible to achieve the same pair of targets and that money wages have not been differentially influenced during the transition.

The difference between the two outcomes which is usually taken to be crucial is that the terms of trade will be worse under devaluation than under protection and therefore, since by assumption output is the same in each case, the real national income is lower as well. This point is conceded by CLS but, they argue,²³ 'this terms-of-trade gain from import restrictions is likely to be very small'.

However, CLS do not even mention that the loss to real wages after devaluation, caused by a rise in import

²⁰ *Import controls versus devaluation and Britain's economic prospects*, Trade Policy Research Centre, London, 1975.

²¹ *Economic Policy Review*, No. 1, Feb. 1975, p. 3.

²² The other instrument, in both cases, being fiscal policy.

²³ They also argue that 'If Britain's terms of trade are better [those of her trading partners] must be worse by just as much . . . [this] is one of the main reasons why import restrictions . . . are forbidden.' This argument is extremely unconvincing; if other countries really wanted to have their terms of trade in manufactures improved they would favour export subsidies. But 'dumping' is just as unpopular as protection.

¹⁹p. 8.

prices relative to money wages, will be much larger proportionately than the loss to real national income through worse terms of trade; judging from past experience in the UK, the rise in import prices following from devaluation tends to be about four times as large as the deterioration in the terms of trade. The fact that real wages are lower by a larger amount than the real national income implies (given public expenditure) that there is a redistribution of income in favour of profits.²⁴ Additional, therefore, to the direct effect of devaluation on costs, the loss of real wages and redistribution of income towards profits will react on money wage costs and reinforce the inflationary effect of devaluation as compared with protection.

One argument used against protection as compared with devaluation is that the exclusion of imports will cause domestic prices, since they are no longer subject to foreign competition, to rise more than they otherwise would have done. The effect of competitive imports on the prices of domestic manufactures has been the subject of an elaborate research project during recent years at the DAE. The empirical results²⁵ show pretty conclusively that final prices charged on average in the UK have so far been almost completely impervious to the growing penetration of our markets by foreign manufactures. Domestic wholesale and retail prices have, on the contrary, been rigidly determined by the cost of inputs and by taxation.

So much for comparative statics. An equally important part of the comparison between protection and devaluation (at this level of generality) concerns the dynamics of how, or even whether, either strategy *can* achieve external and internal equilibrium simultaneously, particularly when a large adjustment is necessary. It is on these dynamic aspects of the process that CLS are particularly unconvincing.

Although, they argue,

'quick effects... cannot be expected... there is evidence from other countries that, given time, devaluations do bring about declines in imports *provided domestic incomes are not allowed to increase at the same time*²⁶... It would be an illusion, however, to think that these problems would be avoided by import controls. Past experience in the United Kingdom (in 1951-53) shows that the effects of import controls also take time.'

In a later passage CLS argue that

'It has been observed that the immediate aftermath of a fairly large devaluation, coming after a long period of exchange rate stability, has been a *fall* in earnings of foreign exchange... But times have changed. Recent experience has been of floating rates of exchange which make such behaviour less likely. With small repeated falls in the exchange rate... a repetition of the so-called J curve whereby foreign exchange earnings from exports [less

²⁴It is sometimes suggested that a redistribution of income towards profits could be avoided, if this is what the government wanted, by appropriate changes in taxation. But this would not, in practice, be possible because all the redistribution towards profits would be in exporting industries. Unless these industries were taxed with differential severity, new taxes would have to be levied on the rest of industry which would not have benefited from the redistribution. Moreover, discriminatory taxes on export profits would nullify the incentive provided by devaluation.

²⁵These results will be published shortly.

²⁶Our italics.

imports??] improve only after a dip, is not to be expected.'

These statements about how the real world behaves are dogmas; CLS neither produce any evidence nor cite any of the large body of empirical work which bears on the crucial question of how large and how rapid are the responses of export and import prices and volumes to devaluation.

Although precise comparison between the different studies is difficult because of differences in data and methodology, we believe that all those who have made detailed empirical investigations²⁷ would agree *à peu près* with the following propositions.

