PRODUCTIVITY: THE KEY TO SUSTAINING TASMANIA'S ECONOMIC RENAISSANCE

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by

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2004-05 was a very good year for the Tasmanian economy . As measured by real gross State product (GSP) Tasmania's economy grew by 4.0% in 2004-05 (Slide 2):

- the strongest since 2001-02 (which was a rebound from two years of negative growth,
- a growth rate which has been exceeded only twice in the past decade and only five times in the past 27 years

Over the past four years, Tasmania's real GSP has grown at an average annual rate of 3.4%. That's the best performance over any four year period since that ended 1988-89.

Incidentally, I acknowledge that the Tasmanian Treasury has many reservations about the ABS' GSP estimates for Tasmania[1]. However since Treasury don't publish details of, nor any history of, their 'underlying economic activity' measure – by contrast with the Queensland Treasury which publishes detailed estimates of State product[2] – but it is all we have to go on.

It should actually be easier for Tasmania to produce accurate estimates of GSP than any other State since it's presumably easier to measure intra-state trade between Tasmania and the mainland (given that none of it occurs by road or rail) than between any other State and the rest of Australia.

So I repeat the plea I made here last year for Treasury to be more transparent about its measure of 'underlying economic activity' - in particular by giving more detail about how it's constructed, providing a time series of previous estimates. This stuff shouldn't be a state secret.

Tasmania's 4% growth rate in 2004-05 was, along with Queensland's, the fastest of any State or Territory (Slide 3):

- this is the first time Tasmania has ever recorded the fastest economic growth in the nation;
- the best it has ever done previously was third, in 1991-02 and then in 2001-02;
- on average over the past 27 years Tasmania has ranked 6th, and has ranked 8th on 8 occasions.

Tasmania's 2004-05 performance stands out even more clearly in per-capita terms:

- Tasmania's 3.2% per capita growth rate was easily the highest in Australia (the Northern Territory was next with 2.5%)
- and was almost treble the national average of 1.1%

Over the past four years Tasmania's per capita real GSP has grown at an average annual rate of 3.3%:

- this is the strongest 4-year per capita growth rate Tasmania has seen since the period 1983-84 to 1987-88;

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[1] See, eg, footnotes 1 and 2 to Table 2.1 in 2005-06 Budget Paper No. 1, *Budget Overview* (Hobart, 2005), page 29.

[2] See, eg, Office of the Government Statistician, *Queensland State Accounts* (June Quarter 2005), available on-line at http://www.oesr.qld.gov.au/data/regular_publications/qld state accounts/qsa_200506.pdf.

- second only to Western Australia's 4.0% pa over this period;
- it is the highest ranking Tasmania has ever achieved on this measure since State estimates first became available 27 years ago;
- and was more than half as much again as the national average of 2.1% pa.

This strong growth has produced some very positive trends in the standing of Tasmania's economy relative to the national average (Slide 4):

- Tasmania's per capita GSP has risen from a low of 68.9% of the national average in 2000-01 to 75.5% in 2004-05, the highest it has been since 1995-96;
- the biggest improvement in any State's per capita GSP relative to the national average over a four-year period since Western Australia's rose by 6.8 pc points between 1990-91 and 1994-95.

Reflecting the improvements in relative per capita GSP, Tasmania's per capita household disposable income (HDI) has improved from a low of 76.6% of the national average in 2000-01 to 83.6% of the national average in 2004-05. That's the highest since the current series of State Accounts began in 1989-90.

Of course we need to remember that on both of these measures Tasmania remains the nation's poorest State - although it's interesting that Tasmania is closing the gap on Australia's second poorest State – Queensland(!) – with Tasmania's per capita HDI equivalent to 94% of Queensland's in 2004-05, up from 88% in 2000-01.

