CHAPTER 6 PUBLIC SPENDING AND TAXATION (1)

by Terry Ward and Robert Neild

Introduction

The purpose of this chapter is to analyse public expenditure and revenue in order to present a forecast of the public sector financial balance in the coming financial year, 1975-76. If present tax rates and other features of fiscal policy remain unchanged, taking the January 1975 White Paper forecast of public expenditure and assuming the behaviour of the other major economic variables is as projected elsewhere in this study, the financial deficit in 1975-76 will be £6¾ billion. This represents an increase of £2 billion over the latest estimate of the deficit in the current financial year, 1974-75.

The chapter begins by examining in more detail the changes made to the estimate of public expenditure for 1974-75 since last March and the reasons for the revisions. Secondly, the course of public expenditure over the next four years, as presented in the January 1975 White Paper is considered in relation to previous forecasts. Thirdly, estimates have been made of what the financial deficit is likely to be both for the current financial year and, on the assumption of unchanged tax rates, for the coming year, 1975-76. In addition, an appendix is devoted to examining whether, given the present structure of taxation, a higher rate of inflation leads to an increase of the excess of public expenditure over revenue rather than the reverse.

Public Expenditure in 1974-75

In his budget speech last March, Mr Healey announced that one of his main priorities in formulating fiscal policy was a reduction in the size of the public sector financial deficit, (2) which by 1973-74, had risen to £3 billion. This increase, he argued, was a major factor underlying the collapse of the previous Government's growth policy and the deterioration in the U.K. balance of payments position. The budget changes he made in March were forecast to reduce the financial deficit to £1.2 billion in the current financial year, 1974-75. In November 1974, however, this forecast, before the changes in taxation made in Mr Healey's second budget, was revised upwards to £4.1 billion, an increase of £2.8 billion (after allowing for the cut in the rate of VAT in July) between March and November. Such an enormous revision represents the equivalent of some 4 per cent of GDP and indeed is greater than any policy change in the financial balance introduced in any budget since 1950-51.

An examination of the March and November estimates, published in the Supplementary Financial Statement and Budget Report, 1974-75, reveals that while anticipated revenue was revised upwards only slightly, the estimate of public expenditure was increased by almost £3.4 billion in total or by 9 per cent. One reason for this increase, Mr Healey claimed in his Budget speech, was "wage increases and other cost increases", which "increased public expenditure as outlined in the March budget in current price terms - but not in volume terms". This statement is by no means unambiguous, because it does not make it clear whether the estimates of volume had or had not been changed. In fact, as later acknowledged by the Treasury (in evidence to the Select Committee on Public Expenditure (1) part of the increase took the form of an unplanned addition of £550 million to the volume of expenditure on goods and services a rise of about three per cent. Nevertheless the apparent impact of unforeseen cost increases on the financial balance of the public sector has opened up the question whether it is a valid general proposition that an acceleration in inflation will increase government outgoings by more than receipts (see Appendix 6.2).

Table 6.1 sets out the changes that have been made to the estimate of public expenditure in the present financial year, 1974-75, since the March 1974 budget. The overall percentage change between the two sets of estimates as far as goods and services are concerned has been approximately divided between that arising from a change in the volume of expenditure and that arising from a change in price — a division made possible by the details on changes to programmes given in the January 1975 White Paper.

In total, the estimate of public expenditure for 1974-75 was revised upwards by 8.9 per cent between the March and November budgets, and subsequently seems to have been reduced slightly between November and January though this must be regarded as a very tentative observation given that it rests on what has happened to only part of the total — goods and services and debt interest. The main elements underlying the revision between March and January were increases in subsidies, which were raised by over 50 per cent, and in local authority expenditure, which, on current and capital account combined, was raised by over 12 per cent.

As regards local authorities, it is clear that there was a very substantial upward revision to the March estimate of capital expenditure and that this was entirely the result of an increase in volume terms of almost 20 per cent. Of this, however, a large part consists not of additional construction, but of purchases of houses from the private sector coupled with fewer sales to council house tenants, both of which are included as capital formation by the public sector.

⁽¹⁾ This chapter presents the first results of the project, "Full Employment Balance in the Budget," financed by the Institute of Fiscal Studies.

⁽²⁾ Defined as public expenditure, excluding transactions in financial assets, minus current receipts, capital taxes and transfers.

⁽¹⁾ On 16 December, 1974.

Table 6.1 Changes to the Estimate of Public Expenditure in 1974-75, between March 1974 and January 1975

	£ million at Current Prices			Percentage Chang		
**************************************	March 1974	January 1975		Real	Price	Total
Current expenditure on goods and						
services	15863	16993		0.8	6.3	7.1
of which: central government	9441	9883		0.7	4.0	4.7
local authorities	6422	7110	ı	1.5	9.1	10.7
Subsidies	2171	3302				52.1
Debt interest	3429	3800				10.8
Current grants to personal sector	8198	8250				0.6
Current grants abroad	395	375				-5.1
Total current expenditure	30056	32720				8.9
Gross domestic fixed capital formation				,		
plus increase in value of stocks	6888	7402		7.9	-0.4	7.5
of which: local authorities	2574	2984		19.7	-3.2	15.9
other	4314	4418		0	2.4	2.4
Capital grants plus transfers	962	937				-2.6
Total capital expenditure, excl. financial						
transactions	7850	8339				6.2
Total public expenditure, excl. financial transactions	37906	41059				8.3

Notes:

The March estimates relate to the budget forecast published in *Financial Statement and Budget Report*, 1974-75. The January estimates are derived from the White Paper *Public Expenditure to 1978-79*, Cmnd 5879, published in January 1975, especially Table 3.3.