- (a) A devaluation of (say) 10%, given unchanged money labour costs, will result in an almost immediate rise in sterling import prices of about 8.5%, and in sterling export prices (with a short lag) of about 6.5%, implying a fall in dollar prices of about 3.5%. So there is a terms-of-trade deterioration which will settle down to about 2%, but initially this will be a little larger.
- (b) The 'long-term' price elasticity of demand for exports in aggregate is 1.5 - 2.5, while that of imports is somewhere between 0 and 1.
- (c) The time lags in response of export and import volume are both long. The estimates of mean lag that we know of are all at least a year; the model used by the Treasury contains a mean lag for manufactured exports of six quarters.

The point relevant to the present discussion, on which all investigators agree, is that the reactions of import prices (and the terms of trade) to devaluation occur almost immediately, whereas those of export and import volumes occur slowly. This makes the CLS propositions quoted above wrong, or at best inadequate, since they appear to be asserting that in considering the adjustment process the only important difference between devaluation and protection is the speed of the volume response. But even were it the case that the volume response is not much slower under devaluation than under protection (which we dispute), there remains the crucial difference that there is an immediate loss of real income and output in the former case but not in the latter. To be more precise, if it could be assumed that fiscal policies were set so as to make the balance of payments the same in each case, output and employment must be lower for a year or two under devaluation than under protection.²⁸

In sum, devaluation, if it can be made effective, requires lower real wages than protection, because it involves both less favourable terms of trade and a redistribution of income from wages to profits. The transitional problems for devaluation are the more

²⁷See for instance: HM Treasury Macro-economic Model, *Technical Manuel*, February 1976; 'Relationships in the London Business School model' in G. A. Renton (ed.) *Modelling the economy*, Heinemann, 1975; Jacques R. Artus 'The 1967 devaluation of the pound sterling', IMF Staff Papers Vol. 22, No. 3, Nov. 1975. T. S. Barker (ed.), 'Economic structure and policy', Cambridge Growth Project series, Chapman and Hall (forthcoming). We understand that the propositions in the text are broadly confirmed by the relationships which emerge from research recently carried out by the National Institute.

²⁸The comparative statics assumption (p. 00) was that the same target for output as well as the balance of payments can ultimately be achieved by either strategy. The outcome differs during the transitional period because of the different time lags of adjustment.

acute because the terms-of-trade loss and redistribution of income in favour of profits both occur almost immediately, while the benefits (in terms of higher exports and reduced import penetration) are delayed. Restriction of imports need not involve either a terms-of-trade loss or a rise in profit margins, whether in the short or the long term, and the impulses are all positive from the start.²⁹

The next sections consider how each strategy might work out in practice, the scale of action which would be needed to secure a permanent reduction in unemployment by 1980, and the difficulties – external as well as internal – of implementing each strategy on such a scale.

The strategy of import restrictions

Under a regime of import controls the balance-of-payments target would be enforced, subject to a short lag, by restricting imports to match foreign exchange available from export earnings and other sources (such as income from abroad and 'structural' capital flows). Fiscal policy (public expenditure and tax rates) must then be set so that if domestic demand and income rise at their target rates, the public sector deficit will match the balance-of-payments target plus normal private saving less stockbuilding. With a highly progressive tax and subsidy system such as that which exists in the UK, the growth of demand should be reasonably stable provided that the balance-of-payments target does not have to be varied rapidly.

The severity of import restrictions must naturally depend on the growth of exports, but the more imports have to be restricted relative to home demand, the greater the incentive to domestic industries to expand production and substitute their output for goods which were previously imported. Thus the target for growth of domestic demand has to be set in relation to the feasible expansion of domestic supply, taking some account of the ease with which import substitution is likely to be achieved.

In relatively undeveloped countries, or those with low export earnings compared with domestic produc-

tion and demand, bottlenecks may easily arise in the supply of raw materials and imported manufactures for which domestic substitutes do not exist. The 'foreign exchange budget' then imposes a direct limitation on growth. Expansion of domestic income may, for example, create shortages of food which cannot be met by imports without depriving manufacturing industries of the imported inputs and investment goods they would need to maintain and expand production.

The situation in which import restrictions might be imposed in the UK is altogether different from the case described above. Our circumstances would be much more like those in Australia and New Zealand or formerly, Japan and the USA. Britain already possesses large export earnings (in our case derived from manufactures, in most of the above-mentioned countries derived at first from primary products). Even if UK exports were reduced by trade restrictions imposed by other countries, our export earnings would still far exceed the requirement for imports of food, raw materials and those components and machinery which could not be produced at home without great difficulty. The surplus of export earnings over minimum import requirements provides Britain with a large margin of flexibility. This margin would make it possible to bypass within a short time any damaging bottlenecks in the supply of particular goods by releasing foreign exchange for imports to meet the gap.