The improvement in Tasmania's economic growth performance has been broadly mirrored in an improvement in labour market outcomes (Slide 5):

- employment has increased (in trend terms) by 23,900 since the end of 2001, representing a growth rate of 2.9% per annum – behind only Queensland (4.2%) and Western Australia (3.2%) and ahead of the national average of 2.4% pa over this period;
- the 19 months between April 2003 and October 2004 was only of only three periods since monthly employment statistics commenced (in February 1978) when annual trend growth in employment was faster in Tasmania than on the mainland (the others were March 1983-March 1984 and September 1989-September 1991);
- Tasmania's trend unemployment rate dropped to 5.7% in December 2004 and January 2005, the lowest recorded since the commencement of monthly labour force data, and at that time just 0.6 pc points above the mainland figure, the narrowest margin since October 1986;
- Tasmania's unemployment rate has since risen to 7.1%, and the margin over the mainland figure to 2.0 pc points, the highest since May 2003;
- However this is largely due to a 2.5 pc pts rise in Tasmania's traditionally-low participation rate to 61.4%, the highest since April 1991 – over the same period the mainland's participation rate rose by only 0.4 pc pts;
- Tasmania's employment-population ratio has continued to rise, reaching a 15½-year high of 57.0% in October. It is now 4.2 pc pts below the corresponding mainland figure, the narrowest margin since September 1996, and compared with a margin of 6.7 pc pts in November 2002.

The upturn in the Tasmanian economy in the early years of this decade owed a good deal to the housing boom that was prompted, at least in part, to an influx of mainland 'sea-changers' and investors attracted by Tasmania's [then] relatively cheap land and housing costs[3].

Between 2000-01 and 2003-04, dwelling investment in Tasmania rose by 77% in real terms, compared with 43% on the mainland (Slide 6). Growth in residential construction accounted for nearly 27% of the increase in Tasmania's real GSP over this period, compared with 20.4% on the mainland

From the December quarter 1999 – at which point established house prices in Hobart were no higher than they had been five years earlier – they rose by 106% up to their peak in the June quarter of this year (according to the ABS' recently modified house price series), more over this period than in any other capital city except Brisbane (although prices are still rising in Adelaide, Perth and Darwin).

This boom is now over –

- residential investment fell 7½% in real terms in 2004-05, more than anywhere else in Australia; and
- Hobart house prices have fallen further from their peak than anywhere else except Sydney (where prices peaked at the end of 2003.

Reflecting this, of course, Tasmania's mini-population surge has also subsided, with net interstate immigration slowing from 58 per week in 2003, on average, to just 5 people per week in the four quarters ended March 2005 (the latest available); while population growth has halved from 1.2% pa to 0.6%.

However, despite the housing boom having come to an end, Tasmania's economy is still doing fairly well in most other respects (Slide 7):

- retail sales are growing faster in Tasmania than anywhere else in Australia, up 6.8% in trend terms over the year to October compared with just 3.1% on the mainland;
- new motor vehicle sales have been affected in Tasmania, as on the mainland, by higher petrol prices and (I would argue, more importantly) by more cautious attitudes towards borrowing since the end of the housing boom, but they are holding up better in Tasmania than anywhere except the mineral boom States of WA and Queensland;
- while residential building is 'rolling over', non-residential building activity is growing more strongly in Tasmania than on the mainland (assisted by a significant increase in the level of public sector non-residential approvals); and
- although engineering construction is starting to taper off with the completion of most of the major energy projects of recent years, considering that Tasmania is not seeing much of the resources boom prompted by China's thirst for minerals and energy, activity in this sector is holding up pretty well.

This time last year I made the point that, although many aspects of Tasmania's economic performance had improved, one key area in which there'd been no improvement was in relation to [labour] productivity – that is, output per unit of labour input.

[3] The Reserve Bank's Luci Ellis discussed this at last year's Tasmanian Economic Forum.

Happily, there has been some improvement on this score in 2004-05. GSP per person employed rose by 1.1%; while GSP per hour worked rose by 1.9% (Slide 8).