These estimates are supplemented by those contained in Supplementary Financial Statement and Budget Report, 1974-75,

published at the time of the November budget.

The breakdown of the total change into real and price terms is estimated from the details given in Cmnd. 5879, Table 3.13 and in the individual programmes.

A revision to the forecast of prices was the prime reason for the increase in the estimate of local authorities' current spending. Indeed, it would appear that the expected level of costs for 1974-75, which in this case are mainly wages and salaries, was over 9 per cent higher in January than was anticipated the previous March. In comparison, the price of central government current expenditure was revised upwards by only 4 per cent over the period. This would suggest significantly higher wage claims being granted to local authority workers than to those under the control of central government; alternatively, the possibility exists that the March estimate of pay and price rises was lower for the latter than for the former. There is certainly evidence that public sector wage rates increased relative to those in the private sector during 1974, as the differential between the two sectors, which had widened over successive attempts at wage restraint, was narrowed. While this catching-up process occurred at a more rapid rate than could have reasonably been expected in March, there is no evidence that it disproportionately affected the pay of local authority workers relative to central government employees. However, local authority treasurers were told by the government in November 1973 to assume a rate of inflation of 9 per cent when computing their estimates of expenditure for the 1974-75 financial year, and there seems to have been no subsequent instruction to amend this assumption. (1) The possibility therefore exists that the 9 per cent rate originally intended for control purposes, was built into the March budget estimates and treated, quite inappropriately, as a forecast of local authority consumption.

Less than a third of the total change between March and January shown in table 6.1 is the *direct* result of price increases. The remainder can all be regarded as a real change, though in part it is undoubtedly an *indirect* consequence of the acceleration in inflation — the subsidies required to hold prices at a given level increasing with the rise in cost.

⁽¹⁾ This instruction helps to explain why the increase in domestic rates was so unexpectedly large for the 1974-75 financial year; at the time the rates were set it was already very clear that a considerably higher level of costs would prevail in the financial year than the government had advised.

Table 6.2 Indices of Public Expenditure by Economic Category, at Constant Survey Prices, 1970-71 to 1978-79 (a)

	1970-71	1971-72	1972-73	1973-74	1974-75 ^(b)	1975-76	1976-77	1977-78	1978-79
Expenditure on goods and services:									
December 1973 White Paper	100.0	100.9	103.9	106.7	109.7	112.8	115.0	117.8	
January 1975 White Paper	100.0	100.9	103.7	105.4	(102.7) 107.4	112.2	114.0	115.1	117.2
Transfer payments (excluding grants to businesses):						-			
December 1973 White Paper	100.0	104.7	107.4	116.3	120.3	120.0	122.0	124.9	
January 1975 White Paper	100.0	104.5	107.6	119.8	133.2	140.1	141.0	144.0	146.8
Total public expenditure, (excluding grants to businesses and financial transactions):		VBt 1							
December 1973 White Paper	100.0	102.3	105.2	109.0	!113.6 (109.1)	115.4	117.6	120.4	
January 1975 White Paper	100.0	102.2	105.2	110.8	117.1	122.7	124.1	126.0	128.3

Notes:

Public Expenditure to 1978-79

In the preceding section, it was seen that the estimate of public expenditure in 1974-75 has been raised by over £3 billion since last March and most of this is an increase in real, rather than in purely monetary, terms. In December 1973, it may be recalled, the then Chancellor, Mr Barber, announced cuts to the existing programme of expenditure for 1974-75 amounting to £1200 million. These cuts have clearly been more than offset by the addition to expenditure made since the March budget, which itself boosted the planned volume of spending by almost £1 billion. Table 6.2 presents a comparison, in terms of index numbers, taking 1970-71 as a base, of the proposals published in the January 1975 White Paper with those contained in the previous White Paper of December 1973.

Table 6.2 shows so far as 1974-75 is concerned how the December 1973 White Paper estimates were first cut and later increased, though to a somewhat lower level. The table also shows that expenditure on goods and services is now planned to increase much faster between 1974-75 and 1975-76 — by over 4½ per cent — than was intended in the 1973 White Paper, with the result that in the coming financial year this element of public expenditure is forecast to be only slightly below (about £125 million at 1974 survey prices) the level planned in December 1973, before the Barber cuts were made. In subsequent years, the average growth rate of direct expenditure is only about 1½ per cent a year.

As regards transfer payments (subsidies, grants and debt interest) the level of expenditure in 1974-75 is very substantially above that envisaged in the 1973 White Paper. Indeed, excluding grants to business (investment grants, REP and RDG), the net addition to expenditure on this element in 1974-75 is of the order of £2.3 billion (at 1974 survey prices) since December 1973. Moreover the addition is even greater with respect to the coming financial year, 1975-76, transfer payments being forecast

to be over five per cent higher than in 1974-75 and almost 17 per cent higher than was planned in the 1973 White Paper. From 1975-76 on, expenditure again grows at a very slow rate.