Thus the main limit on growth would simply be the rate at which production in general could be expanded, given the available labour supply, and this would depend on the size of resources which could be devoted to investment in expansion of capacity and in labour-saving improvements. Since industrial investment now accounts only for some 9% of national income, even a rapid acceleration of investment would represent a small short-term claim on the total income available. The main difficulty about higher investment in the short run would be the lack of capacity in investment goods industries themselves. The 'flexible' import margin might for a time have to be allocated mainly to extra supplies of machine tools, etc. needed for the first-round expansion of industrial capacity.

The large size of the margin of flexibility and the possibility of continued *increase* in total imports of manufactures under a protectionist strategy can readily be demonstrated. The first and most important point is that imports of manufactures now account for almost half the bill for all imports of goods and services, which means that purchases of food, fuel and materials absorb less than half the present total of export earnings.

Second, even if other countries impose trade restrictions, UK exports should still rise in future as world trade recovers. Although some increase in imported raw materials would be needed, imports of food have always remained virtually constant and the net balance-of-payments cost of fuel supplies will fall as North Sea revenues start to accrue. The probability is, therefore, that finance will be available for some increase in total imports of manufactures, although at a much slower rate than in the past.

In addition to the issue of how fast imports can rise and how they should be allocated, a protectionist strategy must also still deal with the problems presented

²⁹In addition to making a general argument against import controls, CLS made a number of penetrating criticisms of the model set out in last year's *Review*. Some of these criticisms were justified and we have attempted to meet them all when constructing the new model described in Appendix B. The criticism which was generally taken to be the most damaging one gave, by an unfortunate conjunction of sentences in the CLS paper, an impression which was exaggerated to the point of being entirely incorrect.

'The CEPG rejects exchange rate adjustment because it believes that "the required fall in the sterling exchange rate would be some 30% in 1975" . . . The CEPG draws this conclusion from its forecasting model. Yet, upon examination, it does not appear to follow from the model at all. On the contrary, if that model is accepted it can be demonstrated that a very moderate devaluation, probably about 10% as compared with the CEPG's 30%, is all that is required.' This conclusion is supposed to follow mainly from the fact that we had set, unjustifiably, a more stringent balance-of-payments target for devaluation than for protection. It was indeed a serious blemish to our analysis that the targets were different in the two simulations; we did not then as now have a model which could be programmed so as always to ensure that common targets emerge, given alternative instruments. But CLS set out their conclusion in a way which invites gross misunderstanding. The 30% devaluation they quote clearly refers to the scale of *nominal* devaluation in the year 1975. The 10% which they claim would be sufficient refers to effective devaluation maintained over the period to 1978. The way to ascertain how serious our error was was simply to rerun the model assuming common balance-of-payments targets. We did this and found that the 30% should have been not 10% but 23%.

by the present inflationary gap. It is not possible to foresee accurately how fast output could be expanded in the new situation, but as a reasonably cautious assumption, suppose the growth of business output (excluding public services) could be 7% in 1976-7 when spare capacity is being brought back into use, falling to 5% a year by 1979-80. If growth of public services is no more than that planned in this year's White Paper,³⁰ this growth of business output would suffice to reduce unemployment to about 1.1 million in 1977 and to 900,000 in 1980. The implied growth of real national income (allowing for the terms of trade, net income from abroad and from the North Sea, etc.) would average about 5% a year over the whole period up to 1980.

Calculation of the scale of import restriction required is somewhat artificial because trading relationships would be fundamentally changed, and the extent of retaliation cannot be foreseen. Assuming the growth of world trade to be unaffected and only moderate retaliation, imports of manufactures (taking semis and finished manufactures together) would have to be restricted so as to be about equal in 1977 to their level in 1973; then, between 1977 and 1980, imports of manufactures could rise at about 7% per annum. To put the point another way, the rise in imports of manufactures would have to be kept to 5% per annum between 1975 and 1980 compared with 10% per annum between 1965 and 1975.³¹

The prior claims on an increase in real national income (discussed above, p. 8) are still so large that, assuming protection was introduced in mid-1976, a large tax increase³² may still be needed to limit the overall expansion of demand to a manageable rate, and real wages might continue to fall for a year or two (although less than under conventional policies). However, after two or three years real wages should recover to the 1975 level and by 1980 could be up to 10% higher, depending how fast public expenditure had expanded meanwhile.

