REGIONAL GOVERNMENT ECONOMIC POLICY: ASSESSING THE POLICY INSTRUMENTS

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ABSTRACT The recent abandonment of the Regional Development Programme in the 1996/97 Budget has seen Commonwealth interest in regional development come full circle in a period of just two years. The recent Industry Commission (1996) study suggests that industry assistance policy, one of the most important instruments used by regional governments to influence economic outcomes within their jurisdictions, is inimical to both regional and national economic development. Hence, at the same time that the Commonwealth government is distancing itself from regional economic policy, the Industry Commission has raised serious doubts about the efficacy of a major instrument of regional policy at the State and local government level. This paper employs a computable general equilibrium model of an Australian regional economy to examine the efficacy of a range of regional policy instruments to see what scope may exist for a regional government to influence its own economic destiny. It concludes that the ability of regional governments to influence their economies in a positive way using conventional policy instruments may be limited.

1. INTRODUCTION

The early nineties were witness to considerable government interest in regional development policy. The Commonwealth government was informed by a consultant's report (McKinsey and Co, 1994), a Federal Task Force (Taskforce on Regional Development, 1994), an Industry Commission Inquiry (Industry Commission, 1993), and research by the Bureau of Industry Economics (Bureau of Industry Economics, 1994). This waxing of interest in regional development was also apparent in many State and local government jurisdictions (Gordon, 1995).

The findings of the McKinsey and Regional Task Force reports provided a major impetus to the Commonwealth's return to regional development policy. The Commonwealth's *White Paper on Employment and Growth* (1994) provided for a four year Regional Development Programme. A key policy initiative was the establishment of a network of approved Regional Development Offices and funding through them for small scale infrastructure projects. Major instruments of regional policy at the State and local government level were selective and general industry assistance measures.

Interest in regional development at the Commonwealth level has come full circle in a very short period of time, with the abandonment of the Regional Development Programme in the 1996/97 Budget by the incoming Liberal government. The absence of a "clear rationale" for Commonwealth involvement in regional development was provided as a key reason for the Commonwealth's withdrawal.

The Industry Commission's most recent study, *State, Territory and Local Government Assistance to Industry (Draft Report)* (1996), now raises serious doubts about the ability of regional governments (State and local) to implement effective regional development policy. In particular, the Commission focuses on the efficacy of selective industry assistance. This is one of the most popular forms of regional government development policy. The Commission estimates that the States and local government combined spent $2.7 billion, or $151 per capita, on industry assistance programs in 1994/95. Payroll tax exemptions cost the State government finances a further $4.8 billion, or $268 per capita.

Giesecke and Hagger (1996) contend that the Commission assesses the efficacy of industry assistance by means of four implied criteria:

1. Does industry assistance promote the economic objectives of regional governments as stated by those regional governments?
2. Does industry assistance increase either the per-capita real gross regional product of the region, or the per-capita real consumption of the region?
3. Does industry assistance increase either the per-capita real gross resident product of the nation, or the per-capita consumption of the nation?
4. Does industry assistance engender unfavourable public perceptions of government processes?

The broad conclusion of the Commission is that the consequences of the industry assistance instrument do not compare favourably against these criteria. Where a region undertakes industry assistance in isolation, it may experience small increases in measures of the absolute size of its economy. Such measures typically feature prominently in the stated economic objectives of regional governments. However per-capita measures of welfare at both the regional and national levels are more likely to decrease than increase. When all regions provide industry assistance there are likely to be net losses experienced by all regions, both in terms of measures of absolute economic size, and per-capita welfare measures. Finally, the lack of both public disclosure and *ex-ante* analysis which is a frequent concomitant of the use of the instrument may be associated with some undermining of the public's faith in the integrity of the political system.