The revisions to the estimates of transfer payments result in total public expenditure (again excluding lending and other capital transactions) in 1974-75 being considerably higher than was intended in December 1973, before the Barber cuts. Moreover Table 6.2 shows that the excess is even greater for 1975-76, there being a much more rapid growth between these two years than was indicated by the 1973 White Paper — a rise of 4.8 per cent as against only 1.6 per cent. Thereafter the White Paper forecast is for a much slower rate of increase.

The Public Sector Financial Balance in 1974-75 and 1975-76

Receipts in 1974-75

The approach to estimating the financial deficit in the current year is to take public expenditure (at current prices) as given by the latest official estimates discussed above and to confront these with our own estimates of receipts. These have been constructed from an analysis of the main components of revenue. It should be emphasized that the analysis of particular taxes is still at an intermediate stage, and work will continue in the future with the object of improving our understanding of the way the tax system operates and refining our estimates.

Table 6.3 presents estimates of the receipts side of public sector transactions by economic category in 1974-75 and 1975-76 (ignoring transactions in financial assets), together with the most recently published comparable figures for 1973-74 and the Treasury forecast for 1974-75 contained in the November Financial Statement. If the latter forecast is compared with our

⁽a) The figures are derived from Table 3.2 of *Cmnd. 5519* and Table 3.4 of *Cmnd. 5879*. Expenditure on goods and services covers wages and salaries and other current costs and capital expenditure including the increase in the value of stocks; 'shortfall' is deducted from this item. Transfer payments include the contingency reserve. Grants to businesses are best regarded as negative taxes since changes in grant arrangements are closely related to changes in business taxes and tax allowances.

⁽b) Figures in brackets show Treasury predictions after the December 1973 cuts.

Table 6.3 Public Sector Receipts by Economic Category, 1973-74, 1974-75 and 1975-76. (£m)

	1973-74	1974-75		1975-76	% Change 1974-75 (3) to 1975-76
	(1)	(2)	(3)	(4)	(5)
Taxes on income	9600	13314	13000	16750	28.8
National insurance contributions	4099	5353	5321	6757	27.0
Taxes on expenditure:					
Central government (a)	7089	8462	8452	9147	8.2
Local authorities	2716	3099	3099	3950	27.5
Gross trading surplus	2242	2687	2687	3100	15.4
Rent	1690	1951	1951	2244	15.0
Interest, dividends, etc.	672	671	671	700	4.3
Total Current Receipts	28008	35537	35181	42648	21.2
Taxes on capital	829	776	846	779	-7.9
Capital transfers	27	28	28	28	_
Total Receipts	28864	36340	36055	43455	20.5

Source: The 1973-74 figures are taken from Financial Statistics, December 1974. The 1974-75 figures in (2) come from Supplementary Financial Statement and Budget Report, 1974-75 and those in (3) are our estimates, details of which are shown in the Appendix to this chapter.

The figures for 1975-76 are again our estimates, the derivation of which is also described in the Appendix, on the assumption that tax rates, allowances, etc. remain unchanged and that the forecasts of income and expenditure contained elsewhere in this study are realised.

The figures for central government taxes on expenditure relate to receipts rather than accruals as in the government accounts, in order to correspond with our estimates. The adjustment for accruals, which needs to be added in order to get a financial deficit basis, was £454 million in 1973-74 and is estimated at £108 million in 1974-75.

own estimates for 1974-75 – set out in Column 3 – it can be seen that in total there is an insignificant divergence, the sum of the two sets of figures being within one per cent of each other.

The forecasting procedures for the various items are described in the Appendix to this chapter.

Some divergence between our estimates of revenue in 1974-75 and those of the Treasury is to be expected to the extent that they are based on different assumptions about the behaviour of the economy over the relevant period. For our part, we have used the forecasts set out in Table B of the Statistical Appendix as a basis. As can be seen, the main reason why our estimate of total receipts is slightly less than the Treasury's is that we derive a lower figure for taxes on income. This applies both to personal income tax, our estimate of which is two per cent lower than the official one, and to corporation tax, which, apart from the advance corporation tax element payable on dividend distributions, is collected with an average lag of about 18 months. With regard to the latter, our calculations indicate some past build-up of tax losses which has arisen from the inability of companies, taken as a whole to absorb against income the depreciation allowances (to which they were entitled on the investment undertaken) which were increased substantially over a very short space of time in 1971 and 1972. These 'losses' are available to be offset against tax liabilities both in the current year and in the future.

In total, therefore, taking the estimates of public expenditure in 1974-75 as given in Table 6.1, the estimate of the current year's financial deficit is not significantly different from the official forecast, at about £4.8 billion.

Receipts in 1975-76

The estimates for 1975-76 in Table 6.3 are, in the case of taxes, derived using the same procedures as for 1974-75. The assumptions are that tax rates, allowances and other such features remain as they are at the moment and that the change in income and consumers' expenditure and the rate of price and wage increase are as forecast in Table B of the Statistical Appendix. In other words, the estimates for 1975-76 show what the implications for revenue would be if there were no changes in fiscal policy and if the economy followed the path forecast.

On these assumptions, total receipts in 1975-76 will be 20 per cent higher than in the preceding financial year, 1974-75.

