



Research Discussion Paper no. 1

A Data-driven Investigation of South Australia's Productivity Performance

by Dean Parham

September 2020

© Government of South Australia. Published 2020. All rights reserved.

No part of this publication may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968* (Cth), without prior written permission from the South Australian Productivity Commission.

South Australian Productivity Commission
GPO Box 2343
ADELAIDE South Australia 5001
AUSTRALIA

Telephone: 08 8226 7828
Email: sapc@sa.gov.au
Website: www.sapc.sa.gov.au

An appropriate citation for this publication is:

Dean Parham, *A Data-driven Investigation of South Australia's Productivity Performance*,
Research Paper, September 2020.

CONTENTS

1.	INTRODUCTION	4
2.	NATIONAL TRENDS	5
2.1	The big picture: Living standards	5
2.2	Key productivity developments	7
2.3	Industry contributors to developments	12
2.4	Summary points	15
3.	SOUTH AUSTRALIAN TRENDS	16
3.1	Living standards	16
3.2	Market-sector productivity trends	17
3.3	Proximate contributors	19
3.4	Summary points	23
4	INTER-JURISDICTIONAL COMPARISONS	24
4.1	Living standards and other economy-wide measures	24
4.2	Market-sector productivity	29
4.3	Proximate contributors	34
4.4	Summary points	42
5.	AN INDUSTRY PERSPECTIVE	44
5.1	The influence of different industry mixes	44
5.2	The influence of different industry productivity levels	47
5.3	Summary points	48
6.	INDUSTRY CONTRIBUTORS TO SA PRODUCTIVITY TRENDS	49
6.1	Labour productivity	49
6.2	Capital productivity	52
6.3	Summary points	54
7.	COMPARISON OF EDUCATIONAL ATTAINMENT IN EMPLOYMENT	55
7.1	Summary points	56
8.	COMPARISON OF AGE STRUCTURES	57
8.1	Summary points	58
9.	CONCLUDING POINTS	59
9.1	Findings	59
9.2	Broader implications	60
	APPENDIX	62
A.1	Charts of labour productivity by industry in NSW, Victoria and Australia	62
A.2	Tables of labour productivity by industry in all jurisdictions	69

1. INTRODUCTION

The objectives of this paper are to provide the South Australian Productivity Commission (SAPC) with:

- a review of the historical productivity performance of the South Australian economy;
- an assessment of SA's performance against that of other Australian States and Territories; and
- an exploration of underlying factors that affect SA's performance relative to comparable jurisdictions.

As discussed with the SAPC, emphasis is placed on the presentation of tables and charts that the SAPC can draw on its own work, rather than development of an extensive narrative.

Data for the work are taken from ABS sources. Economy-wide data are drawn from the National Accounts (ABS Cat. No. 5204, Table 1 and, for the States and Territories, ABS Cat. No.5220.0, Tables 2-10). Market-sector data for all jurisdictions are taken from the ABS productivity datacube, published online as Cat. No. 5260.0.55.002. Other sources are indicated in the paper as appropriate.

Productivity estimates range from 1994-95 to 2018-19. They are therefore unaffected by the Covid-19 pandemic and its economic effects. The paper takes a medium to long-term view of productivity and other trends and does not address any effects of, or responses to, the pandemic.

In various places, trend series and trend growth rates are presented in order to see past short-term volatility. These trend series and associated growth rates have been constructed with a Hodrick-Prescott filter (using $\lambda=100$ for annual data).

Growth and growth rates are calculated as differences in natural logs throughout the paper.

The outline of the paper is as follows:

- The next section provides the background on national trends.
- Section 3 provides the overview of South Australia's historical productivity performance.
- Comparisons of South Australia's performance with other jurisdictions are made in Section 4.
- The importance of industry mix in affecting South Australia's comparative performance is addressed in Section 5.
- Section 6 examines trends in SA's capital productivity.
- Section 7 compares the age structure of employment in SA with other jurisdictions.
- Concluding points are made in Section 9.

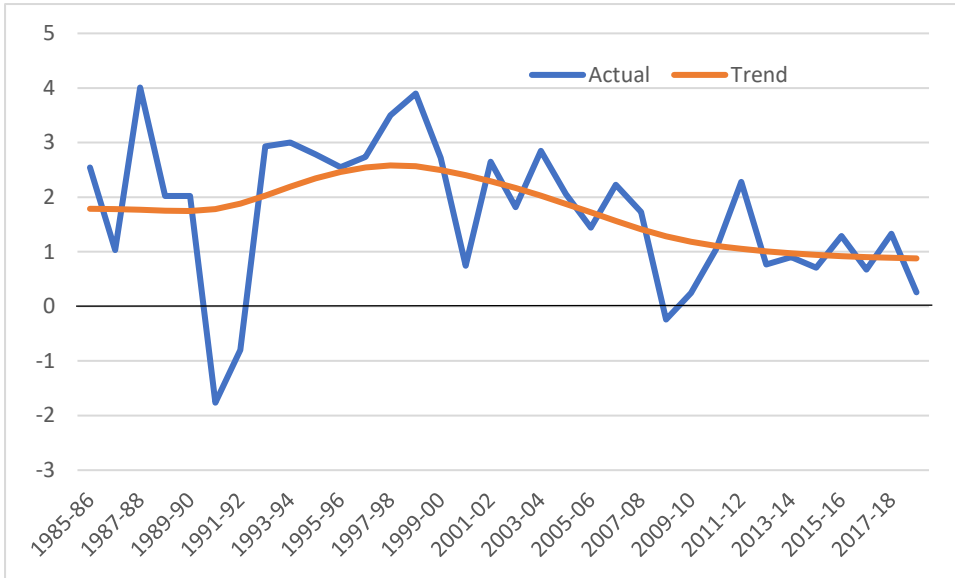
2. NATIONAL TRENDS

This section briefly outlines trends in the national economy and identifies issues that are relevant to the review of South Australia's economic performance in subsequent sections.

2.1 The big picture: Living standards

GDP per capita is often used as a ready indicator of living standards. Australia enjoyed higher growth in GDP per capita in the 1990s and early 2000s (Figure 1).

Figure 1; Annual growth in Australia's GDP per capita (% per year)



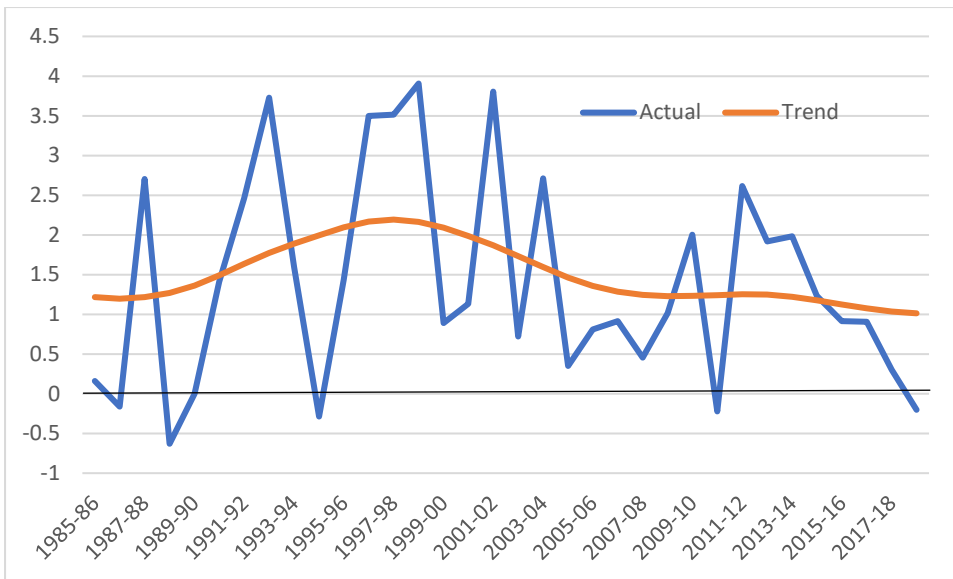
GDP per capita can be broken down into two components: GDP per hour worked (labour productivity) and hours worked divided by the population total (labour utilisation).¹

The stronger growth in per capita GDP in the 1990s and early 2000s was due to the surge in productivity growth, represented in this sub-section by GDP per hour worked (Figure 2).

At least in trend terms, growth in GDP per hour was no longer above normal from around the mid-2000s. Nor was growth in GDP per capita above normal.

¹ GDP/population = GDP/hours x hours/population

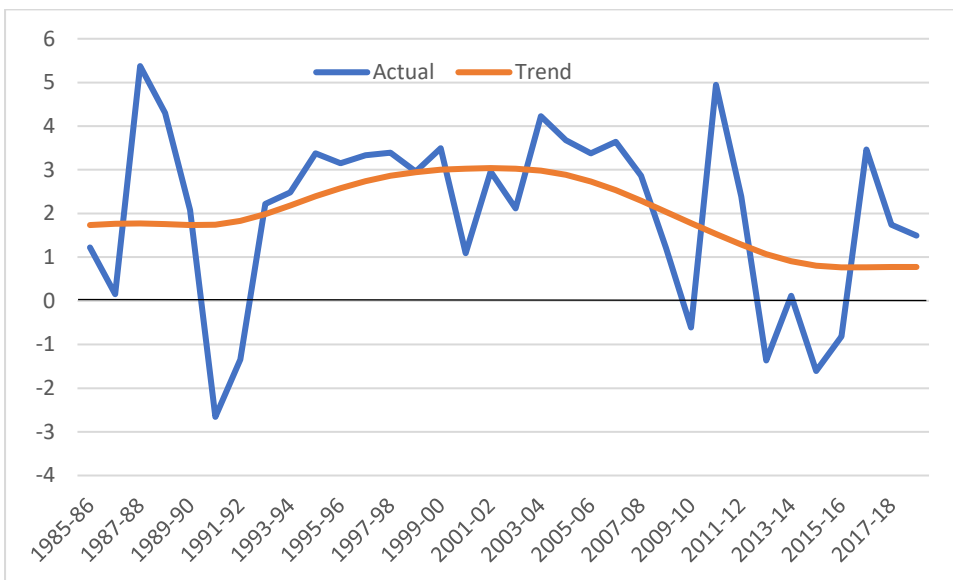
Figure 2: Annual growth in Australia's GDP per hour worked (% per year)



However, a surge in the terms of trade gave living standards a fillip. This shows up in Gross Domestic Income (GDI) per capita. GDI is a measure of GDP, adjusted for changes in the terms of trade.

Figure 3 shows that the boost to living standards extended from the mid-2000s into the 2010s, thanks to the terms of trade.

Figure 3: Annual growth in Australia's GDI per capita (% per year)



The current issue for Australia is that growth in living standards is now low in historical terms. Living standards actually went backwards in the early 2010s with falls in the terms of trade.

Given the uncertainty about the future path of the terms of trade, there is only one sure way to raise growth in living standards back to a rate that Australians became accustomed to over a long period. That is to raise productivity growth.

2.2 Key productivity developments

The viewpoint now switches to the well-measured sector of the economy – the 16-industry market sector – to examine the key productivity developments in the national economy.

The annual growth in productivity indexes is shown in Figure 4.

Growth rates in the productivity indexes are presented in Table 1. The years 2003-04, 2011-12 and 2017-18 are productivity peaks. Using peaks to define periods helps to reduce the spurious effects of cycles on the calculation of trends.

Table 1: Annual average growth rates in Australia's market-sector productivity (% per year)

	MFP	Labour productivity	Capital productivity
1994-95 to 2003-04	1.70	3.00	-0.26
2003-04 to 2011-12	-0.03	1.52	-2.11
2011-12 to 2017-18	0.84	1.66	-0.24

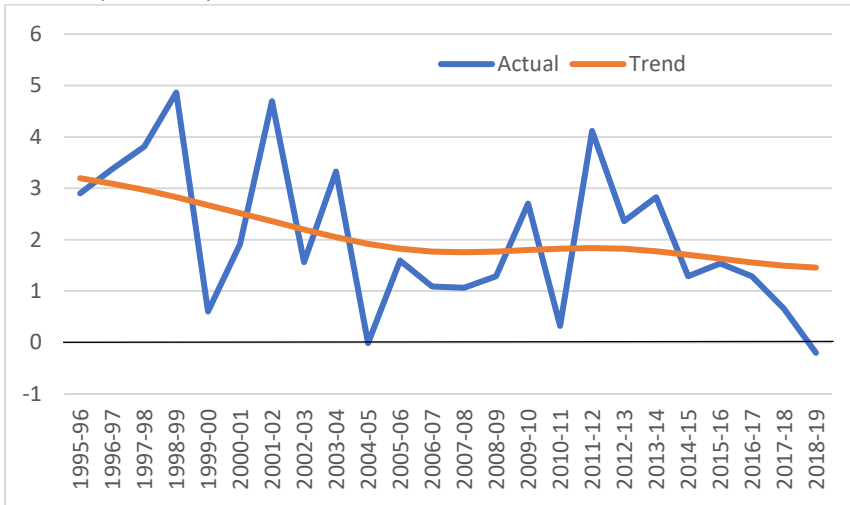
Multifactor productivity growth fell away in the 2000s at -0.03% annually between 2003-04 and 2011-12. The drop in MFP can be attributed to falling capital productivity as MFP growth can be viewed as a weighted average of labour productivity growth (1.52% a year) and capital productivity growth (-2.11% a year).