This result appears all the more significant given that these measures of productivity fell in every other jurisdiction (except the Northern Territory); for the mainland as a whole, the 'hours' measure of productivity fell by 1.6%.

Of course in this, perhaps more than in other areas, however, 'one swallow does not a summer make' (Slide 9):

- the level of Tasmanian labour productivity (gross product per hour worked) is still the lowest of any State or Territory - nearly 85% below the national average;
- over the past five years, labour productivity has grown more slowly in Tasmania than in every jurisdiction except NSW and the ACT.

Moreover, from a longer-term perspective, which is appropriate when one is talking about productivity (Slide 10) –

- the growth rate of labour productivity in Tasmania remains consistently below the national average; and
- the level of productivity has yet to emerge from the lower range relative to the national average into which it fell at the end of the 1990s.

As I also said last year, productivity is important. As one of the foremost contemporary American economist, Paul Krugman, says, 'Productivity isn't everything, but in the long run it's nearly everything'[4].

Or, as the well-known business strategist Michael Porter of Harvard University pointed out in the book that first brought him to world-wide attention, *The Competitive Advantage of Nations*,

> 'Productivity is the prime determinant in the long run of a nation's standard of living … High productivity not only supports high levels of income but allows citizens the option of choosing more leisure instead of working longer hours. It also creates the national income that is taxed to pay for public services which again boosts the standard of living. The capacity to be highly productive also allows a nation's firms to meet stringent social standards which improve the standard of living, such as in health and safety, equal opportunity and environmental impact'[5].

Substitute 'state' for 'nation', and this applies to Tasmania as much as it does to any country.

Productivity growth essentially stems from three sources –

- innovation in the commonly-understood sense of that word;
- technical efficiency gains (in the sense used by economists, that is, reducing the extent to which more resources and factor inputs than required by a particular technology are used, or to which resources and factor inputs are put to sub-optimal uses); and

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[4] Paul Krugman, *The Age of Diminished Expectations*, (MIT Press, Cambridge, 1994) p. 13.
[5] Michael E. Porter, *The Competitive Advantage of Nations* (The Free Press, New York, 1990), page 6.

- technological diffusion or imitation (that is, applying processes and products developed elsewhere).

All three sources of productivity growth are enhanced by competition and by investment.

There's now a large body of theoretical and empirical research demonstrating that - as an OECD survey of this research published in 2002 put it –

> 'competition has pervasive and long-lasting effects on economic performance by affecting economic actors' incentive structure, by encouraging their innovative activities, and by selecting more efficient ones from less efficient ones over time'

and that

> 'the link between product market competition and productivity growth is positive and robust'[6].

From that perspective it's encouraging that Tasmania has been at the forefront of efforts to promote competition and remove the anti-competitive effects of existing and new legislation and regulations (Slide 12).

The National Competition Council's 2004 review of governments' performance in implementing National Competition Policy says that 'compared to other jurisdictions Tasmania's performance has been excellent'[7]. Tasmania is one of only three jurisdictions to have had no deductions or suspensions from its NCP payments in 2004-05.

The NCC also describes Tasmania's 'gate-keeping arrangements' (for reviewing new legislation for anti-competitive effect) as 'best practice'[8].

Another key driver of productivity growth is investment in physical capital – buildings and structures, plant and equipment, and (especially these days) information technology and software (Slide 13).

During the 1990s, the share of Tasmania's output applied to investment in physical capital has been consistently below the national average – indeed, in most years, the lowest of all States and Territories – especially in relation to business (as opposed to public) investment.

More recently, non-residential investment as a share of Tasmania's output has increased to be in line with the national average over the past four years

This is largely attributable to the now largely completed surge of investment in major energy projects and to public investment.

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[6] Sanghoon Ahn, "Competition, Innovation and Productivity Growth: A Review of Theory and Evidence", OECD Economics Department Working Paper No. 317 (OECD, Paris, 2002), pages 5-6. See also Dirk Pilat, "Competition, Productivity and Efficiency", *OECD Economic Studies*, No. 27 (November 1996), pages 107-146.

