THE 2016 'TASMANIA REPORT' – WHERE TO FROM HERE?

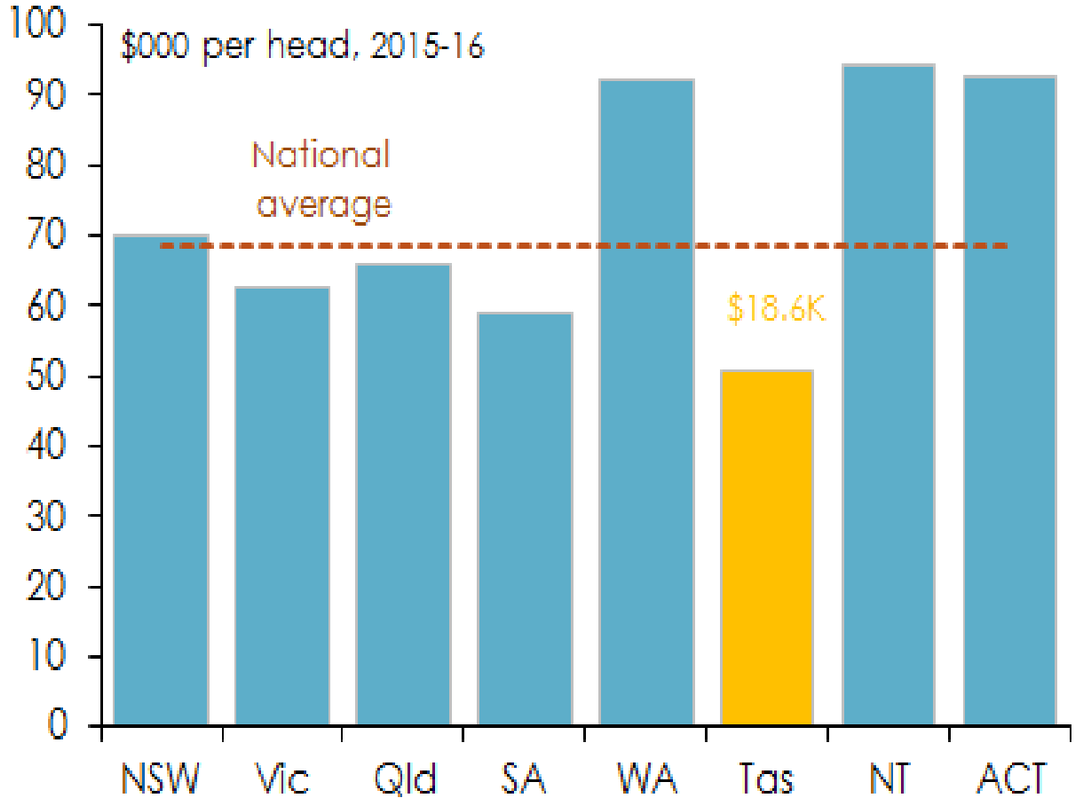
PRESENTATION TO THE TASMANIAN ECONOMIC FORUM

HOSTED BY THE ECONOMIC SOCIETY OF AUSTRALIA (TASMANIA BRANCH)

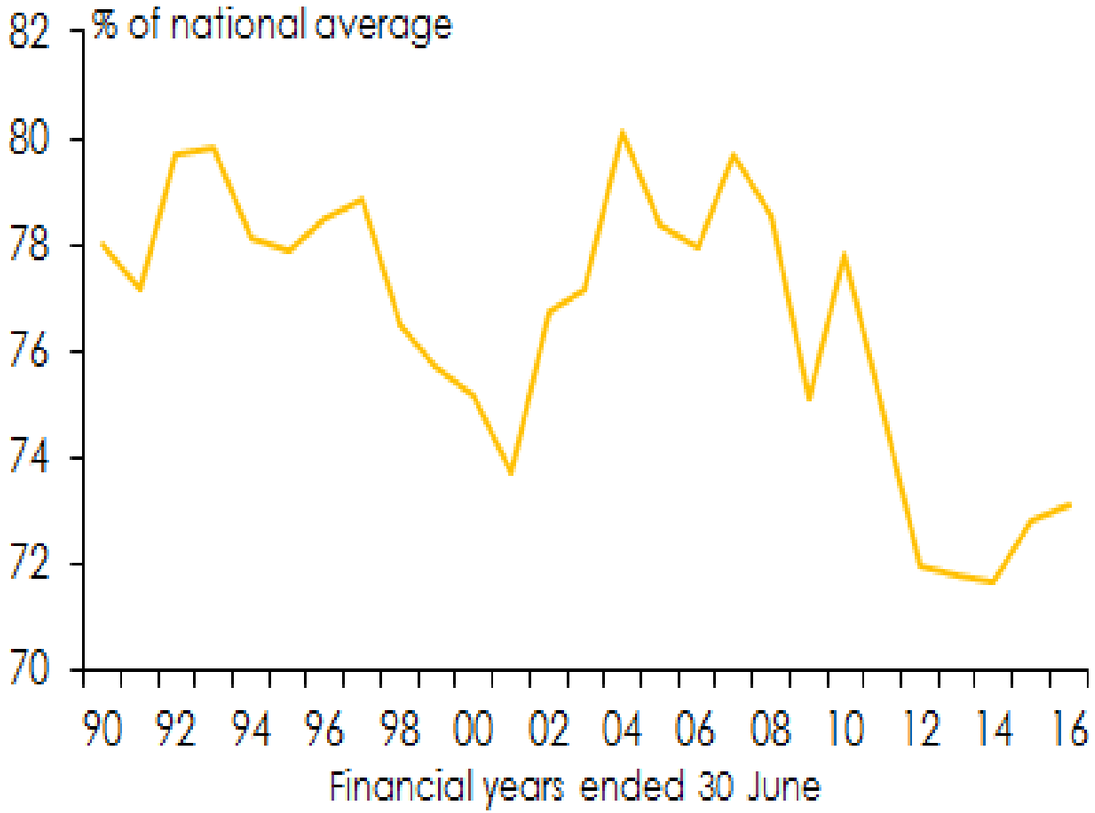
HOBART FUNCTION & CONFERECE CENTRE - 17TH FEBRUARY 2017

Tasmania's per capita gross product is 27% below the national average

Gross state product per capita, States and Territories, 2015-16



Tasmanian gross state product per capita as a pc of the national average

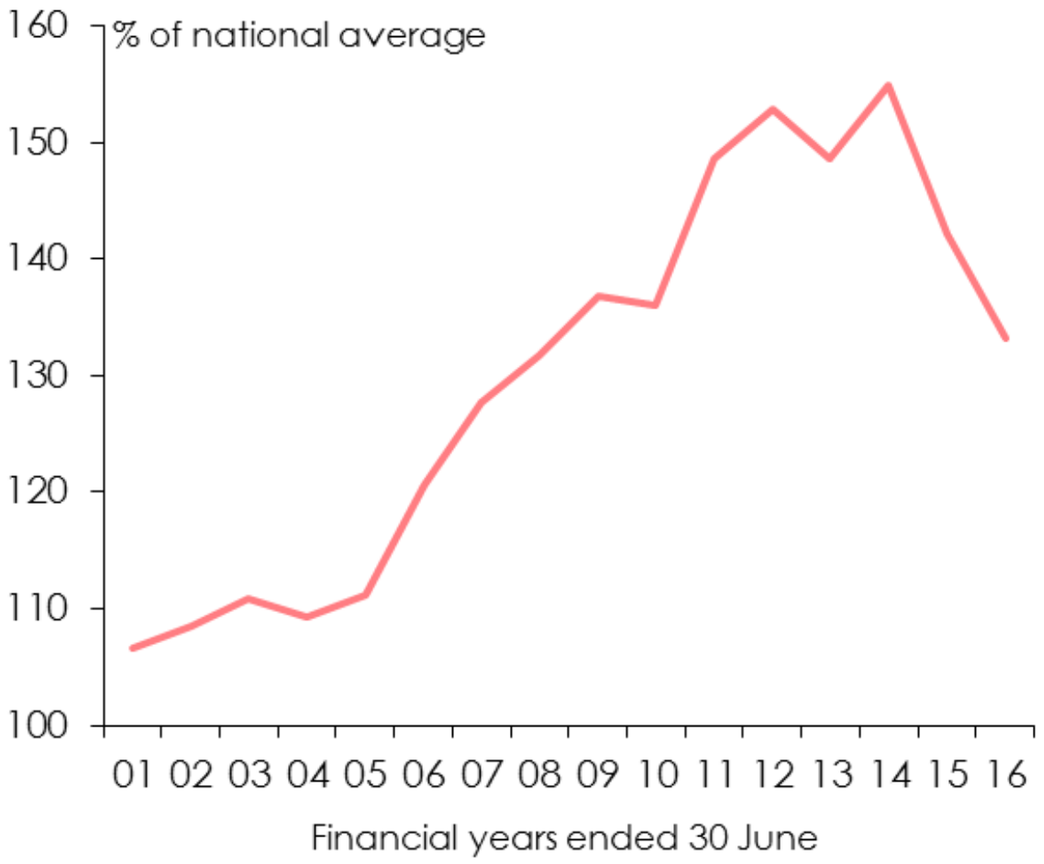


Sources: ABS 5220.0.

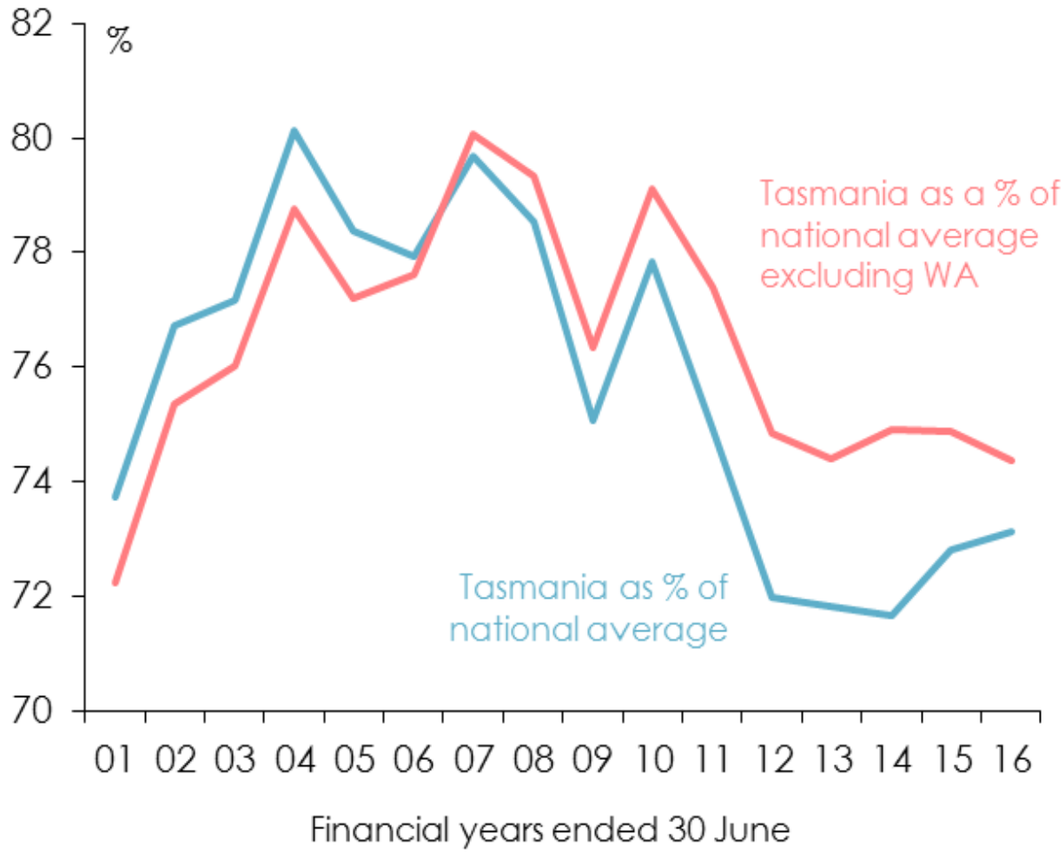
SAUL ESLAKE

Some of the widening in the 'GSP gap' in recent years reflects the effects of the boom in WA on the national average – but not much

Western Australia's per capita GSP as a pc of the national average



Tasmanian GSP per capita as a pc of national average excluding WA



Sources: ABS 5220.0

SAUL ESLAKE

Why does this gap exist?

$$\frac{\text{gross State product}}{\text{population}} = \frac{\cancel{\text{employment}}}{\text{population}} \times \frac{\cancel{\text{total hours worked}}}{\cancel{\text{employment}}} \times \frac{\text{gross State product}}{\cancel{\text{total hours worked}}} = \frac{\text{gross State product}}{\text{population}}$$

SAUL ESLAKE

Why does this gap exist?

$$\frac{\text{gross State product}}{\text{population}} = \frac{\text{employment}}{\text{population}} \times \frac{\text{total hours worked}}{\text{employment}} \times \frac{\text{gross State product}}{\text{total hours worked}}$$

$$= \text{participation rate} \times \text{average hours worked} \times \text{labour productivity}$$

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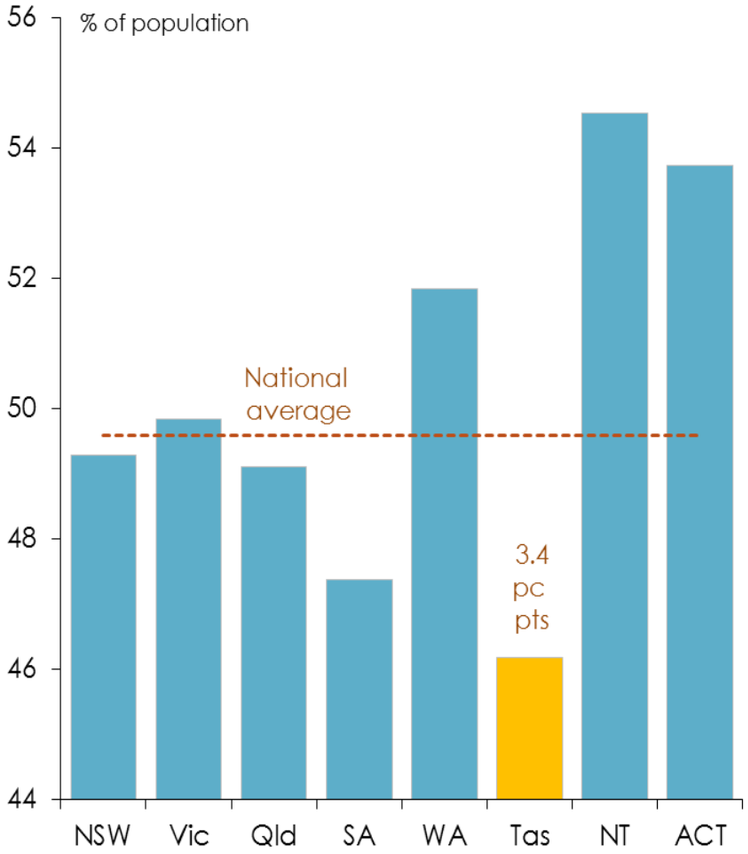
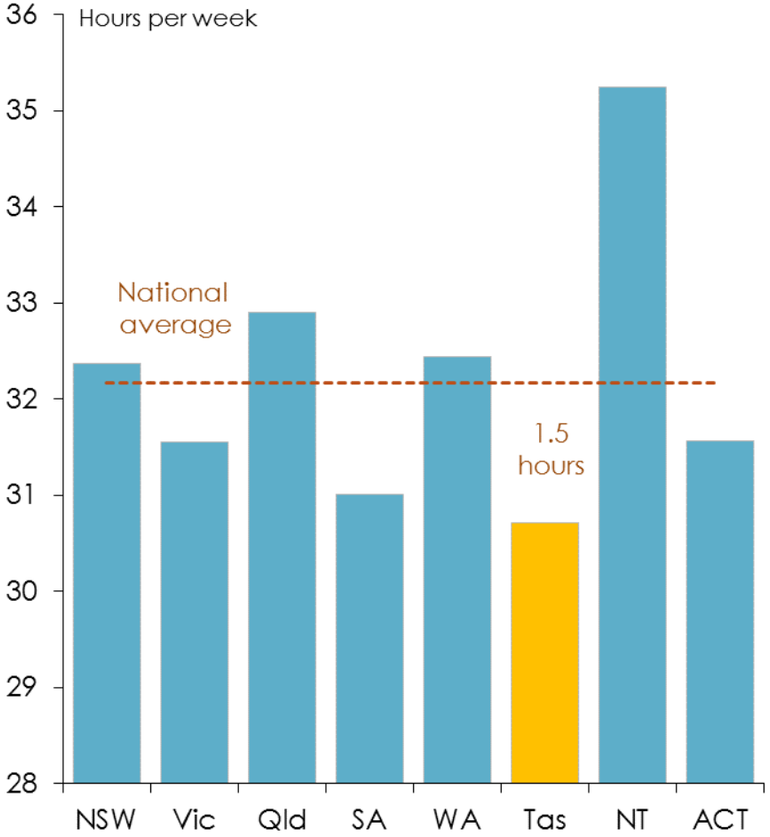
Tasmania's below-average per capita GSP reflects below-average employment participation, working hours, and productivity