Three developments warrant some further attention:

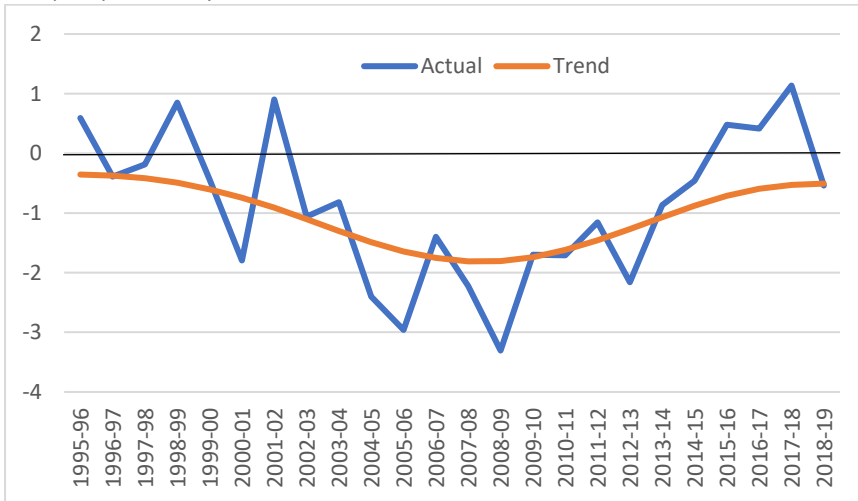
- the recovery of capital productivity from the 2000s decline;
- the decline in labour productivity growth since 2011-12; and
- the absolute decline in all indexes in 2018-19.

Figure 4: Annual growth in Australia's productivity (%)

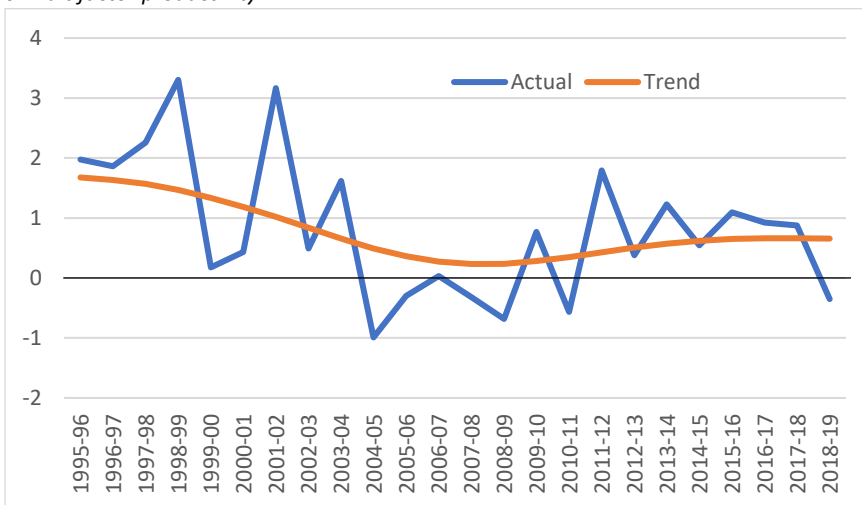
a. Labour productivity



b. Capital productivity



c. Multifactor productivity



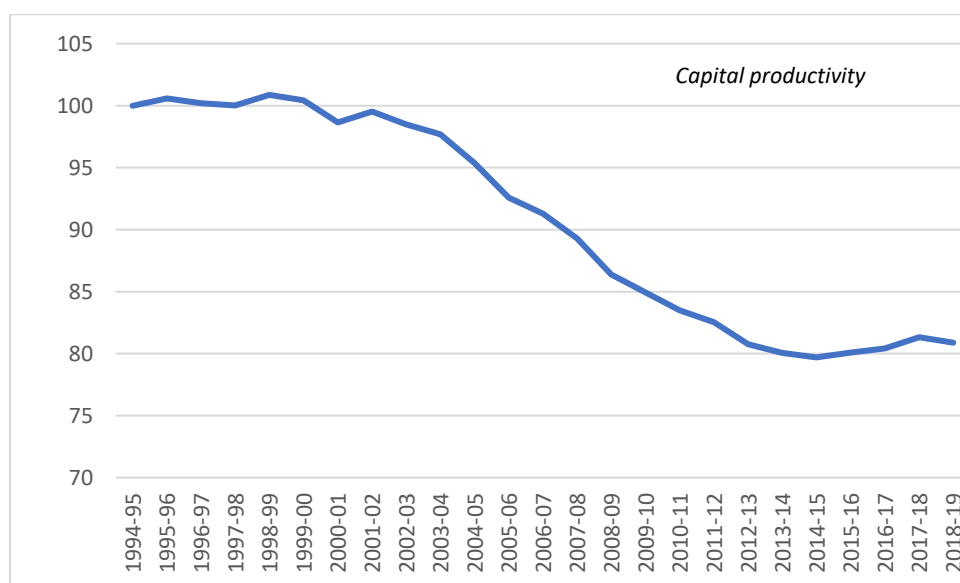
Can we expect more recovery in capital productivity from the 2000s decline?

A decline in capital productivity was the main development from the early 2000s through to around the mid-2010s. Capital productivity fell 20% over this period (Figure 5).

Capital productivity tends to revert to zero over the long term. Assuming a constant capital share of income, capital productivity will tend to zero as an equilibrium between investment and productive and profitable opportunities is found (and nothing else changes).

Capital productivity growth is now back hovering around zero after a transition from one productivity level to another (Figure 5). Does this mean that the capital productivity issue is over?

Figure 5: Index of Australia's capital productivity (1994-95=100)



According to my calculations, the mining industry was responsible for about three-quarters of the decline in capital productivity. Capital productivity declined in the mining industry for several reasons including:

- overmeasurement of the growth in the productive capital stock because annual investment was added to the productive stock as it occurred, rather than when investment projects were completed and production started up;
- installation of infrastructure to serve production expansions over the long-term meaning underutilisation in the short term; and
- exploitation of more costly deposits made viable by the expectation of ongoing higher output prices.

Some short-term bounce back, rather than just a new level effect, might be expected from the first and some gradual rise in capital productivity over the long term might be expected from the second. The third would maintain a long-term change in level.

The mining industry has transitioned to positive capital productivity growth in the last two years, as production has ramped up. There are early signs of a bounce back in that industry.

However, other industries have offset this recent positive growth with negatives. It is only a short period, but it seems that earlier investment is not paying off as expected.

The decline in labour productivity growth since 2011-12

Although the average rate of labour productivity (LP) growth between 2011-12 and 2017-18 is more rapid than the average rate of the previous period (Table 1), the annual rate of LP growth has been in decline since a peak in 2011-12 (Figure 4). LP growth was just 0.66% in 2017-18 and -0.2% in 2018-19.

The decline in LP growth came about from a combination of slower output growth (Figure 6) and stronger labour growth (Figure 7).

Figure 6: Annual output growth in Australia's market sector (% per year)

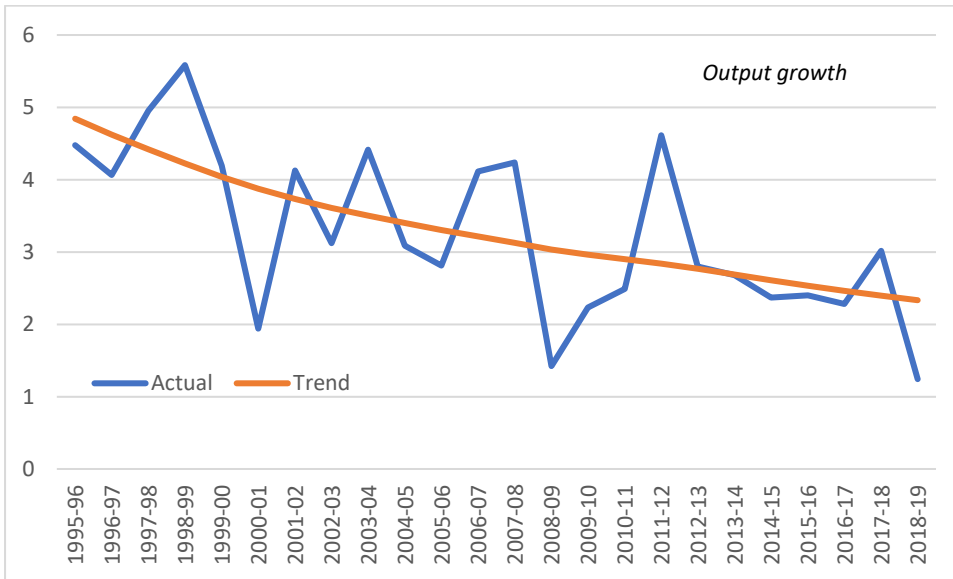
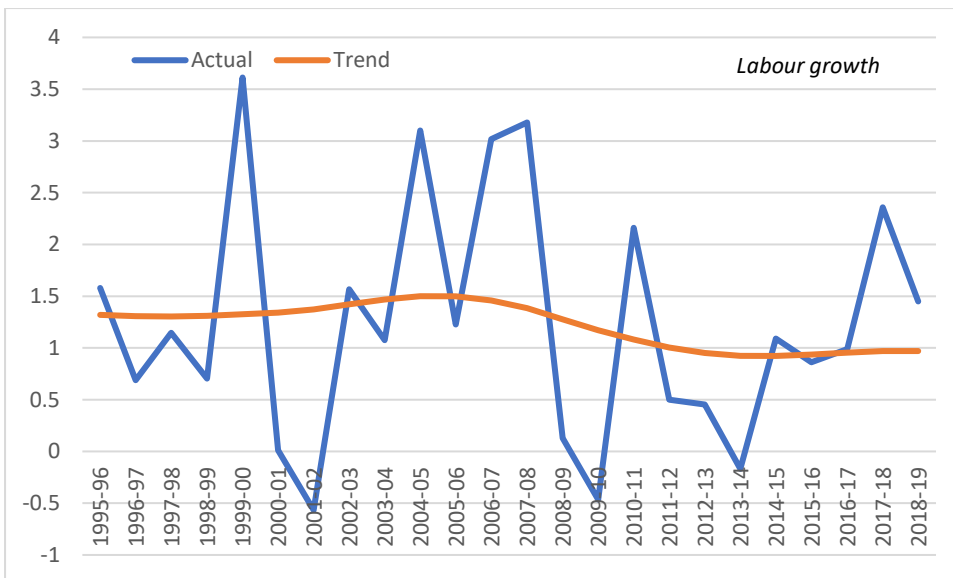
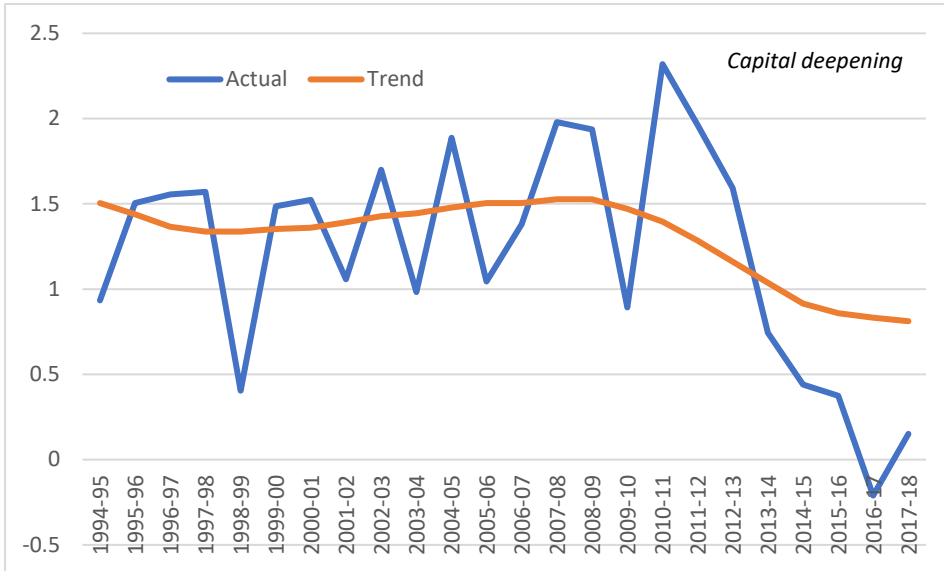