Income Tax and Corporation Tax

Looking at the component parts of the estimate, taxes on income are forecast to yield 27 per cent more revenue than in the current year, but this conceals a very divergent pattern as regards personal income tax and corporation tax. While the former, assuming an increase in money income of about 22 per cent, is estimated to

increase by almost 44 per cent, the yield of corporation tax on our calculations declines dramatically, the revenue collected in 1975-76 being approximately £800 million below the 1974-75 level.

The reason for this is twofold.

Firstly, the additional advance corporation taxation which companies are required to pay during the present financial year — a measure introduced by Mr Healey in March of last year — and which is estimated to amount to over £300 million, represents a deductable item from corporation tax demands issued from January 1976.

Secondly, under the tax concession, introduced in November, with regard to the rise in the value of company stocks, companies are allowed to defer the tax payable on the amount by which an increase in the value of stocks exceeds trading profits less expenses (but gross of depreciation) by 10 per cent. This concession is estimated to have a full year effect on tax revenue of just over £1 billion when computed with respect to income earned by companies during their 1973-74 financial years. However, when computed with respect to income earned in 1974-75, which is the basis for tax paid in 1975-76, the full year effect, because of the large amount of stock appreciation, increases to an estimated £2 billion.

In order to estimate corporation tax receipts in 1975-76 an assumption needs to be made about the form this particular scheme will take in the future. There are three possible alternatives in the light of what Mr Healey said on its introduction, that the whole repayment of the tax deferred from 1974-75 was not contemplated in the coming financial year, 1975-76, but that 'the need for deferring tax in 1975-76 on abnormal stock appreciation in the present year's profits is likely to be even greater'. The first possibility is that the scheme will be applied as in 1974-75 without companies being asked to repay the tax deferred. Secondly, that while the scheme will continue, companies will have the tax deferred from 1974-75 debited against the credit due in 1975-76. Thirdly, that the scheme will be discontinued, but companies will not be asked to pay back in 1975-76 the tax deferred from 1974-75.

The second alternative seems the most plausible assumption to make, since the first involves a massive increase in the concession, the amount of tax deferred doubling from £1 billion to £2 billion, while the third means that companies would enjoy no relief at all for the cost of replacing stocks and work in progress at higher prices, in 1975-76. The second alternative results in companies enjoying a bigger concession in 1975-76 than in 1974-75, though the increase is small in comparison with the marked rise in the value of stocks. It nevertheless leads to a fall in corporation tax receipts of about 30 per cent between the two years.

National Insurance Contributions

National insurance contributions, at the present rates and assuming the same pattern of wage increases as in the immediate past, (1) would increase by 23 per cent between 1974-75 and 1975-76, assuming wages rise by 25 per cent and that there is a further increase in

unemployment during the year (which reduces the rise which would otherwise have taken place by some two percentage points). But this ignores the further increase in the rate of contributions which will almost certainly take place in December 1975 when the government have committed themselves to raising benefits. Assuming an increase of 15 per cent at that time implies that contributions will be 27 per cent higher in 1975-76 than in 1974-75.

Taxes on Expenditure

Taxes on expenditure, excluding local authority rates, are forecast to rise by little more than eight per cent over the coming year. There are two main reasons for the smallness of this increase. Firstly, specific duties now account for well over half of revenue collected through indirect taxation and, unlike ad valorem taxes, their yield does not significantly increase with inflation. Secondly, receipts of VAT plus car tax are estimated to be only 15 per cent higher in 1975-76 than in the current financial year, which represents a much smaller increase than the projected growth of consumer expenditure between 1974 and 1975 of about 22 per cent. This is despite the raising of the rate of VAT on petrol to 25 per cent last November, which is estimated to add some £250 million to revenue (almost 10 per cent of the 1974-75 yield of VAT) in the coming financial year. It arises because of the cut in the rate of VAT to 8 per cent in July, 1974, the main effect of which, because of the three month lag in collection, will come through in 1975-76. Had this cut not been made, receipts of VAT would have increased by an estimated 32 per cent between the two years.

Rates

Local authority rates are forecast to increase by over 27 per cent over the period from the projected growth of local expenditure, from what is known of government grants - in particular the rate support grant agreed for the next financial year - from an analysis of the ratio of local authority borrowing in relation to capital expenditure in past years, and from an assumption about the likely increase in rents. This forecast increase in rates is slightly more than the average 25 per cent rise which Mr Crosland said would occur as a result of the rate support grant settlement. The reason for this may be that we have projected a higher rate of growth of costs than the Minister with regard to current expenditure, which we see as keeping pace with the rise in average wages over the economy as a whole. In view of the wage claims granted in the public sector in 1974, this seems a plausible assumption. Fuller details of the expenditure estimates are described below.

Other receipts

The gross trading surplus of the public sector, which is mainly earned by public corporations, is estimated to be some 15 per cent higher in 1975-76 as compared with the present financial year. This estimate is derived from an analysis of the operating account of public corporations since 1960 and in particular of the mark-up implied by the relationship between sales and costs, which remained fairly constant over the 1960's, but which has declined significantly during the period of price restraint.

⁽¹⁾ Some assumption about the distribution of income is necessary because graduated contributions account for 60 per cent of the total payments, and these are assessed as a percentage of income earned between £9 and £62 per week. Our estimate is based on the New Earnings Survey data for 1974.