[7] National Competition Council, *Assessment of Governments' Progress in Implementing the National Competition Policy and Related Reforms 2004*, Volume 1 (Ausinfo, Canberra, October 2004), page xxiii.

[8] *Ibid*., page 4.13.

Without in any way detracting from the worth of these investments, it is still notable that the share of business investment in Tasmania's gross product is lower than anywhere else in Australia except the ACT.

The other important driver of productivity growth is investment in 'human capital' – broadly speaking, the skills and aptitudes of the work force.

Education contributes to increased productivity and economic growth in several ways:

- by increasing the skills and abilities of individual workers;
- by raising the flexibility of workplace teams;
- by allowing for more rapid utilization and transmission of new skills and production technologies; and
- by fostering the creation of knowledge, ideas and technological innovation.

Research by academic economists suggests that each additional year of schooling in the adult population boosts long-run economic growth by between ¼ and ¾ percentage points per annum, or by anywhere between 6 and 19% in total[9].

Here too, Tasmania has traditionally performed poorly by comparison with the rest of Australia (Slide 14):

- in 2004, only 44.4% of Tasmanians aged 15-64 had post-school qualifications, the lowest of any State or Territory and compared with a national average of 51.8%;
- of those Tasmanians aged 25-64, only 49.2% had post-school qualifications, cf. 57.5% of all Australians;
- only 15.8% of Tasmanians aged 25-64 had a bachelor's degree or higher, cf. 21.9% of all Australians;
- conversely, 44.1% of Tasmanians aged 15-64 had not completed Year 12, the highest of any State or Territory and compared with a national average of 32.3%.

Although I'm not aware of any statistics which prove this, common sense suggests that Tasmania's figures are more affected by interstate migration than those for other States.

The skill characteristics of Tasmanians in employment compared with those employed in other States broadly reflect these educational outcomes (Slide 15):

- the proportion of the Tasmanian work force employed in the highest-skilled occupations (as defined by ASCO) in 2003-04 was, at 23.1%, lower than in any other State except Queensland and below the national average of 26.4%;

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[9] See, eg, Steve Dowrick, 'The Contribution of Innovation and Education to Economic Growth', Paper presented to the Melbourne Institute Economic and Social Outlook Conference *Towards Opportunity and Prosperity*, April 4-5 2002; available at www1.ecom.unimelb.edu.au/iaesrwww/conf/top2002/pdffiles/DowrickSteve5A.pdf; Robert Barro, 'Education and Economic Growth', OECD 2003, available at www.oecd.org/dataoecd/5/49/1825455.pdf; and Access Economics, *The Economic Benefits of Increased Participation and Training* (May 2005).

- the proportion of the Tasmanian work force employed in the lowest-skilled occupations was at 20.0% above the national average of 19.3% although lower than in South Australia, Queensland and the Northern Territory.

It's well known that labour costs are lower in Tasmania than in any other State:

- for example in 2004-05 average weekly ordinary time earnings for full-time adults in Tasmania were 11.5% below the national average, and lower than in any other State or Territory;
- this wasn't always the case – Queensland wages were lower than Tasmania's, on average, until 1999-2000, and were also lower in SA than in Tasmania until 1989-90;
- a measure of labour costs derived from the State accounts shown here, employee compensation per hour worked, was 15% lower in Tasmania than the national average in 2004-05 (Slide 16a)

Having the lowest labour costs (thus defined) of any State or Territory is widely perceived as a key source of comparative advantage for Tasmania – as for example reported in the Competition Index published annually by the Tasmanian Treasury[10].

But is having the lowest labour costs in the country really a source of comparative advantage, if the reason for it is that Tasmania's work force is the least skilled of any State or Territory?

The State Accounts can be used to construct an index of labour costs per unit of output or 'unit labour costs' which sheds some more light on this question (although note, unlike the measure constructed by Federal Treasury for the Australian economy as a whole, it doesn't include on-costs such as payroll tax & workers' compensation premia).

