

PRIME MINISTER

EMPLOYMENT EFFECTS OF EXPENDITURE INCREASES

In the note prepared for the Chancellor by Treasury officials, there were estimates of the employment effects of an extra £1 billion of public investment. (Note is attached). The Chancellor is still considering how best to present this material. His difficulty is that the effect on employment of £1 billion of income tax cuts is even smaller in year one, perhaps only 5,000. Put another way the cost per job created by tax cuts is probably around £150,000, compared with £47,000 for central government investment. Over time, the effect of investment is likely to fall away while the supply side benefits of income tax cuts are likely to build up over time. The Treasury model is weak in capturing these effects but officials estimate it might be year four before the two paths cross. There are dangers, therefore, in using the model to show a detailed path for investment expenditure as this could provoke requests for the path for tax cuts to be shown, which are not well captured by the model. The Chancellor thinks that until the presentation of tax cuts has been more fully developed, no figures on the time path of the two policy options should be released.

The best way to present the argument is probably in stages:-

- (i) Extra infrastructure expenditure is likely, even in the short run, to be an expensive way of creating new jobs - the precise effects will vary with the nature of the investment - and one which is less and less effective over time as the impact of higher interest rates is felt.
- (ii) The Government rejects the view that higher expenditure financed by higher borrowing will help. Therefore there has to be a choice between higher public expenditure and tax cuts. Some

E.R.

models suggest initial impact on jobs is greater than with personal tax cuts. But Government needs to look at longer term impact. With tax cuts, the number of jobs is likely to build up over time as economy's supply performance improves. So for given initial impact on PSBR, tax cuts likely to produce more jobs in the long run. It is the cumulative result of the short term decisions of successive Governments that has produced the unemployment and poverty traps.

- (iii) Those economies which have held down expenditure and taxes, and where real wages have grown more slowly have been most successful in creating employment.

Tim is putting this argument into speaking note form for Questions.

cc *Prin Office*
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From: J ODLING-SMEE

20th December 1984

CHANCELLOR OF THE EXCHEQUER

cc Chief Secretary
Financial Secretary
Economic Secretary
Minister of State
Sir Peter Middleton
Sir Terence Burns
Mr Bailey
Mr Byatt
Mr Monck
Mr Battishill
Mr Folger
Mr Riley
Mr G Smith
Mr G White
Mr Gleed
Mr Ritchie
Mr Cropper
Mr Lord
Mr Ridley

EMPLOYMENT EFFECTS OF TAX CUTS AND EXPENDITURE INCREASES

We are preparing two or three notes on this subject. The main material will reach you tomorrow. But I thought that you might like to have in advance the attached briefing note which you requested following the Prime Minister's statements last week. It is designed to use in public, and may therefore be more urgent than the internal papers that I shall be submitting tomorrow.

2. The note quotes some numbers from simulations of the Treasury model. The first year cost per job estimates are consistent with the Prime Minister's statement that the cost per job of expenditure on public infrastructure was in the range of £35,000-£55,000. However, the estimated cost per job rises over time as the initial increase in employment is crowded out. The version of the model on which these simulations were carried out is public, and so others could in principle reproduce these results.

3. We believe that these numbers are consistent with others which have been quoted recently. Although the cost per job is higher than that implicit in Huhne's article in the Guardian of 13th December, the difference can probably be explained mainly by different monetary policy assumptions: we assume fixed money supply, whereas he assumes fixed

interest rates. Our numbers are also consistent with those in the recent piece from the Warwick University Institute for Employment search (which we shall be commenting on in tomorrow's note), when allowances are made for the increase in prices since 1982 and for the difference between unemployment and employment.

4. The note does not provide any figures for the import content of different types of expenditure. For the reasons given by Mr Folger in his minute of 14th December, it would be best to avoid being drawn into a discussion on this subject. I understood that this was also your view.

Joh 0-8

J ODLING-SMEE

PUBLIC SECTOR INVESTMENT AND EMPLOYMENT

note by the Treasury

This note presents estimates of the short-term impact of additional public sector investment on employment. These suggest that, given the Government's medium-term financial strategy, any initial increase in employment will be short-lived.

2. The impact of additional public sector investment on employment in the short term depends on a number of factors, especially:

- the labour-intensity of the project: housebuilding, for example, involves more jobs than motorway construction;
- the import-intensity of the project: when major pieces of machinery (eg aircraft, earth-moving equipment) have to be imported fewer jobs are created in the UK;
- the adverse effects on employment elsewhere of some of the wider economic consequences of higher public expenditure, especially higher interest rates and inflation.