Table 6.4 Public Expenditure by Economic Category, 1974-75 and 1975-76 (£ million at current prices)

	1974-75	1975-76	Percentage Change		
			Real	Price	Total
Current expenditure on goods and					
services	16993	21972 -	3.4	25.0	29.3
Subsidies	3302	3497	-11.7	20.0	5.9
Debt interest	3800	4440	-2.6	20.0	16.8
Current grants	8250	10096	8.6	12.7	22.4
Current grants abroad	375	441	22.5		22.5
Total current expenditure	32720	40446			23.6
Current surplus	2461 (a)	2202(a)			
Gross domestic fixed capital formation	n				
plus increase in value of stocks	7402	9075	6.7	15.0	22.6
Capital transfers	937	1002	6.9	_	6.9
Less Taxes on capital and other capita	1				
receipts	-874	-807			
Financial deficit	5004 (a)	7068 (a)			

Notes:

The 1974-75 figures are taken from Supplementary Financial Statement and Budget Report, 1974-75 and from Public Expenditure to 1978-79, Cmnd. 5879.

The 1975-76 figures are derived by applying the real change shown by Cmnd. 5879, Table 3.4, inflated by our price forecasts, to the 1974-75 figures.

The figures are not entirely comparable with the figures in the Financial Statement, since no adjustment has been made for accruals of taxes on expenditure over receipts. The change over the year in the amount of tax in the hands of traders awaiting collection by the Customs and Excise is likely to be around £300 million, which would reduce the financial deficit to £6.75 billion in 1975-76 and to £4.8 billion in 1974-75.

The basic assumption is that the subsidy to nationalised industries is gradually phased out by 1976, in line with the January 1975 White Paper, and that the price-cost relationship returns to what appears to be its normal historical one.

Rents, a major component of which is rents on council houses, are assumed to increase by only 15 per cent overall, despite the rent freeze of 1974-75, since the government has stated that a special subsidy will be introduced to keep the rise below what it otherwise would have been. It is unlikely that there will be any large increase in interest and dividend receipts, and as regards taxes on capital — death duties and capital gains tax — the fall in asset values during the present financial year implies a marked decline in receipts in 1975-76.

The overall picture

The increase in total receipts is 20.5 per cent between 1974-75 and 1975-76, with the additional yield of personal income tax making by far the greatest contribution: of the £7.5 billion rise in revenue, personal income tax accounts for £4.3 billion, or almost 60 per cent. This is based on an assumption of unchanged allowances. If some adjustment is made to the amount of these in order to allow for the deterioration in their real value over the year, the yield of the tax would be lower, considerably so if an attempt were made fully to maintain their real value. If, for example, personal and child tax allowances were increased by only the same

absolute amount as last year, the yield of income tax and total receipts would be reduced by about £600 million, which would by no means fully compensate for the decline in their real value.

Expenditure in 1975-76

The estimates of public expenditure for 1975-76 are derived by taking the details in the January 1975 White Paper, which show the change at constant prices between 1974-75 and 1975-76, and inflating these by estimates of the movement in price for the various items. The results of this exercise are set out, by economic category, in Table 6.4, which shows expenditure at current prices in both 1974-75 and 1975-76, and the change between these two years, divided into that caused by changes in the volume of expenditure and that caused by changes in price or cost.

In total, current expenditure is forecast to increase by over 23 per cent and capital expenditure by slightly less. Current spending on goods and services rises by 29 per cent between the two years, assuming an increase in price — mainly wages and salaries — of 25 per cent, in line with wage rates over the economy as a whole, not more rapidly (as has occurred in the present financial year).

The estimate of subsidies in 1975-76 is slightly higher than in 1974-75, the fall in their real value — the consequence of subsidies to public corporations being phased out — being more than offset by inflation. The same

phenomenon is also evident with regard to debt interest, while current grants to the private sector increase in real as well as price terms. The main elements here are pensions and national insurance benefits, the former of which the government is committed to raising in line with wages and the latter in line with prices. For the first time a real increase has been built into the White Paper forecast and we have combined this with an assumed price rise of 15 per cent, on the expectation of the adjustment for inflation lagging behind the current rate. An additional amount has then been included to allow for the expected rise in unemployment between 1974-75 and 1975-76. For grants other than pensions and national insurance benefits a price increase of 10 per cent has been assumed.

The net result of the above forecasts when combined with the estimate of current receipts shown in Table 6.3, is a current account surplus of £2202 million in 1975-76 which, if an approximate adjustment is made for the change in outstanding VAT over the year, becomes about

£2500 million.

As regards capital formation, the real change indicated in the White Paper, is inflated by an assumed price increase of 15 per cent between the two years. This is a little lower than our estimate of the overall rate of inflation in the economy, but is broadly consistent with the Treasury's view that construction costs, having got out of line with other prices, will show a relative decline in the immediate future. (1)

Subtracting the estimate of taxes on capital from the forecast for capital formation and capital transfers produces an estimate of the public sector financial deficit of £7068 million in 1975-76, which is reduced to approximately £6750 million, if the Financial Statement procedure of allowing for the change in outstanding VAT is adopted. This represents an increase over 1974-75 of almost £2 billion and a higher proportion of GDP than in the present financial year $-8\frac{1}{2}$ per cent of GDP as opposed to 7 per cent.