This measure shows (Slide 16b) that employee compensation per unit of output in 2004-05 was actually the third highest in Australia (after only the ACT and NSW) and was in line with the national average.

In other words, once account is taken of the below-average productivity of Tasmanian workers, Tasmania's labour costs are actually *not* the lowest in Australia but, rather, are about in line with the national average.

There is a broader dimension to this. The State breakdown of the results of the ABS' most recent quinquennial Household Expenditure Survey[11] show that the reason for Tasmanians having lower incomes, on average, than residents of any other State or Territory is *not* that the lowest-income Tasmanian households have lower incomes than their counterparts on the mainland.

In fact the incomes of the bottom quintile of Tasmanian households are slightly higher than the national average for the bottom fifth of households by income, and indeed higher than the lowest quintile of any State or Territory except NSW when 'equivalized' for differences in household size and housing costs (Slide 17).

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[10] Tasmanian Department of Treasury and Finance, *The Competition Index 2004*, http://www.treasury.tas.gov.au/domino/dtf/dtf.nsf/LookupFiles/Competition_Index_2004.pdf/$file/Competition_Index_2004.pdf, page. 5.

[11] ABS, *Household Expenditure Survey: Summary of Results* (6530.0), Table 4.

Rather, Tasmanian household incomes are on average lower than those of households in other States and Territories because the *highest*-income households in Tasmania earn significantly less than their counterparts in any other State or Territory – 7.8% less than the national average, or 13.5% when 'equivalized' for differences in household size and housing costs.

This is perhaps the inevitable result of Tasmania having a relatively low proportion of jobs calling for high levels of education and skill, particularly in the corporate sector where such jobs are well-paid.

The same pattern is apparent when we compare levels of household net worth between Tasmania and other States (Slide 18):

- average household net worth in Tasmania in 2003-04 was $328,000 – 30% below the national average of $473,000;
- average net worth of the poorest fifth of Tasmanian households was $24,500 – not much, but $900 more than the average net worth of the poorest fifth of Australian households;
- average net worth of the second poorest quintile of Tasmanian households, $148,700, was also above the corresponding national figure of $144, 237;
- however the average net worth of the richest fifth of Tasmanian households, of $1,128,000, was 19.5% below the average net worth of the richest fifth of households nationally (nearly $1.4mn).

Of course this may be at least partly the result of land values being lower, and having risen by less over long periods of time, in Tasmania than in other parts of Australia.

Among other things, the below-average income and net worth of the highest-paid and wealthiest Tasmanian households means that charitable and philanthropic organizations find fund-raising more difficult than in other States, possibly making those organizations more dependent on the government than elsewhere.

Of course the level of educational attainment and skills possessed by the Tasmanian workforce reflects the cumulative impact of the choices made by them, their parents and Tasmanian governments over many decades (Slide 19).

Until this decade, a much smaller proportion of Tasmanian children went on to upper secondary education than in most other parts of Australia, and an even smaller proportion went on to acquire tertiary qualifications (and an above-average proportion of those who did probably migrated to the mainland).

There has been a significant improvement in the retention rate from Year 10 to Year 12 in Tasmania since the mid-1990s (even allowing for some slippage in 2004 which may be due to the improving jobs market), and Tasmania no longer ranks lowest on this score.

Two aspects of this data which are worth noting (although I have no explanation for either of them)

- while there is a noticeable gap between the retention rates to Year 12 of boys and girls everywhere except the ACT – 72% vs 82% nationally – the gap is much larger in Tasmania – 65% vs 81% in 2004 – than in any other State; and

- in most other parts of Australia there is a substantial gap (averaging 14 pc points) between the Year 12 retention rates of government and non-government schools. In Tasmania however the gap is less than 5 pc points. Most of the margin between the Tasmanian and national Y12 retention rate is in the non-government school sector, not the government school sector.