The implications of the Industry Commission's report for economic development policy making by regional government are potentially very significant. The Commission's findings suggest that the use of the industry assistance instrument has a detrimental impact on the economic welfare of the pre-policy population of a region. It suggests that some regional governments have devoted a significant proportion of their revenue to the use of an instrument that has had a negative impact on economic welfare. It calls into question the

raison d'être of the many State and local agencies responsible for implementing industry assistance measures. It suggests that regional governments would be well advised to abandon entirely their most important (in budget terms) regional economic development policy tool.

In this paper, the question of the veracity of the conclusions of the Industry Commission is largely left aside. Rather, the Commission's conclusions are taken as a stimulus for the following question: what policy tools are available to regional governments to improve their declared economic development targets? Apart from industry assistance (broadly defined to include such non-specific assistance as the public provision of export promotion), regional governments are left with two broad economic development policies which they can pursue: fiscal policy and microeconomic reform. The potential impact on a small regional economy (Tasmania) of both these two policies is assessed, and then compared with the potential consequences of the industry assistance instrument. The Tasmanian economy provides a useful case-study. It is a State that is small enough to have been defined as a region in its own right (Taskforce on Regional Development, 1994). Its economic performance, as measured by the growth in measures of the size of the economy, has lagged that of other regions over many years. The primary production, government demands, and the raw-materials processing sector each account for relatively large proportions of economic activity.

2. *FEDERAL* SIMULATIONS

2.1 The *FEDERAL* Model

FEDERAL is a bottom-up two-region model of the Australian economy designed to allow analysis of regional (state) and national economic shocks within a federal economic system. The model traces its lineage to the single region 1982 version of *ORANI*, taking the latter model into its full multiregional complexity. For a full description of *FEDERAL*, see (Madden, 1992), while an overview of the model can be found in Madden (1995).

The two regions in the first (1989) version of *FEDERAL* were Tasmania and the Australian mainland. A second version concentrated on New South Wales/Victoria, while the latest (1994) version has South Australia as its region of focus.

Distinguishing features of the model are its extensive modelling of two tiers of government finance and its detailed modelling of regional income, including returns on interstate owned capital and land. An enlarged set of taxes and subsidies are imposed by both tiers of government, and these affect the decisions of economic agents in each region. Regional firms minimise costs subject to individual technologies which allow substitution between sources. Regional households maximise utility subject to a region-specific utility function and income constraint which recognises a range of transfer payments as well as factor income and direct taxes by both levels of government. Regional investors allocate

investment across regional industries on the basis of rates of return.

The model contains a significant number of exogenous variables that either represent, or can act as a proxy for, Local, State and Commonwealth government regional policy instruments. The model is suited to the evaluation of the impact of both:

- Commonwealth regional policy on the two regions identified in the model; and
- State regional policy on the state in question, and the regions within the relevant State[1].

The model has been used extensively for both types of application. In this paper we use the model to assess the economic consequences of the Tasmanian government trying to influence economic outcomes aggregated to the Tasmanian state level.

2.2 Introduction to the Simulations

As discussed in Section 3, the Industry Commission (1996) results suggest that the State's should severely limit their use of the industry assistance instrument. A suspension in the use of this instrument would, at the broadest level, leave regional governments with essentially two development policy instruments: fiscal policy and microeconomic reform. The simulations reported below consider the economic consequences of a number of policies aimed at increasing the traditional targets of regional government (employment, gross state product, investment and exports). While it is acknowledged that these targets are not necessarily good indicators of the welfare of the pre-policy population, they figure prominently among both the explicit and implicit economic objectives of many regional governments. The Industry Commission, in its examination of industry assistance, sought to improve upon the use of these variables as evaluation criteria by evaluating impacts on a measure of real consumption per capita using the MMRF model. In the long-run closure of the MMRF model, both regional unemployment and participation rates are held fixed. Hence regional populations move equiproportionally with employment[2]. The Industry Commission therefore calculates the impact on real regional consumption spending per head by subtracting the percentage change in employment from the percentage change in real consumption.

