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ECONOMIC EFFECTS OF PUBLIC EXPENDITURE REDUCTION: A STRATEGIC ROLE FOR LABOUR MARKET FLEXIBILITY

by

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ABSTRACT

This paper looks at the macroeconomic impact of government spending proposals in health, education, labour market programs and social security in order to highlight some of the short-term adjustment problems likely to be encountered with any sort of spending cut. An important adjustment problem is in deploying the labour released by the government sector elsewhere in the economy. The paper argues that there is an important strategic role for real and relative wage flexibility in assisting the adjustment. There are also economic gains from this flexibility.

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Economic Effects of Public Expenditure Reduction :

A Strategic Role for Labour Market Flexibility

by

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1. *Introduction*

No student of structural adjustment in Australia can fail to notice, as they search among the data of the 1970s and 1980s for evidence to support their favourite theory, that almost any trend in private sector activity is swamped by one phenomenon - the growth of government spending.

Whatever the reasons for this growth (and they are probably many), one effect of government spending on goods and services will be to crowd out, to some extent, private sector activity. It will do this, ultimately, by competing away real resources. If government agencies do not use resources as efficiently as the private sector, perhaps because they are shielded from price signals or market competition, prosperity will suffer. Over the longer term, Australians would gain from reducing government's claim on resources.

One practical problem is that no matter how the benefits of government spending cuts are distributed there are also groups of losers, some of whom are well-organised and politically vocal. Strategically, policy proposals are more likely to be adopted when costs to these groups are kept low, or where policies can be packaged together to afford gains to them which roughly offset the costs.

Attention has been given elsewhere to the groups that benefit currently from free provision of the goods and services paid for by government - both identifying them and proposing ways to compensate deserving cases when government spending is cut.[1] The purpose of this paper is to focus instead on those employed in activities where government spending is cut.

An earlier paper modelled the macroeconomic impact of government budget cuts, including the short-term impact on aggregate demand and unemployment.[2] The results suggested that the benefits of budget cuts would take time to accrue and that significant adjustment costs would be borne by those employed in the government sector. This paper investigates the point further in the context of a particular budget proposal, and looks at strategies to alleviate the short-term labour adjustment problems.

2. *An Illustrative Budget Proposal*

2.1 *Spending*

The scenario for government spending examined in this paper is the proposal put forward by the National Economic Priorities Project in 1987.[3] This was a comprehensive package that included spending proposals in four main areas:

- health
- education
- labour market programs
- social security and welfare.

1 For example, ABS (1987) and Freebairn, Porter and Walsh (1987).
2 Dee (1989b).
3 Freebairn, Porter and Walsh (1987).

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amount being supplied by government. If such direct switching also occurred then labour market adjustment problems would be spread more evenly through the economy. Presumably, however, any allocative efficiency gains from reducing over-consumption of uncharged health and education services would also be smaller. The actual effects of government spending cuts obviously depend on factors such as this, so empirical research in this area is clearly warranted.

The cuts in the first three areas imply a significant reduction in government spending on goods and services in the economy and a direct reduction in government's claim on resources. They were to be accompanied by adjustments in transfer payments designed primarily to ensure that the truly disadvantaged would be insulated from ill effects when government no longer provided the goods and services free to the public.

The proposed cuts in social security were pure reductions in transfer payments. These were not designed to reduce the government's claim on real resources directly, but to provide some recipients with an incentive to re-enter the workforce. Obviously though, these cuts would affect the disposable income of recipients and indirectly affect the terms of competition for resources.

The budget savings estimates outlined by the National Economic Priorities Project were given by broad spending function which did not always spell out clearly how cuts in the first three areas would be divided between goods and services and transfer payments. For the purposes of modelling the impact on aggregate demand and resource use, it is important to make this distinction. With the assistance of ABS publications giving Commonwealth, State and local government spending by economic transactions framework, the Priorities Project estimates can be reclassified in terms of their total impact on goods and services and transfer payments. This is shown in Table 1. The table also shows in which areas of activity the spending cuts on goods and services would occur, and which types of transfer payments would be reduced or increased.