Thus during the first years of a protectionist strategy, when real wages were still falling, the pressure for inflationary settlements to restore the position would be great.

Although the problem of inflation would be real and difficult to resolve, protection would have made the task of securing full employment and high real incomes much easier than under the present economic system.

Devaluation as a macro-economic instrument

The purpose of devaluation is to stimulate growth of exports and retard import penetration by giving British producers a large cost advantage (and increase in profits) *vis-à-vis* their foreign competitors. The cost advantage is provided by cutting the level of British labour costs expressed in terms of foreign currency (the 'dollar wage'). To achieve a large and permanent devaluation without setting in train a wage/exchange

³⁰With 2% a year growth of public service employment, the level of unemployment in 1980 could be brought down to about 0.75 million.

³¹This comparison is affected by the slump in 1975. The growth of manufactured imports from 1973 to 1980 would have to be 3% compared with 12.5% between 1965 and 1973.

³²Either explicit, or in the form of a failure to index allowances in line with inflation.

Table 1.11 The increase in national income under a protectionist strategy, 1975-80 (increases over period, £1975 billion)

	1975-77	1977-80	1975-80
Domestic output	10.6	17.2	27.8
Terms of trade	- 0.2	- 1.2	- 1.4
Net income from North Sea and abroad	0.2	1.2	1.4
Real national income	10.6	17.1	27.7
Resource claims:			
balance of payments	0.5	2.2	2.7
stockbuilding	4.8	0.0	4.8
	5.3	2.2	7.5
Reduction of inflation:			
private surplus	0.3	2.3	2.6
stock appreciation	0.5	- 0.2	0.3
	0.8	2.1	2.9
Other claims:			
household grants	0.8	1.1	1.9
public expenditure	1.3	2.3	3.6
property income	5.0	4.1	9.1
	7.1	7.5	14.6
Total prior claims	13.2	11.8	25.0
Wages and salaries	- 2.7	5.5	2.8

Note: see footnotes to Tables 1.3 and 1.5.

rate inflation spiral requires, simultaneously, a large downward adjustment of the exchange rate and strict upper limits on money wage settlements enforced over a period of years to prevent the 'nominal' devaluation being undone by subsequent increases in money wages in terms of sterling.

(a) Exchange rate adjustment

There is no precedent for a large, planned devaluation of a major currency since the fixed exchange rate regime broke up in 1971-2. Indeed, even going back much further than this and considering minor as well as major currencies, precedents for effective devaluation to remedy 'fundamental imbalance' are hard to find - the best example of success being perhaps the French devaluation of 1958, which was made to stick in the first years after General de Gaulle came to power. The difficulty of adjusting the exchange rate itself applies mainly to major currencies such as sterling which are freely convertible and which attract substantial foreign deposits because of their convertibility. But the problem of internal adjustment to the lower level of real wages required for effective devaluation is universal and is perhaps the reason why protection has nearly always been adopted by countries with insufficiently competitive domestic industries.

It was emphasised in the introduction to this chapter (p. 1) that to attempt a large, deliberate devaluation

Table 1.12 Growth of exports and imports, 1975–80 under a devaluation strategy

	(£1975 billion)		(% per year)	
	1975	1980	Growth 1975–80	Actual 1965–75
Domestic demand*	103.3	125.9	4.0	1.8
Domestic output†	100.4	127.0	4.8	1.9
Business output	85.9	112.3	5.5	1.8
Import of manufactures	12.8	25.1	14.4	9.0
Other imports†	15.8	19.9	4.7	1.9
Total imports	28.6	45.0	9.5	4.9
Balance of payments target	-1.7	1.0	—	—
Terms of trade loss	0.0	4.4	—	—
less				
Income from North Sea and abroad†	-1.2	-4.2	—	—
Required exports	25.7	46.6	12.6	5.3
(per cent)				
Ratio of manufactured imports to				
—domestic demand*	12.4	19.9	9.9	7.0
—business output	14.9	22.4	8.5	7.1
Ratio of exports to business output	29.9	41.4	6.7	3.5

* Domestic expenditure on all final goods and services.