This study calculates a similar measure, and reports the results for this measure in the simulations below. One should, however, be more cautious than the Industry Commission in advancing this measure as a good indicator of changes in welfare for two reasons. First, the calculation does not measure the impact on the pre-policy population, but rather, the post-policy population. The impact of the policy change on the pre-policy population of the region is a better

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[1] FEDERAL is currently confined to bottom-up modelling at the State level, however sub-state regions can be examined using a top-down extension to the model.

[2] In MMRF the proportion of the population which is of working age is held constant.

indicator of the welfare consequences of the policy. Second account is not taken of the rental on capital and land that accrues to the new entrants into the region. Only the wage income of the new entrants enters into the real consumption calculation. This tends to understate the impact of the policy on real consumption per-capita. Finally, it should be noted that real private consumption per capita is an incomplete welfare indicator as it abstracts from other factors which affect social welfare, such as public consumption and distributional impacts. Subject to these caveats, this paper reports a measure of real private consumption per capita using a method similar to the Industry Commission's. It is, however, assumed that new entrants have fewer dependants per capita than the incumbent population.

Simulations appropriate for modelling include:

- an increase in current government expenditure (fiscal policy);
- reductions in a range of government taxes (fiscal policy);
- changing the tax mix (fiscal policy); and
- removing exemptions to payroll tax (fiscal / microeconomic policy).
- improving the productivity of government business enterprises (microeconomic policy);

This paper only examines the first four of these simulations. For an analysis of the last simulation in the list, see Madden (1995). A simulation of assistance to an individual industry is reported in addition to the fiscal/microeconomic reform simulations.

The simulations are conducted for both a short and long run. The short run is that period during which real wages and regional industry capital stocks are fixed. In the long run, national employment, regional industry rates of return and regional unemployment rates are set exogenously.

First, the effects of changes in individual policy instruments are reported. These may have positive effects on the economy but at budgetary costs, or they can have positive impacts on the budget but at a cost to economic activity. By combining such policy instruments the effects of budget-neutral policies can be seen.

2.3 Simulation Results

Increase in State Government Expenditure

This section considers the impact of an increase in Tasmanian government consumption expenditure such that the State's borrowing requirement increases by $10 million in 1994/95 dollars. Table 1 contains results for selected Tasmanian macroeconomic variables in both the short and long runs.

An increase in State government current consumption expenditure that increases the borrowing requirement by $10 million is quite effective at boosting the size of the Tasmanian economy in both the short and long runs due to the high ratio of employment to output in the government sector. In the short run employment increases by just over 400 positions. In the long run, employment is approximately 370 positions higher than it would otherwise have been.

Table 1. Impact on Key Macroeconomic Variables of Increase in Regional Government Current Consumption Spending

	Short Run	Long Run
Tasmanian PSBR	10.00	10.00
Per-capita real consumption	0.04	-0.07
Real Tasmanian consumption	0.04	0.09
Regional real private investment	0.69	0.18
Tasmanian IPI	0.16	0.00
Tasmanian CPI	0.05	0.00
Tasmanian employment	0.21	0.19
Tasmanian export price index	0.01	0.00
Tasmanian real exports	-0.10	-0.04
Tasmanian real GSP	0.13	0.15

Tasmanian gross state product is also projected to increase in both the short and long run. While Tasmanian real private consumption spending is projected in the long run to increase by only 0.09 per cent, Tasmanian real consumption in total (that is, including government consumption) is projected to increase by 0.19 per cent. Real private consumption is projected not to increase fast enough to match the increase in the State's long run population caused by interstate migration from the Mainland. Hence real private consumption per-capita decreases. Real total consumption per capita remains virtually unchanged. The aggregate demand expansion does not assist in the achievement of real regional export targets. The increase in the demand for Tasmanian goods by the government causes an increase in the Tasmanian price level, decreasing the competitiveness of Tasmanian products.

Increase in the Average Rate of State Government Payroll Tax

In 1994/95 the Tasmanian government raised $142.1 million in payroll tax revenue. This represented 25.2 per cent of State taxation revenue, making it the most important taxation revenue source for the government.