The spending cuts outlined in Table 1 provide a useful basis for analysing the impact of several types of spending cuts which fall on goods and services. They also include a pure cut in transfer payments which can serve as a useful comparison.

2.2 *Taxation*

An important aspect of the Priorities Project spending proposals was that they be packaged together with tax cuts. Tax cuts would have their own beneficial impact on economic activity, even in the short term, and among those earning enough to benefit from them, would help to offset the withdrawal of free goods and services arising from the spending cuts.

TABLE 1 : PRIORITIES PROJECT BUDGET SAVINGS (1986-87 values)

		$m
Health		
Saving on goods and services - health and pharmaceuticals		9526.0
less increase in transfer payments - means-tested benefits		2526.0
		7000.0
Education		
Saving on goods and services - education		2192.0
Saving in transfer payments - non-means-tested benefits		308.0
		2500.0
Labour Market Programs		
Saving on goods and services - public administration		500.0
Social Security and Welfare		
Saving in transfer payments	- unemployment benefits	400.0
	- means-tested benefits	1340.0
	- non-means-tested benefit	450.0
		2190.0

given credence. Furthermore, when spending cuts are undertaken in a short-term environment of real and relative wage flexibility, the outcomes in the rest of the economy are less adverse.

There would obviously also be strong advantages in targeting spending cuts so that adjustment problems were not so heavily concentrated in a few occupations, requiring very much larger cuts in real wages relative to the rest of the economy to keep employment rates from falling. As the second column of Table 6 shows, the Priorities Project spending cuts are projected to require significant real wage reductions for the professional and para-professional occupational groups even in the long term (although once again, the reductions may be exaggerated).

7. *Summary*

This paper has looked at the macroeconomic impact of government spending proposals in health, education, labour market programs and social security in order to highlight some of the short-term adjustment problems likely to be experienced with any sort of spending cut.

An important adjustment problem is in deploying the labour released by the government sector elsewhere in the economy. This paper has argued that since productivity gains in the government sector are unlikely to solve this problem, there is an important strategic role for real and relative wage flexibility in assisting the adjustment. There are also economic gains from this flexibility.

The analysis also suggests an important area for further research. One of the factors contributing to the apparent severity of the short-term adjustment problems is the assumption that although household demand for privately supplied health and education responds via conventional price and income signals, there is no additional direct dependence of private demand on the

TABLE 6 : SHORT- AND LONG-TERM[a] EFFECTS OF GOVERNMENT SPENDING CUTS ON OCCUPATIONAL REAL WAGES, GIVEN WAGE FLEXIBILITY

Occupation[b]	Short Term	Long Term
Professional	-34.7	-20.9
Para-professional	-33.8	-20.0
Skilled white collar	-10.1	6.0
Semi-skilled white collar	-15.3	-0.0
Skilled blue collar - metal trades	0.9	15.3
Skilled blue collar - building trades	-10.3	15.9
Skilled blue collar - other	-8.9	10.3
Semi-skilled blue collar	-1.9	6.9
Rural workers (hired)	18.7	-0.4

a An important assumption underpinning the short-term projection is that industry capital stocks are fixed, while after-tax rates of return adjust. In the long-term projection, industry capital stocks can adjust to keep after-tax rates of return fixed. In both projections, real wages vary by occupation to keep occupational employment rates fixed. A full technical specification of short- and long-term environments is given in Dee (1989a).

b The results are percentage deviations from the values occupational real wages would have taken in the short and long term in the absence of the spending cuts.

education - the demand for skills in those areas would not fall as dramatically. The extra household spending on health and education would likely be funded in part by reducing expenditure in other areas - demand for skills in other areas would be more severely affected. Under the rigid wage structure underlying Table 4, the accompanying short-term decline in real GDP is unlikely to be arrested but the short-term adjustment in employment rates is likely to be more muted. Similarly, under the flexible wage structure of Table 6, the adjustment in wage relativities is likely to be smaller than shown.