Figure 7: Annual growth in hours worked in Australia's market sector



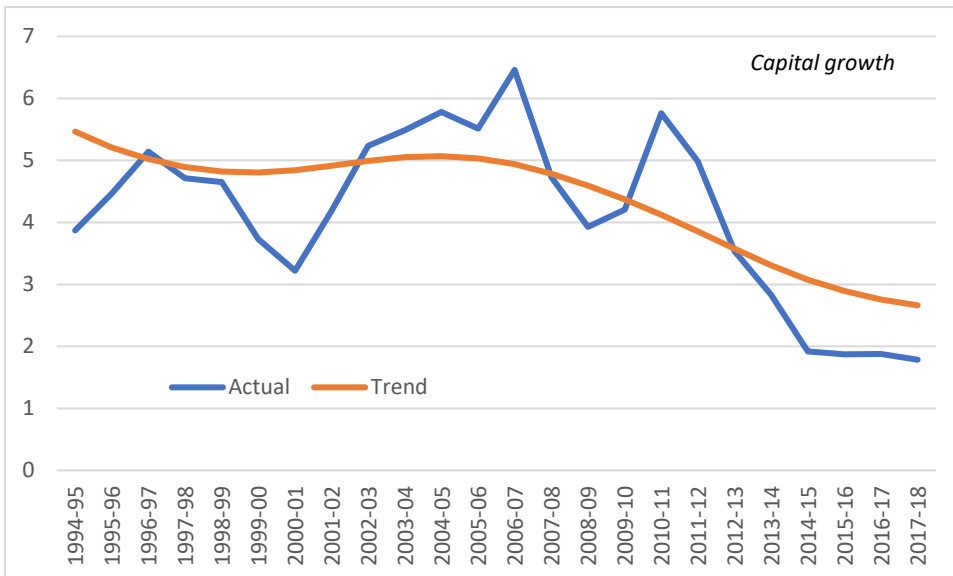
LP growth can also be viewed as the sum of capital deepening (increasing the capital-to-labour ratio) and MFP growth (increased efficiency). Doing so sheets home the decline in LP growth to a collapse in capital deepening (Figure 8). The rate of MFP growth has not changed much over the period, except in the last year.

Figure 8: Annual rate of capital deepening in Australia's market sector



The collapse in capital deepening can in turn be attributed to the rise in labour growth (Figure 7) and a fall in capital growth (Figure 9).

Figure 9: Annual growth in capital in Australia's market sector



This phenomenon of weaker capital deepening has been observed in other advanced countries and seems to be a proximate factor at the heart of the general productivity slowdown.

The decline in productivity in 2018-19

The fall in output growth from 3% in 2017-18 to a very weak 1.2% in 2018-19 (Figure 6) is a major reason for the decline in productivity indicators in the most recent year. Input growth was stronger than output growth, with labour growing at 1.4% and capital growing at 1.8%.

The principal factor of interest in explaining the very recent productivity decline is where the decline in output growth came from.

2.3 Industry contributors to developments

Industry contributions take account of two factors – the size of productivity growth in an industry and the relative size of the industry. Industries with the largest rates of growth and the largest shares of output or inputs will make the largest contributions to market sector growth.

Capital productivity

The mining sector has recently turned from a major detractor from market-sector capital productivity growth to a positive contributor (Figure 10).

Figure 11 shows the industry contributions to capital productivity growth over the two most recent years. The negative contribution in the last year from the construction industry stands out. Other industries to contribute negatively are Agriculture, Manufacturing, the utilities (Electricity, gas, water and waste services), Transport, postal and storage, Information, media and telecommunications and the Rental, hiring and real estate industry. At least some of these declines could be the lingering effects of winding back from the mining investment boom.

Figure 10; Annual contributions of the mining industry to growth in market-sector capital productivity

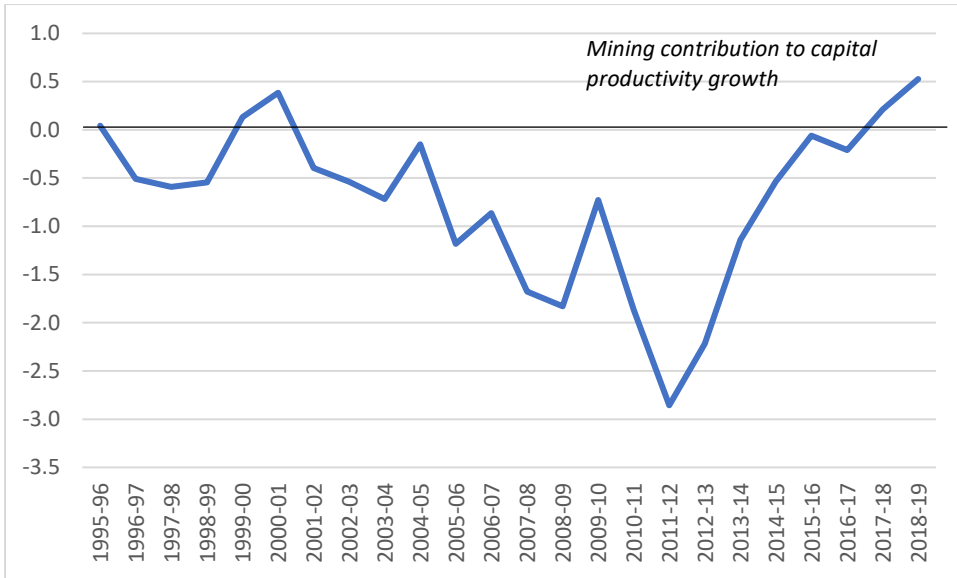
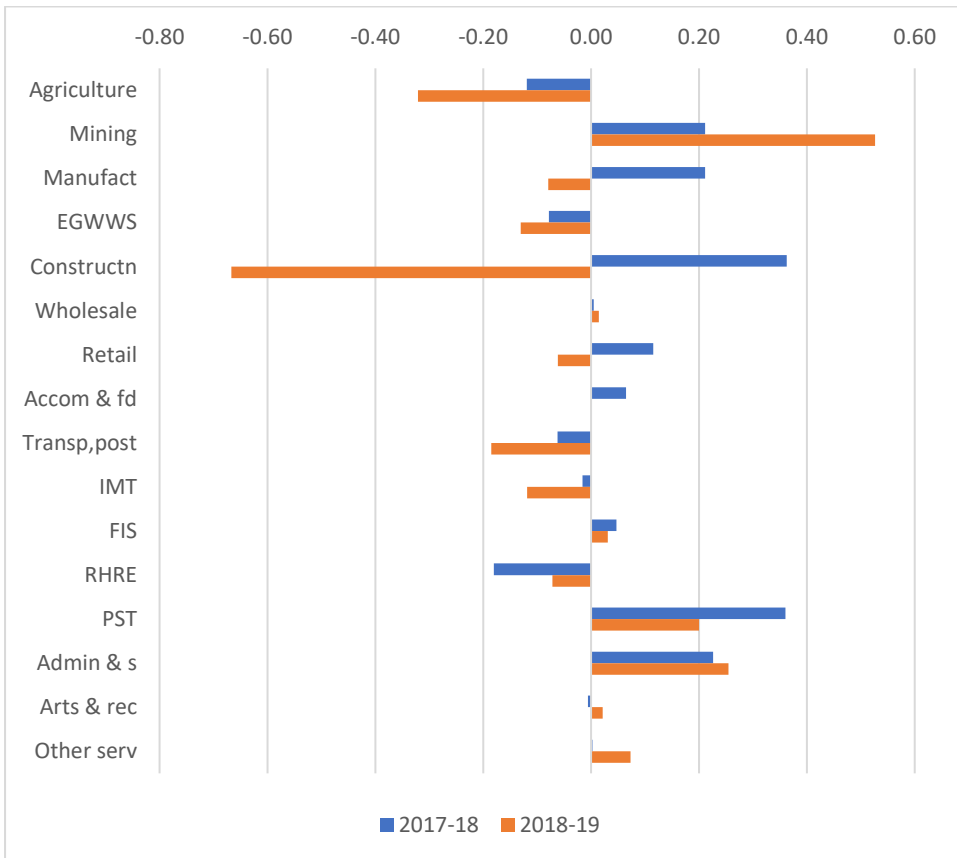


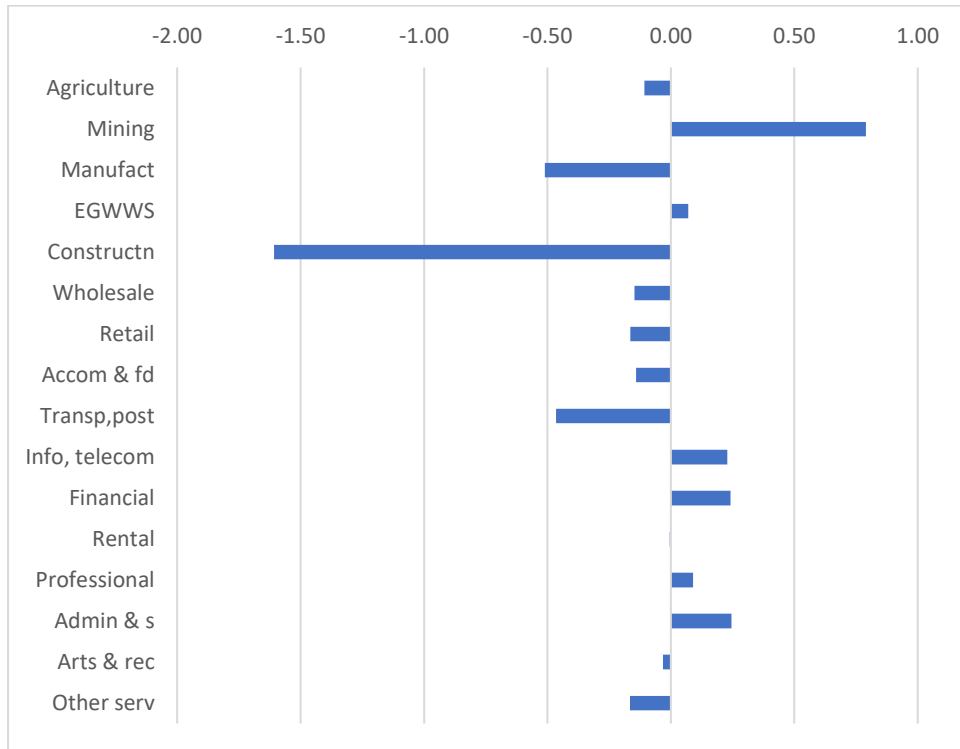
Figure 11: Annual industry contributions to market sector capital productivity growth



The slowdown in labour productivity

Industry contributors to the slowdown in LP growth from the peak growth in 2011-12 are shown in Figure 12. The contributions to market sector LP growth in 2011-12 are subtracted from the average contributions from 2012-13 to 2017-18.

Figure 12: Industry contributions to LP growth from 2011-12 to 2017-18 (average) less contributions in 2011-12 (% pts)



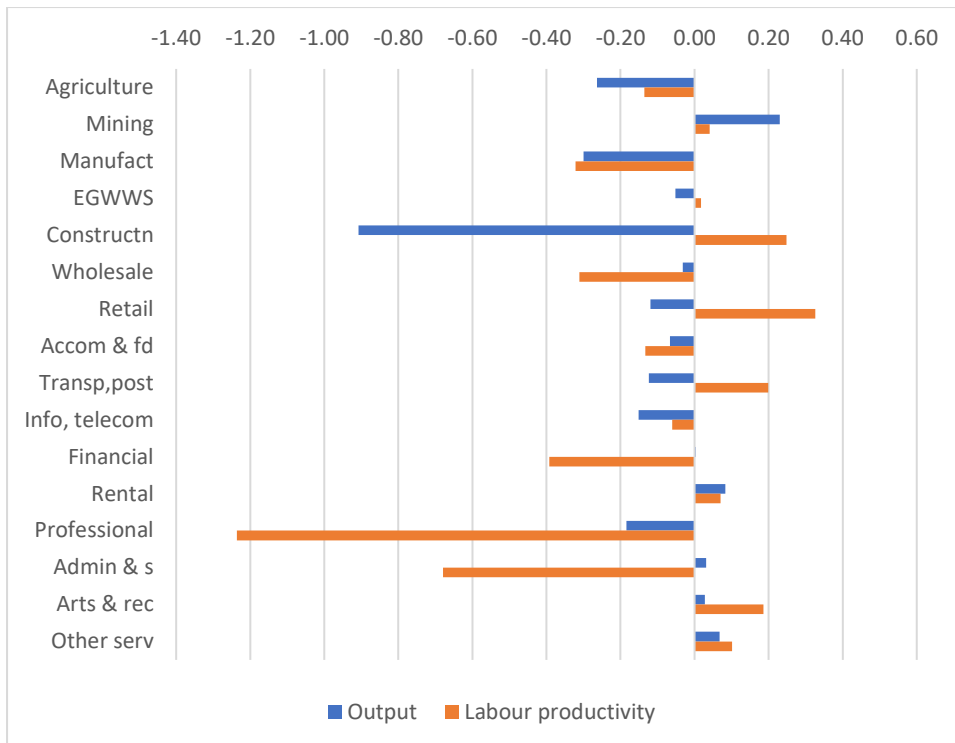
This reveals the Construction industry to be the main contributor to weaker LP growth from the peak. Manufacturing and the Transport, postal and storage industry also took about half a percentage point off their 2011-12 contributions to LP growth.