3. Any single estimate of the short-term employment effects of additional public expenditure must be conditional on the assumptions that are made about these factors. Unless specific projects are under review, it is necessary to assume that they have the characteristics of the "average" project.

4. Simulations on the Treasury model of a permanent increase in annual investment of £1 billion produce the following estimates of the change in unemployment in the short term:

<u>Change after</u>	<u>Central Government Investment</u>	<u>Local Authority housebuilding</u>
One year	-20,000	-20,000
Two years	-20,000	-30,000
Three years	-10,000	-10,000
Four years	0	10,000

NOTE: The Treasury model discriminates between housing and non-housing investment in terms of their import-intensity and labour-intensity, but it does not distinguish between categories within non-housing investment.

5. It is assumed in these simulations that, consistently with the Government's medium-term financial strategy, interest rates rise in order to keep money supply growing at an unchanged rate despite the higher borrowing. Largely because of the higher interest rates and a temporary rise in inflation, the reduction in unemployment is not sustained beyond the third year in the simulations.
6. The initial "cost per job" in the sense of the rise in the PSBR in the first year for each person taken off the unemployment register by the end of the first year is £47,000 for central government investment and £37,000 for local authority housebuilding. These figures are many times higher than the costs per job of specially-targetted employment and training measures.
7. They are lower than the initial "cost per job" estimates of a reduction in income tax derived from the Treasury model. However, the true "costs per job" will be lower than the model estimates, because the model does not include an allowance for the incentive effects of income tax cuts on enterprise and effort. These supply-side effects are likely to build up over time, and hence the "costs per job" will fall. By contrast, the "cost per job" estimates of additional public investment tend to rise over time as the gain in unemployment is eroded.
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	PSBR £m	Employment (000's)	Unemployment (000's)	GDP (%)	Inflation (% pts)	Earnings Growth (% pts)	Short term Interest Rates (% pts)
<i>Investment in New Buildings and Works + £1b. financed by borrowing)</i>							
Year 1	-200	40	-20	0.35	0.1	0.2	0.4
2	-200	40	-30	0.25	0.2	0.2	0.5
3	-100	20	-10	0.05	0.15	0.15	0.5
4	200	0	0	-0.05	0.0	0.0	0.5
<i>Investment in New Buildings and Works + £1b. financed from company sector liquidity)</i>							
Year 1	-200	40	-30	0.4	0.1	0.2	0.2
2	-400	60	-40	0.35	0.2	0.3	0.25
3	-400	40	-30	0.25	0.25	0.3	0.15
4	-200	0	0	-0.75	0.15	-0.05	-0.15

	PSBR £m	Employment (000's)	Unemployment (000's)	GDP (%)	Inflation (% pts)	Earnings Growth (% pts)	Short-term Interest Rates (% pts)
<u>Current Expenditure + EIB</u>							
<u>50% Employment, 50% Recurrent</u>							
Year 1	800	70	-40	0.25	0.1	0.25	0.45
2	900	60	-40	0.2	0.2	0.25	0.6
3	1100	40	-30	0.15	0.15	0.2	0.65
4	1400	20	-10	0.05	0.05	0.05	0.75
<u>Asset Expenditure + EIB</u>							
<u>- All Employment</u>							
Year 1	600	100	-70	0.3	0.1	0.3	0.45
2	900	100	-60	0.2	0.2	0.3	0.65
3	1200	70	-50	0.05	0.15	0.2	0.7
4	1500	50	-30	-0.0	0.05	0.1	0.8
<u>Current Expenditure + EIB</u>							
<u>- All Recurrent</u>							
Year 1	900	30	-20	0.25	0.1	0.2	0.4
2	900	30	-20	0.15	0.2	0.2	0.6
3	1100	10	-10	0.05	0.15	0.15	0.6
4	1300	-10	10	-0.05	0.05	0.05	0.65
<u>C.G Investment + EIB</u>							
Year 1	1000	30	-20	0.3	0.1	0.2	0.4
2	1000	30	-20	0.2	0.2	0.2	0.6
3	1100	10	-10	0.1	0.15	0.2	0.6
4	1400	-10	0	0.0	0.05	0.05	0.7
<u>- A Investment + EIB</u>							
Year 1	900	40	-20	0.35	0.1	0.2	0.45
2	900	40	-30	0.2	0.2	0.2	0.65
3	1100	10	-10	0.05	0.2	0.25	0.7
4	1400	-20	10	-0.1	0.05	0.1	0.75