Even so, the short-term real wage adjustments are still likely to be significant when spending cuts are so heavily concentrated in a few areas of the economy. Workers in the affected occupations may not find a significant short-term drop in real wages any more acceptable than a significant increase in unemployment. Yet opposition to spending cuts is likely to be less when the problems are at least

The object here is not to give a detailed evaluation of various tax cut proposals. Nevertheless, it is appropriate to compare different types of spending cut when they are corrected, via accompanying tax cuts, for their impact on the government borrowing requirement. In this way the evaluation does not merely pinpoint which spending cut is bigger or smaller, but which is more efficient (in terms of achieving desired outcomes for output, prices, employment and so on) in a budget-neutral environment.

In the following analysis, each spending cut is therefore accompanied by a tax cut sufficient to leave the real public sector borrowing requirement unchanged. The type of tax cut used is an equiproportional reduction in all personal and company income tax rates.

3. *Analytical Framework*

The modelling framework used to assess each of the spending cuts in Table 1 is a version of the ORANI model which has been extended in several ways.[4] The ORANI model itself gives a detailed picture of activity levels in a large number of Australian industries, including the health, education and public administration sectors affected by the Priorities Project spending cuts. For each industry, the model describes its usage of inputs of various types - land, labour, capital, and materials from other industries - and the disposition of its output to various users - to other industries, to investment, to households, to government and for export.

4 The standard ORANI model is documented in Dixon, Parmenter, Sutton and Vincent (1982). The extensions described in this section are documented in Dee (1989a).

The model extensions firstly introduce income taxes and transfer payments and combine these, together with the commodity taxes and government spending items from standard ORANI, into an integrated set of government accounts.

Income taxes on labour income are treated as progressive, with average tax rates rising along with taxable labour incomes. These taxes correspond closely in concept to personal income taxes, the difference being that for the self-employed they cover taxes on an imputed return to labour rather than on all business income. In the analysis which follows, these tax rates on labour income are also assumed to be fully indexed.[5] Income taxes on non-labour income are modelled as proportional, with average tax rates constant.

On the outlays side, transfer payments are divided into three categories. Unemployment benefits are paid only to the unemployed, means-tested benefits are paid only to those not in the workforce, while non-means-tested benefits are payable to everyone. In practice, most wage earners earn sufficient to exclude them from means-tested benefits and only about 5 per cent of these benefits are paid to those who are employed.

The extended version of ORANI also models labour supplies in order, among other things, to explain the number of people in each of these employment status categories. Labour supply decisions are modelled as a multi-step process.

5 Indexation of personal income taxes was an important part of the Priorities Project tax proposals. More pragmatically, if income taxes were not treated as indexed, the extended ORANI model would lose the property of being homogeneous of degree zero in the nominal exchange rate and domestic prices. Some explanation would then be required for the way in which changes in competitiveness were divided between changes in the nominal exchange rate and domestic prices.

TABLE 5: SHORT-TERM MACROECONOMIC EFFECTS OF GOVERNMENT SPENDING CUTS WITH WAGE FLEXIBILITY[a]

Variable[b]	Health ($7.0b saving)	Education ($2.5b saving)	Labour Programs ($0.5b saving)	Social Security ($2.2b saving)	Total[c] ($12.2b saving)
Real GDP	0.0	0.2	-0.0	0.2	0.4
Consumer price index	-9.1	-5.5	-0.4	-5.1	-20.1
Real private consumption	1.8	-0.1	0.1	-1.6	0.2
Real investment	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]
Real government consumption	-18.2	-5.9	-1.2	0.0d	-25.3
Exports (volume index)	8.4	5.1	0.4	4.3	18.2
Imports (volume index)	-3.7	-2.6	-0.2	-2.9	-9.3
Trade balance	1.4	0.9	0.1	0.9	3.3
Persons in workforce	-0.6	-0.2	-0.0	0.1	-0.7
Persons employed	-0.1	0.2	-0.0	0.2	0.3
Persons unemployed	-8.4	-5.8	-0.0	-1.0	-15.3
Real capital stock (domestically and foreign owned)	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]
Real domestic (private and govt) saving	6.8	4.5	0.3	4.4	15.9
Real per capita disposable income					
- employed	0.8	0.1	0.1	0.6	1.5
- others	6.7	-0.8	0.1	-10.2	-4.2
Income tax rates	-16.6	-7.7	-1.1	-6.3	-31.6
Real PSBR	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]