It's also important to pay attention to the quality of educational outcomes, as well as to measures of the amount of schooling Tasmanian students are getting.

This time last year I summarized the results for Australia of the OECD Programme for International Student Assessment (PISA) tests administered in 2003 by the Australian Council for Educational Research[12] (Slide 20).

It suggests that on three important measures of educational attainment – reading literacy, mathematical literacy, and problem solving ability – Tasmanian students are, regrettably, near the 'bottom of the class' - with only the Northern Territory having a higher proportion of students 'failing to reach level 1' (the lowest level of attainment) in these three areas, and a smaller proportion of students in the highest levels.

Another set of internationally standardized test results which was released just after last year's Tasmanian Economic Forum – the Trends in International Mathematics and Science Study or TIMSS[13] (Slide 21) - suggests that Tasmanian school children do well by national standards in mathematics and science by year 4: their scores are slightly below the national average, but better than those for the other small States.

But then something happens – or doesn't happen – over the following four years which leaves Tasmanian school children performing well below the national average in maths and science by Year 8, lower than for any other State.

When I've referred to the results of these two surveys over the course of the past year, the Minister for Education has on occasion emphasized that:

- I'm an economist not an educational expert (to which I plead guilty as charged);
- that the differences between the results for Tasmania and other States are not significant (which may be true although I've said, partly tongue-in-cheek, that if the differences were the other way round the Minister would probably say they were significant and take the credit for them); and
- that 'the' preferred comparison was against the benchmarks established by the Ministerial Council on Education, Employment, Training and Youth Affairs or MCEETYA.

I should note that the Chairman of the Productivity Commission, Gary Banks, has pointed out that these benchmarks focus on the proportion of students who do not reach a minimum standard (one which students who do not reach 'would have difficulty progressing satisfactorily at school') rather the more conventional approach to benchmarking which focuses on some concept of 'best practice'.

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[12] Australian Council for Educational Research, *PISA in brief from Australia's Perspective,* http://www.acer.edu.au/research/PISA/documents/PISA_Brief_screen.pdf.

[13] Australian Council for Educational Research, *Trends in International Mathematics and Science Study 2002-03,* http://www.acer.edu.au/research/TIMSS/TIMSS_02_03.htm.

And they are not derived from any nationally applied test, unlike the PISA and TIMSS results which I mentioned earlier. Hence, as Gary Banks observes, the MCEETYA data are 'a very blunt indicator and tend to show only winners'[14].

Nonetheless, when one looks at the MCEETYA numbers in full (Slide 22) – rather than the limited tabulation of them presented in this year's Annual Report of the Department of Education – one sees that they show essentially the same picture as the other surveys –

- namely, that Tasmanian kids to pretty well in the early years of schooling, suggesting that they are as innately smart as kids from anywhere else in the country
- but that by the time they get to Year 7 they have slipped below the national average.

As I understand it, one of the main objectives of the Essential Learnings Framework is to get teachers to provide more objective and rigorous feedback to parents on their children's performance and achievements. I hope that it does so.

My underlying message regarding the sustainability of the improvement in Tasmania's economic performance remains summarized in the assertion that 'Tasmania's future cannot possibly lie predominantly in the volume production of essentially unprocessed goods and services at lower prices than competitors with better access to larger and cheaper resources of labour and capital, or to markets; but instead depends on its capacity to produce and market highly differentiated goods and services embodying a relatively high intellectual content for which customers are willing to pay a premium price'.

I re-iterate it (again!) here in the context of my earlier point that having the lowest labour costs in the country may not be the point of competitive advantage that it is commonly portrayed as being.

Having the lowest labour costs as a result of having the least skilled labor force in fact leaves Tasmanian producers, and the Tasmanian economy, more vulnerable to competition from others with even lower labour costs, or who for other reasons - such as lower taxes, less stringent environmental or health and safety regulation, subsidies or a willingness to operate on thinner profit margins – can sell at lower prices than Tasmanian producers.