A simulation was undertaken to determine the required increase in the average rate of payroll tax such that the Tasmanian State government borrowing requirement decreased by $10 million. That is, the increase in the average rate required, taking into account that the act of increasing the payroll tax rate will have a depressing effect on State government revenues through the negative impact that the payroll tax has on Tasmanian employment levels. Table 2 reports the impact on key Tasmanian macroeconomic variables of an increase in the average rate of payroll tax such that the State's borrowing requirement decreases by $10 million.

Looking first at the employment effects, it is clear that an increase in the payroll tax has a marked deleterious effect on Tasmanian employment. In the short run employment is projected to be 610 positions lower than otherwise. In the long-run, employment is projected to be 886 positions lower than otherwise.

Table 2. Impact on Key Macroeconomic Variables of Increase in Average Rate of Payroll Tax - $ 10 million PSBR Impact

	Short Run	Long Run
Tasmanian PSBR	-10.00	-10.00
Per-capita real consumption	-0.13	0.04
Real Tasmanian consumption	-0.13	-0.37
Regional real private investment	-1.34	-0.57
Tasmanian IPI	-0.17	0.11
Tasmanian CPI	-0.01	0.11
Tasmanian employment	-0.31	-0.45
Tasmanian export price index	0.05	0.16
Tasmanian real exports	-0.43	-1.51
Tasmanian real GSP	-0.22	-0.48

The payroll tax impacts most severely on the trade exposed industries. These industries face both relatively high rates of payroll tax and high elasticities of demand for their output. In the short run real Tasmanian exports are 0.43 per cent lower than they would otherwise be. In the long run real exports are 1.51 per cent lower than they would otherwise be.

The impact of the decline in employment in the short run is ameliorated by the stabilising effect of Commonwealth government unemployment benefits. Hence the decline in aggregate real consumption spending is significantly lower than the fall in employment. This effect does not operate in the long run where regional unemployment rates are held constant.

The rate of return to capital in Tasmanian industries falls, leading to a decline in real private investment in Tasmania of 1.34 per cent in the short run. Since the demand for Tasmanian output is lower in the long run than it would otherwise have been, the demand for capital by Tasmanian firms is also lower. Hence real private investment is also lower in the long run.

Change to Uniform Payroll Tax Rate

Table 3 presents the results for selected Tasmanian macroeconomic variables of the removal of all exemptions from the application of the payroll tax, and then imposing an across the board revenue neutral rate (approximately 3.3 per cent). The rate of payroll tax on wages paid by the Community Services sector has been held constant in this simulation in recognition of the substantial number of organisations in this sector that are exempt from payroll tax by reason of their community service, volunteer, and charitable orientations.

The results in Table 3 suggest that such a policy might be effective in achieving a number of State government policy targets. Gross state product, real exports, investment, and employment are all projected to be higher in both the short and long run. Tasmanian export volumes increase in both the short and long run as the traded-goods sector experiences a decrease in its average rate of payroll tax. Real consumption spending is marginally lower in the short run (partly due to

Table 3. Impact on Key Macroeconomic Variables of Removal of Payroll Tax Exemptions - PSBR Neutral

	Short Run	Long Run
Tasmanian PSBR	0.00	0.00
Per-capita real consumption	-0.03	-0.20
Real Tasmanian consumption	-0.03	0.05
Regional real private investment	1.48	0.55
Tasmanian IPI	0.30	-0.02
Tasmanian CPI	0.09	0.03
Tasmanian employment	0.21	0.28
Tasmanian export price index	-0.11	-0.22
Tasmanian real exports	0.86	1.92
Tasmanian real GSP	0.17	0.27

the household consumption-set being weighted in favour of commodities produced by industries paying a below average rate of payroll tax). In the long run there is a small increase in aggregate real consumption spending. The impact of the policy on real regional consumption is attenuated by the fact that Tasmanian households own a relatively small proportion of the capital in those industries that experience a decline in their payroll tax rate. The measure of real consumption per-capita declines because of the high level of interstate immigration relative to the increase in regional real consumption. This suggests, subject to the caveats outlined in Section 2.2, that the welfare consequences of the policy are uncertain, notwithstanding that the policy has a positive impact on the standard economic targets of regional governments.