a The important assumptions underpinning these projections are that industry capital stocks are fixed, while after-tax rates of return adjust, and real wages vary by occupation to keep occupational employment rates fixed. A full technical specification of the short-term environment is given in Dee (1989a).

b All results, with the exception of the trade balance, are percentage deviations from the value the variable in question would have taken in the short term in the absence of the spending cuts. The trade balance, while also a deviation from control, is expressed in percentage points worth of base-period GDP.

c Because of rounding, individual row entries may not add to totals.

d Held fixed by assumption.

price and income effects, but there is no additional direct substitution arising from direct dependence of private health and education expenditure on the amounts being provided free by government. With an element of direct dependence, households would end up purchasing more of their own health and

For the significant number of workers still having a useful working life ahead of them, the aim should be redeployment. Assistance could be given to reduce their search costs, but there must also be industries willing to absorb them.

The best way to ensure this in a technical sense is via changes in real wages and in wage relativities. Table 5 shows the projected short-term macroeconomic impacts of the Priorities Project spending cuts when industry capital stocks are fixed, but where wage relativities vary to keep occupational employment rates from changing. Real wages fall on average, with the largest reductions occurring in the professional and para-professional occupational groups. Because the falls in real wages themselves improve the international competitiveness of the traded sector, the outcomes for real GDP are better than when real wages were fixed. Further, the number of people unemployed actually falls in aggregate.

Because of increased profitability in many traded goods industries, the real disposable income of employed people (which includes a non-labour income component) increases on average, despite the real wage declines. Nevertheless, the projected decreases in real wages required to redeploy the teachers and medical workers released by the government spending cuts are substantial. For the size of spending cut suggested by the Priorities Project, the required short-term falls in real wages for the professional and para-professional occupational groups, for example, are almost 35 per cent. The first column of Table 6 shows the required adjustments for the remaining occupations.

The relative wage adjustments implied by these projections are likely to be overestimated if, as seems likely, the treatment of government spending cuts in this paper has underestimated the private health and education expenditure response. The responses that have been captured operate through conventional

The first decision is whether or not to participate in the workforce. Participation rates respond positively to average real wages and negatively to unemployment rates and real disposable non-labour incomes. In keeping with available econometric evidence, these responses are relatively weak at the economy-wide level. While demographic influences are also likely to be important in determining participation rates, they are assumed to be constant over the time horizon relevant for the model results.

The second decision is which occupation to pursue. Again, available empirical evidence suggests that skills transformation prospects are relatively limited. But because the supply of persons is modelled down to the occupational level, the subsequent analysis of spending cuts can pick up the implications of those cuts for employment and unemployment rates by occupation. Persons of a given occupation are assumed to be perfectly mobile across industries. Therefore, it does not make sense in this model to talk about unemployment rates by industry.

For those persons who succeed in finding a job in their chosen occupation, the final decision is how many hours of work to offer. Hours per employed person tend to fall as both real disposable non-labour incomes and real after-tax wage rates increase, although once again the responsiveness is not great.[6]

6 The main sources of parameter estimates for the labour supply equations are as follows. Parameters for participation are based on a survey of the studies by Brooks, Sams and Williams (1982), Filmer and Silberberg (1977), Leaper and Silberberg (1976), Manion (1980), and Miller and Volker (1983, 1984). Parameters for occupational choice are taken from Powell, Parham, Sams, Hiep and Rimmer (1984) and parameters for hours worked are taken from Tulpule (1980).