The fall in the last year

Figure 13 gives an insight into where the fall in output and LP came in the 2-18-19 year. The industry contributions in 2017-18 are subtracted from the 2018-19 contributions. Consequently, weaker contributions in 2018-19 show up as negatives.

Lower output growth was centred on the Construction industry. Lower LP growth came especially from the Professional, scientific and technical industry and Administrative and support services. Manufacturing, Wholesale trade and Financial and insurance services also featured.

Figure 13: Change in industry contributions to output and LP growth from 2017-18 to 2018-19 (% pts)



2.4 Summary points

- Growth in Australia’s living standards is weak on account of weak growth in labour productivity and lower terms of trade. A return to the growth in living standards that Australian have been used to depends on revitalising productivity growth
- The decline in capital productivity that began in the mid-2000s has come to a halt. But at issue is whether there should be some recovery or bounce back in capital productivity.
- The mining industry, which was chiefly responsible for the decline in capital productivity has shown recent signs of some bounce back.
- That bounce back has been offset by ongoing declines in capital productivity in other industries.
- Annual rates of labour productivity growth have been in decline since 2011-12. LP growth has been very weak in the last two years and, indeed, was negative in the last year.
- The progressively slower LP growth has been associated with falling rates of capital deepening. MFP growth, having reappeared after an absence in the 2000s, was relatively stable throughout the 2010s period.
- All forms of productivity growth dropped off in the 2018-19 year. Weak output growth was a common factor. Very weak capital deepening was a factor in low LP growth.
- The Construction industry has featured in the slower rates of LP growth since 2011-12 and the slower output growth in 2018-19.
- The Professional, Administrative and Financial industries brought about much of the fall in LP growth in the last year by employing more labour relative to output growth.

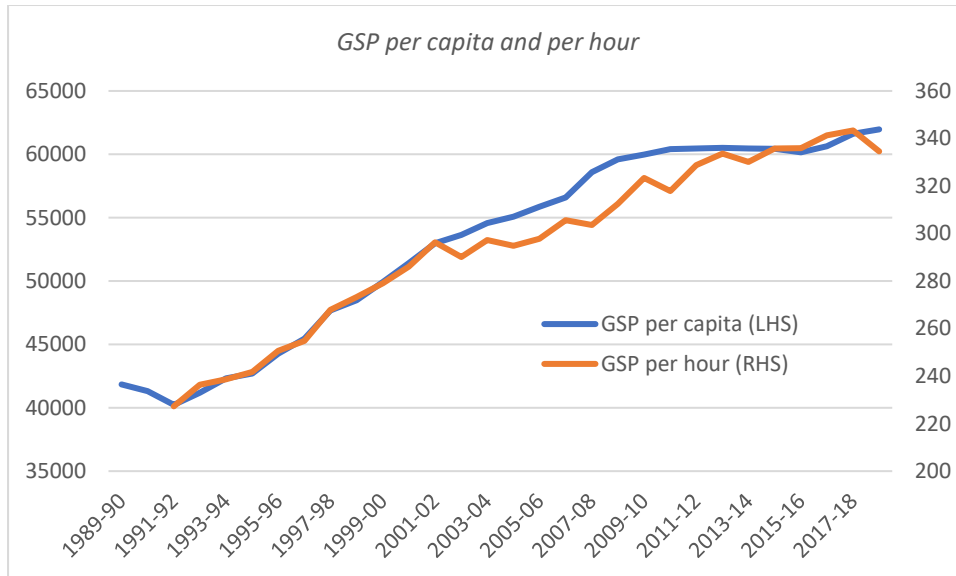
3. SOUTH AUSTRALIAN TRENDS

With this as background and with some pointers toward key developments, attention now turns to the South Australian economy.

3.1 Living standards

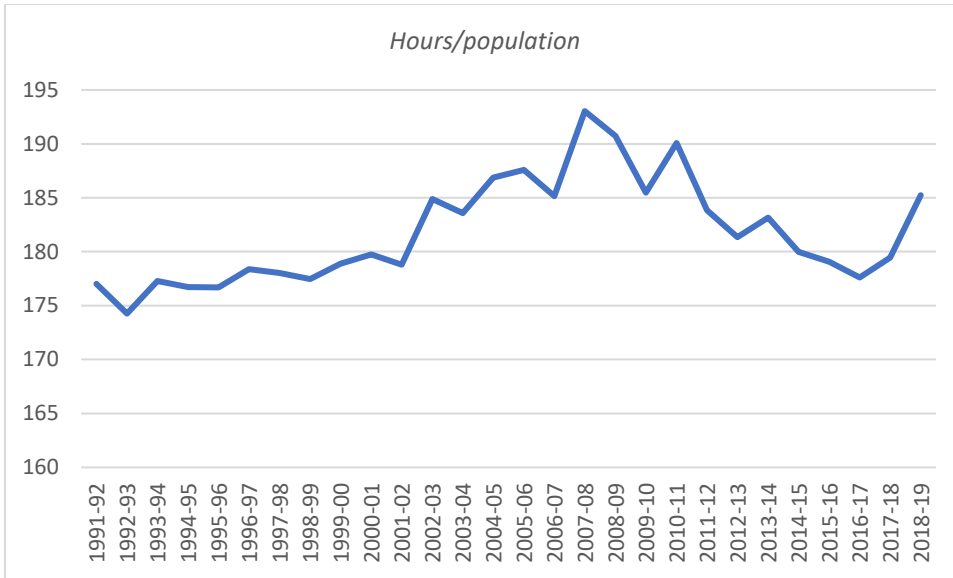
Living standards in SA, as measured by Gross State Product per capita, showed a 'flat spot' at around \$60,000 from the late 2000s after a period of steady growth (Figure 14). Growth has picked up again in recent years.

Figure 14: SA's GSP per capita and GSP per hour (2017-18 \$ chain volumes)



Labour utilisation (hours worked per head of population) has had important influence on the momentum of living standards in SA. Living standards had grown in line with productivity growth from 1991-92 to 2001-02, implying little change in the rate of utilisation. However, while the two series then diverged as productivity growth slowed (Figure 14), some of the effect of weaker productivity growth on living standards was offset by an increase in labour utilisation (Figure 15). The 'flat spot' in living standards came after 2007-08 as labour utilisation fell. The pickup in growth in living standards in recent years has been due to a return to greater labour utilisation.

Figure 15: Labour utilisation in SA (hours)



A decomposition of growth in living standards into contributions from labour productivity growth and labour utilisation growth is presented in Table 2. Numbers in the first column are the sum of the numbers in the other two columns.

There appears to be an inverse relation between productivity and utilisation. This could usefully be explored further to see whether it is the lower-skilled and those in lower-productivity industries who enter and exit employment.

Table 2: Decomposition of growth in SA GSP per capita

	GSP per capita	Labour productivity	Labour utilisation
1991-92 to 2001-02	2.75	2.65	0.10
2001-02 to 2007-08	1.68	0.41	1.28
2007-08 to 2015-16	0.32	1.26	-0.94
2015-16 to 2018-19	0.99	-0.14	1.13

3.2 Market sector productivity trends

Attention now turns to the ABS productivity estimates for the market sector of the SA economy.

There appear to be two periods with distinct productivity characteristics. In the period before 2003-04 or thereabouts, labour productivity and MFP were reasonably strong and capital productivity was reasonably flat (Figure 16, Figure 17 and Figure 18). After 2003-04, labour productivity continued to grow, albeit at a slower rate, while there was quite a steep decline in capital productivity. These two developments had an offsetting effect on MFP, which stagnated.

Figure 16: SA's labour productivity (index, 2017-18=100 on LHS and % per year on RHS)

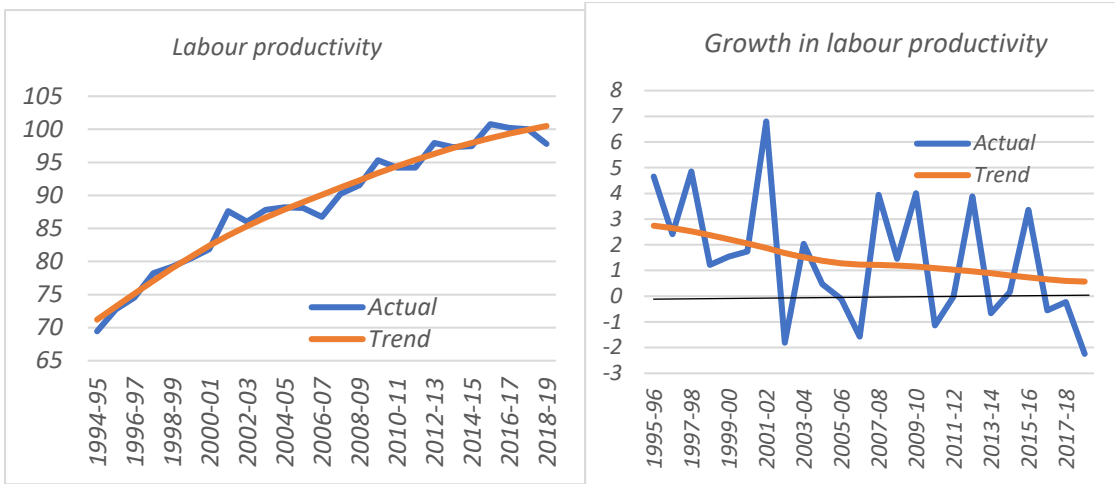


Figure 17: SA's capital productivity (index, 2017-18=100 on LHS and % per year on RHS)

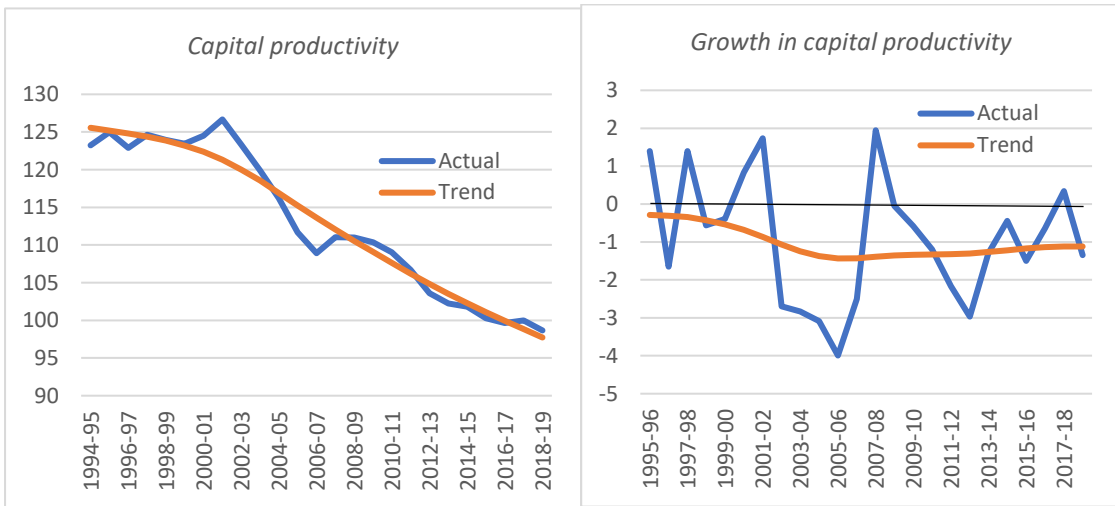
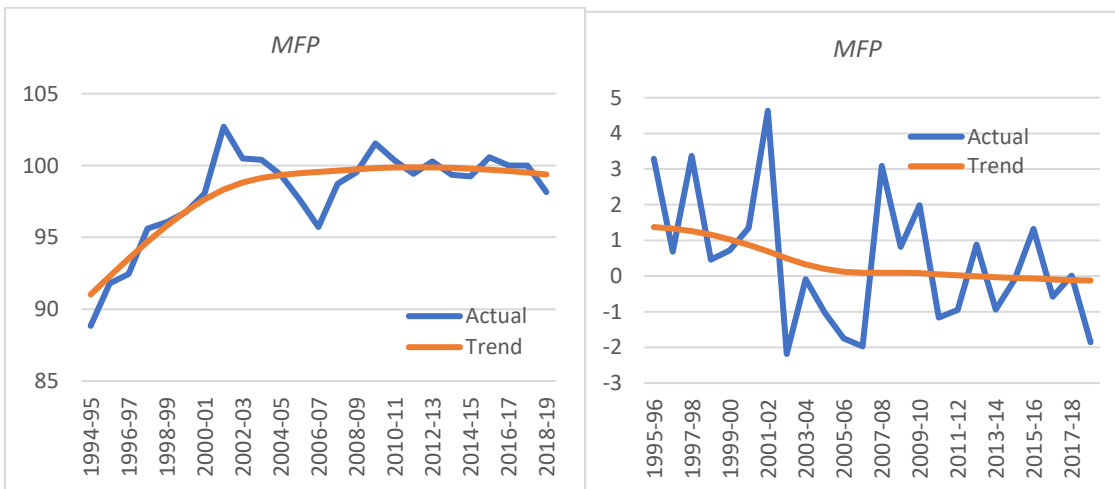


Figure 18: SA's MFP (index 2017-18=100 on LHS and % per year on RHS)



The average annual rates of growth in the productivity indexes are displayed in Table 3.