Liquor Licence Fees

In 1994/95 the Tasmanian government collected $17.1 million in revenue from liquor licence fees, representing 3 per cent of State government tax collections. The fee is essentially a tax on sales of liquor. Hence the increase in the liquor licence fee has been modelled as an increase in the rate of sales tax on purchases of the commodity "Beverages and malts" by Tasmanian consumers. Table 4 reports the impact on key Tasmanian macroeconomic variables of this simulation.

The increase in the liquor licence fee does not have as negative an impact on the State economy as raising a similar amount of revenue from a payroll tax. This is because of the high interstate import content in the beverages that are taxed. However with only $17.1 million raised by this tax in 1994/95 it is highly questionable whether an increase in the tax rate sufficient to reduce the PSBR by $10 million would be feasible.

Motor Tax

In 1994/95 the Tasmanian government collected $30.7 million in motor taxes

Table 4. Impact on Key Macroeconomic Variables of Increase in Liquor License Fees - $ 10 million PSBR Impact

	Short Run	Long Run
Tasmanian PSBR	-10.00	-10.00
Per-capita real consumption	-0.16	-0.16
Real Tasmanian consumption	-0.16	-0.27
Regional real private investment	-0.74	-0.22
Tasmanian IPI	-0.15	0.00
Tasmanian CPI	0.08	0.18
Tasmanian employment	-0.13	-0.12
Tasmanian export price index	-0.01	0.00
Tasmanian real exports	0.09	-0.02
Tasmanian real GSP	-0.09	-0.16

and fees, representing 5.4 per cent of total Tasmanian tax collections. The motor tax is imposed on the owners of motor vehicles or trailers at the time of initial registration or annual renewal. Approximately one third of motor tax receipts are from commercial enterprises, and the other two thirds from households. An increase in the rate of motor tax payable by households has been modelled as an increase in direct taxes on households. Table 5 reports the impact on key Tasmanian macroeconomic variables of this simulation.

Of all the taxes modelled, the motor vehicle tax has the least impact on the size of the Tasmanian economy, falling as it does directly on consumers. Hence both the aggregate and the per-capita measure of real consumption spending decline. The fall in demand by Tasmanian households induces a small fall in the CPI in both the short and long runs. The impact on production is attenuated by increasing exports of Tasmanian products to overseas and the mainland. This is due to an improvement in the competitiveness of Tasmanian exporters due to a small fall in the prices they pay for inputs due to the tax-induced decline in demand by Tasmanian households.

Table 5. Impact on Key Macroeconomic Variables of Increase in Motor Vehicle Taxes on Households - $ 10 million PSBR Impact

	Short Run	Long Run
Tasmanian PSBR	-10.00	-10.00
Per-capita real consumption	-0.11	-0.11
Real Tasmanian consumption	-0.11	-0.17
Regional real private investment	-0.47	-0.14
Tasmanian IPI	-0.11	0.00
Tasmanian CPI	-0.07	0.00
Tasmanian employment	-0.07	-0.06
Tasmanian export price index	-0.01	0.00
Tasmanian real exports	0.08	0.02
Tasmanian real GSP	-0.05	-0.09

Table 6. Impact on Key Macroeconomic Variables of Increase in Gambling Taxes - $ 10 million PSBR Impact

	Short Run	Long Run
Tasmanian PSBR	-10.00	-10.00
Per-capita real consumption	-0.17	-0.16
Real Tasmanian consumption	-0.17	-0.33
Regional real private investment	-0.86	-0.29
Tasmanian IPI	-0.19	0.00
Tasmanian CPI	0.05	0.20
Tasmanian employment	-0.18	-0.19
Tasmanian export price index	-0.01	0.00
Tasmanian real exports	0.10	-0.02
Tasmanian real GSP	-0.13	-0.23

Gambling Taxes

In 1994/95 the Tasmanian State government collected $49.9 million in a range of taxes on gambling, representing 8.8 per cent of total State taxation collections. Gambling taxes are modelled as a sales tax on purchases by Tasmanian households of Tasmanian produced Entertainment and Recreation. Table 6 reports the impact on key Tasmanian macroeconomic variables of this simulation.