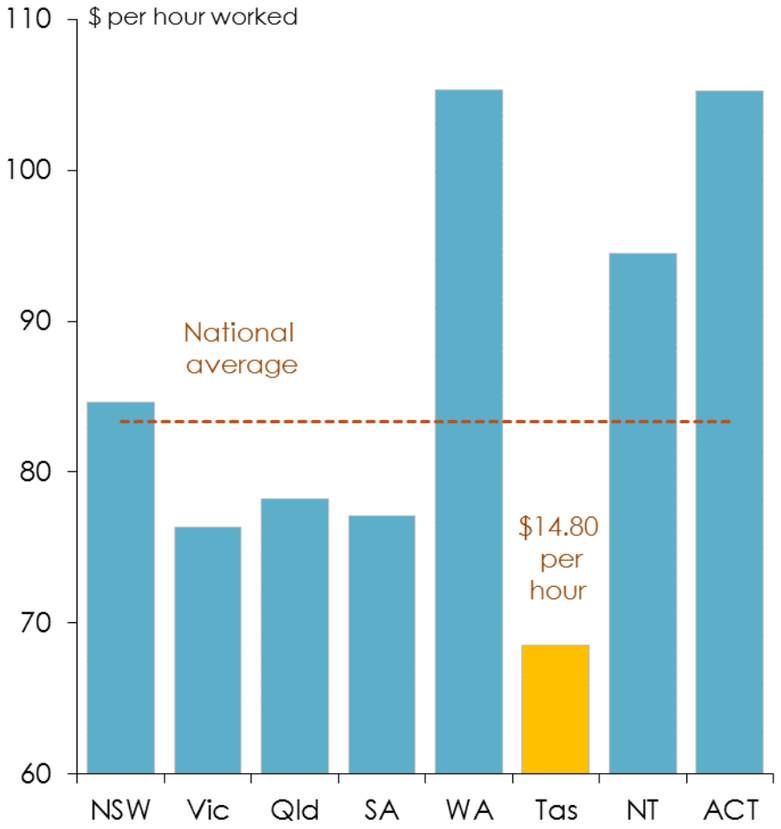
Employment-to-population ratio, 2015-16



Average weekly hours worked, 2015-16



Output per hour worked, 2015-16

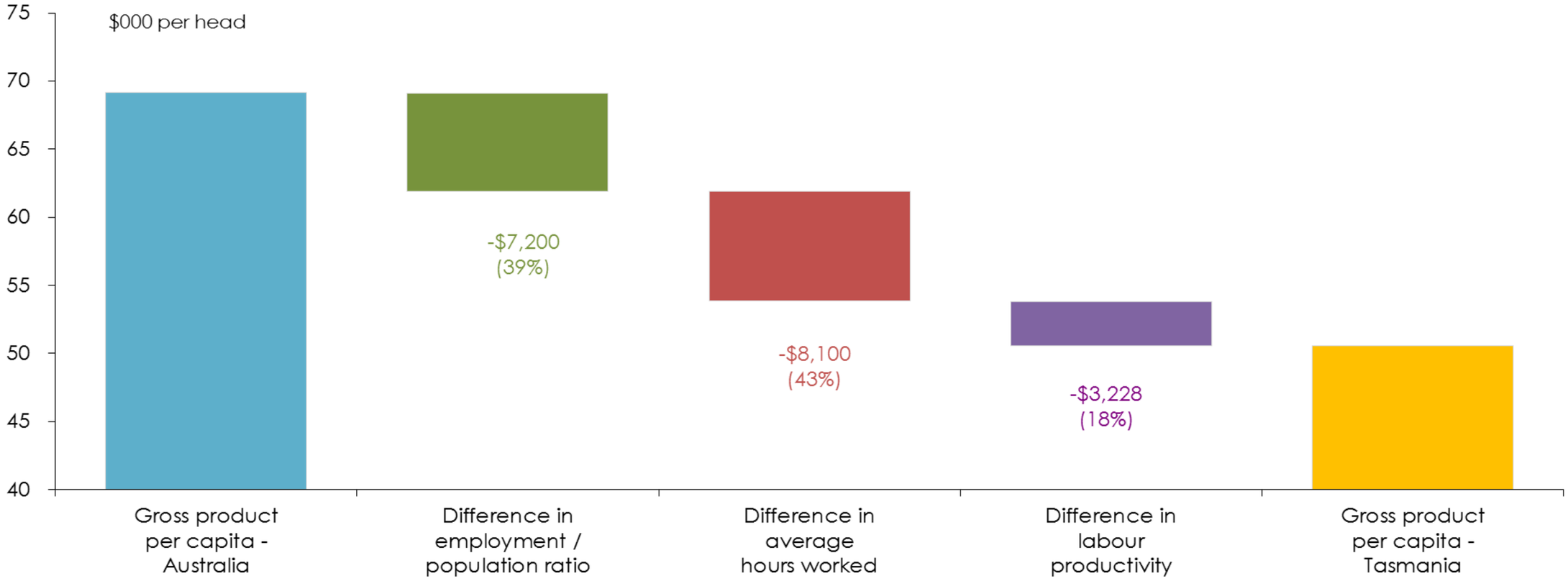


Sources: ABS 5220.0 and 6201.0

SAUL ESLAKE

Tasmania's below-average per capita GSP reflects below-average employment participation, working hours and productivity

Sources of the difference in per capita gross product between Tasmania and Australia, 2015-16

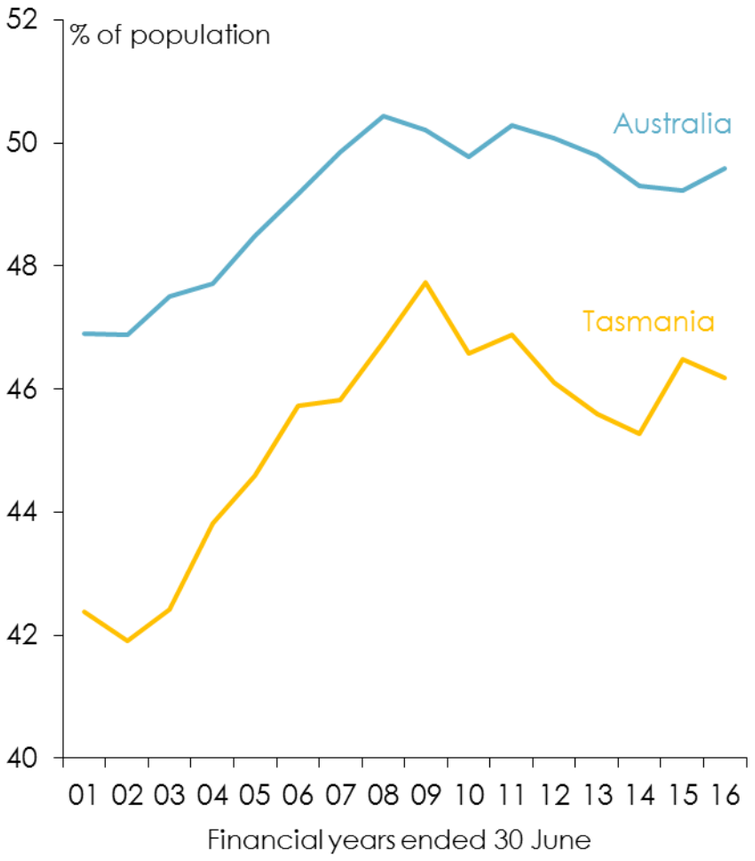


Sources: ABS 5220.0 and 6201.0

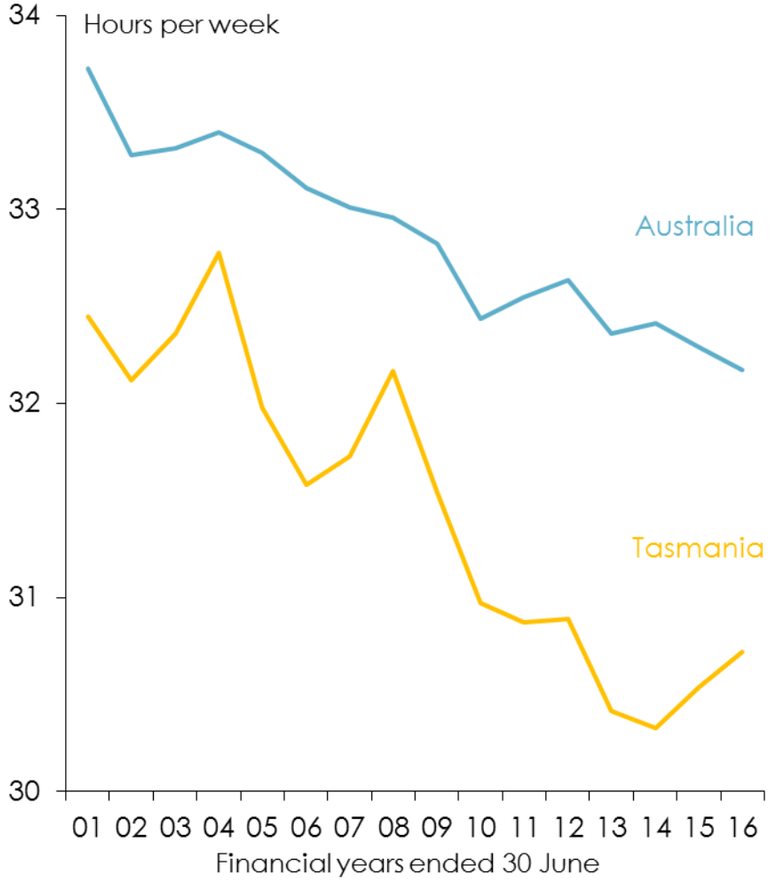
SAUL ESLAKE

It's not immediately obvious that any of these three 'drivers' of the GSP gap are showing any improving trend relative to the rest of Australia

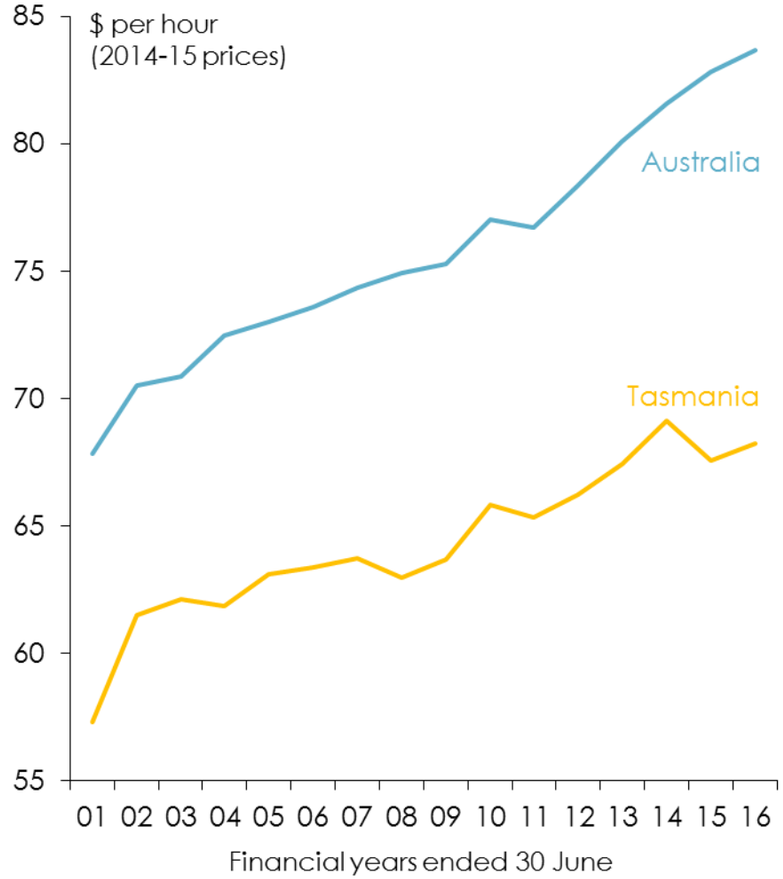
Employment-to-population ratio, 2000-01 to 2015-16



Average weekly hours worked, 2000-01 to 2015-16



Output per hour worked, 2000-01 to 2015-16



Sources: ABS 5220.0 and 6201.0

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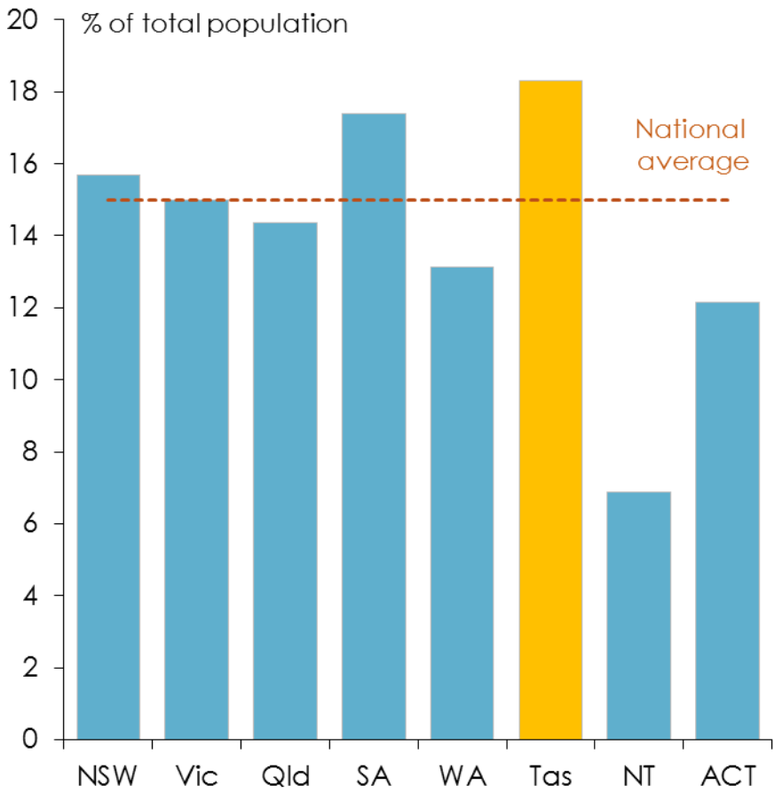
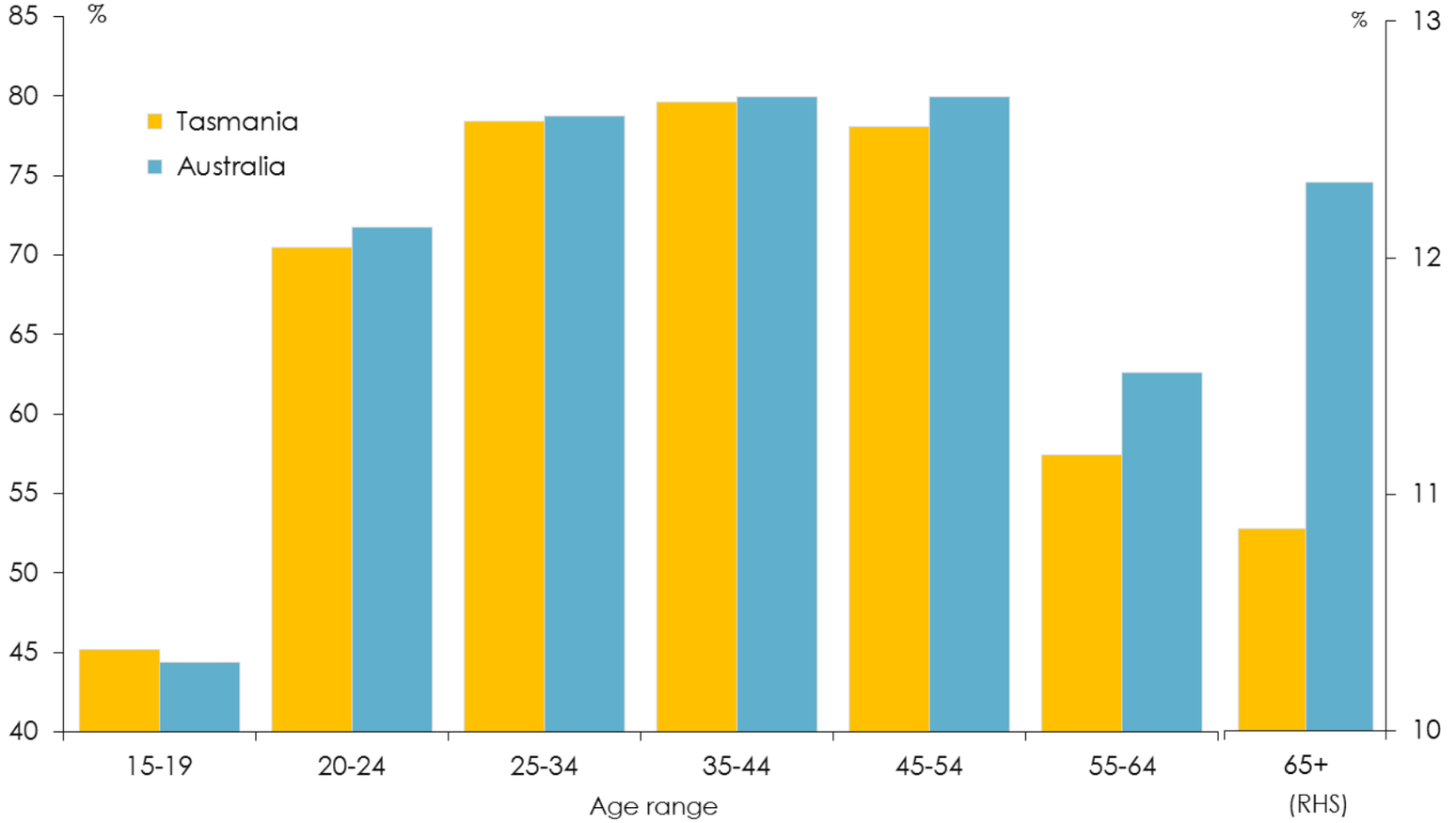
Tasmania's 'employment participation gap' is partly a result of the age structure of our population – but only partly

Pc of population aged 65 and over, 2015



Employment as a pc of population, by age group, 2015



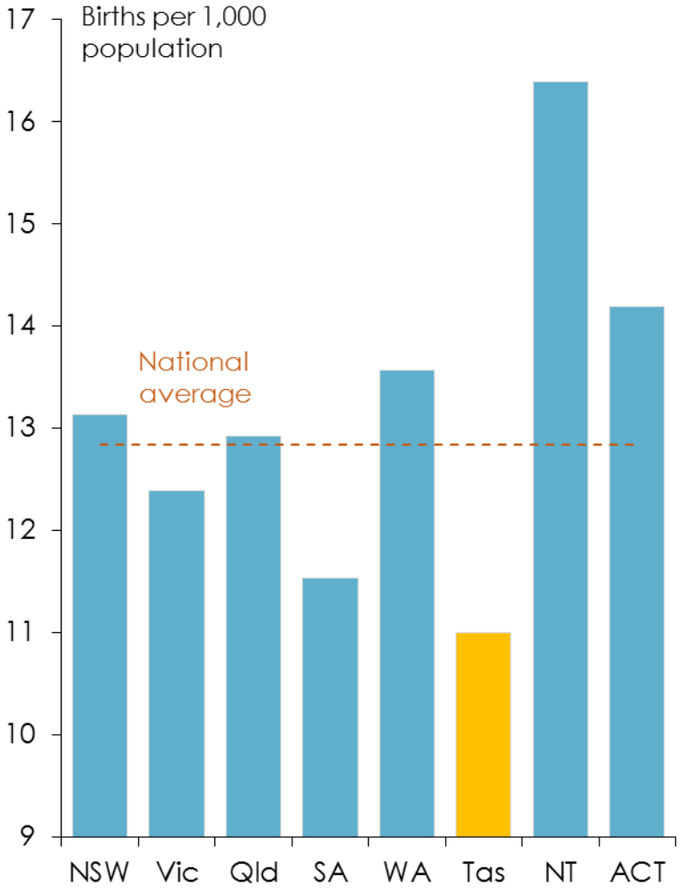
Sources: ABS 3101.0 and 6291.0.55.001.