Whether all persons of a given occupation succeed in finding a job depends on whether relative occupational wages are assumed to be flexible. In ORANI, much of the model's flexibility comes from being able to choose which subset of variables will be exogenous. For example, relative occupational wage rates can be endogenous and can vary to meet particular exogenous targets for occupational employment rates. Alternatively, occupational wage relativities can be fixed exogenously, perhaps along with the economy-wide real wage, while occupational employment rates can vary in response to changes in economic conditions.[7]

A further feature of the extended version of ORANI is that aggregate investment, whether financed domestically or by foreigners, is allocated among industries according to after-tax rates of return, rather than the pre-tax returns used in the standard ORANI model. This gives an important channel by which both spending cuts and their accompanying tax cuts can affect economic activity. By affecting after-tax returns, they will in the longer term affect industry capital stocks.

Net foreign investment is defined in turn as the difference between total investment and national (i.e., private plus government) saving. The disposable income available to households for consumption or saving is not only net of tax, but also net of the capital rentals earned by foreigners on the share of the Australian capital stock they own.

7 Industry labour demands in ORANI are expressed in terms of person-hours, but industries are usually assumed to be indifferent between whether additional person-hours are met by additional persons or additional hours from existing employees. This, together with the assumption that employed workers can always work their desired number of hours (i.e., the model abstracts from under-employment or unfilled overtime), ensures that any mismatch between the supply and demand for person-hours in the face of real or relative wage rigidity appears as a mismatch for persons.

large workforces and if significant savings are to be made by streamlining their operations, many workers are likely to be laid off.

Some thought therefore needs to be given to devising packaging for government spending cuts so as to mitigate the opposition by the labour that is shed in the process. The longer-term gains from government spending cuts appear to be substantial so the effort is worthwhile. As both the model results and recent experience with microeconomic reform in New Zealand indicate, however, the adjustment problems can be large enough to threaten the entire reform package, especially when insufficient thought is given to facilitating adjustment by those most directly disadvantaged in the short run.

The short-term labour adjustment problems may be mitigated if changes to work and management practices which improve productivity can be negotiated quickly in affected industries. However, there is no guarantee that such productivity improvements would keep unemployment rates from increasing in the short term. They are likely to allow affected industries to economise on the labour they require to produce a given amount of output, so that employment levels would be maintained in absolute terms only if output expanded sufficiently. It is hard to see how this can happen, even in the long term, in the face of reductions in demand by government.

What is required is not just a strategy to achieve productivity improvements, but also strategies to help surplus labour be redeployed quickly. These strategies may vary. In some industries, the age structure of the workforce may be skewed towards the older age groups. If a significant number of workers are nearing retirement age, the cheapest strategy for easing labour market adjustment problems may be to assist some of these workers into early retirement.

declines in employment rates in these occupations alone account for almost 150 000 people.

TABLE 4: SHORT-TERM[a] EFFECTS OF SPENDING CUTS ON EMPLOYMENT RATES BY OCCUPATION

Occupation[b]	Health ($7.0b saving)	Education ($2.5b saving)	Labour Programs ($0.5b saving)	Social Security ($2.2b saving)	Total[c] ($12.2b saving)
Professional	-6.8	-5.2	-0.2	-0.5	-12.7
Para-professional	-9.1	-4.5	-0.1	-0.7	-14.4
Skilled white collar	-0.3	-0.4	-0.1	-0.8	-1.5
Semi-skilled white collar	-3.2	-0.8	-0.3	-0.8	-5.0
Skilled blue collar - metal trades	-0.6	-0.3	-0.1	-0.3	-1.3
Skilled blue collar - building trades	-0.5	-0.5	-0.1	-0.5	-1.7
Skilled blue collar - other	-1.5	-0.5	-0.0	-0.7	-2.7
Semi-skilled blue collar	-1.4	-0.7	-0.1	-0.4	-2.6
Rural workers (hired)	-0.4	-0.0	-0.1	1.4	0.9

a The important assumptions underpinning the short-term nature of the projections are that industry capital stocks are fixed, while after-tax rates of return adjust, and real wages in all occupations are fixed, while occupational employment rates adjust. A full technical specification of the short-term environment is given in Dee (1989a).

b The results are percentage deviations from the values employment rates would have taken in the short term in the absence of the spending cuts.

c Because of rounding, individual entries may not add to totals.