APPENDICES

Appendix 6.1 Estimating public sector receipts

The procedure adopted for estimating public sector receipts is briefly set out below. Estimates of the yield of the different taxes are set out in Table 6A.1.

Income Tax: The procedure adopted is the relatively crude one of isolating for past years automatic changes in revenue from those resulting from discretionary measures, by using the information given in successive Financial Statement and Budget Reports. Automatic changes are then related to changes in cash income from employment, as derived from the National Income Blue Book. Though crude, the elasticity of tax yield with respect to changes in income calculated from this procedure has remained remarkably stable, at about 1.75, over the past few years. However with the increase in the standard rate of tax from 30 per cent to 33 per cent, we have assumed a proportionate increase in the elasticity to 1.925. In the future it is intended to adopt a structural approach to estimating yield, since this will enable distributional aspects to be considered in much more detail.

Corporation Tax: Estimates are derived from an analysis of the Appropriation Account of Companies as published in the *National Income Blue Book*; the main elements of this have been projected for future years.

Taxes on Capital

Revenues from Capital Gains Tax, Stamp Duties and Death Duties are estimated by obtaining the lag between accruals of tax liabilities and tax receipts, and then fitting the movement in the prices of shares and other assets to accruals. The movement of the indices then indicates receipts ahead. Allowances, necessarily rather rough, are made for the transition from Death Duties to Capital Transfer Tax and for the introduction of the Development Land Tax.

Value-added tax plus car tax: The method used is to compute what the yield of VAT, excluding specific duty items, would have been in each year since 1959, had it been applied at a constant rate and with the same coverage as at present. The main sources of information for this exercise are the figures for various items of consumers' expenditure published in the National Income Blue Book and details on the allocation of taxes published in Economic Trends, November 1970. Inter-year changes in estimated receipts of VAT are then regressed on changes in consumer expenditure expressed both in money and real terms. The equation used for estimating future yield is:

$$v = -2.959 + 1.019 cp + 1.240 c$$

where v is the percentage change in estimated VAT between years, cp is the percentage change in consumers expenditure and c the percentage change in real consumption. This indicates that VAT receipts tend to increase more than in proportion to consumers' expen-

⁽¹⁾ See Public Expenditure to 1978-79, Cmnd. 5879, p.165.

Table 6A.1 Estimated Receipts of Taxation in 1974-75 and 1975-76 (£ million)

	1974-75	1975-76	% change 1974-75 to 1975-76	
Income tax plus surtax	10458	15034	43.8	
Corporation tax	2613	1800	-31.1	
Capital gains tax (a)	410	350	-14.6	
Death duties	365	345	-5.5	
Stamp duties	210	230	9.5	
otal Inland Revenue 14056		17759	26.3	
Value-added tax plus car tax	2604	2994	15.0	
Oil	1540	1515	-1.6	
Tobacco	1350	1400	3.7	
Spirits, beer and wine	1125	1235	9.8	
Betting and gaming	240	288	20.0	
Other revenue duties	10	10	_	
Protective duties	575	650	13.0	
Total Customs and Excise 7444		8092	8.7	
Motor vehicle licences	541	550	1.7	
Total	7985	8642	8.2	

⁽a) Including Development Land Tax

diture once real consumption growth exceeds a rate of about 2.23 per cent a year.

Tobacco, beer and wines and spirits:

For each of these three items (wines and spirits is taken as one item), duty is derived from estimated demand equations, using the statistics published on consumers expenditure and receipts of duty in the National Income Blue Book and in Customs and Excise, Annual Report, 1973. The equations used for estimating the future volume of sales are:

Tobacco:- log_e s=7.486 - 0.0028t - 0.0353D- log_e P, where s is the volume of sales, t is a time trend, D is a dummy variable picking up the effect of anti-smoking campaigns and p is the relative price of tobacco.

Beer:- log_e s = 9.669 - 0.6905 log_e p + 1.6126 log_e y, where s is the volume of sales, p the relative price of beer and y is real disposable income.

Wines and log_e s = -11.685 - 1.3922 log_e p +

Spirits:—

1.7748 log_e y, where s is the volume of sales, p the relative price of wines and spirits and y is real disposable income.

1: The estimates of duty are consistent with the

Oil: The estimates of duty are consistent with the projections on energy usage and sources in Chapter 4. Within the aggregated forecasts of total deliveries of oil, future supplies of petrol and derv have been projected from the steady upward trend which prevailed over the period 1960 to 1973 and from the assumption that the

savings on trend achieved in 1974 would be repeated in 1975. Fuel oil is obtained as a residual.

Betting and gaming: Estimates are derived on the assumption that spending on this item would continue to increase in line with total consumers' expenditure, as has been the case in the past.

Protective duties: Estimates are derived from the projected growth of imports of food and finished manufactures.

National Insurance Contributions: Estimates are derived from an analysis of average contributions, the graduated element being calculated from the distribution of earnings data given in the New Earnings Survey for 1974. An allowance has been made for the loss resulting from the expected rise in unemployment.

Gross trading surplus: Estimates are derived from an analysis of the operating account of public corporations for the years since 1960, as published in the *National Income Blue Book*.