The increase in the gambling tax has the effect of reducing the demand for Entertainment and Recreation by households. The Entertainment and Recreation sector is a relatively labour-intensive industry, and so the impact of the tax on employment is significant[3].

Industry Assistance

We considered a stylised example of an assistance package to an individual industry by simulating a hypothetical $10 million assistance package to the Tasmanian Pulp & Paper industry. The assistance package involves reductions in payroll taxes, production taxes and commercial land taxes, each at a cost of $3.33 million to the Tasmanian State (and Local) Government budget. Commercial land taxes are the province of local governments, so the package would involve either inter-governmental co-ordination or a specific State Government subsidy.

The short-run effects of the Pulp & Paper assistance package are shown in Table 7, while the long-run effects are shown below in Table 8.

It can be seen that the beneficial effects of the package are considerably greater in the long run, particularly due to the subsidisation of capital (via commercial land-tax reductions) having encouraged substantial investment in the short-run and greater physical capital (with associated employment) in the long-run.

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[3] In so far as the Gambling component of the Entertainment and Recreation sector is more capital-intensive than the industry as a whole, this result must be qualified.

Table 7. Short Run Impact of Industry Assistance to the Paper Industry

	Payroll Tax Reduction	Production Tax Reduction	Commercial Land Tax Reduction	Total
Tasmanian PSBR	3.33	3.33	3.33	10.00
Per-capita Real Consumption	0.01	0.01	0.03	0.06
Real Tasmanian consumption	0.01	0.01	0.03	0.06
Regional real private investment	0.14	0.15	0.23	0.52
Tasmanian IPI	0.03	0.03	0.04	0.10
Tasmanian CPI	0.01	0.01	0.02	0.05
Tasmanian employment	0.06	0.05	0.03	0.13
Tasmanian export price index	0.00	0.00	0.00	0.00
Tasmanian real exports	-0.07	-0.06	-0.03	-0.15
Tasmanian real GSP	0.04	0.03	0.02	0.09

Table 8. Long Run Impact of Industry Assistance to Paper Industry

	Payroll Tax Reduction	Production Tax Reduction	Commercial Land Tax Reduction	Total
Tasmanian PSBR	3.33	3.33	3.33	10.00
Per-capita Real Consumption	-0.02	-0.02	0.02	-0.02
Real Tasmanian consumption	0.04	0.04	0.06	0.14
Regional real private investment	0.06	0.06	0.09	0.21
Tasmanian IPI	0.00	0.00	0.00	0.00
Tasmanian CPI	0.00	0.00	0.00	-0.01
Tasmanian employment	0.07	0.06	0.05	0.19
Tasmanian export price index	-0.01	-0.01	-0.01	-0.03
Tasmanian real exports	-0.01	0.00	0.00	-0.01
Tasmanian real GSP	0.07	0.07	0.09	0.23

2.4 Regional Policy Packages

Table 9 restates the impacts on four key regional policy targets of each of the policy instruments, in which the sign of the results for those instruments which in Section 2.3 were revenue-raising have been changed. Thus in Table 9 all instruments are designated as region-stimulating policies.

Table 9 provides the information for forming budget-neutral policy packages capable of stimulating regional employment. Policy packages which are poor region-stimulating instruments are clearly good revenue-raising instruments in the sense of raising a given amount of revenue for a low negative impact on policy targets. Combining good region-policies will give the best budget-neutral policy packages.