6. *A Strategic Role for Labour Market Flexibility*

It seems reasonable that labour adjustment problems of this magnitude, and concentrated in a few areas, are likely to produce considerable pressure against government spending cuts. The spending cuts in health and education proposed by the Priorities Project have been used to illustrate this point, but it would apply equally to spending cuts in other areas. The operation of government business enterprises in the transport sector has been subject to criticism, for example, and the Priorities Project more recently recommended privatising those enterprises already operating in competitive markets.[10] Yet many of these enterprises have

10 BCA (1988) and Freebairn, Porter and Walsh (1988).

The behaviour of aggregate consumption is modelled separately for the employed (who make their choices of both aggregate consumption and hours of work in a full consumption-saving-labour-leisure choice framework) and for the rest - the unemployed and those not in the workforce (who do not choose hours of work, but are assumed to adjust their aggregate consumption in strict proportion to their disposable income).

4. *The Long-term Effects of Government Spending Cuts*

Over the longer term, the Australian economy could be expected to have sufficient flexibility to redeploy the resources released by government spending cuts. All surplus labour released from schools, hospitals or employment offices could be employed in other industries or could switch into alternative occupations, so long as real wages were flexible and relative wages sufficiently variable across occupations to provide the wage signals to guide the redeployment.

The accompanying tax cuts will tend to improve industry profitability and in the long term, industries will have time to put new capital in place to expand productive capacity. This will help the rest of the economy to absorb labour from the government sector and will allow increases in real wages for at least some occupations.

The generally favourable long-term effects of spending cuts of all types under these conditions are supported by projections from the extended version of the ORANI model. Operationally, the long term in these projections can be interpreted as a period of about ten years.

One important effect which has not been included in the model analysis is the impact that lower government involvement in health and education would have on work and management practices in these industries. The Priorities Project argued that a more competitive environment would induce significant improvements in productivity. The model projections throughout this paper assume that the production technology in the affected industries is the same after as before the budget cuts. If the productivity improvements could be quantified, they could be imposed exogenously as technological changes along with the budget cuts, but the extent of the productivity improvements is hard to gauge.

One implication of this omission is that while the model does project a small increase in private sector provision of health and education following the government spending cuts,[8] the increase is not as great as would be the case if productivity improved. Furthermore, it is not nearly sufficient to offset the loss of government provision, even in the long term.

Nevertheless, the various kinds of spending cut, each with its matching tax cut, are projected to improve most macroeconomic aggregates. This is shown in Table 2. With each type of spending cut, real GDP increases. This follows from an expansion in real capital stocks in many industries, generally accompanied by an expansion in overall employment.

The trade account improves in most cases as resources are reallocated from the non-traded to the traded sector of the economy. The real exchange rate generally also strengthens. This is indicated in the model results by an increase in the consumer price index, showing an increase in domestic relative to foreign prices.

8 Specifically, the projected final declines in activity in the health and education industries are not as great as the initial reductions in demand by government.