SAUL ESLAKE

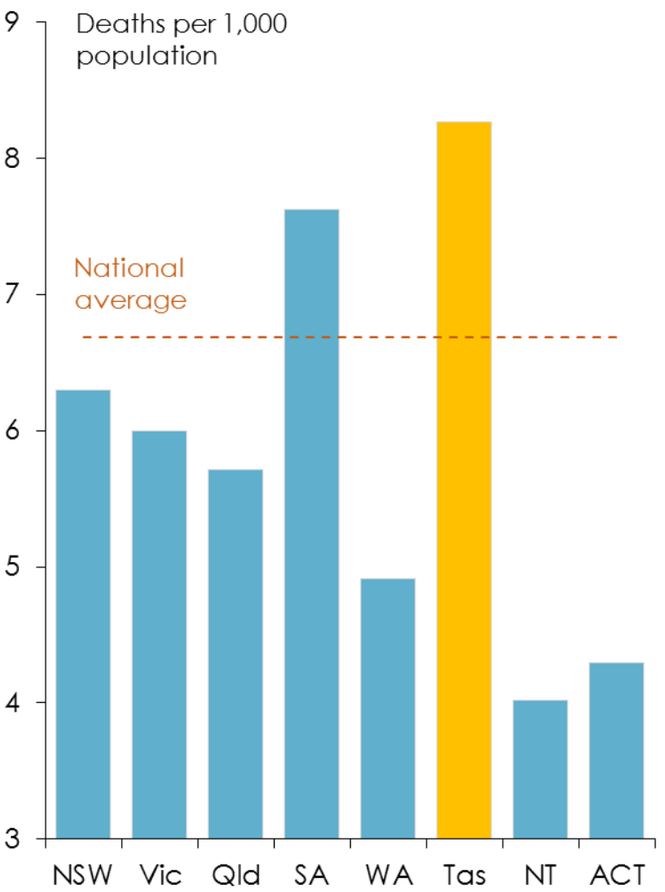
Reflecting both interstate migration and 'natural' causes …

Net interstate migration to Tasmania, 2006-07 to 2014-15

Crude birth rate, 2015



Crude death rate, 2015

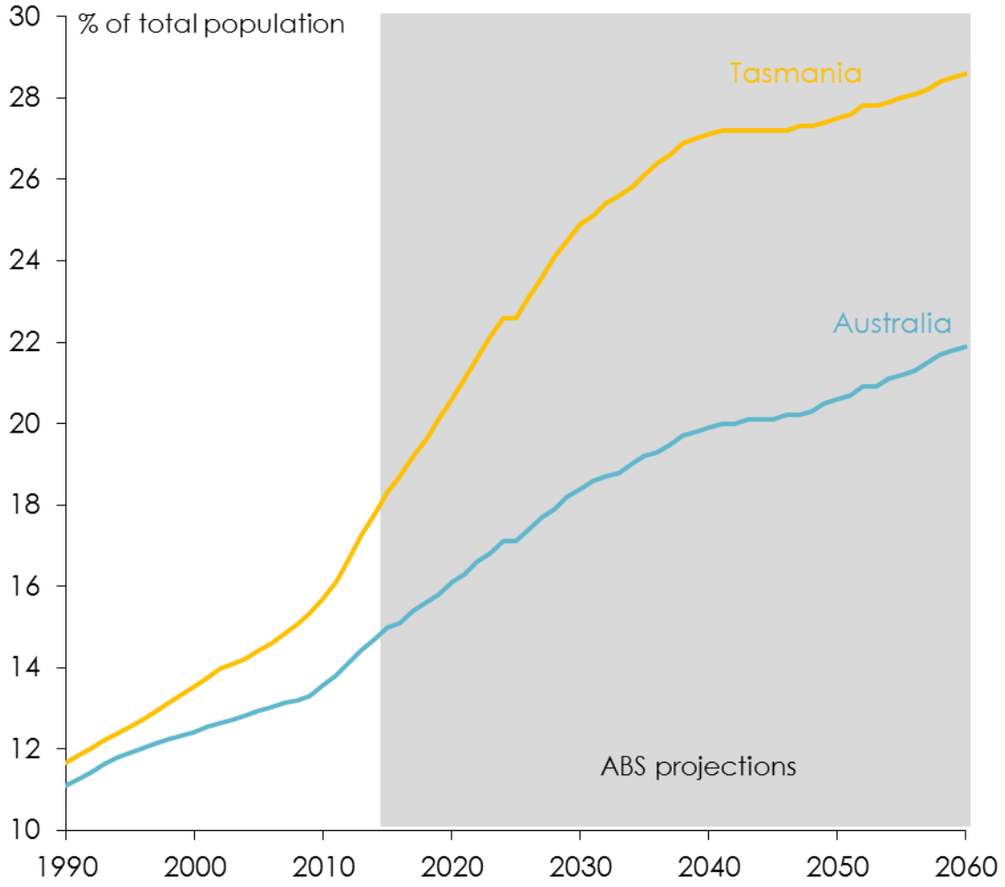


Sources: ABS, ABS.Stat (beta); 3301.0; and 3302.0.

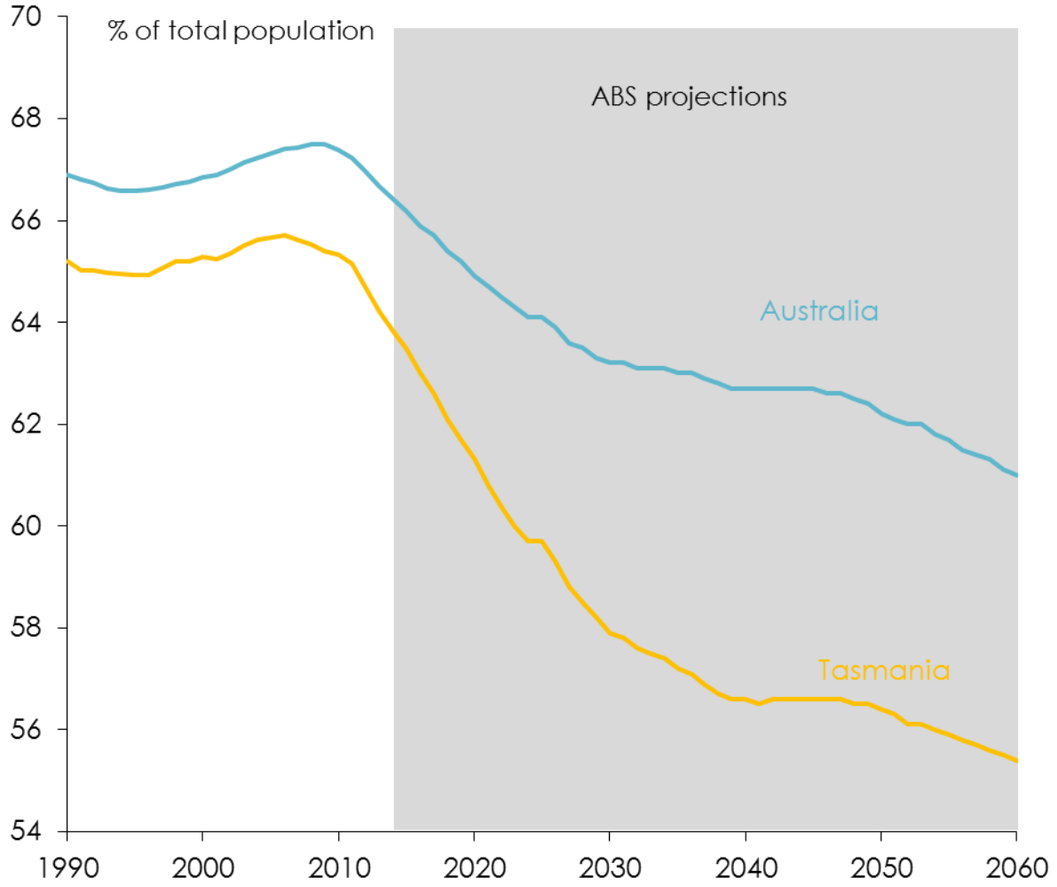
SAUL ESLAKE

… Tasmania's population is going to age even more rapidly

Pc of population aged 65 and over



Pc of population aged 15-64



Source: ABS 3222.0

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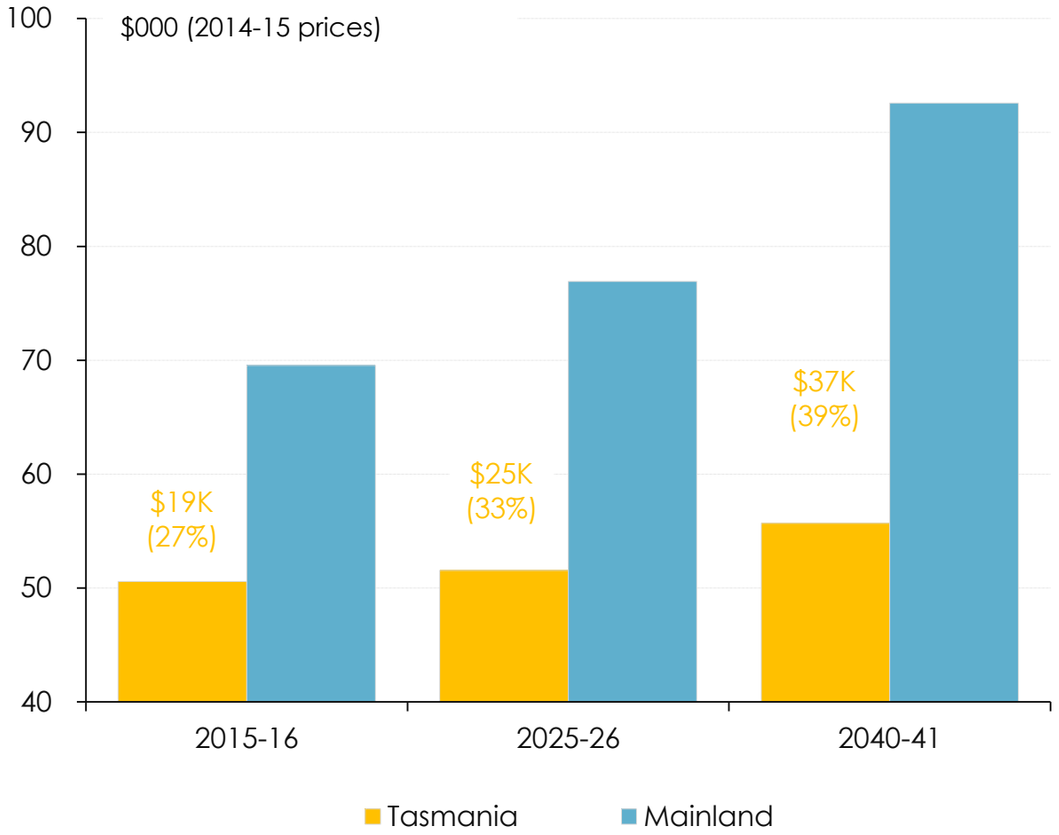
… and so the 'GSP gap' will get even larger over time, all else being equal

Projected employment rates, Tasmania and mainland

Projected levels of per capita GSP, Tasmania and mainland

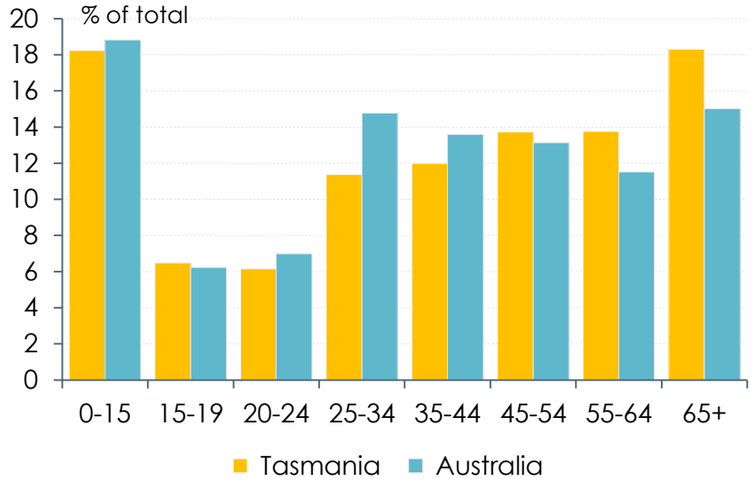


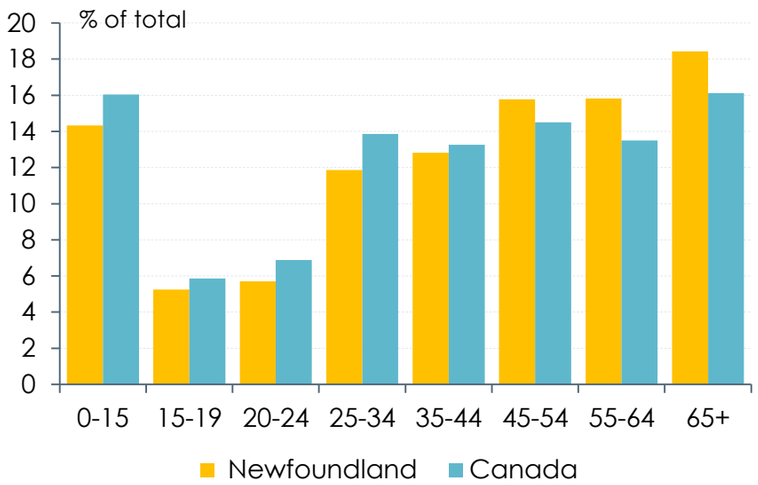
Note: Per capita GSP projections assume employment-to-population ratios for 15-64s and over 65s, and average hours worked unchanged at 2015-16 levels, and productivity growth for Tasmania and mainland continuing at same rates as over ten years to 2015-16. *Sources:* ABS 3222.0, 5220.0 and author's calculations

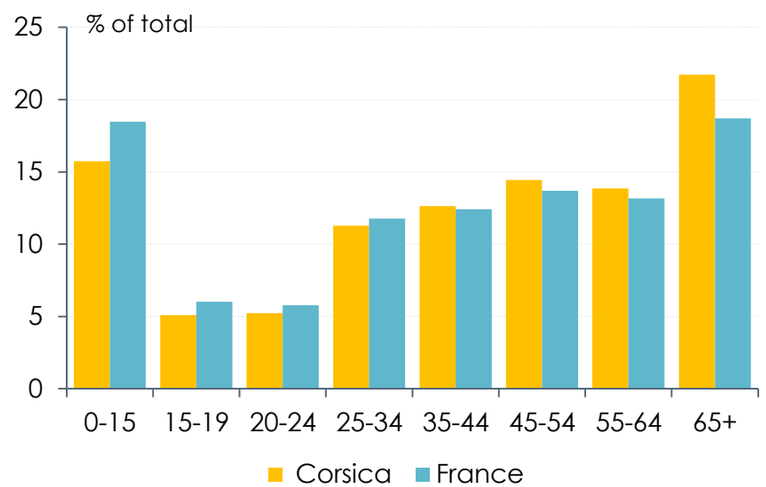
SAUL ESLAKE

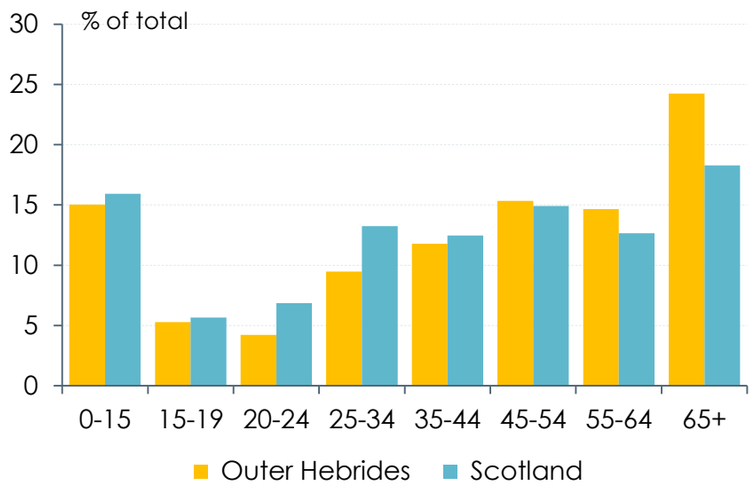
Tasmania's demographic profile is similar to that of other islands … but not all of them