Table 3: Growth rates in labour productivity, capital productivity and MFP (% per year)

	Labour productivity	Capital productivity	MFP
1995-96 to 2003-04	2.35	-0.52	1.12
2003-04 to 2017-18	0.93	-1.29	-0.03
2018-19	-2.25	-1.35	-1.86

Productivity performance has been quite negative over the last few years, especially in the final year (Table 4). A decline of 2.25% in labour productivity is very large.

Table 4: Productivity growth in SA's market sector in the last three years (%)

	Labour productivity	Capital productivity	MFP
2016-17	-0.55	-0.64	-0.58
2017-18	-0.23	0.34	0.01
2018-19	-2.25	-1.35	-1.86

While the SA economy had some parallels with developments in the national economy, there were also important differences:

- capital productivity fell in both the SA and national economies from 2003-04;
- while capital productivity has flattened out in the national economy since 2013-14, it has continued to decline in SA;
- the slower growth in labour productivity in the national economy since 2011-12 is not as evident in the SA numbers; and
- a decline in productivity is evident in both the SA and national economies in 2018-19, although it is a much stronger decline in SA.

3.3 Proximate contributors

These productivity trends are now analysed in terms of contributions from output and input trends.

The actual and trend growth in output and inputs are displayed in Figure 19. However, for ease, the output and input contributors are examined in trend terms with help from Figure 20.

Figure 19: Annual growth in outputs and inputs (%)

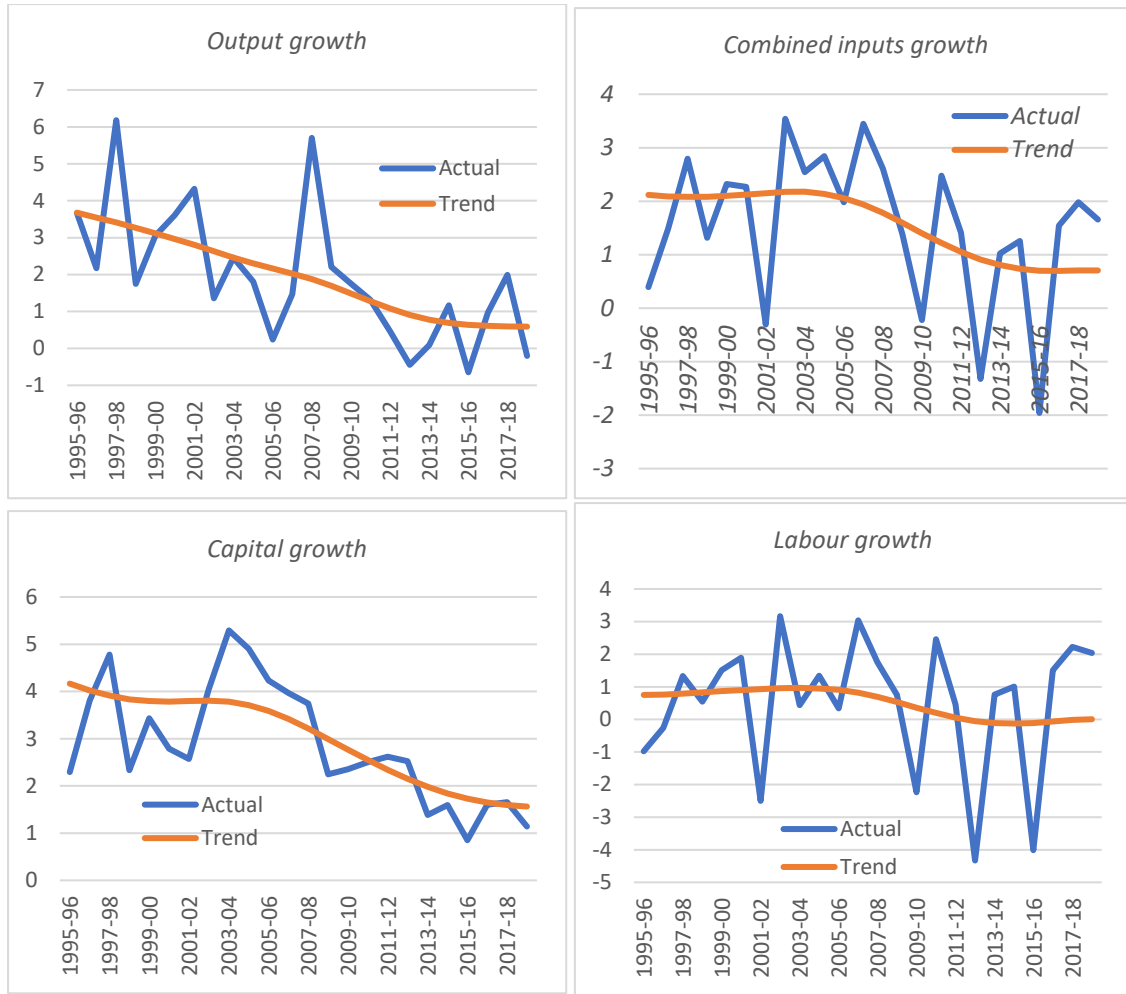
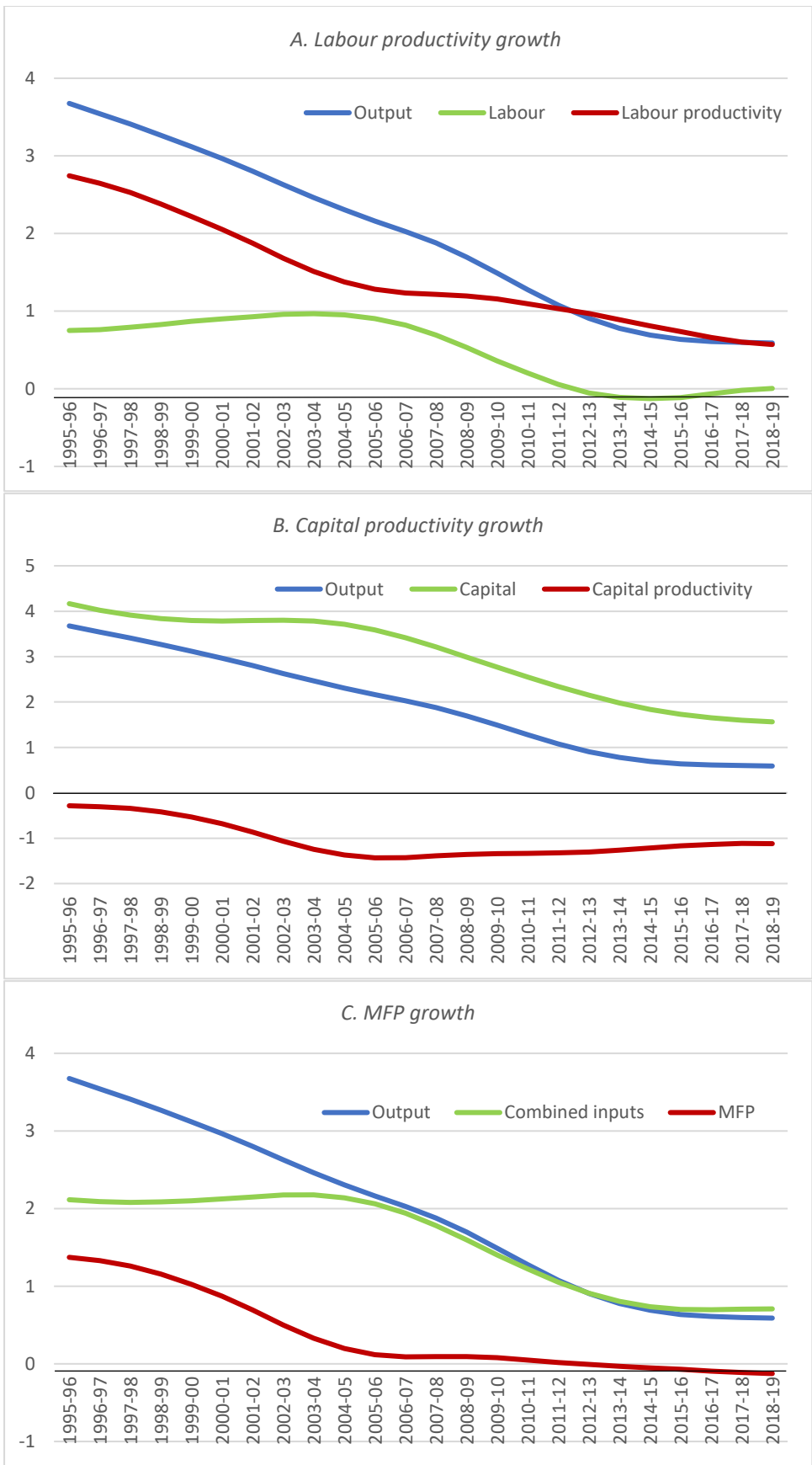


Figure 20 shows the growth in the trend series for productivity and corresponding output and input components. These should be read for rough rather than precise explanation.

The figure indicates:

- labour productivity growth fell over the period because of a large drop off in output growth and without a matching fall in labour growth;
- capital productivity growth went negative because growth in capital held up while output growth fell; and then it maintained the same negative rate as the rate of capital growth fell at the same rate as output growth; and
- MFP growth was reasonably strong at first but declined, as input growth was maintained in the face of slower output growth; and then kept very low, as input growth aligned with the decline in output growth.

Figure 20: Proximate contributors to annual growth in trend productivity in SA



A decomposition based on actual rates of growth is presented in Table 5 so as to put some actual numbers on the developments just mentioned. Note that, in each column, the growth in labour productivity equals the growth in output less the growth in labour; the growth in capital productivity equals the growth in output less the growth in capital; and the growth in MFP equals the growth in output less the growth in combined inputs. The acceleration column is the change in growth rate between the two periods.

Table 5: Proximate contributions to productivity growth over two periods (%)

	1995-96 to 2003-04	2003-04 to 2017-18	Acceleration
Output	3.11	1.29	-1.82
Labour	0.76	0.36	-0.40
Capital	3.63	2.58	-1.05
Combined inputs	2.00	1.32	-0.68
Labour productivity	2.35	0.93	-1.42
Capital productivity	-0.52	-1.29	-0.77
MFP	1.12	-0.03	-1.14

Labour productivity growth was 1.4 percentage points weaker in the latter period because output growth slackened by 1.8 percentage points, but labour growth only fell 0.4 of a percentage point.

Capital productivity was negative throughout (-0.5 and -1.3% a year) because capital growth, at 3.63 and 2.58% annually, was stronger than output growth of 3.11 and 1.29% a year. Capital productivity growth was more negative in the second period because capital growth did not slow as much as output growth.