TABLE 3 : SHORT-TERM[a] MACROECONOMIC EFFECTS OF GOVERNMENT SPENDING CUTS

Variable[b]	Health ($7.0b saving)	Education ($2.5b saving)	Labour Programs ($0.5b saving)	Social Security ($2.2b saving)	Total[c] ($12.2b saving)
Real GDP	-2.1	-0.9	-0.2	0.2	-3.4
Consumer price index	0.5	-0.5	0.1	-2.9	-2.8
Real private consumption	1.5	-0.2	0.1	-1.6	-0.2
Real investment	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]
Real government consumption	-18.2	-5.9	-1.2	0.0[d]	-25.2
Exports (volume index)	-0.3	0.5	-0.0	2.7	2.8
Imports (volume index)	0.1	-0.6	-0.0	-1.9	-2.4
Trade balance	-0.0	0.1	-0.0	0.6	0.7
Persons in workforce	-0.5	-0.2	-0.0	0.1	-0.6
Persons employed	-2.8	-1.2	-0.2	-0.3	-4.5
Persons unemployed	36.7	16.6	2.2	7.2	65.6
Real capital stock (domestically and foreign owned)	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]
Real domestic (private and govt) saving	-0.4	0.7	-0.1	3.1	3.3
Real per capita disposable income					
- employed	2.5	0.9	0.2	1.0	4.5
- others	5.6	-1.3	0.1	-10.4	-6.0
Income tax rates	-9.8	-4.3	-0.8	-5.3	-20.2
Real PSBR	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]

a The important assumptions underpinning the short-term nature of the projections are that industry capital stocks are fixed, while after-tax rates of return adjust (affecting the allocation of investment), and real wages in all occupations are fixed while occupational employment rates adjust. A full technical specification of the short-term environment is given in Dee (1989a).

b All results, with the exception of the trade balance, are percentage deviations from the value the variable in question would have taken in the short term in the absence of the spending cuts. The trade balance, while also a deviation from control, is expressed in percentage points worth of base-period GDP.

c Because of rounding, individual row entries may not add to totals.

d Held fixed by assumption.

Table 4 gives the projected short-term impact on employment rates broken down by occupation, and shows in more detail where the adjustment problems occur. Declines in employment are concentrated in the professional occupational group, which includes medical practitioners and pharmacists, and the para-professional occupational group, which includes nurses and teachers. The total

The short-term impact of the spending cuts (shown in Table 3) is generally projected to be deflationary, as indicated by declines in real GDP. The Priorities Project education cuts are not offset by increases in transfer payments, so the fall in government demand for goods and services is reinforced in the short term by a reduction in real private consumption. With the health cuts, the overall impact on private consumption is cushioned by the significant increases in transfer payments. With social security cuts, the deflationary impact comes primarily from the decline in disposable income and consumption spending of recipients.

Profitability improves and output expands in at least some industries, however. When declines in government demand are reinforced by declines in household demand, the resulting fall in domestic relative to foreign prices helps the competitiveness of most export and import-competing industries. When this occurs, it improves the trade account and limits the decline in overall employment. When competitiveness does not improve, notably in the case of the health spending cuts, many of the industries in the traded sector which gain in the long term face a decline in international competitiveness and are unable to expand in the short term.[9]

The most notable feature of the short-term results is the significant projected increase in the number of unemployed, especially in the face of the cuts to health and education spending. Although the disadvantaged in need of health care are insulated from the cuts, those made unemployed by them constitute a significant group who are made worse off.

9 The increases in transfer payments that accompany the health spending cuts are assumed to be means-tested and thus paid to those not in the workforce. This group increases its consumption in strict proportion to disposable income, contributing to the overall expansion in real private consumption and consequent rise in the consumer price index.

TABLE 2 : LONG-TERM[a] MACROECONOMIC EFFECTS OF GOVERNMENT SPENDING CUTS

Variable[b]	Health ($7.0b saving)	Education ($2.5b saving)	Labour Programs ($0.5b saving)	Social Security ($2.2b saving)	Total[c] ($12.2b saving)
Real GDP	2.5	1.4	0.1	0.7	4.8
Real GNP	1.8	1.1	0.1	0.6	3.7
Consumer price index	0.6	0.2	0.1	-0.0	0.8
Real private consumption	4.5	1.3	0.3	-1.1	5.0
Real investment	10.8	5.5	0.6	3.5	20.4
Real government consumption	-18.1	-5.9	-1.2	0.0[d]	-25.2
Exports (volume index)	0.9	1.3	-0.0	1.9	4.0
Imports (volume index)	0.5	-0.1	0.0	-1.0	-0.6
Trade balance	0.1	0.2	-0.0	0.4	0.7
Persons in workforce	-0.2	0.0	-0.0	0.2	0.1
Persons employed	0.1	0.2	-0.0	0.2	0.5
Persons unemployed	-4.0	-3.5	0.1	0.4	-7.0
Real capital stock (domestically and foreign owned)	8.7	4.2	0.6	1.7	15.2
Real domestic (private and govt) saving	11.3	6.9	0.6	5.8	24.5
Real per capita disposable income					
- employed	4.9	2.1	0.3	1.4	8.7
- others	5.7	-1.2	0.1	-10.3	-5.7
Income tax rates	-16.9	-7.9	-1.1	-5.7	-31.6
Real PSBR	0.0[d]	0.0[d]	0.0[d]	0.0[d]	0.0[d]