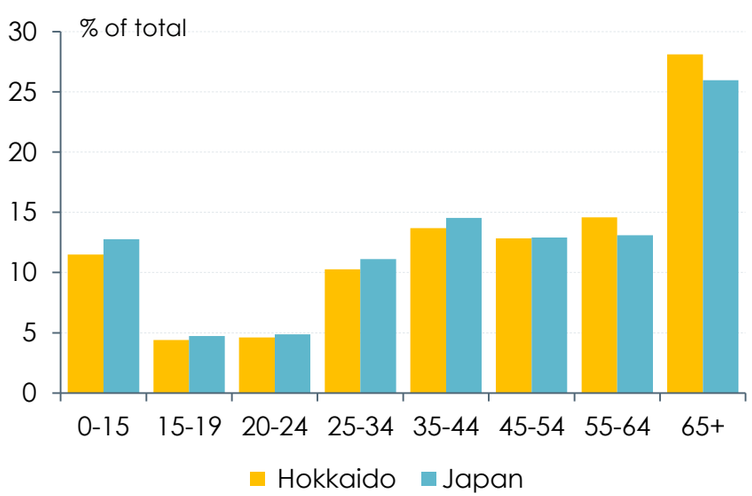
Age profile of selected islands and their 'mainlands', 2015

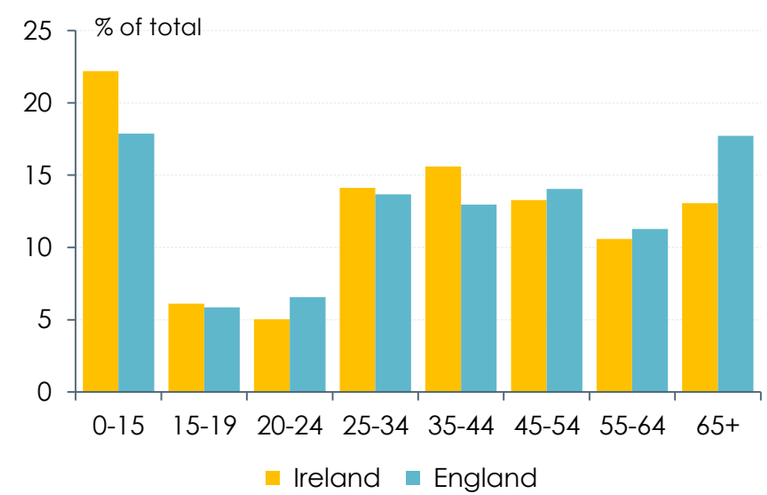












Sources: ABS; Statistics Canada; Institute National de la Statistique et des Études Économiques; UK Office for National Statistics; Statistics Japan (2014); Ireland Central Statistics Office.

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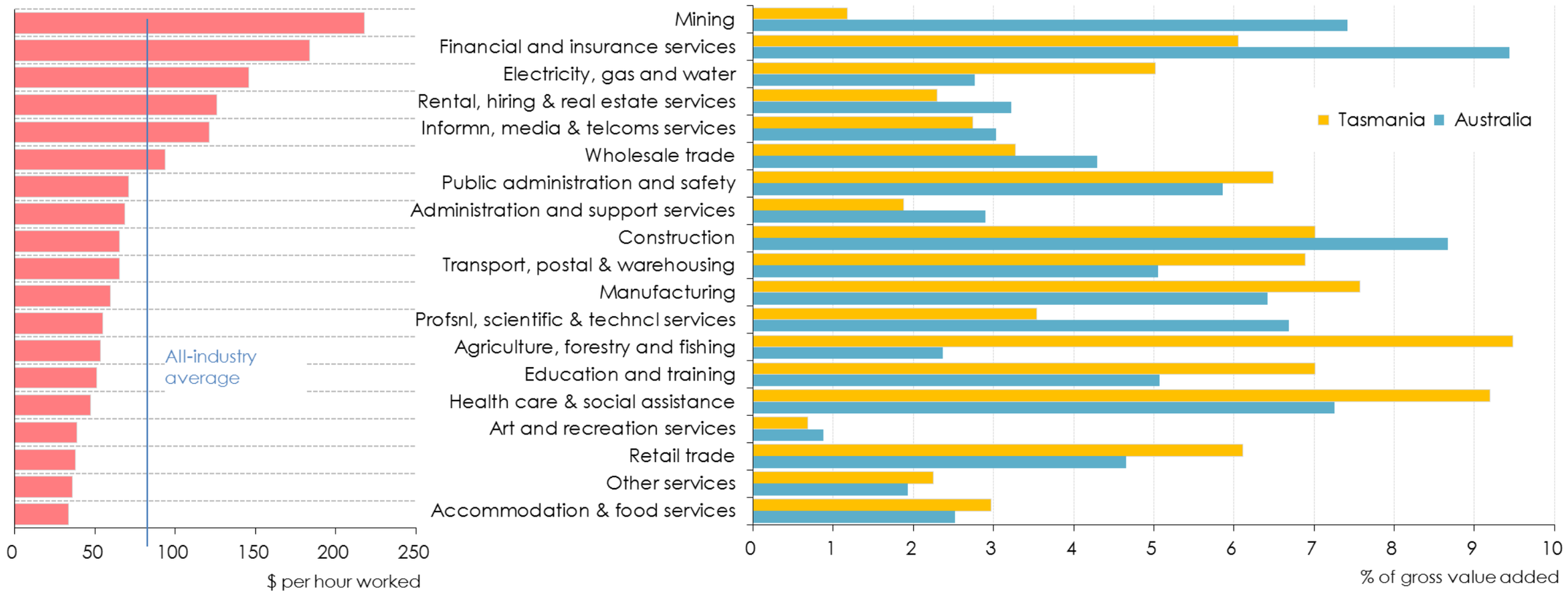
The structure of Tasmania's economy makes it hard to match the productivity levels of other States

Industry sectors ranked by Australia-wide labour productivity, and shares of the Tasmanian and Australian economies, 2015-16



Sources: ABS 5220.0, and 6291.0.55.003, and author's calculations.

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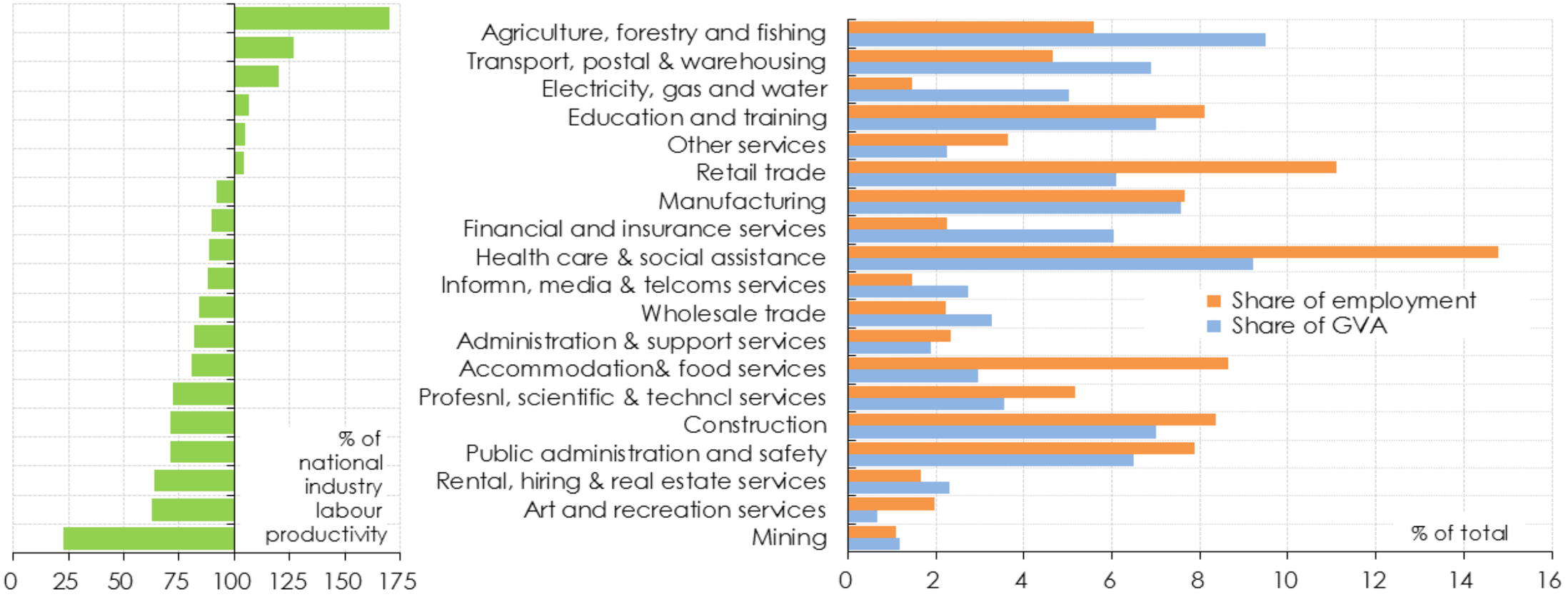
But it doesn't help when productivity in a majority of Tasmanian industries is below the corresponding national industry average

Industry sectors ranked by Tasmanian labour productivity as a pc Australia-wide averages, and shares of Tasmanian gross value added and employment, 2015-16

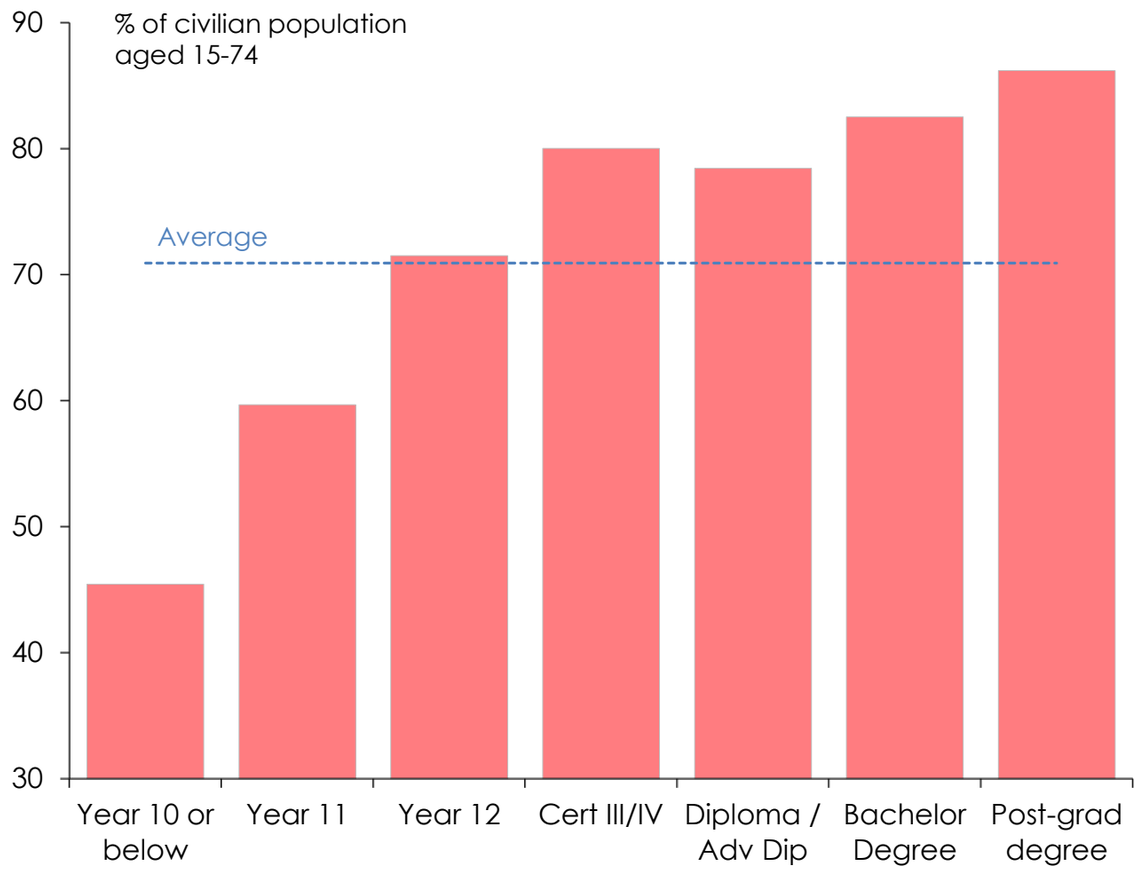


Sources: ABS 5220.0, and 6291.0.55.003, and author's calculations.

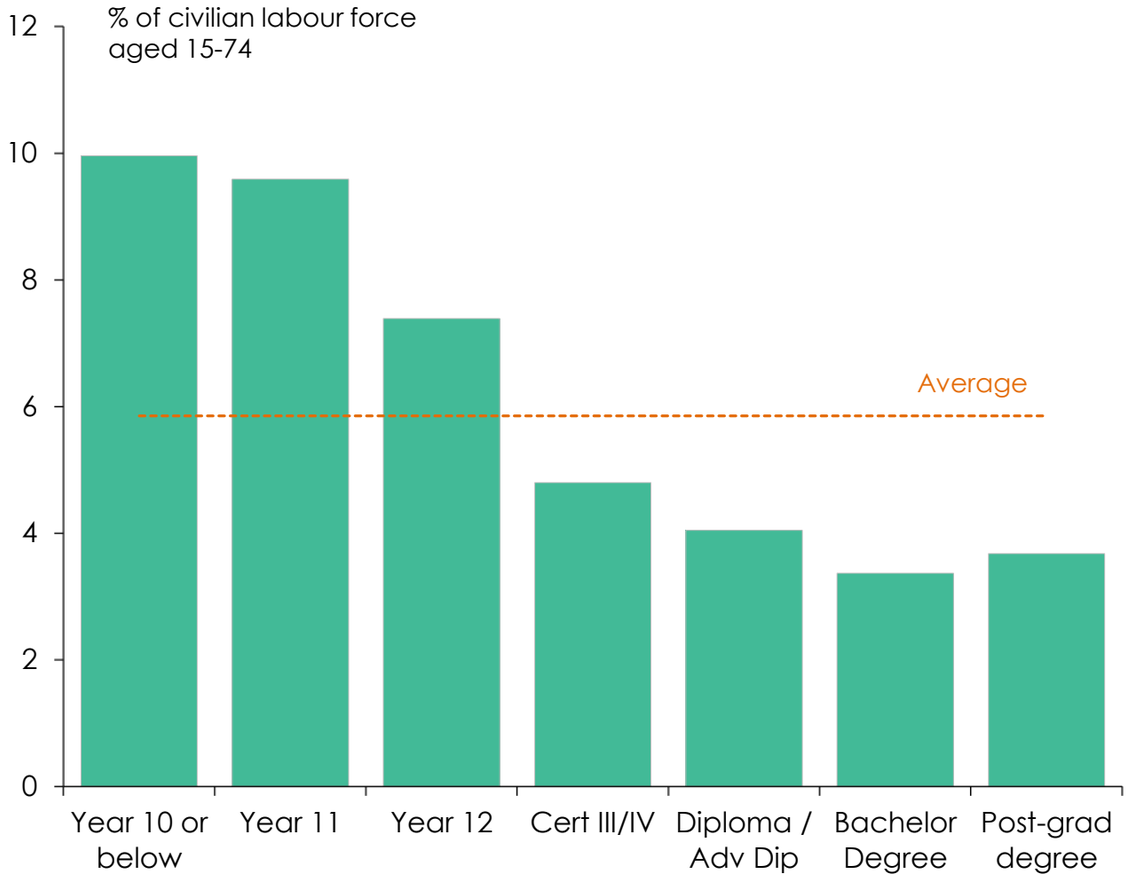
SAUL ESLAKE

Educational attainment is unambiguously positively correlated with workforce participation, and inversely correlated with unemployment

Educational attainment and labour force participation, May 2016



Educational attainment and unemployment, May 2016



Source: ABS 6227.0.