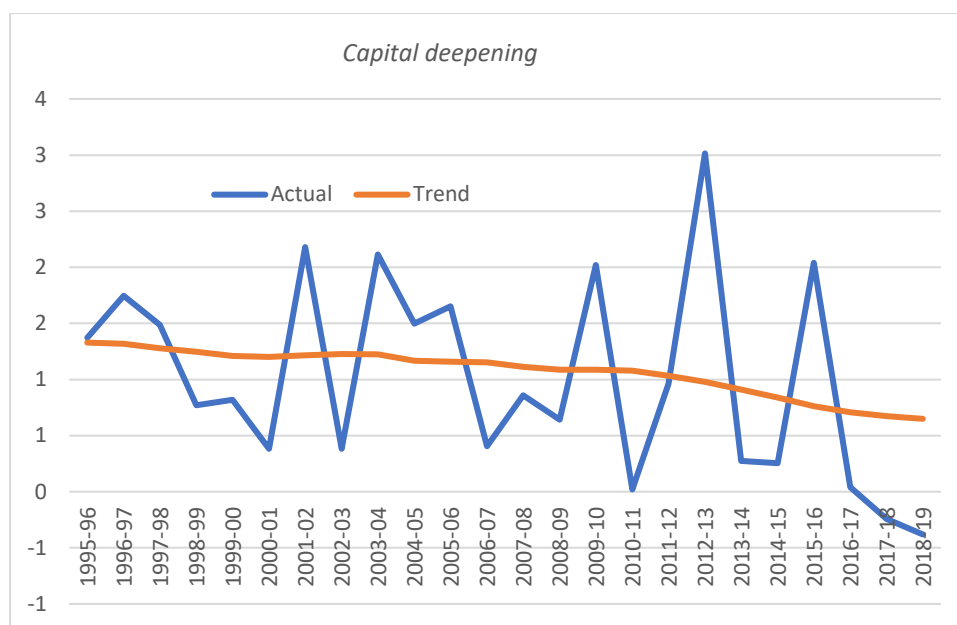
MFP growth was strong on average over the first period, with output growth of 3.1% and combined input growth of 2.0% annually. But it virtually disappeared in the second period as output growth fell 1.8 percentage points and input growth fell 0.7 percentage points to be at approximately the same rate of growth. Slower growth in capital was responsible for about two-thirds of the deceleration in combined input growth and labour about one-third (Table 6).

Table 6: Labour and capital contributions to growth and acceleration in combined input growth

	1995-96 to 2003-04	2003-04 to 2017-18	Acceleration
Labour contribution (pp)	0.43	0.20	-0.23
Capital contribution (pp)	1.56	1.12	-0.45
Combined input growth (% pa)	2.00	1.32	-0.68

The slower growth in capital than in labour implies weaker capital deepening. Figure 21 bears this out. In actual terms, there was in fact capital shallowing in the last two years. Consequently, the strong negative growth in labour productivity in the last year (-2.25%) can be attributed to negative capital deepening (-0.38) and negative MFP growth (-1.86%).

Figure 21: Annual rate of capital deepening in SA's market sector (%)



3.4 Summary points

- Growth in SA’s living standards came to a standstill or ‘flat spot’ around the late 2000s. In increase in labour utilisation supported growth in living standards in the 2000s, but the flat spot came about as the rate of labour utilisation declined.
- There are some parallels in the productivity performance of the South Australian and national economies: the fall in capital productivity from the mid-2000s, the slower LP growth since 2011-12 and the drop in productivity in 2018-19.
- However: while capital productivity has halted its decline in the national economy, it has continued to decline in SA; the decline in LP growth has not been as strong in SA; but the drop in productivity in the last year has been larger.
- But it has not just been a fall in the last year. SA’s productivity growth has been negative in each of the last three years.
- The main contributor to weaker productivity growth has been weaker output growth. Output grew at only 1.3% a year between 2003-04 and 2017-18.
- Growth in labour and capital inputs has slowed, but not to the same extent as output growth. And so labour and capital productivity have both weakened.
- MFP growth disappeared between 2003-04 and 2018-19 as the decline in combined input growth aligned with the decline in output growth.
- The more rapid cutback in capital growth than in labour growth means there has been a fall in the rate of capital deepening. Indeed, there has been capital shallowing in the last couple of years.

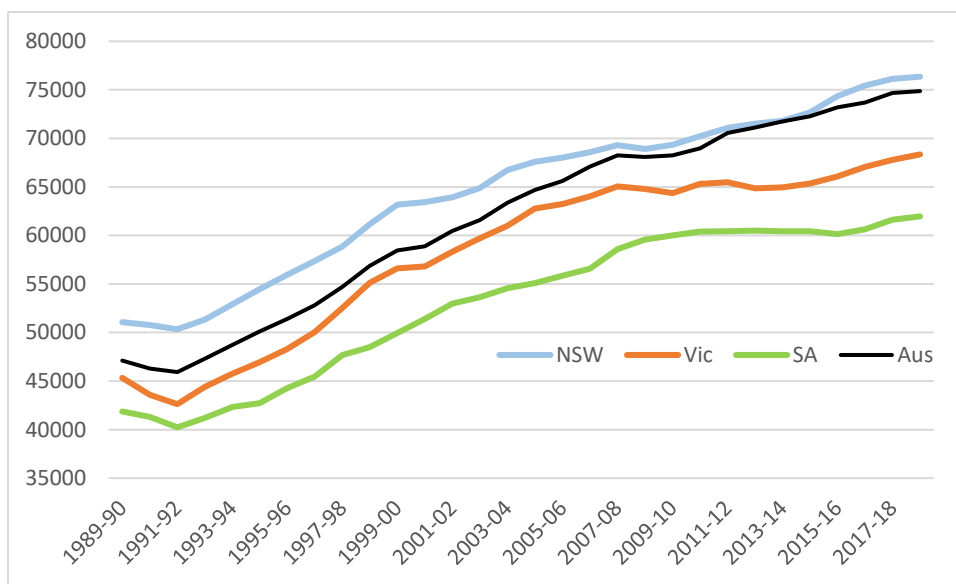
4 INTER-JURISDICTIONAL COMPARISONS

4.1 Living standards and other economy-wide measures

The inter-jurisdictional comparisons of South Australia's economic performance highlight NSW and Victoria. They are reasonable benchmarks because, like SA, they do not have proportionately large mining sectors and so their performance is not greatly affected by changes in mining activity and the income it generates (see Section 5). Comparisons with Australia as a whole, however, do give a feel for the effects of inclusion of resource riches.

South Australia's average income has been persistently below that of NSW, Victoria and the national average (Figure 22). It has broadly kept pace in growth terms with Victoria's but has fallen further behind NSW and the national average in the 2010s.

Figure 22: Average income in SA, NSW, Victoria and Australia



Some observations for all jurisdictions are shown for comparison in Table 7. The years are chosen to correspond to the timing of local peaks in the national series. The initial year, 1992-93, provides a starting point that is representative, coming out of the early-1990s recession.

The table shows South Australia has had the second lowest average living standards of any State or Territory in all years. In 2017-18, SA's GSP per capita was 83% of the national average, leaving a gap of a little over \$13,000. (The gap was \$12,900 in the final year, 2018-19.)

Table 7: Average living standards (GSP per capita) in the States and Territories

	1992-93	1999-00	2007-08	2011-12	2017-18
NSW	51,332	63,159	69,307	71,092	76,133
Victoria	44,412	56,611	65,036	65,497	67,793
Queensland	43,880	53,808	67,245	67,641	70,976
South Australia	41,191	49,933	58,602	60,448	61,613
Western Australia	52,428	64,909	83,078	92,478	99,955
Tasmania	39,536	45,244	54,126	55,366	58,493
Northern Territory	60,309	70,214	88,461	92,753	107,352
ACT	59,680	69,686	86,405	90,562	95,345
AUSTRALIA	47,291	58,452	68,263	70,568	74,680

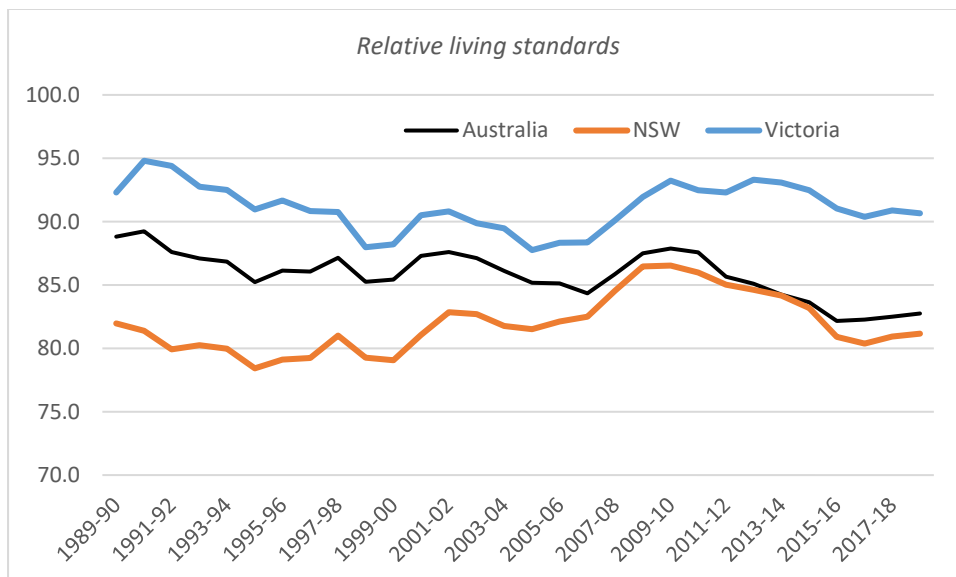
Figure 23 shows the inter-jurisdictional comparison in a different way. Average income in SA is shown as a percentage of average income in NSW, Victoria and the nation as a whole.

The main feature of the chart is the rise in SA's standing in the late 2000s and its subsequent decline in the 2010s. This implies that the continued rise in SA's living standards in the late 2000s and its subsequent 'flat spot' were not shared by other jurisdictions.

Up until the mid-2000s, South Australia had been losing ground with NSW and the national average. It had, however, at least held ground with Victoria.

Over the entire period, SA has basically held its ground relative to NSW and Victoria. It has, however, lost ground relative to the national average.

Figure 23: SA's GSP per capita in proportion to that of NSW, Victoria and Australia (%)



Contributions of labour productivity and labour utilisation

As previously noted, growth in average income can be viewed as a combination of growth in labour productivity and in labour utilisation. In similar vein, average income, relative to other jurisdictions, can be explained in terms of relative labour productivity and relative labour utilisation. And so variations in Figure 23 can be explained by variations in relative labour productivity (Figure 24) and variations in relative labour utilisation (Figure 25).

Variations in relative utilisation appear to have had most influence on SA's relative living standards, at least in comparison to NSW and Victoria. The rise in SA's relative living standards in the 2000s and the subsequent fall in the 2010s is correlated more with the movement in relative labour utilisation than relative labour productivity.

Figure 24: SA's GSP per hour in proportion to that of NSW, Victoria and Australia

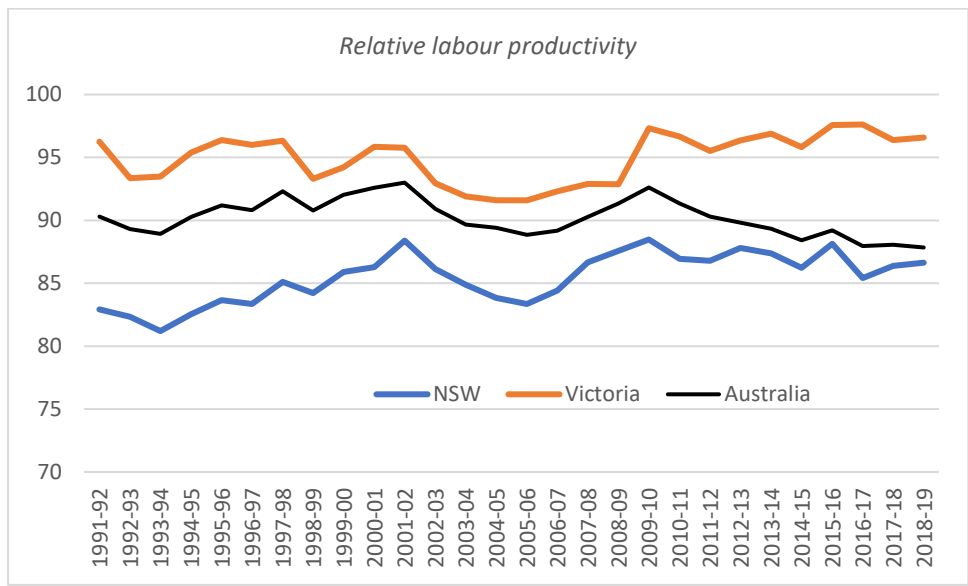
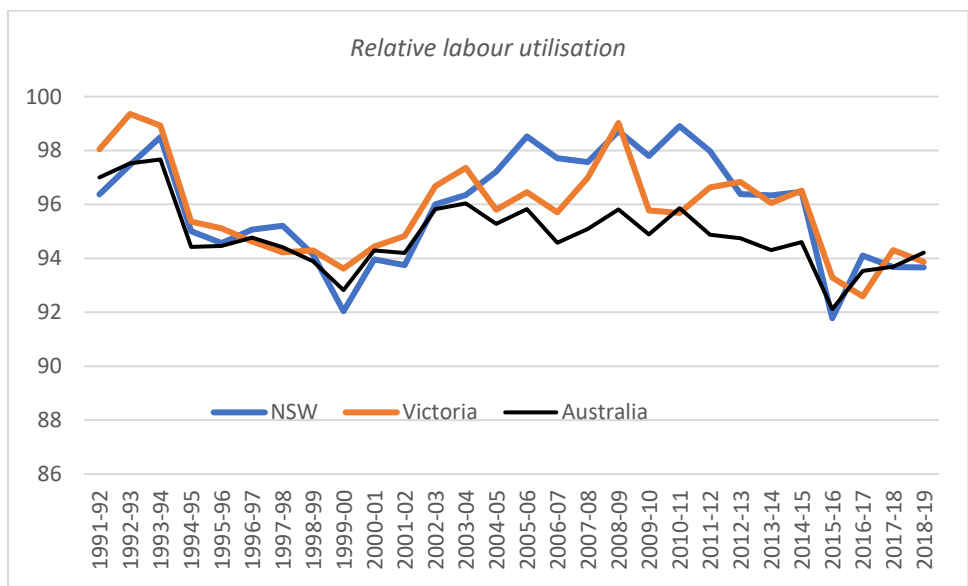


Figure 25: SA's labour utilisation in proportion to that of NSW, Victoria and Australia



However, SA did experience a 5 percentage-point decline in productivity relative to the national average from 2009-10 which, again, was due to the relatively strong growth in productivity in the resource-rich States.