Local Authority Income

Local authority rates and rents (and other similar income) for 1975-76 are estimated by taking the official statements on expenditure at constant prices, applying to them estimates of expected price and cost increases and then linking to the resulting estimates of local authorities' total expenditure at current prices the official statements made about the proportion of "relevant" expenditure to be financed by the Rate Support

Grant, making allowance for differences in coverage. The result is an estimate of total grants from the central government at current prices.

Net borrowing by local authorities is then estimated as 65 per cent of capital expenditure. This proportion has been very stable in the past; local authorities apparently link borrowing closely to capital outlay.

There remains a residual to be financed by rent or rates. Rent control on commercial buildings has been relaxed and new legislation is before Parliament which will permit local authorities to raise housing rents in response to rising costs, subject to a new regime of subsidies on capital charges, when the present freeze ends in March. In the light of this and such evidence as could be obtained as to the thinking of local authorities. it was assumed that rents would rise by 14 per cent between 1974-75 and 1975-76. That leaves a required increase in rates amounting to 27½ per cent between 1974-75 and 1975-76. This is rather above the figure of 25 per cent put forward by the Secretary of State for the Environment in November, when announcing the Rate Support Grant (1). The most likely explanations are that we may have assumed a higher rate of inflation than lay behind his estimate; and perhaps our estimate of the increase in rents is lower than his.

The estimates are set out in Table 6A.2 together with figures for earlier years and the March and November Budget estimates for 1974-75. The extraordinary underestimate of local authorities' expenditure in the March Budget and its subsequent correction in November are largely matched by an extraordinary dip in the borrowing ratio and its subsequent restoration to a figure slightly above normal.

Appendix 6.2 Public Sector Accounts and Inflation

The large revisions made during the year to the estimate of the public sector financial deficit for 1974-75 raises a number of questions about the behaviour of the fiscal system during a period of high inflation. This appendix examines whether under the present structure of taxation, a higher rate of inflation can be expected to lead to an increase in public expenditure relative to government receipts rather than the reverse.

An addition to the rate of inflation will normally add an equal proportionate amount to public expenditure except where the outlays (for instance some interest payments) are fixed in money terms. It is well known that the "price" of goods and services bought by the public sector normally rises faster than prices on average, So long as public sector pay rises in line with pay in the private sector the 'relative price effect' is governed entirely by the relative growth of productivity in the two sectors and is completely invariant to the rate of inflation.

In 1974-75, the pay of public sector employees increased more rapidly than that of workers in the private sector as a result of the catching-up process mentioned earlier. There was therefore a relative pay as well as a relative productivity effect, public spending

(1) See Press Notice 899, Department of the Environment.

increasing by more in relation to the rate of inflation than is normally the case. In future it can be expected that public sector wage rates will tend to increase in line with wage rates in the private sector, and the relative price effect will assume its normal value. (1).

As far as public sector receipts are concerned there are two main points to make. Firstly, at a stable rate of inflation, fiscal drag is positive: at high rates of inflation the growth of government receipts will be proportionately greater than at lower rates of inflation. Secondly, an acceleration in inflation needs to be very rapid indeed in order to cause receipts to increase by less than expenditure; this phenomenon is extremely unlikely to occur except for short periods of time. To the extent that it does occur, it is wholly a consequence of lags in the collection process, and its significance is open to question, since much of the tax will indeed have been paid by the personal sector if not yet received by the government sector.

The elasticity of public sector revenue with respect to changes in the rate of inflation is estimated at about 1.2 if account is taken only of automatic changes in revenue. Discretionary changes in such items as local authority rates and rents made in response to changes in inflation would, if included, clearly increase the elasticity. However, there are lags of varying lengths in the collection of all taxes. Table 6A.3 sets out the average lag between the time when income is earned or expenditure incurred and the time when the tax payments on that income or expenditure are received by the appropriate government agency. Income tax, which is almost wholly the cause of elasticity being greater than unity, is mostly received by the Inland Revenue after a lag of about four weeks. If inflation is accelerating, therefore, current tax receipts - as opposed to payments - will not fully reflect the current rate of wage increase. This gives rise to the possibility, exacerbated by the lags elsewhere in the system, that if the rate of acceleration in inflation is sufficient, then cash receipts in the hands of the government may increase less than in proportion to the rise in inflation and consequently less than in proportion to the rise in expenditure. The critical rate of acceleration in wage inflation at which this begins to happen is very rapid - approximately 30 per cent and while the phenomenon may well occur for short intervals, it is extremely unlikely to prevail with regard to a whole financial year (2).

Collection lags in the tax system raise a number of further issues in a period of accelerating inflation. Firstly, the government may be forced to increase its borrowing in the short-term as expenditure rises faster than current receipts. Secondly, companies hold both income tax which they deduct from the pay of their employees and VAT for at least five weeks before paying these over to the Inland Revenue or Customs and Excise. Both represent interest-free loans from the government. The former, because of its progressive nature, increases more than in proportion to increases in wage costs and is therefore worth more in real terms the higher the rate of inflation. VAT tends to increase in

⁽¹⁾ As mentioned earlier, Cmnd. 5879 assumes a negative price effect for the next few years as construction costs decline relative to other prices.

⁽²⁾ For this to occur, the average increase in taxable income over the period April to March needs to be 30 per cent higher than the average increase in the period February to January.