SAUL ESLAKE

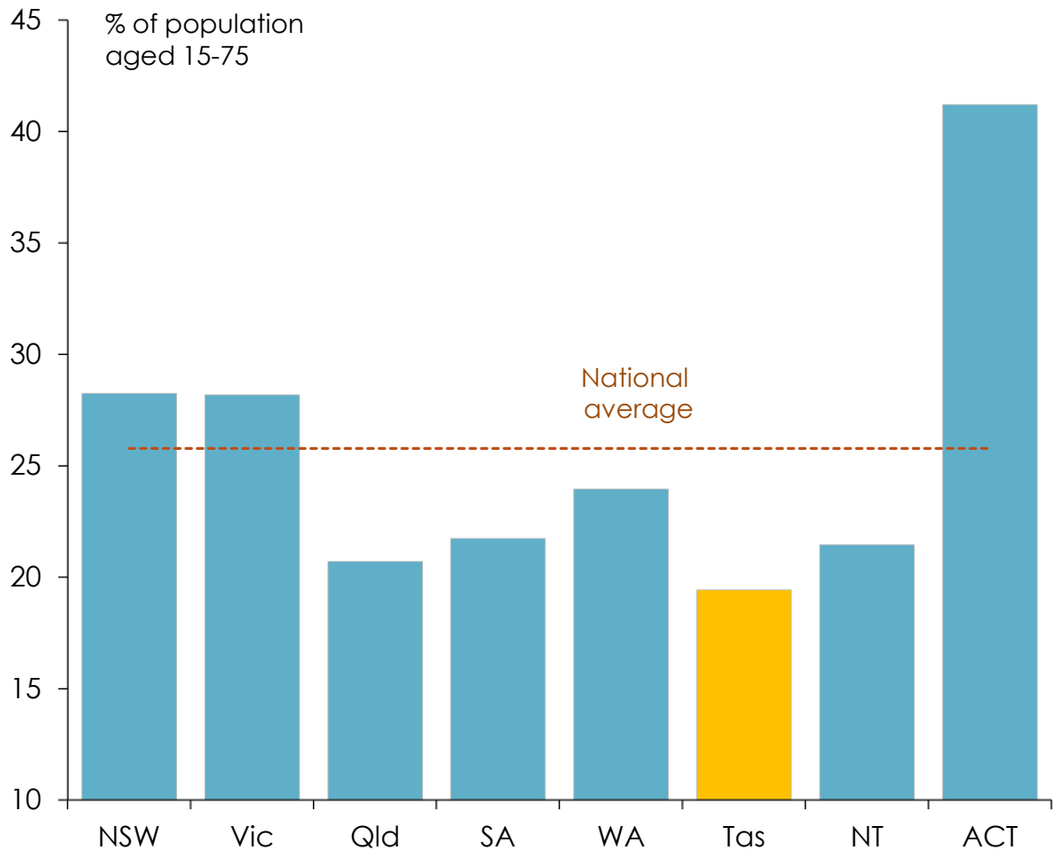
Educational attainment is also unambiguously correlated with earning capacity

- people who complete Year 12 have lifetime earnings which are 42% higher than those who leave school at Year 10, and 64% higher than those who do not go beyond Year 9;
- the lifetime of earnings of people who complete a bachelor's degree are 45-50% higher than those whose highest educational qualification is Year 12 – while those of people with a higher degree are 66-74% higher than those of people whose highest educational qualification is Year 12.

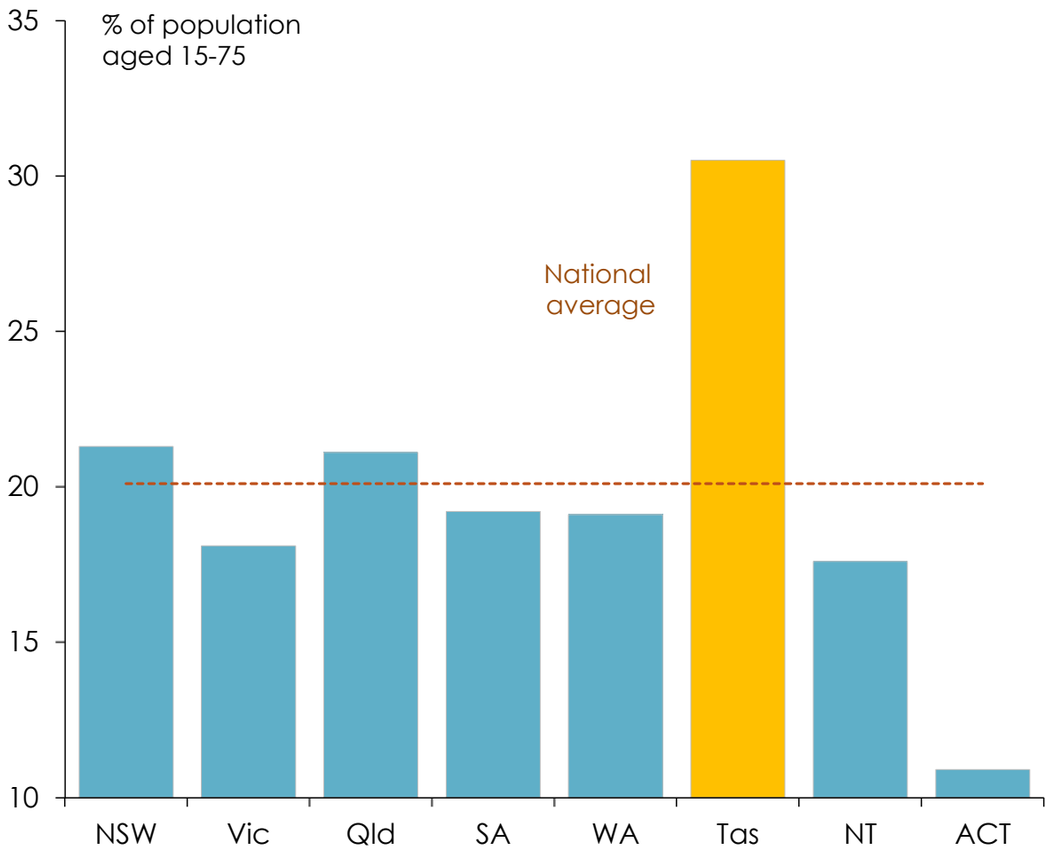
Source: Andrew Leigh, 'Returns to Education in Australia', *Economic Papers*, Volume 27, No. 3, September 2008, pp. 233-249

So, clearly, Tasmania's below-average levels of educational attainment must be detracting from its economic performance

15-75 population with bachelor's degree or higher, May 2016



15-75 population with no qualification beyond Year 10 of high school, May 2016



Source: ABS 6227.0.

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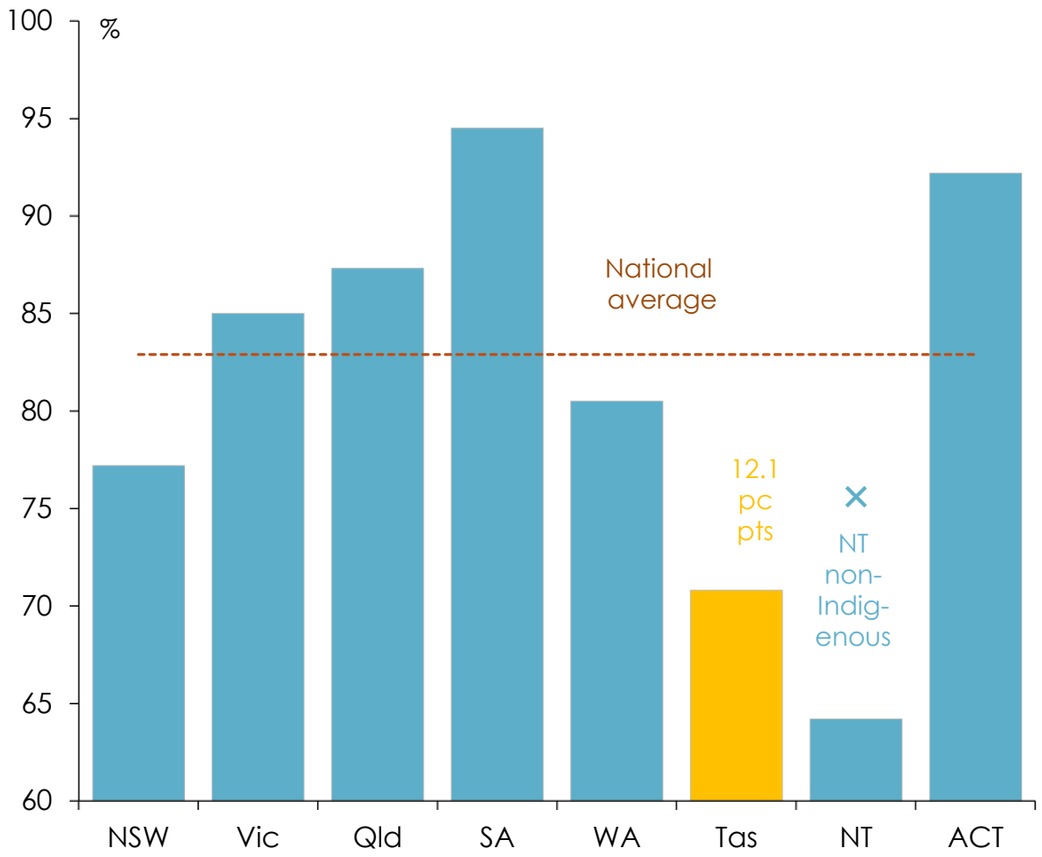
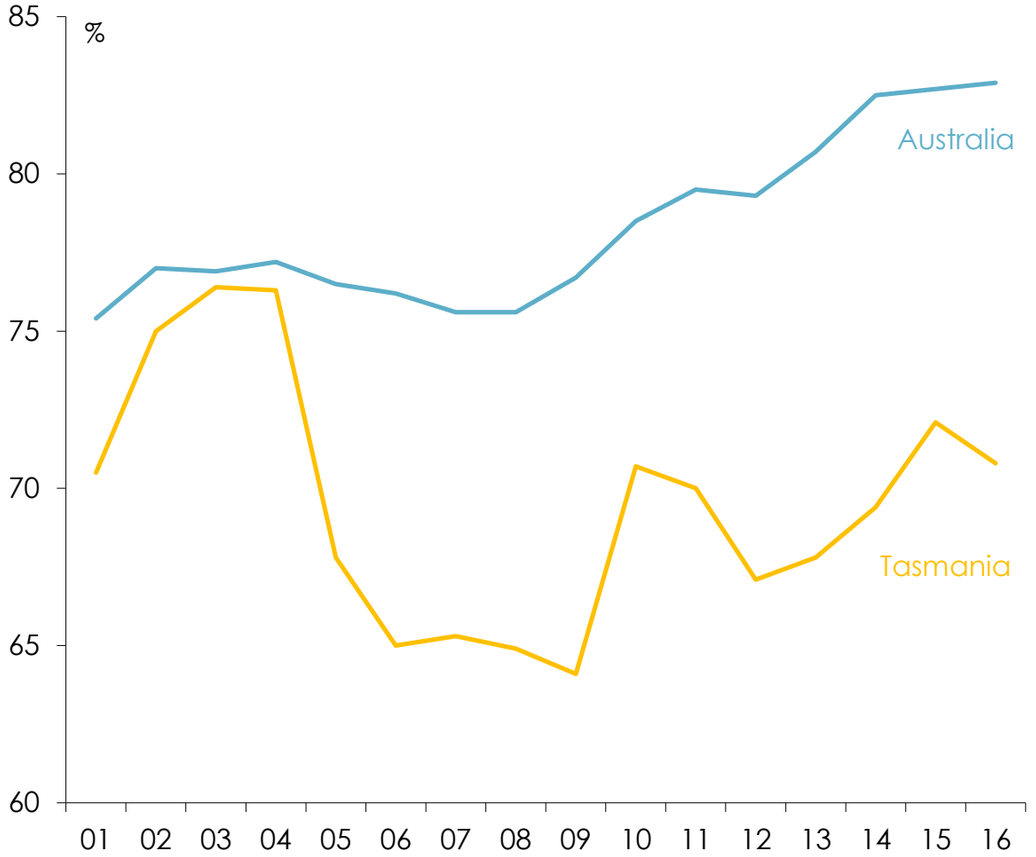
It will be difficult to raise average skill levels in Tasmania while the proportion of Tasmanians doing Year 12 remains so low

Apparent school retention rates from Year 10 to Year 12, 2016



Apparent school retention rates from Year 10 to Year 12, Tasmania vs national average



Source: ABS 4221.0.

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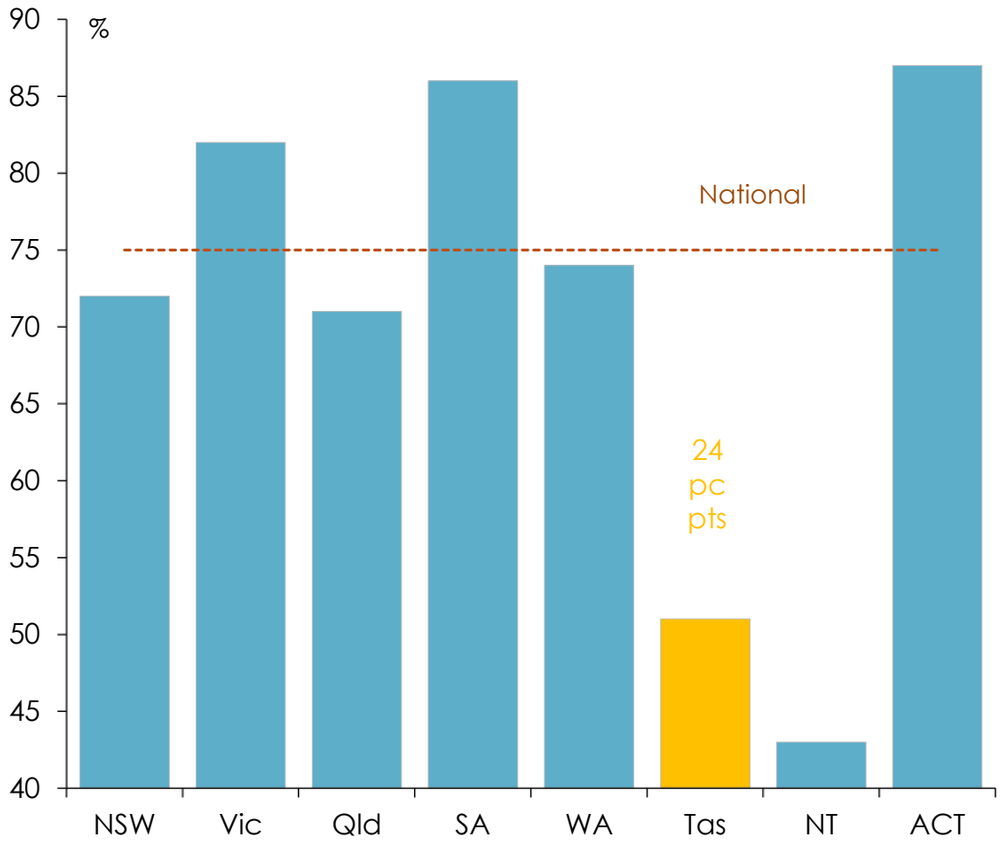
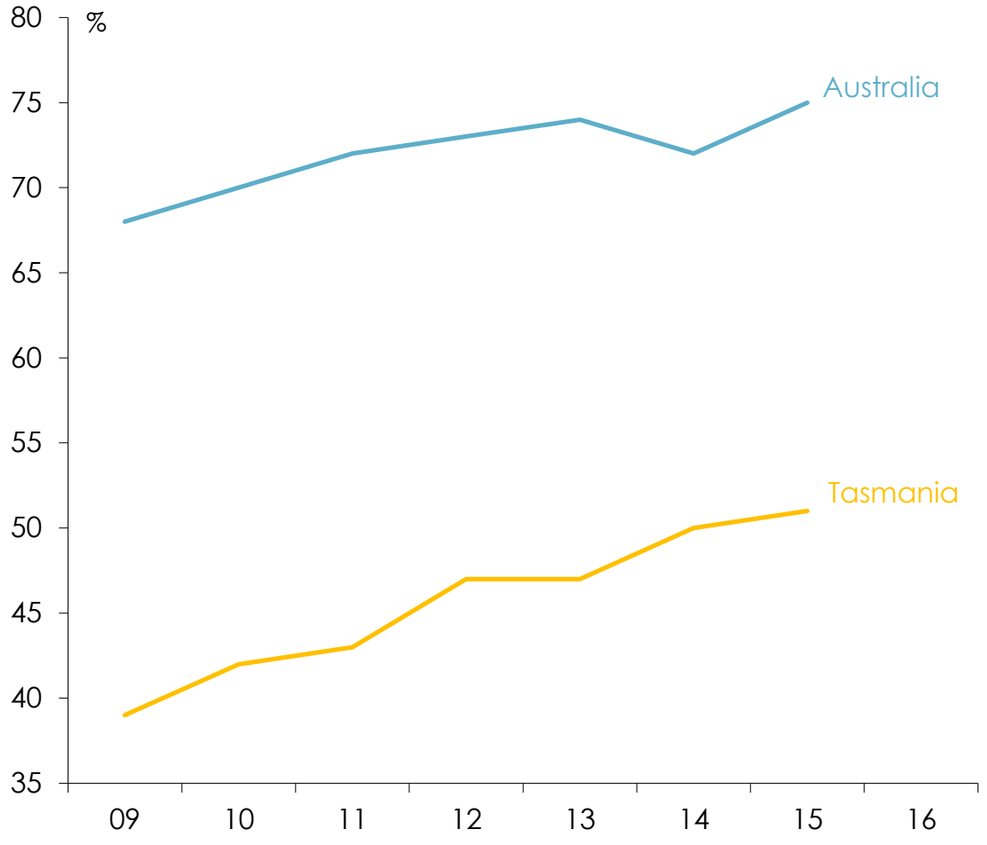
It will be difficult to raise average skill levels in Tasmania while the proportion of Tasmanians completing Year 12 remains so low

Year 12 completion rates, 2015



Year 12 completion rates, Tasmania vs national average



Note: Completion rates are estimated by calculating the number of students who meet the requirements of a year 12 certificate or equivalent expressed as a percentage of the potential year 12 population. The potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 years divided by five. *Source:* Productivity Commission, *Report on Government Services,* 2017, Volume B, Chapter 3. Second chart commences in 2009 to avoid series break associated with introduction of TCE.