Some observations from these figures at various points are presented in Table 8. SA's relative labour utilisation is shown as a proportion rather than a percentage to reinforce that multiplication of the productivity percentage by the utilisation proportion equals the living standards percentage. If the utilisation proportion is close to unity, the living standards percentage is close to the productivity percentage.

Table 8: SA as a proportion of living standard levels in NSW, Victoria and Australia

	1992-93	1999-2000	2005-06	2011-12	2018-19
New South Wales					
Productivity (%)	82.3	85.9	83.3	86.8	86.6
Utilisation	0.97	0.92	0.99	0.98	0.94
Living standards (%)	80.2	79.1	82.1	85.0	81.1
Victoria					
Productivity (%)	93.3	94.2	91.6	95.5	96.6
Utilisation	0.99	0.94	0.96	0.97	0.94
Living standards (%)	94.8	90.8	89.5	93.2	90.4
Australia					
Productivity (%)	89.3	92.0	88.8	90.3	87.8
Utilisation	0.98	0.93	0.96	0.95	0.94
Living standards (%)	89.2	87.2	86.1	87.9	82.3

To have the same living standards as Victoria, SA would need to raise its productivity from \$335 per hour to \$346 per hour and its labour utilisation from 185 hours per person to 197 hours per person.

The rates of growth in average income, labour productivity and labour utilisation are presented for all jurisdictions in Table 9, Table 10 and Table 11 respectively.

These tables show that SA had the weakest growth in living standards since 2011-12. At 0.32% a year, SA's growth rate was about one-third of the national average of 0.94% a year.

This weak growth in living standards has been associated with both weak growth in productivity (against the resource-rich jurisdictions) and weak growth in labour utilisation (against NSW, Victoria and the national average).

SA's rate of productivity growth was 0.42 percentage points below the national average (although comparable with the rates in NSW and Victoria) and its rate of growth in labour utilisation was 0.21 of a percentage point lower than the national average (and further below the rates of NSW and Victoria).

Table 9: Growth rates in GSP per person in all jurisdictions (% per year)

	1992-93 to 1999-00	1999-00 to 2007-08	2007-08 to 2011-12	2011-12 to 2017-18
New South Wales	2.07	1.16	0.64	1.14
Victoria	2.43	1.73	0.18	0.57
Queensland	2.04	2.79	0.15	0.80
South Australia	1.92	2.00	0.78	0.32
Western Australia	2.14	3.08	2.68	1.30
Tasmania	1.35	2.24	0.57	0.92
Northern Territory	1.52	2.89	1.18	2.44
Aust Cap Territory	1.55	2.69	1.17	0.86
AUSTRALIA	2.12	1.94	0.83	0.94

Table 10: Growth rates in GSP per hour for all jurisdictions (% per year)

	1992-93 to 1999-00	1999-00 to 2007-08	2007-08 to 2011-12	2011-12 to 2017-18
New South Wales	1.24	0.94	1.96	0.80
Victoria	1.57	1.23	1.31	0.57
Queensland	1.47	1.80	1.43	1.48
South Australia	1.66	1.05	2.00	0.72
Western Australia	1.20	1.90	3.33	2.55
Tasmania	0.75	0.93	2.82	0.53
Northern Territory	0.53	1.73	1.07	2.08
Aust Cap Territory	1.00	2.18	2.42	1.50
AUSTRALIA	1.36	1.29	1.99	1.14

Table 11: Growth rates in labour utilisation in all jurisdictions (% per year)

	1992-93 to 1999-00	1999-00 to 2007-08	2007-08 to 2011-12	2011-12 to 2017-18
New South Wales	0.84	0.22	-1.32	0.34
Victoria	0.86	0.51	-1.13	0.00
Queensland	0.57	0.99	-1.28	-0.68
South Australia	0.26	0.95	-1.22	-0.40
Western Australia	0.94	1.19	-0.65	-1.25
Tasmania	0.60	1.31	-2.26	0.38
Northern Territory	0.99	1.16	0.11	0.36
Aust Cap Territory	0.55	0.51	-1.25	-0.64
AUSTRALIA	0.76	0.65	-1.16	-0.19

4.2 Market-sector productivity

Attention now turns to the market-sector productivity estimates published by the ABS in its productivity datacubes.

Overview of productivity performance across jurisdictions

A broad picture of productivity trends in the States and Territories is provided before moving on to the thematic issues.

Figure 26 shows productivity growth rates in all jurisdictions over three different periods: 1994-95 to 2003-04, 2003-04 to 2011-12 and 2011-12 to 2017-18. The height of the green dots represents the strength of LP growth, the blue bars represent the contribution of capital deepening to LP growth and the orange bars represent the MFP growth contribution.

SA's performance in the first (1990s) period looks reasonable. LP growth is not up with the best, but it is not too far off the pace – half a percentage point below the average for Australia. It had the same rate of capital deepening as the Australian average, which meant the difference in LP growth rates is due to it having a little slower growth in MFP. LP growth was on a par with that of NSW.

LP growth in the second (2000s) period was poorer in all jurisdictions apart from Tasmania. SA's LP growth was second slowest behind Victoria. The rate of capital deepening had mostly held up and even increased in WA and Qld. But MFP growth collapsed everywhere except Tasmania. It was negative in the resource States of Qld and WA, as well as Victoria, the ACT and SA.

In the third period, LP growth was about the same or weaker in most jurisdictions. Tasmania's LP growth collapsed, putting SA in third last. SA's rate of capital deepening held up, but it did not raise its rate of MFP growth to the extent that other jurisdictions did.

Concentrating on the last period, Figure 27 shows that SA had the weakest output growth compared with other jurisdictions. While its input growth was also the weakest, the small gap between output growth and input growth meant small MFP growth.

Figure 28 shows the growth in capital and labour against the growth in output over the third period. Growth in capital was not strong relative to other jurisdictions, but it was strong relative to SA's output growth. This meant a substantial fall in capital productivity. However, there was a cutback in labour growth, which contributed to positive LP growth, despite the weak output growth.

Figure 26: Growth rates in LP and its capital deepening and MFP growth components (% per year)