Table 6A.2 Local Authority Expenditure and the pattern of its financing

							£ million a	and percentage		
		penditure Capital (â)	Total	Rates	Financed by Rents etc	(b) Grants from Central Govt.	Borrowing(c)	Capital exp. as % of total	Borrowing as % cap. exp.	Central Govt. Grants as % of current expenditure
	1	2	3	4	5	6	7	8	9	10
1963	2322	900	3222	1014	545	1093	570	27.9	63.3	47.1
1964	2526	1132	3658	1096	602	1232	728	30.9	64.3	48.8
1965	2875	1206	4081	1228	691	1326	836	29.6	69.3	46.1
1966	3245	1365	4610	1374	777	1563	896	29.6	65.6	48.2
1967	3641	1590	5231	1467	854	1819	1091	30.4	68.6	50.0
1968	4009	1734	5743	1548	965	2042	1188	30.2	68.5	50.9
1969	4423	1778	6201	1667	1105	2242	1187	28.7	66.7	50.7
1970	5032	1899	6931	1824	1231	2606	1270	27.4	66.9	51.8
1971	5582	2014	7596	2087	1320	3033	1156	26.5	57.4	54.3
1972	6356	2341	8697	2377	1444	3505	1371	26.9	58.6	55.1
1973	7580	2917	10497	2617	1690	4339	1851	27.8	63.5	57.2
1 1973/74	7935	3277	11212	2688	1763	4508	2253	29.2	68.8	56.8
Budget Estimate										
1974/75 March(d	8961	2830	11791	3250	1832	5425	1284	24.0	45.4	60.5
	8828	2737	11565			5371	1112	23.7	40.6	60.8
1974/75 Nov.	9810	3199	13009	3099	1841	5816	2253	24.6	70.4	59.3
Cambridge Foreca	ist									
1975/76	12750	3450	16200	3950	2100	7900	2250	21.3	65.2	62.0

a) Excluding net lending to private sector

(b) Rent, dividends, interest and gross trading surpluses

(c) Excluding lending to private sector and borrowing on that account
 (d) Change of classification due to separation of water and seage agencies

Sources: National Income and Expenditure, 1963-1973, Table 43, and Financial Statement and Budget Report 1974-75 and Supplementary Financial Statement and Budget Report 1974-75.

Table 6A.3 Average Lags in the Collection of Individual Taxes

Tax			Average	Lag			
Income tax:							
Schedule	E		5 week	S			
Schedule	D		15 mont	hs			
Corporation tax			18 mont	hs			
Advance corporati	on tax	8 weeks					
Value added tax			6 weeks				
Customs and excis	e duties	2 weeks					
Taxes on capital	Proport	ion colle	cted in				
	1st year	2nd year	r 3rd year	4th year			
Capital gains tax	0	.5	.4	.1			
Death duties	.5	.3	.1	.1			

line with inflation.

Wage earners lose out significantly as against the self-employed, and those paying higher rates of tax, who enjoy an average lag of about 15 months between earn-

ing income and paying the tax on it. At the time of writing, the current bill for the latter two groups relates to a level of income of over 30 per cent, on average, below that now being earned. A similar situation exists with regard to corporation tax, which — except for the ACT element — is collected with an even longer delay, averaging 18 months. In a period of accelerating inflation, these groups not only enjoy an interest-free loan of increasing monetary value, but also experience a decline in their tax bill relative to current income.

Although tax collection lags are shortest with respect to specific duties, these are important in reducing the sensitivity of the yield of the total tax system with respect to changes in the general price level. Specific duties account for over half of all indirect tax revenue and in the recent past there has been no attempt to adjust their rates in line with inflation. Before the March 1974 Budget, which increased the rate of duty on tobacco, beer, wines and spirits, rates had remained unchanged since 1969. The motor vehicle licence duty was last increased in March, 1968 and since then consumer prices have risen by about 80 per cent. Merely to restore the real value of the licence duty to its 1968

level would mean increasing it from £25 to £45, and this does not take account of projected inflation in the

coming year.

Table 6A.4 shows the actual receipts of duty in 1969 and in 1973. Between those years, the rates of duty remained unchanged and consumer prices increased by 33 per cent — almost 50 per cent more than the rise in the total yield of duty (23 per cent). If duties had been raised in line with the consumer price index in order to maintain their real value, total receipts in 1973 would have been an estimated £1.1 billion greater than they actually were, after taking account of the decline in the volume of sales associated with an increase in the relative price of dutiable items.

Finally it should be noted that under the new rent regime now coming in, rents, as well as rates, can be expected to be adjusted annually in response to cost changes. Previously three years was the common interval. On present policies, local income therefore seems likely to follow costs (in greater or lesser proportion) subject to a discretionary adjustment lag less than that which has been normal for specific taxes controlled by the central government.

Table 6A.4 Receipts of Specific Duties, 1969 and 1973 (£ million)

	1969	1973	% Change 1969 to 1973
Total receipts of specific duties	3729	4572	22.6
Consumer price index, 1969=100	100	132.7	32.7
Total estimated receipts if duties raised in line with consumer price index	3729	5683	52.4
Difference between actual and estimate receipts		1111	

Notes:

Specific duties cover beer, wines, spirits, tobacco, hydrocarbon oil and motor vehicle licences. The figures for 1973 include a small element of VAT, which was imposed on the first four items from April 1973 in substitution for an equivalent part of the excise duty. The estimate takes account of price elasticities of demand.