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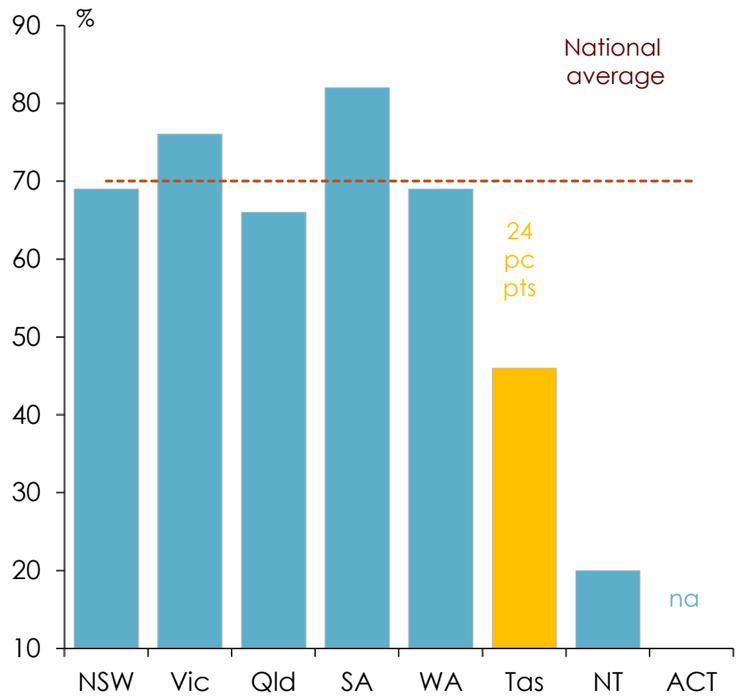
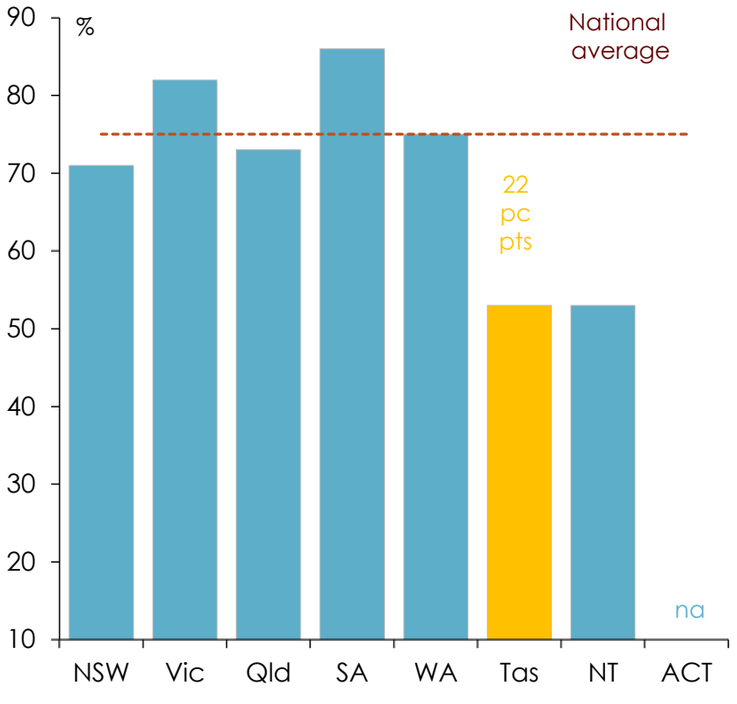
Tasmania's below-average Year 12 completion rates are not the result of more Tasmanian students coming from low SES households

2015 Year 12 completion rates by students' socio-economic status, States and Territories

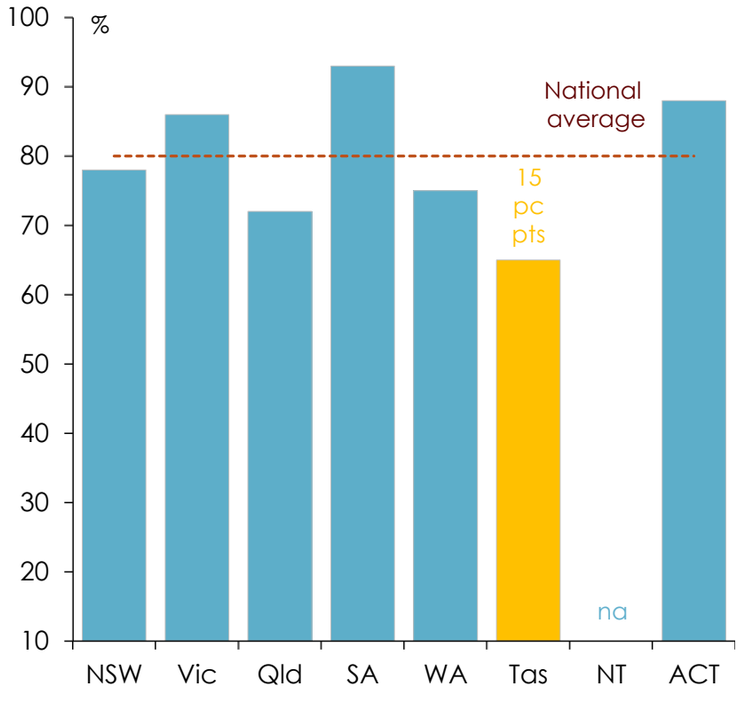
Low



Medium



High



A student from a high SES household in Tasmania was less likely to have completed Year 12 in 2015 than a student from a low SES household in any other State

Note: Low socioeconomic status is the average of the three lowest deciles, medium socioeconomic status is the average of the four middle deciles and high socioeconomic status is the average of the three highest deciles. *Source:* Productivity Commission, *Report on Government Services,* 2017, Volume B, Chapter 3.

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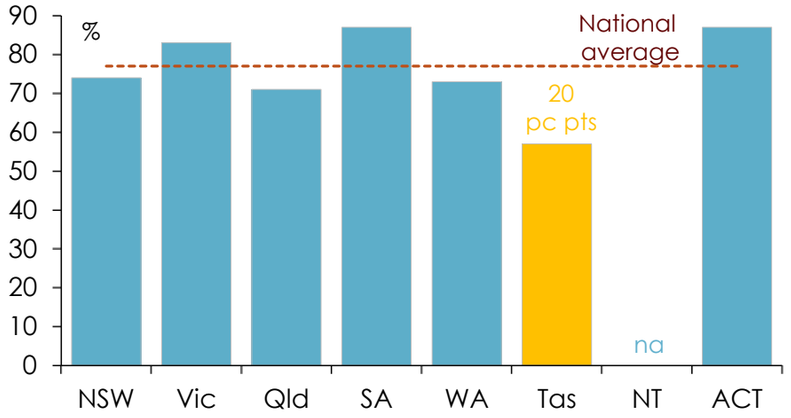
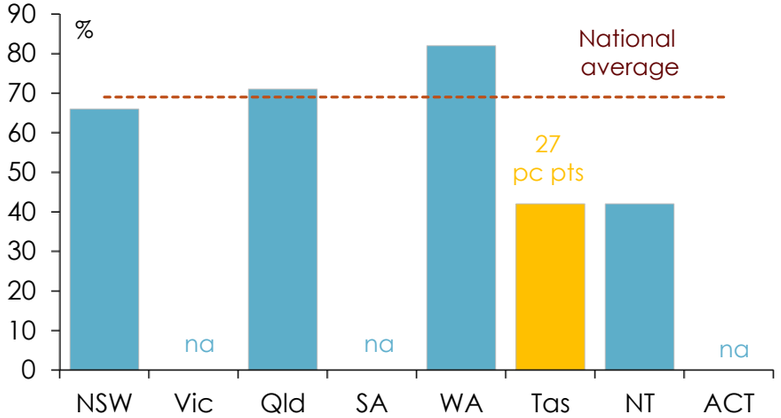
Tasmania's below-average Year 12 completion rates are not the result of more Tasmanian students coming from rural and regional areas

2015 Year 12 completion rates by students' location, States and Territories

Metropolitan



Remote



Provincial

Very remote

A student from living in Hobart was less likely to have completed Year 12 in 2015 than a student from a provincial, remote or very remote location in any other State

Source: Productivity Commission, *Report on Government Services,* 2017, Volume B, Chapter 3.

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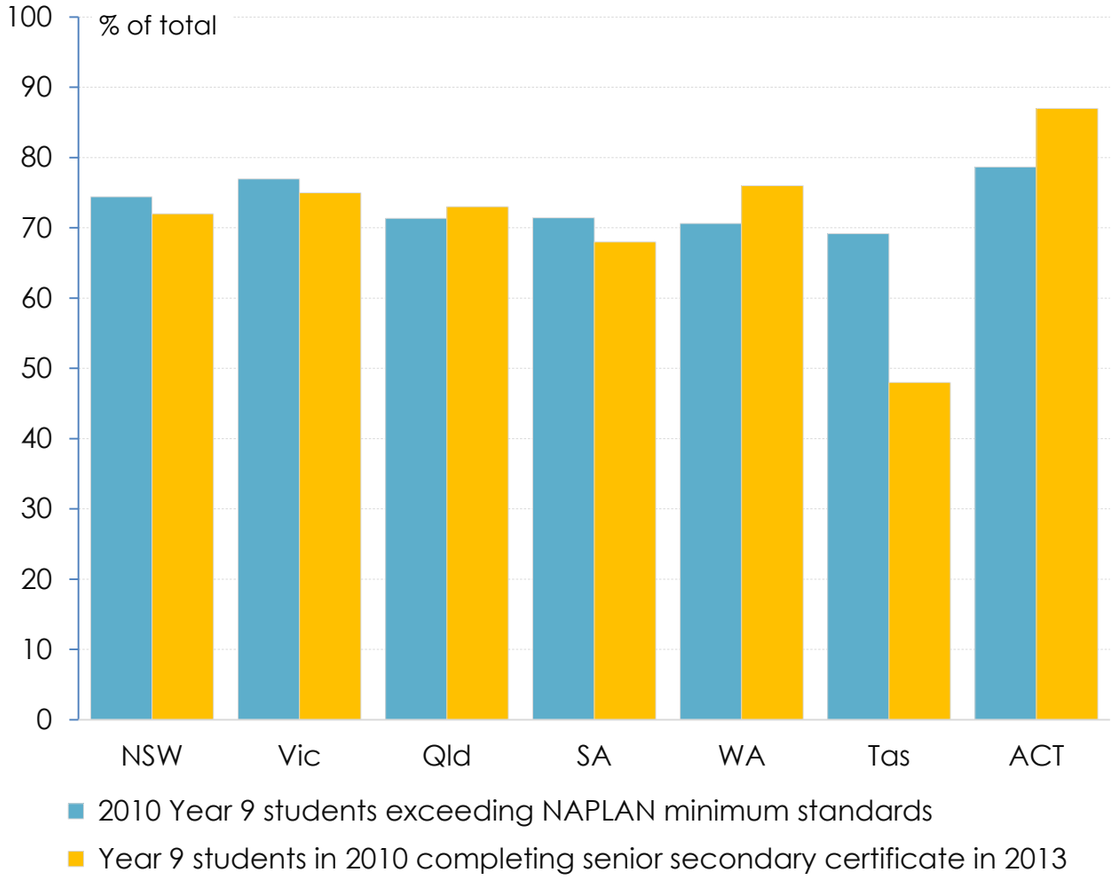
Tasmania's poor Year 12 retention and attainment rates are not because Tasmanian students are less capable than students from elsewhere

Year 9 NAPLAN results 2010 and subsequent senior secondary certificate completions



Selected Tasmanian schools Year 9 NAPLAN and Year 12 certificate completion rankings

	Year 9 NAPLAN ranking	Year 10s completing Year 12 ranking
Burnie	4/25	24/25
Campbell Town	1/13	13/13
Devonport	8/29	28/29
Huonville	3/33	33/33
Kingston	8/15	13/15
Mountain Heights	1/10	10/10
Queechy	29/34	33/34
Scottsdale	5/29	26/29
Taroona	5/9	9/9
Wynyard	10/24	24/24

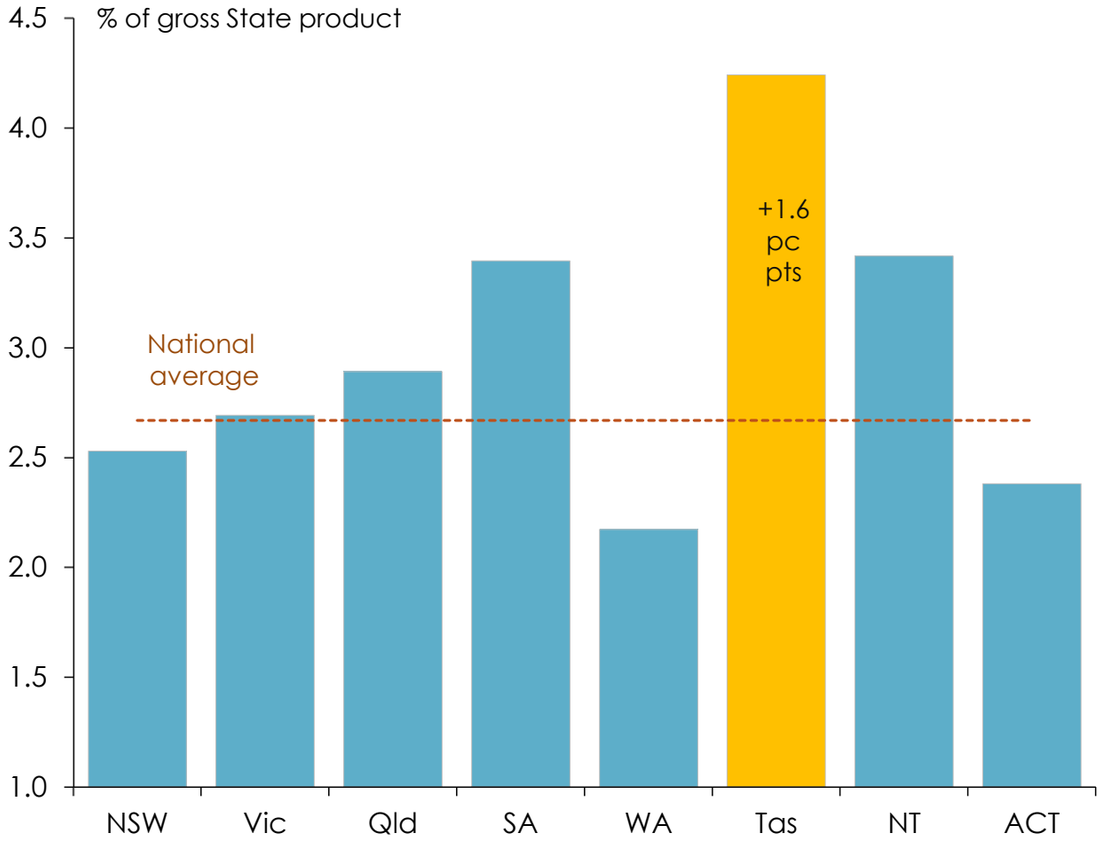
Note: Table shows school rankings among group of schools from NSW, Vic, Qld & SA with similar Index of Community Socio-Economic Advantage (ICSEA), of the % of Year 9 students recording NAPLAN scores above minimum standard in Year 9, and % of Year 10 students in 2012 who completed Year 12 two years later

Source: Eleanor Ramsay and Michael Rowan, *Submission to State of Tasmania Years 9-12 Education Review*, September 2016

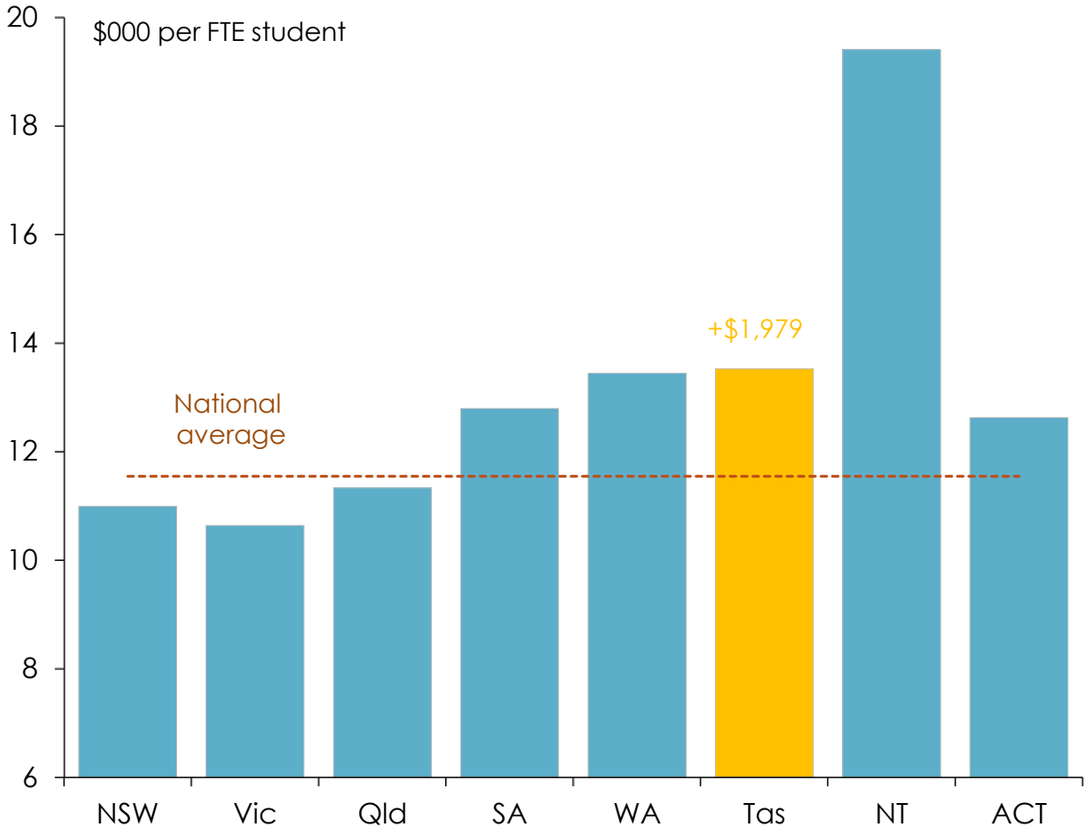
SAUL ESLAKE

Nor, finally, are Tasmania's poor educational outcomes the result of insufficient spending on education

Spending on school education as a pc of GSP, 2014-15



Spending on school education per FTE student, 2014-15



Sources: ABS 5518.0.55.001, 5220.0 and 4221.0.