a The important assumptions underpinning the long-term nature of the projections are that industry capital stocks can adjust to keep after-tax rates of return fixed in the face of the spending cuts, while real wages can vary by occupation to keep occupational employment rates fixed. A full technical specification of the long-term environment is given in Dee (1989a).

b All results, with the exception of the trade balance, are percentage deviations from the value the variable in question would have taken in the long term in the absence of the spending cuts. The trade balance, while also a deviation from control, is expressed in percentage points worth of base-period GDP.

c Because of rounding, individual row entries may not add to totals.

d Held fixed by assumption.

Investment in many industries expands, to cover the depreciation on their greater capital stocks. Cuts in government consumption spending help to make room for this increased investment. Where government spending cuts fall on goods and services, the economy can also support increases in private consumption

spending. As a consequence, however, the increase in capital stocks is not fully financed domestically, so that foreign investors' stake in Australia expands and real GNP (the income accruing to Australians) grows less than real GDP (the income generated in Australia).

The long-term benefits tend to be greater, the bigger is the reduction in government's claim on resources. This can be seen by comparing the impact of the spending cuts in health, education and labour market programs.

The long-term benefits of cuts in transfer payments do not seem to be as great as an equivalent cut in spending on goods and services. This can be seen by comparing the impact of the cut in social security with the cut in education. Cuts in transfer payments do not reduce government's claim on resources, but rather the purchasing power of welfare recipients. Some of these recipients are encouraged to re-enter the workforce, but in keeping with available econometric evidence this impact is not particularly strong. The main impact of the social security cuts is to reduce real per capita income for recipients. Because a substantial number remain unemployed or out of the workforce, the result is a projected decline in overall real private consumption spending.

5. *Short-term Adjustment Pressures*

The long-term benefits from government spending cuts depend to a large extent on the economy's ability to reallocate the resources released by government into alternative uses. In the short term, reallocation will tend to be a sticky process.

One reason is the gestation lags required for new investment projects. Even if industries adjust investment plans immediately in response to changes in profitability, new equipment will take time to install. Industries are also likely to wait to see if the conditions leading to changes in profitability are likely to be

permanent. Investment plans may not be adjusted at all if the government spending cuts are not seen as being credible. Policy makers may not be able to influence the gestation lags involved in installing new capital, but they will certainly have an important role in establishing the credibility of the spending cuts.

The wage setting environment will also be an important influence on short-term adjustment pressures. In the past, this environment has tended to make changes in both real wages and in wage relativities extremely difficult. Reallocation of labour released by the government sector will obviously be more difficult when neither employers nor employees receive signals through relative wage changes. Reallocation of labour towards the traded sector would tend to be brought about instead by general deflation which improved the international competitiveness of the traded sector.

Deflationary pressure is a very blunt instrument for reallocating those with the particular skills and qualifications used in hospitals, schools and employment offices. It is likely that in the short term a significant number of these people will remain unemployed. If this is the case, they are likely to form a vociferous and effective lobby group against government spending cuts. After all, it is cold comfort to a group of trained and dedicated professionals to know that, in a wider economic sense, their hard work has been wasted.

To gauge the importance of these considerations, the impact of the various kinds of spending cuts has been projected in a short-term environment where industry capital stocks, real wages and wage relativities are all fixed.