Table 9. Impact on Key Policy Variables of Region-stimulating Policy Instruments[a] (per cent)

Instrument	Tasmanian Target Variables			
	Employment	Real GSP	Real Consumption[b]	Real Per-Capita Consumption[b]
1. Government current consumption	0.19 (0.21)	0.15 (0.13)	0.09 (0.04)	-0.07 (0.04)
2. Payroll tax reduction	0.45 (0.31)	0.48 (0.22)	0.37 (0.13)	-0.04 (0.13)
3. Reduce liquor licenses	0.12 (0.13)	0.16 (0.09)	0.27 (0.16)	0.16 (0.16)
4. Reduce motor taxes	0.06 (0.07)	0.09 (0.05)	0.17 (0.11)	0.11 (0.11)
5. Gambling taxes	0.19 (0.18)	0.23 (0.13)	0.33 (0.17)	0.16 (0.17)
6. Industry assistance	0.19 (0.13)	0.23 (0.13)	0.14 (0.06)	-0.02 (0.06)

(a) Long-run results, with short-run results shown in brackets.
(b) Household consumption only.

However, Table 9 presents some immediate problems. The ranking of policies across the four targets varies, as Table 10 indicates. For instance, payroll tax reductions are the best stimulating policy as regards the first three targets, but perform poorly on the final target, reducing the measure of real consumption per head. As discussed in Section 2.2, the per-capita consumption measure should be interpreted with caution. However the results in the fourth column of Table 9 suggest the possibility that when the government's target is per-capita income, the scope for policy-effectiveness at the regional level may be considerably reduced.

A second point to emerge from Tables 9 and 10 is that the options for traditional stimulatory policies are not large. While payroll tax reduction, government consumption, and industry assistance all rank reasonably well on the employment front, if not on the real consumption front, there is very limited

Table 10. Ranking of Regional-Stimulating Instruments[a]

Instrument	Policy Targets			
	Employment	Real GSP	Real Consumption[b]	Real Per-Capita Consumption[b]
1. Government current consumption	2	5	6	6
2. Payroll tax reduction	1	1	1	5
3. Reduce liquor licenses	5	4	3	1
4. Reduce motor taxes	6	6	4	3
5. Gambling taxes	2	2	2	1
6. Industry assistance	2	2	5	4

(a) Long-run results.
(b) Household consumption only.

scope to pay for these policies. The largest potential revenue resource in terms of established State tax patterns, payroll taxes, is the worst instrument in terms of low-impact revenue raising[4] and therefore a cut in payroll taxes makes a good region-stimulating package. A liquor tax is a good revenue-raising instrument but has a limited tax base. The Motor Vehicle taxes is clearly the best revenue-raising instrument but its tax base would allow only a limited amount of revenue to be raised to fund stimulatory policies. Gambling taxes represent a larger tax base. However the welfare consequences of expanding this revenue source to fund region-stimulating policies are likely to extend far beyond those captured by the measure of real consumption per capita reported here.

Within the constraint of the available tax base, there would appear to be scope for some policy packages that have a positive impact on the standard economic targets of State governments. Table 11 lists some examples in terms of their effects on employment, real Tasmanian public and private consumption, real Tasmanian GSP, and real Tasmanian consumption per-capita.

Five policies have unambiguous gains in terms of the conventional targets of State economic policy: increased government consumption financed by increased motor vehicle taxes, payroll tax equalisation, and reduced payroll taxes financed by an increase in some combination of motor, liquor and gambling taxes. It is important to note that the apparent efficacy of the policy of a motor-tax funded increase in government consumption rests on the assumption that a dollar spent on public consumption is valued by the community equally with a dollar spent on private consumption. The apparent efficacy of the payroll tax equalisation is not based on such an assumption, with the extra $3 million of consumption being the policies do not result in an increase in the measure of real consumption per