It's only by providing consumers with compelling reasons to buy Tasmanian (at prices that cover the cost of producing in a relatively small and isolated location with legitimate aspirations to high living standards for all) that Tasmanian producers can expect to survive.

The focus during 2005 on the difficulties experienced by Tasmanian vegetable growers provides an exact illustration of this point. I am not unsympathetic to calls for more information to be made available to consumers regarding the origin of the products which they buy. But I am skeptical that this will make much difference in practice to the vast majority of shoppers who, every day, demonstrate by their behaviour that price and convenience are much more important influences on what they buy, and where they buy it, than country of origin.

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[14] Gary Banks, *Comparing School Systems Across Australia*, Address to an Australia and New Zealand School of Government Conference, 'Schooling in the 21st Century: Unlocking Human Potential', Sydney, 28-29 September 2005, pp. 18 and 22.

We in the West have no moral right to prevent people much poorer than us from seeking to improve their living conditions by selling things to us. Nor do we have any moral right to force our own consumers to pay higher prices for things they want to buy, or to restrict their choices, merely to keep otherwise uncompetitive businesses alive - except, perhaps, in those instances where competitors are competitive only by reason of receiving subsidies from their governments.

We need to remember that producers exist to serve the needs of consumers, not the other way round. If producers cannot serve the needs of consumers, at prices consumers are willing to pay, then they have no right to continue to exist; and governments do no service to anyone by pretending otherwise.

Many of Tasmania's potato-growers appear to have relied on a single customer to purchase most, if not all, of their crop; and have not given much (if any) attention to developing other customers, or to giving customers any reason to think that Tasmanian potatoes have characteristics which make them sufficiently distinct to warrant them commanding a higher price than potatoes produced elsewhere. As the experience of Costa Rican banana producers, whose position in many ways resembles quite closely that of Tasmanian potato growers (slides 24-25) indicates, this should not be an impossible goal.

Indeed, other Tasmanian agricultural producers have demonstrated that such strategies can be successfully pursued in Tasmania.

The "four 'w's" – wool, wine, wasabi and wagyu beef – in addition to onions, cheese and salmon, are all examples of Tasmanian primary producers who have established a brand identity and successfully convinced consumers in Australia, Germany, Japan (whose consumers are the most discerning and demanding in the world) and elsewhere to pay premium prices for their product, thereby enabling them to overcome the disadvantages associated with small scale and large distance from major markets.

The common ingredient in all of these success stories – and the missing ingredient in nearly all of the failures – is intellectual input of some form or another: product improvement, enhanced variety, customisation, design, branding, and marketing – with a view to creating something which can be sold at a relatively high price, rather than at a low price.

That's why I am increasingly coming around to the view that a sustained effort to increase the quantity and improve the quality of the education received by Tasmanian students – and for that matter by Tasmanian adults through their working lives – is an integral part of sustaining and building upon the recent improvement in Tasmanian economic performance.

The Tasmanian Government is now in a very strong position to fund improvements in the quantity and quality of the education offered to children and adults (Slide 26):

- On a 'no-policy-change' basis Tasmania will register cash surpluses averaging $155mn or ¾% of GSP over the four years to 2008-09 (although this may be affected by any change to forecasts of GST revenues); and

- Tasmania has now joined Queensland, Western Australia and the ACT (and presumably also the Commonwealth) as a net creditor, and Tasmania is now a net recipient of interest.

While State Governments do need to be fiscally prudent at all times, unlike the Federal Government there is no requirement upon them to run surpluses for macro-economic policy purposes, and there is no particular virtue in being a net creditor.

It's not often that a financial markets economist publicly advocates increased government spending, but in this particular instance I'm happy to do so.

Beyond maintaining a stable and competitive business environment and promoting competition it's hard to think of anything that would do more to enhance the prospects for enhancing Tasmania's productivity performance – and hence for delivering sustainable improvements in Tasmanian living standards – than improving the quantity and quality of education offered to Tasmania's children and adults.