† Domestic output excludes, and 'imports' include, sales of North Sea oil and gas (less operating costs). The net balance-of-payments contribution from the North Sea is included with income from abroad.

of sterling would threaten a *de facto* suspension of convertibility, because holders of sterling funds would be unlikely to accept the abandonment of any commitment to preserve the value of their investments. Outstanding sterling balances of about £7 billion, together with possible short-term outflows, now exceed the foreign exchange reserves and 'last resort' borrowing from the IMF, Federal Reserve Bank, etc. available to Britain (which probably amount in all to not more than £6 billion).³³ Even discounting medium and long-term debts the UK is therefore not able to meet the potential withdrawal from sterling and can only maintain convertibility as long as sterling funds continue to be held voluntarily.

In addition to the monetary risks of attempting a large devaluation, there is the certainty that it would be strongly resented by competitor countries,³⁴ particularly other members of the EEC, because of the dislocation it would cause to their industries selling in the UK market. In this respect, devaluation differs little from protection.

(b) The scale of devaluation

The vital issue, both from the foreign and domestic standpoint, is how large a devaluation would be needed to secure an acceptable rate of growth of output and reduction of unemployment in Britain. As we shall now see, the scale of effective devaluation required is large and almost certainly impossible to implement.

The calculation starts from the required growth of

output. Here for comparative purposes we assume the same growth of output by 1980 as in the discussion of import restrictions – i.e. 5.5% a year, sufficient to reduce unemployment to 900,000 by 1980 if White Paper limits on growth of public services are adhered to. It should be noted that, for reasons already given,³⁵ the time-path of the increase in output between now and 1980 would differ from that under protection, because devaluation is a slow-acting measure which cannot be used to fulfil year-to-year targets for output and the balance of payments simultaneously. The delay in response of exports to devaluation means that the fastest growth of production and absorption of spare capacity might not come until about two years after the devaluation.

The growth of imports which would accompany the target growth of output up to 1980 depends not only on the rise in output, but also on the success of the devaluation itself in reducing the trend of import penetration and on how demand is divided between exports and the home market. Thus the necessary growth of exports and required amount of devaluation have to be obtained by a rather complicated calculation. But the magnitudes can be reasonably well understood (especially given the real uncertainties) by following the argument one step at a time.

First, even allowing for the reduced price competitiveness of imported manufactures, the volume increase to be expected with such rapid growth of output and home demand must be higher than in the past period of very slow growth. On past relationships our estimate is for growth of imports of manufactures

³³see Chapter 5, p. 44.

³⁴If the very strong reaction to the small fall in sterling at the beginning of March this year.

³⁵p. 12 above.

Table 1.13 Inflation and the fall in real wages under a large devaluation,* 1975-80 (% increases over previous year)

	1976	1977	1978	1979	1980
Money wage settlements†	13.0	7.5	7.5	7.5	7.5
Average money earnings before tax†	19.3	12.4	9.9	9.8	9.6
Average money earnings after tax†	15.3	13.3	10.3	9.6	9.3
Unit labour costs (in foreign exchange)‡	-11.5	-15.5	-0.2	4.9	5.8
Unit labour costs (in sterling)‡	14.0	7.9	5.1	5.5	5.6
Import prices	27.0	30.5	14.4	9.2	8.3
Costs per unit output‡ §	18.8	16.0	9.9	8.0	7.6
Business output prices	19.1	16.8	11.6	8.6	7.8
Consumer prices	18.4	21.9	10.7	7.0	6.0
Average real disposable earnings†	-2.6	-7.1	-0.3	2.4	3.1
Costs per unit output (in foreign exchange)§	-7.8	-9.2	4.3	7.4	7.8

* Devaluation in mid-1976 to achieve 5.5% a year average growth of business output by 1980, assuming 9% a year average growth of world trade, balance of payments targets rising to £1 billion in 1980, public expenditure as in this year's White Paper.

† Rates or earnings per adult male: earnings include overtime and 'wage drift'.

‡ Normal costs with capacity utilisation on trend.

§ Costs of 'business sector', including rates, rents, subsidies to public corporations, etc.

|| Average price of home sales before indirect taxes and subsidies on consumption.

at 14% a year – faster than the 9% a year average for 1965-75 (when output rose only 2% a year), but slower than in the 1970-3 period when the expansion of output was still lower than that required in the future. The volume of total imports might rise 10% a year 1975-80, about twice as fast as over the past decade (see Table 1.12).