SAUL ESLAKE

Tasmania's separate college system is a relatively expensive way of educating senior secondary students

Cost of graduates at Tasmanian colleges, 2012

COLLEGE	TOTAL NET RECURRENT ANNUAL INCOME	NUMBER OF STUDENTS ATTAINING TCE	NUMBER OF SCHOOL-BASED APPRENTICE-SHIPS AND TRAINEESHIPS	TOTAL NUMBER OF GRADUATES	COST PER GRADUATE
CLAREMONT	11,265,442	101	29	130	86,657
NEWSTEAD	10,913,243	133		133	82,054
HELLYER	10,895,427	143	30	173	62,979
DON	12,093,065	189	39	228	53,040
HOBART	13,725,077	234	27	261	52,587
ELIZABETH	11,689,991	218	30	248	47,137
ROSNEY	15,587,714	293	59	352	44,283
LAUNCESTON	15,721,865	430	59	489	32,151
TOTALS/AVERAGE	**101,891,824**	**1,741**	**273**	**2,014**	**50,592**

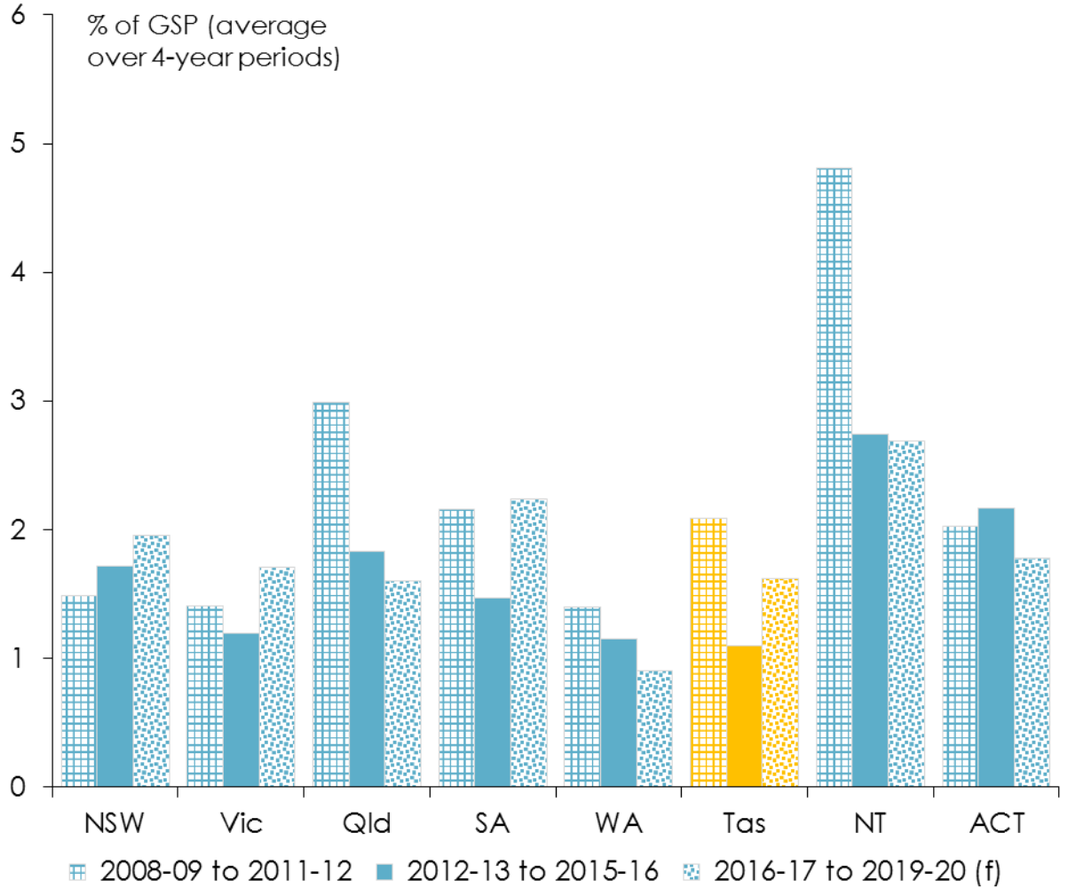
Cost of graduates at selected private and SA public schools, 2012

COLLEGE/ SCHOOL	TOTAL NET SENIOR SCHOOL RECURRENT ANNUAL INCOME (estimate)	NUMBER OF STUDENTS ATTAINING TCE/HSC/etc	NUMBER OF SCHOOL-BASED APPRENTICE-SHIPS AND TRAINEESHIPS	TOTAL NUMBER OF GRADUATES	COST PER SENIOR SECONDARY SCHOOL GRADUATE (estimate)
SCEGGS, NSW	4,233,766	111		111	38,142
CRANBROOK SCHOOL, NSW	5,916,503	133		133	44,485
FRIENDS SCHOOL	3,857,791	147	8	155	24,889
ST MICHAEL'S COLLEGIATE, TAS	1,973,943	69	5	74	26,675
PORT LINCOLN HIGH SCHOOL	4,397,183	75	1	76	57,858
MILLICENT HIGH SCHOOL	3,045,472	40	9	49	62,152
SALISBURY HIGH SCHOOL	5,085,334	116	11	127	40,042
FREMONT ELIZABETH HIGH	4,619,851	47	6	53	87,167
SEAVIEW HIGH SCHOOL	2,743,544	52	9	61	44,976
GLOSSOP HIGH SCHOOL	3,822,383	92	10	102	37,474
HENLEY HIGH SCHOOL	6,283,462	161	9	170	36,962
MARRYATVILLE HIGH SCHOOL	6,254,947	182		182	34,368
UNLEY HIGH SCHOOL	6,212,161	203		203	30,602
SALISBURY EAST HIGH SCHOOL	3,638,026	57	2	59	61,661
BRIGHTON SECONDARY SCHOOL	7,036,881	217	7	224	31,415
MODBURY HIGH SCHOOL	4,505,428	125		125	36,043
NORWOOD MORIALTA HIGH SCHOOL	7,208,772	227		227	31,757

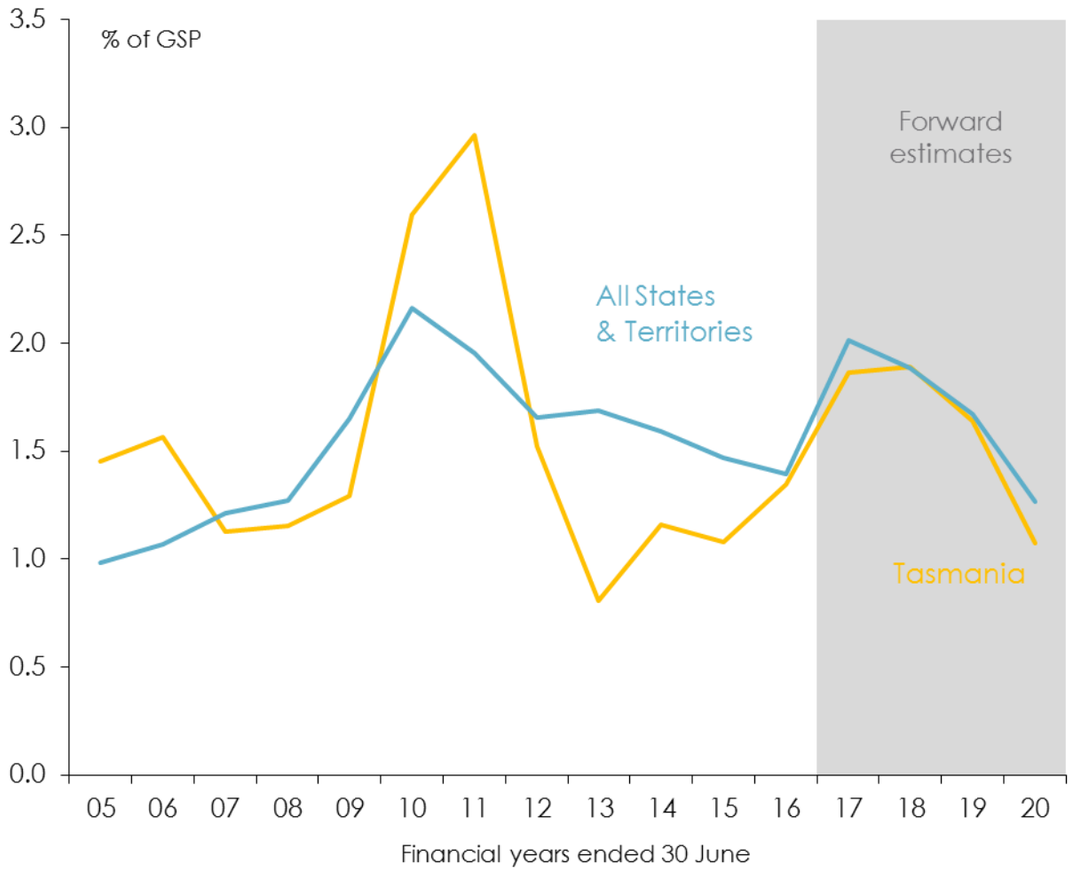
Source: Eleanor Ramsay and Michael Rowan, *Tasmanian Colleges: Fit for the Purpose of Post-Compulsory Schooling? – Addendum*, August 2014 (available at http://educationambassadors.org.au/)

Tasmania probably could afford to spend more on infrastructure …

General government 'purchases of fixed assets', States and Territories



General government 'purchases of fixed assets', Tasmania vs all States and Territories

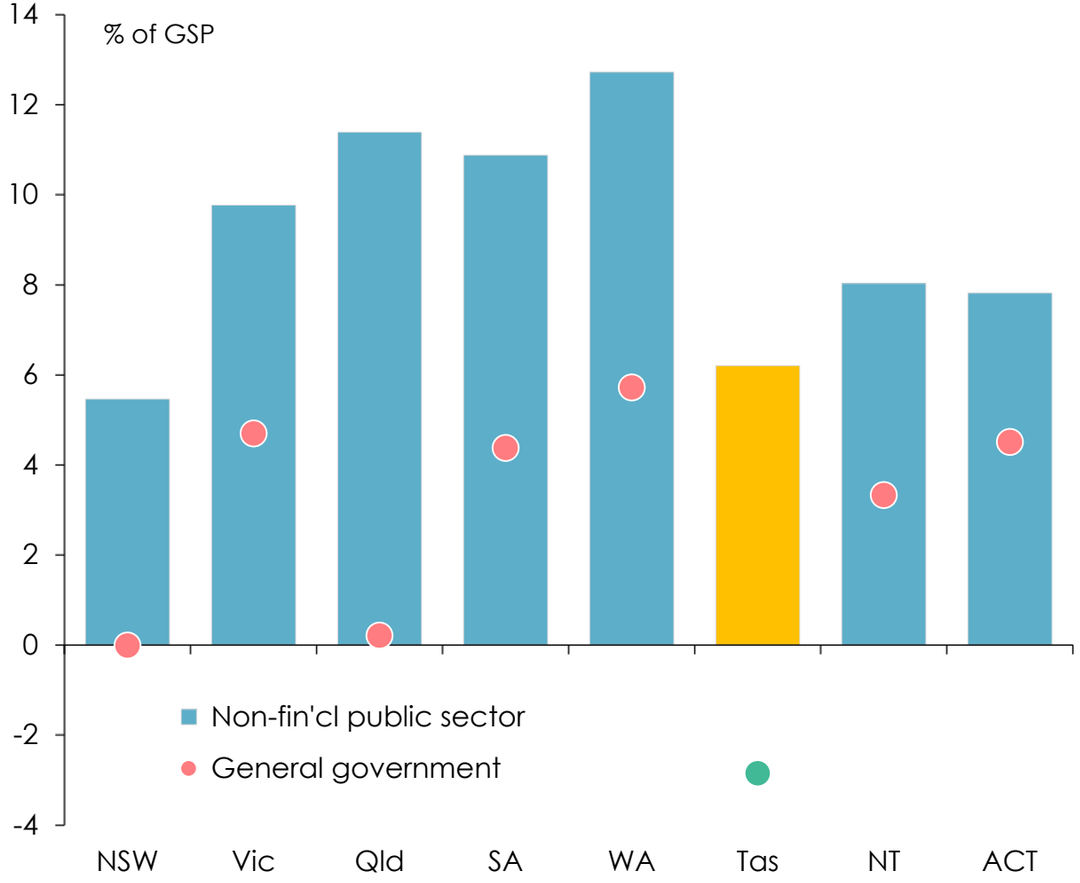


Source: State and Territory Budget Papers and Mid-Year Reviews; ABS, 5220.0.

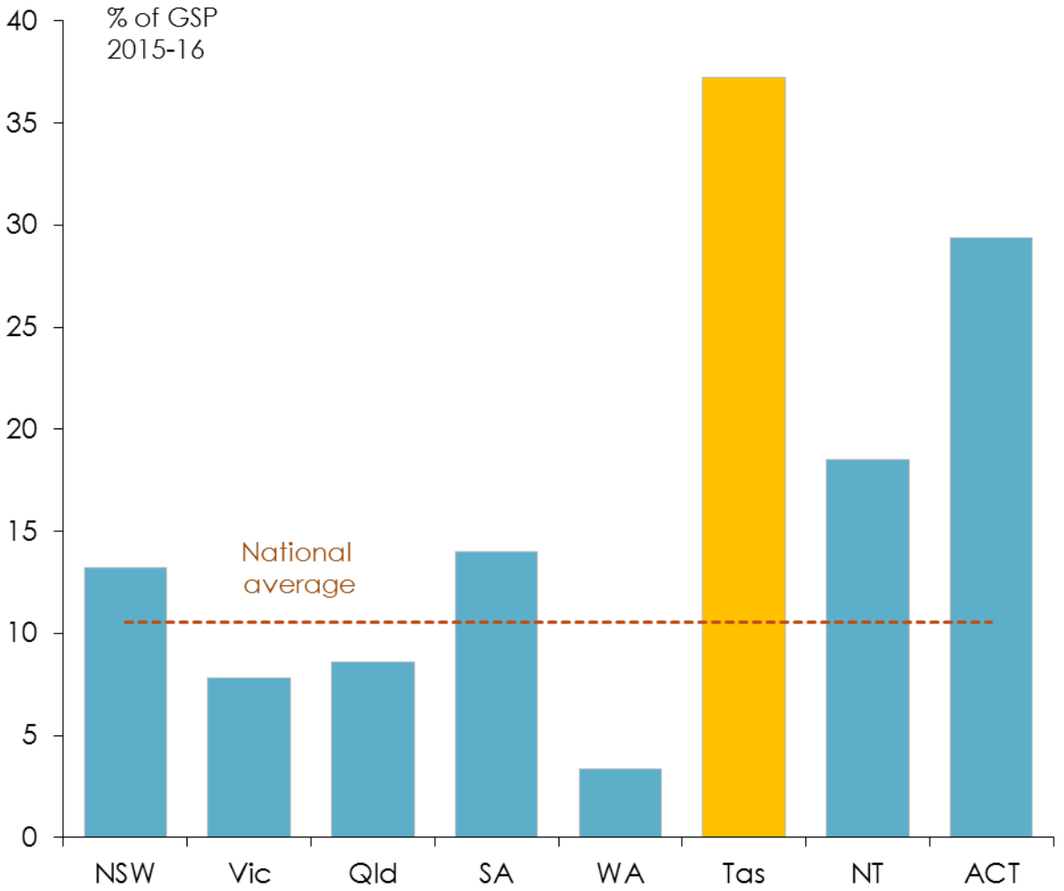
SAUL ESLAKE

… if it didn't have such a huge unfunded superannuation liability

General government and non-financial public sector net debt, June 2016



Non-financial public sector unfunded super liabilities, June 2016



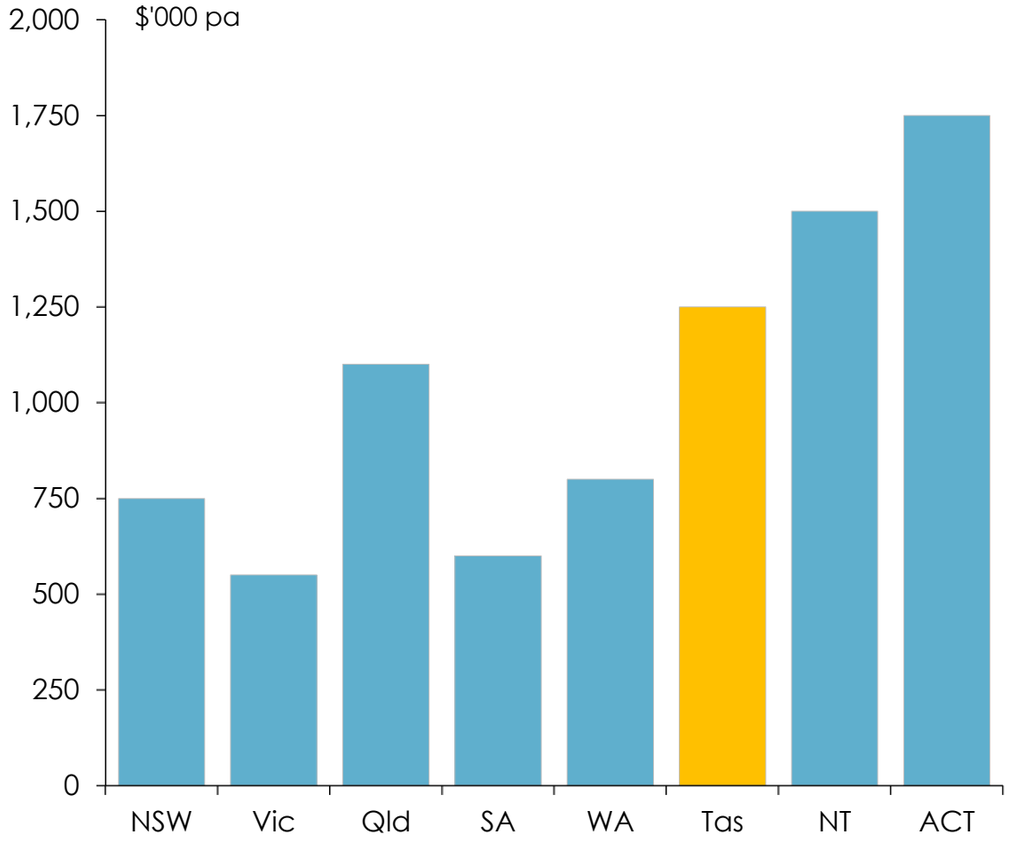
Source: State and Territory Budget Papers and Mid-Year Reviews; ABS, 5220.0.