Table 11. Budget-Neutral Regional Development Packages

Region Stimulating Policy	Financing Budgetary Change	Net Job Change	Real GSP Change($m)	Real Consumption Change($m)[(a)]	Real Per-Capita Consumption Change($)[(a)]
1. Payroll tax cut	Motor tax	780	36.3	12.09	-19.2
	Liquor taxes	660	29.8	6.04	-25.6
	Gambling taxes	520	23.2	2.42	-25.6
2. Industry assistance	Motor taxes	260	13.1	-1.8	-16.6
	Liquor taxes	140	6.6	-7.9	-23.0
3. Government consumption	Motor taxes	260	5.6	3.6	-1.4
	Liquor taxes	140	-0.9	-2.4	-7.8
4. Payroll tax equalisation	Not applicable	560	25.3	3.0	-25.6

(a) Includes both real private and real public consumption.

[4] The negative effects of payroll taxes must be treated with some caution. From a national point of view it is quite a good tax, acting much like an income-tax in the long-run. However, from an individual state's point of view payroll tax increases have a substantial interregional competitiveness-reducing effect.

composed entirely of private consumption. However it is interesting to note that capita, suggesting that the welfare consequences of the policies are unclear, even though the conventional targets of State government policy (employment, GSP, aggregate real consumption) all increase.

In the case of the other policies in Table 11, the regional government needs to trade any apparent advantages of a larger population and increased employment against both lower aggregate real consumption, and per-capita consumption, in the long run.

Further work is required to see whether there may be more policy packages which give satisfactory real regional consumption results. However what is clear is that although quite large packages are involved, the number of jobs generated is small. The results of these simulations suggest that the potential for state and local government regional policy having large impacts on regional economic activity could be limited.

Other than the payroll-tax equalisation scenario, we have not considered in this paper the economic consequences of regional government policy to achieve efficiency or equity objectives. The economic consequences of such policies, when aggregated to the regional level, are contingent on the particular characteristics of the individual policies. Hence the economic consequences of such policies, in the general sense, cannot be quantified. Rather, it is necessary to consider each such policy on the basis of its particular characteristics. An example of such a study is Madden (1995). The results of the modelling undertaken in this study suggest that the Australian adoption of the Hilmer reforms could lift Tasmania's GSP by 2.6 per cent and its real consumption by 4.0 per cent. These impacts dwarf those of the regional packages considered in this paper. The most "successful" packages examined in this paper are the budget-neutral removal of payroll tax exemptions, and the motor-tax-financed decrease in the average payroll tax rate. These two policies increased GSP by 0.27 and 0.39 per cent respectively, and real consumption by 0.05 and 0.20 per cent respectively.

3. CONCLUSIONS

The Industry Commission's State, Territory and Local Government Assistance to Industry (Draft Report) (1996) raises serious questions about the efficacy of industry assistance in achieving the conventional targets of regional economic policy. Simulations with the *FEDERAL* model suggest that regional governments may have only a limited ability to influence the standard targets of regional development policy with either fiscal or industry assistance instruments. Impacts on the standard targets of regional policy: employment, gross regional product, exports, and real consumption, are insubstantial, even when large packages, relative to the available tax base, are involved. There is a possibility that the ability of regional governments to influence per-capita measures of well-being using conventional policy instruments is even more limited. At a time when the Commonwealth government is reducing its involvement in explicit regional

development policy, the answer to the question: "what can regional government's do to influence economic outcomes in their own regions?" could be a qualified: "not much". The qualifications to this conclusion are twofold. The first qualification relates to the use of the microeconomic reform instrument. Previous modelling work supports the conclusion that such policies can make relatively substantial contributions to the achievement of typical regional policy targets, whether measured in total or per-capita terms. The second qualification relates to the consequences of relaxing some of the assumptions that underlie the model employed in this study. In particular, further work is required to assess the sensitivity of our conclusions to the presence of external or internal economies of scale at the regional level, the degree of local ownership of capital and land, and assumptions relating to the composition of interstate migration flows.

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