The growth of exports needed to finance this volume of imports would be the higher, the greater the balance-of-payments improvement which has to be achieved. If a significant surplus on current account is required, exports might have to rise 12% a year. For each £2 billion reduction in the 1980 balance-of-payments target, the growth of exports needed may be lower by a little over 0.5% a year. Thus the average growth rate for exports is not very sensitive to the target chosen.

One uncertainty about the size of devaluation needed to achieve the target growth of output and fall in unemployment lies in estimates of the growth of exports which might occur in the absence of devaluation. Different but plausible assumptions about the future growth of world trade could add or subtract 1% from any projected export growth rate. On the optimistic view that world trade will grow steadily from now on to achieve an expansion between 1975 and 1980 slightly faster than its past trend, the growth of UK exports in the absence of devaluation might be as high as 8.5-9% a year (given a continued gradual gain in cost competitiveness). In that case the shortfall of exports compared with the target for 1980 would be under 20%. But with a little less growth of world trade the shortfall by then could equally be 25% or more.

A further difficulty is that the size of the response of exports (and imports of manufactures) to the cost advantage conferred on UK producers by devaluation cannot be accurately foreseen. The combined response on our estimates (based on past data for the UK and comparable countries) is a gain in net trade (exports less imports) equivalent to about 2% of exports of goods and services for each 1% reduction in UK costs. Since import prices which rise in sterling terms after a devaluation are quite an important component of

domestic costs, the response to *devaluation* (in the sense of a cut in the 'dollar' wage) is rather less than this.

Taking all the possibilities into account, the best we can say is that a devaluation in mid-1976, designed to achieve 5% a year growth of output up to 1980, would probably have to cut UK labour costs in terms of foreign currency by somewhere in the range of 20-30%.

(c) *The problem of adjustment*

The transitional domestic problems which such an objective implies can be seen by considering the timing of events after a large devaluation in mid-1976 designed, for example, to give UK producers a 20% cost advantage relative to world prices of manufactures. The nominal devaluation of sterling, compared with the 1975 average exchange rate, would have to be almost 40%. Import prices would then rise over 30% and even if wage settlements could be pegged at a low level of, say, 7.5%, this would mean domestic prices rising 17-18% a year in 1976-7. Worse still, to keep the balance-of-payments deficit down in 1977 as the terms of trade deteriorated, an increase in tax on consumption of some 4% would be necessary. In the first year after devaluation consumer prices would rise over 20%.

It is at this point that the problem would be most acute. Money wage settlements would have to be held down to a low level (under 10%) when prices were rising 20% and profits were enormously increased. Only if money wages could be held down in this manner would be the cost advantage and profit incentive conferred by devaluation remain intact. Without a fundamental change in wage-fixing machinery such an intense squeeze on real wages must be impossible. Yet if money wages started to rise 15-20% a year in 1977, the effects of the devaluation would be diluted and possibly destroyed.

Even by 1980 a large devaluation (if it could be enforced) would probably have conferred no net advantage to real wages as compared with conventional policies, although it would have brought about a cut in the level of unemployment (Table 1.13).

The choice of strategies

Conventional policies cannot reverse the past trend of low export growth and import penetration to the extent necessary to achieve fast economic growth. Devaluation and import restriction are both in principle effective methods of solving this problem but neither is possible, on the scale required, under existing institutional arrangements.

Neither a large-scale devaluation of sterling nor the imposition of broad import restrictions would *prima facie* be acceptable to the EEC and other major countries and international institutions. Attempted devaluation might also invite sanctions from oil-producers with large sterling holdings.

Domestically the problem of the inflationary gap will remain acute for at least another two years, whatever strategy is adopted. A strategy of protection would be the least damaging to real wages and the least vulnerable, in terms of its ability to bring down unemployment, to any future acceleration of inflation. Under conventional policies, and still more after large-scale devaluation, the control of future inflation is a vital pre-requisite for economic growth. Yet these strategies would sharply reduce real wages, making future limitation of money wage settlements far more difficult (Table 1.14).

If any viable arrangement can be reached which removes the balance-of-payments obstacle to future growth of demand, the British economy should now be capable of a period of very fast growth (by the standard of past performance) at a sustained rate of 5% a year or more for many years to come. This would provide the opportunity for a transformation of industry and the economy in which the critical structural problems existing today could be resolved.