SAUL ESLAKE

Is having the nation's second highest payroll tax rate, levied on the nation's third-narrowest payroll tax base, really such a smart idea?

Payroll tax rates

Payroll tax thresholds

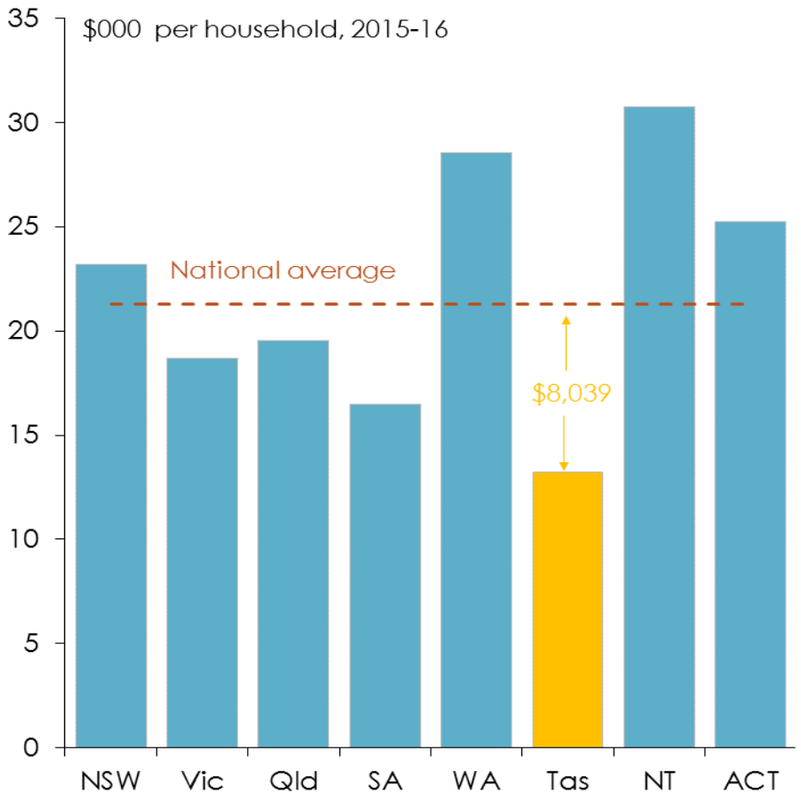


Source: New South Wales Treasury, *Interstate Comparison of Taxes 2014-15.*

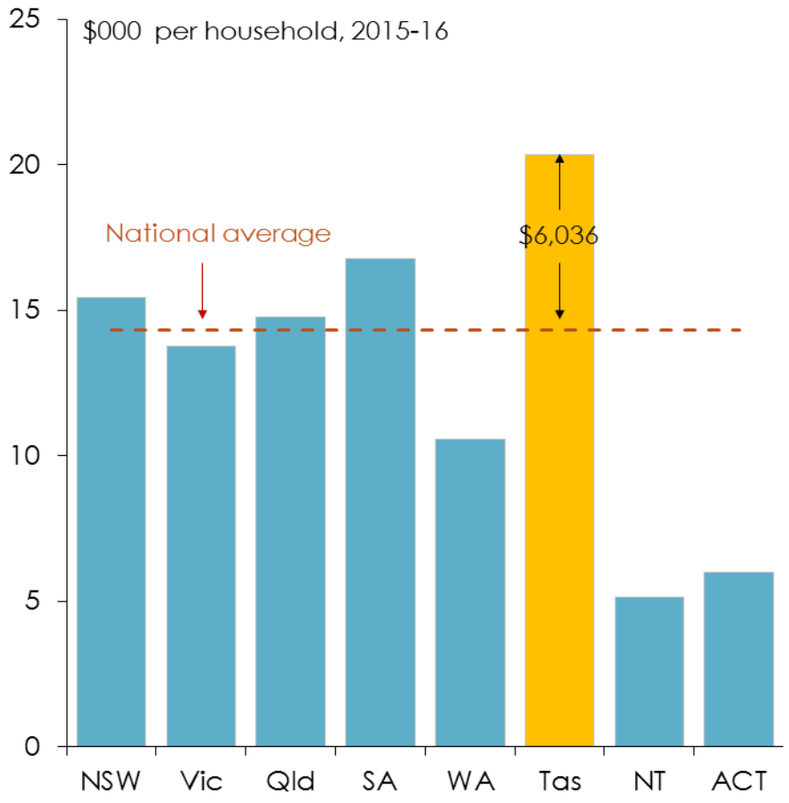
SAUL ESLAKE

The national tax-transfer system shields Tasmanian households from the full effects of Tasmania's economic under-performance

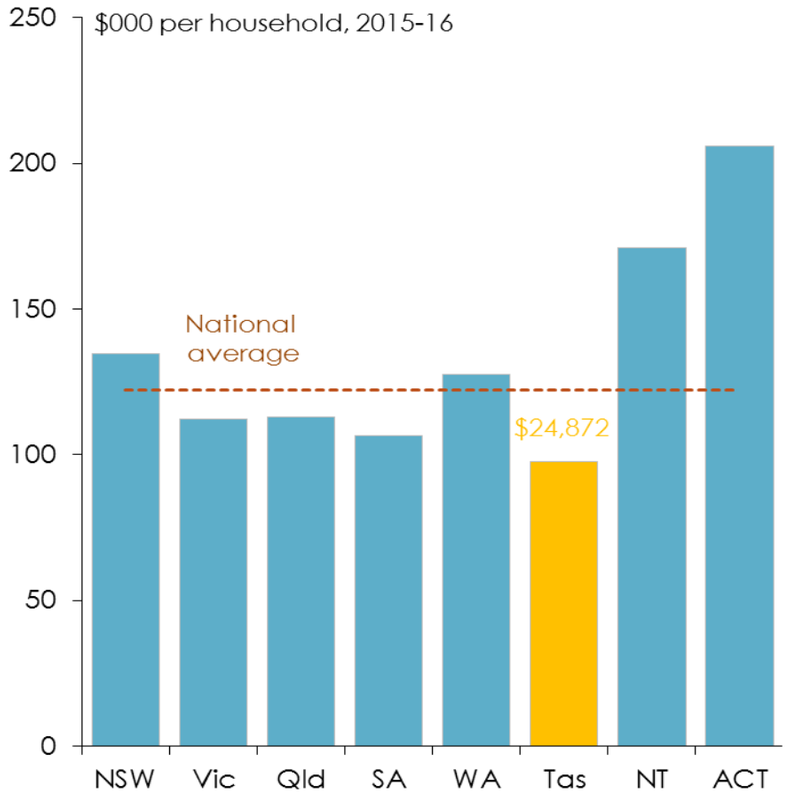
Personal income tax per household, 2015-16



Social security benefits per household, 2015-16



Household disposable income per household, 2015-16



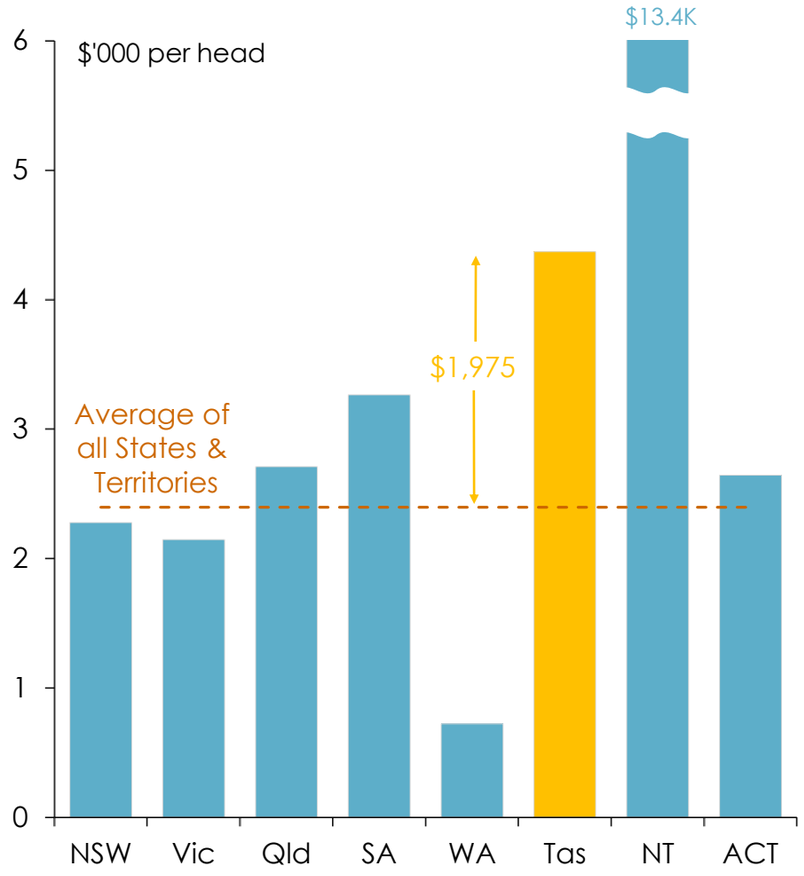
Whereas <u>primary</u> household income per household was $44,000 (32%) below the national average in 2015-16, household <u>disposable</u> income per household was 'only' $25,000 (20%) below the national average

Source: ABS 5220.0.

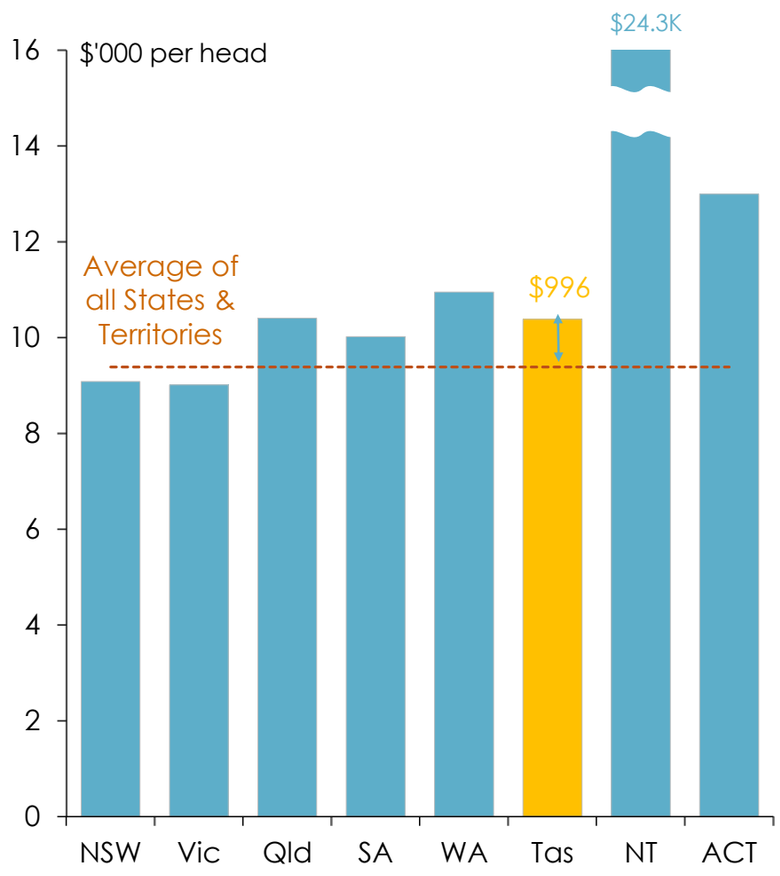
SAUL ESLAKE

Similarly the GST revenue-sharing system shields the State Government from the full impact of Tasmania's economic under-performance

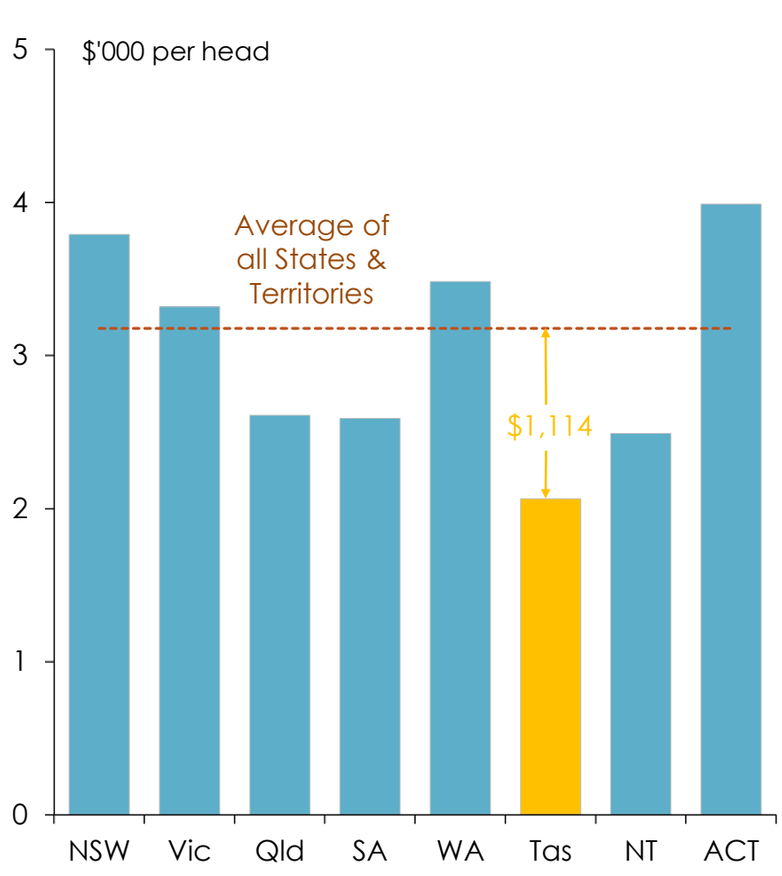
GST revenue-sharing payments per head, 2015-16



State government 'operating expenses' per head, 2015-16



State taxation revenue per head, 2015-16



Sources: Commonwealth, State and Territory Mid-Year Reviews.

SAUL ESLAKE

Conclusions

- **Tasmanians' material living standards – as measured by per capita gross product – were 27% below the national average in 2015-16**
  - national fiscal redistributive mechanisms ameliorate the extent of disadvantage for Tasmanian households but, even so, per capita household disposable income in Tasmania is still 14% below the national average
- **Just under 40% of the 'GSP gap' is attributable to lower employment participation, just over 40% is due to fewer hours worked by those in employment, and just under 20% is the result of lower labour productivity in Tasmania compared with national averages**
- **Tasmania's more rapidly ageing population implies that, all else being equal, the 'GSP gap' between Tasmania and the national average will widen to 33% over the next 10 years, and to 40% over the next 25 years**
- **Preventing this further deterioration in Tasmanians' material living standards relative to the national average would require (for example) lifting productivity growth to the national average, and gradually eliminating the difference in average hours worked**
  - either of which would be very difficult without major changes in the structure of Tasmania's economy
- **The most obvious thing that Tasmanians can do for themselves, and which would make a real difference to Tasmania's longer-term economic prospects, is lifting levels of educational participation and attainment to those prevailing elsewhere in Australia**
- **Other policies – including infrastructure provision and state taxation – could also play a more supportive role**