Table 1.14 Comparison of real post-tax wages, 1975-80, under alternative strategies (index, 1975 = 100)

	Protection		Existing	Devaluation
	(1)	(2)	arrangements (3)	(4)
1976	98.5	98.3	98.1	97.4
1977	96.2	94.5	93.3	90.5
1978	98.5	95.5	94.2	90.2
1979	103.7	99.7	96.1	92.4
1980	107.7	103.1	97.5	95.3

Notes:

The level of unemployment in 1980 corresponding to these strategies is 900,000, except under 'existing arrangements' (3), where it is 1,600,000.

- (1) Import restriction from mid-1976, growth of business output averaging 5.5% a year, wage settlements reducing to 10% a year, public expenditure as in this year's White Paper.
- (2) As (1) but with 2% a year growth of public service employment and 5% a year growth of public investment after 1976.
- (3) Cost competitiveness of UK producers improving at 3% a year via depreciation of sterling, same wage settlements and public expenditure as (1).
- (4) Devaluation in mid-1976 to achieve same average growth of business output by 1980 as (1), wage settlements at 7.5% a year from 1977, public expenditure as (1).

All projections assume fast growth of world trade (averaging 9% a year) and the same balance-of-payments targets (rising to £1 billion surplus in 1980). Import restrictions are assumed to result in a 3% cut in UK exports from 1977 onwards compared with what would otherwise have occurred and export cost competitiveness is assumed not to change (because of smaller depreciation of sterling) from the 1975 level.

Post mortem on last year's Review

Although the conditional forecasts presented a year ago were wrong in some respects, the main analysis and conclusions about alternative policy strategies still seem to hold up pretty well.

It was argued that a rapid improvement in the balance of payments might not be necessary in the period to 1978, but that to achieve even a slow improvement (which *would* be necessary) the public sector financial deficit would have to be substantially reduced (though even without fiscal restriction there would probably be a temporary improvement because of better terms of trade). On the other hand if no measures were taken other than fiscal restriction the rise in unemployment, already manifest, would be aggravated. Since it was unlikely that employment could be sustained by devaluation, in view of the magnitude of the required nominal devaluation in 1975 and 1976 and the likely consequences of this for domestic inflation, it was concluded that

'there seems to be no way of obtaining simultaneously an improvement in the current balance and keeping unemployment below one million other than by introducing some form of import restriction.'

The rate of inflation was expected to diminish quite fast, with retail prices at the end of 1975 perceptibly under 20% up on a year earlier.

In two respects the fiscal recommendations were based on incorrect assumptions. The balance-of-payments target was much too slack, and the extent of the rise of the private sector financial surplus in 1975 under inflationary conditions was not properly foreseen.³⁶ The implications of these two factors for fiscal policy work in opposite directions, so that the overall fiscal recommendation was probably about right.

The fiscal decision actually taken was neutral: there was a rise in the *ex post* public sector deficit, but this was entirely a consequence of the recession.³⁷ Although we expected some improvement in the balance-of-payments deficit even with fairly lax fiscal policy, the improvement which actually occurred was a good deal larger than we (then) would have expected given the fiscal decisions actually taken, although these were quite stringent compared with past reactions to recession.

There is no evidence of any significant error in the forecast of underlying trends in UK trade during 1975. Although 1975 saw the first fall in the volume of imports of finished manufactures in recent history, this is entirely consistent with the (very high) income elasticity of demand suggested last year in combination with the recession which actually developed.

The fact that neither substantial effective devaluation nor protection was implemented in 1975 did, as foreseen, result in a severe recession because net export demand did not rise enough. The experience of 1975 therefore supports the central contention of last year's *Review*, which is, indeed, repeated this year.

The inflation forecast, at first sight, was much too optimistic, since in December 1975 the retail price index was nearly 25% higher than a year earlier. But last year's forecast of the costs of primary inputs –

³⁶See Chapter 6.

³⁷See Chapter 7.

in particular of labour costs – was fairly accurate, and prices in the private sector continued to move in line with costs. The difference between forecast and out-turn almost wholly reflects the unwinding of the government manipulations of indirect taxes and subsidies designed to staunch inflation during the

threshold period.³⁸ This would have been foreseen more accurately if we had then had a comprehensive model of sectoral flows, such as that used for the present *Review*,³⁹ which ensures consistency between, for example, the assumptions underlying the forecast of the public sector deficit and the price level.

³⁸See Chapter 3.
³⁹See Appendix B.