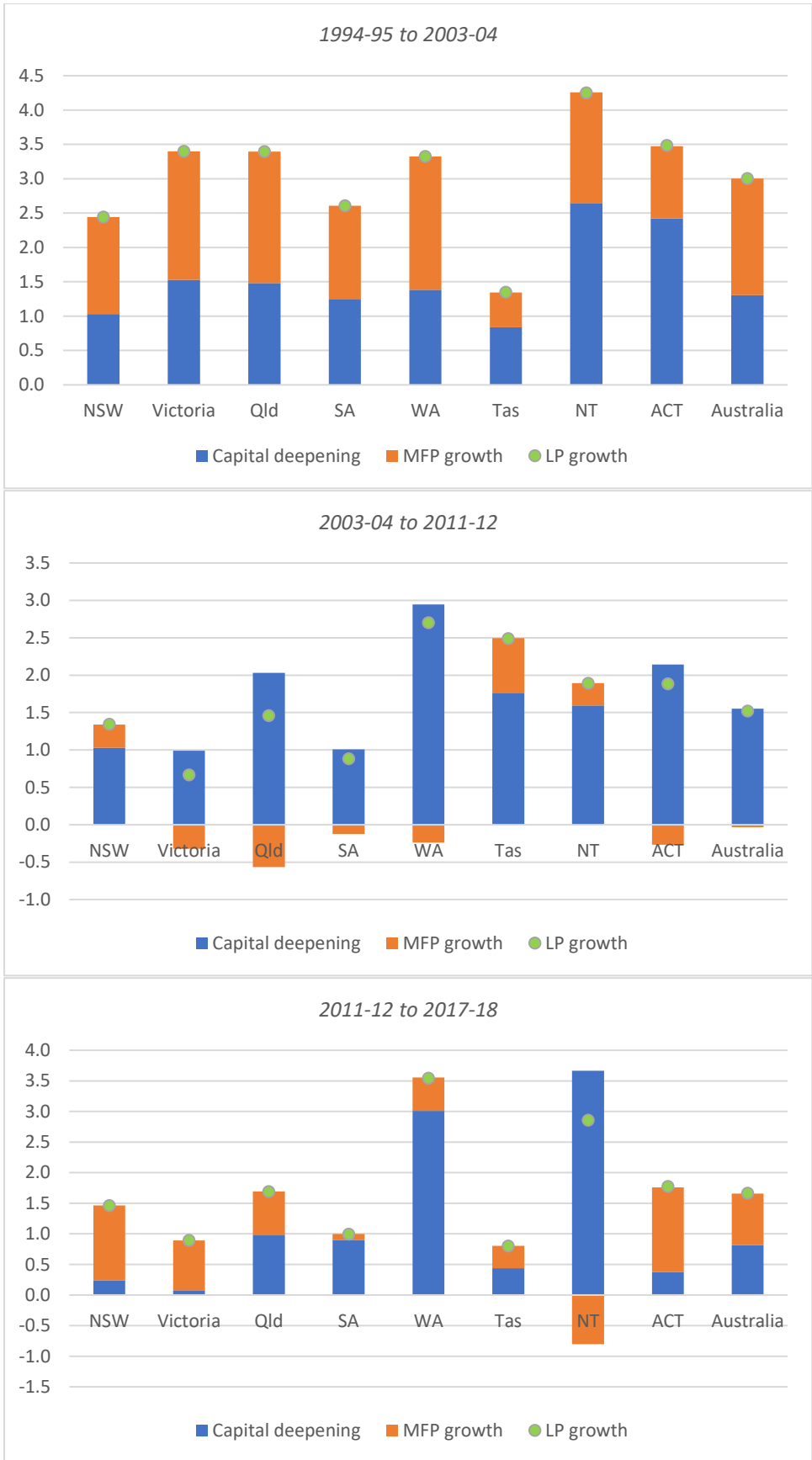


Figure 27: Growth rates in inputs and outputs over 2011-12 to 2017-18

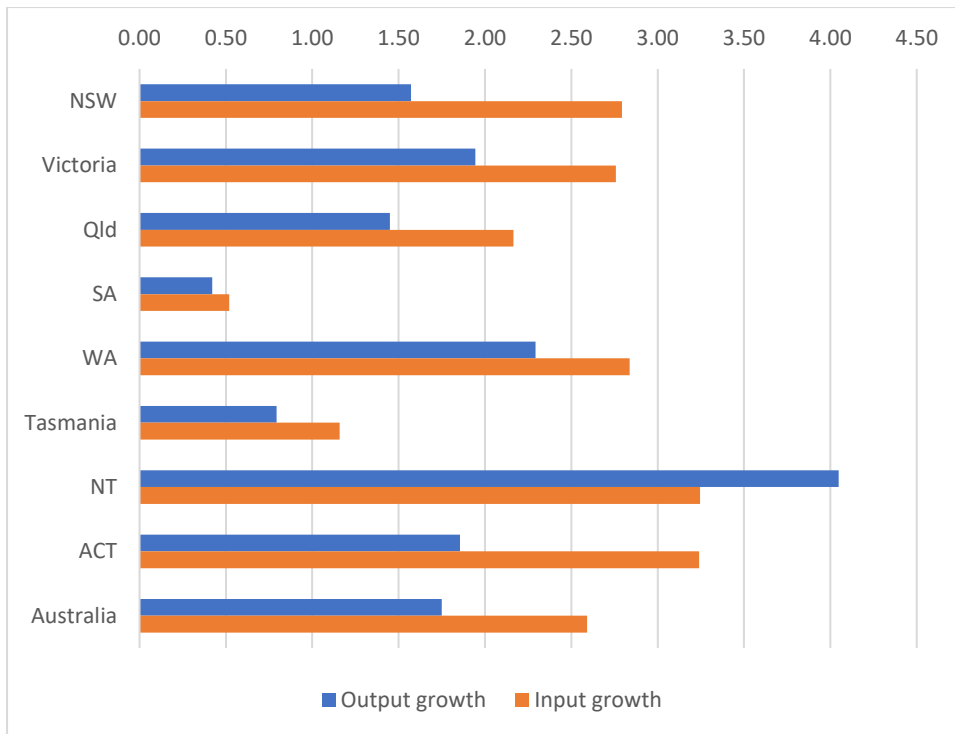
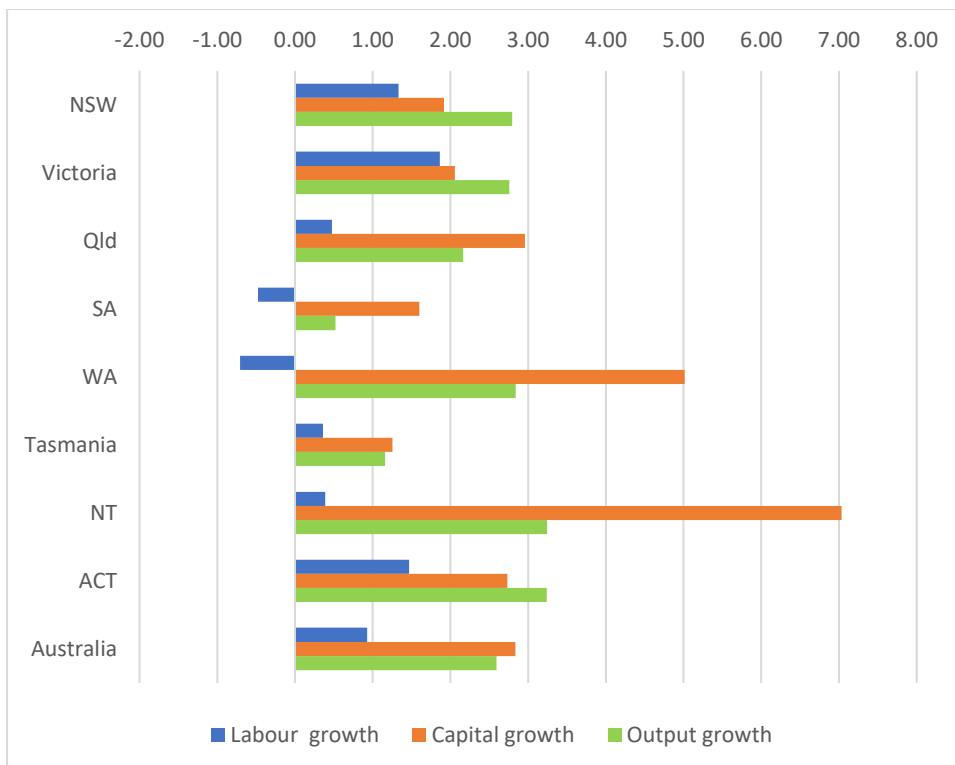


Figure 28: Growth rates in labour, capital and output over 2011-12 to 2017-18 (% per year)



Any rebound in capital productivity?

It was noted in the previous section that SA's capital productivity has continued to decline while, in the national economy, it has levelled out. Figure 29 shows that capital productivity has not only levelled out in NSW and Victoria but has also recovered to some extent. SA's

capital productivity declined at just over 1% a year between 2011-12 and 2017-18, when other jurisdictions (apart from the resource-rich ones and Tasmania) had positive growth (Table 12).

Declining productivity in the resource-rich jurisdictions can be explained in terms of the heavy investment in mining developments and associated infrastructure. In the case of South Australia, the explanation is not as straightforward (see Section 6 for further examination).

Figure 29: Capital productivity in NSW, Victoria, SA and Australia

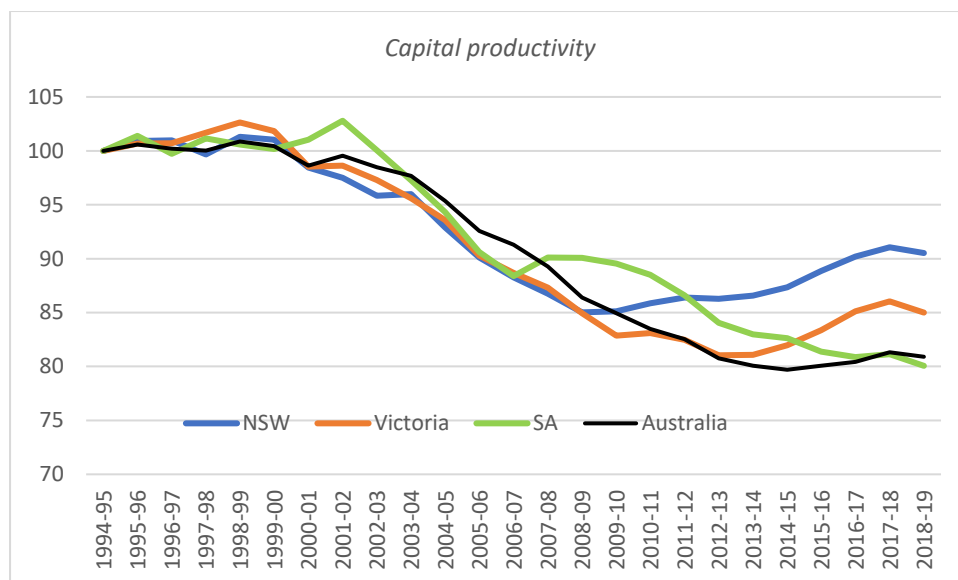


Table 12: Growth rates of capital productivity in all States and Territories

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	-0.46	-1.31	0.88	-0.61
Victoria	-0.50	-1.84	0.70	-1.20
Queensland	-0.32	-3.41	-0.79	-1.31
South Australia	-0.31	-1.45	-1.08	-1.35
Western Australia	0.54	-2.68	-2.18	0.74
Tasmania	-0.48	-1.27	-0.10	1.40
Northern Territory	-0.56	-0.85	-3.79	-2.32
ACT	-4.17	-4.46	0.51	1.34
AUSTRALIA	-0.26	-2.11	-0.24	-0.54

The slowdown in labour productivity growth

A glance at Figure 30 shows that SA’s overall labour productivity growth since 1994-95 has not kept up with the Australian average, with a divergence growing after 2010-11. This was due to strong growth in WA, Queensland and the Northern Territory (Table 13). Overall, SA’s labour productivity growth has been less than growth in NSW and Victoria, but not greatly so.

Figure 30: Labour productivity in NSW, Victoria, SA and Australia

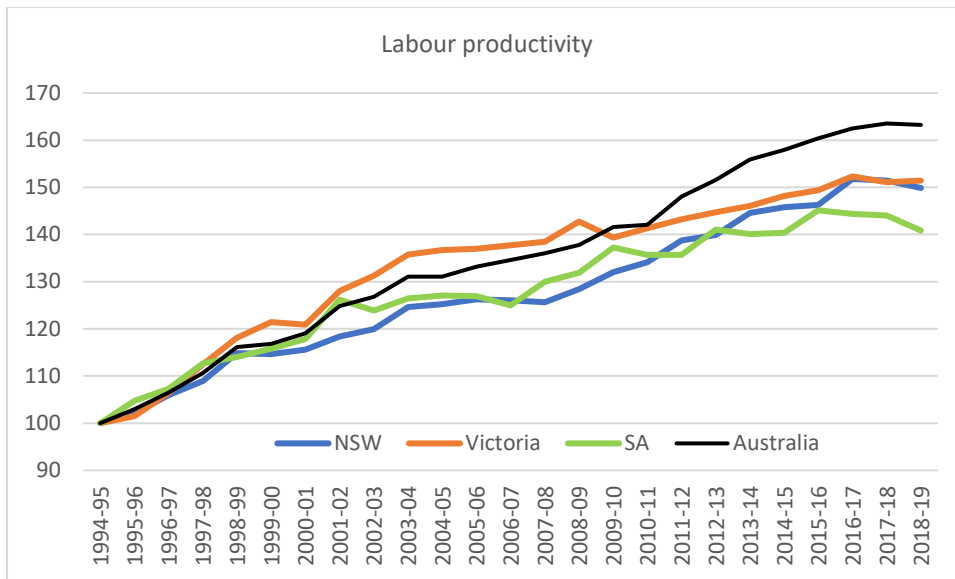


Table 13: Growth rates of labour productivity in all States and territories

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	2.44	1.34	1.46	-1.05
Victoria	3.40	0.66	0.89	0.24
Queensland	3.39	1.46	1.69	0.91
South Australia	2.61	0.88	0.99	-2.25
Western Australia	3.32	2.70	3.54	-0.16
Tasmania	1.35	2.49	0.80	6.18
Northern Territory	4.25	1.89	2.85	7.04
ACT	3.49	1.88	1.77	7.18
AUSTRALIA	3.00	1.52	1.66	-0.20

SA contributed to the slowdown in LP growth in recent years. Although its rate of growth was a little higher in the 2010s period than in the 2000s period (Table 13), SA’s LP growth slowed markedly and, indeed, turned negative after 2015-16 (Figure 30).

Weak MFP growth

SA’s MFP performance was very weak by the standards of comparator jurisdictions. While SA’s MFP continued to be flat after 2010-11, MFP rose in NSW, Victoria and the nation as a whole (Figure 31). Only the NT had weaker MFP growth (Table 14).

SA’s weaker MFP performance was due to its weaker capital productivity performance, at least in relation to NSW and Victoria. While SA’s labour productivity growth was in touch with LP growth in NSW and Victoria, its weaker capital productivity growth meant that its MFP growth was also weaker.

Figure 31: MFP in NSW, Victoria, SA and Australia

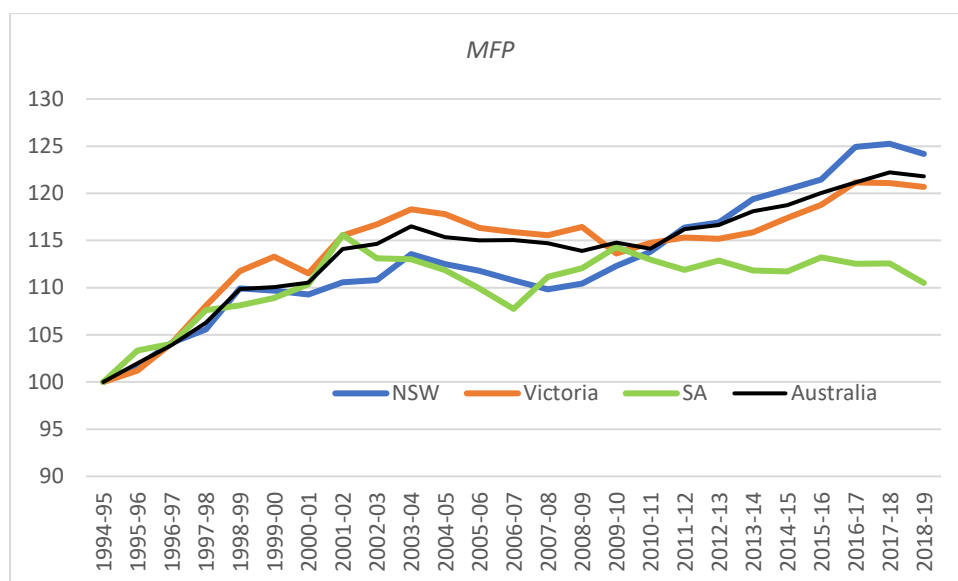


Table 14: Rates of growth in MFP in all States and Territories

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	1.41	0.31	1.22	-0.86
Victoria	1.87	-0.32	0.81	-0.34
Queensland	1.91	-0.57	0.72	-0.12
South Australia	1.36	-0.12	0.10	-1.86
Western Australia	1.94	-0.24	0.55	0.35
Tasmania	0.51	0.73	0.37	3.91
Northern Territory	1.61	0.30	-0.80	1.88
ACT	1.05	-0.27	1.38	5.15
AUSTRALIA	1.70	-0.03	0.84	-0.35

Changes over the final year

SA had large falls in both absolute and comparative terms in 2018-19. With a fall of 2.25%, SA had the largest fall in labour productivity (Table 13) and only the NT had a steeper fall in capital productivity (Table 12). SA had, by far, the largest fall in MFP, with a figure of -1.86% (Table 14).

4.3 Proximate contributors

In this sub-section, SA’s comparative productivity performance is explained in terms of differences in growth in outputs and inputs.

It was noted in the last sub-section that SA’s labour productivity growth weakened relative to the Australian average from 2010-11. Figure 32 suggests weaker output growth was a major factor. South Australia’s output stagnated, while output continued to grow in NSW, Victoria and Australia as a whole. The annual average rate of growth between 2011-12 and 2017-18 was just 0.52% -- well below the rates of growth in other jurisdictions (Table 15).

Figure 32: Output indexes for NSW, Victoria, SA and Australia, 1994-95=100

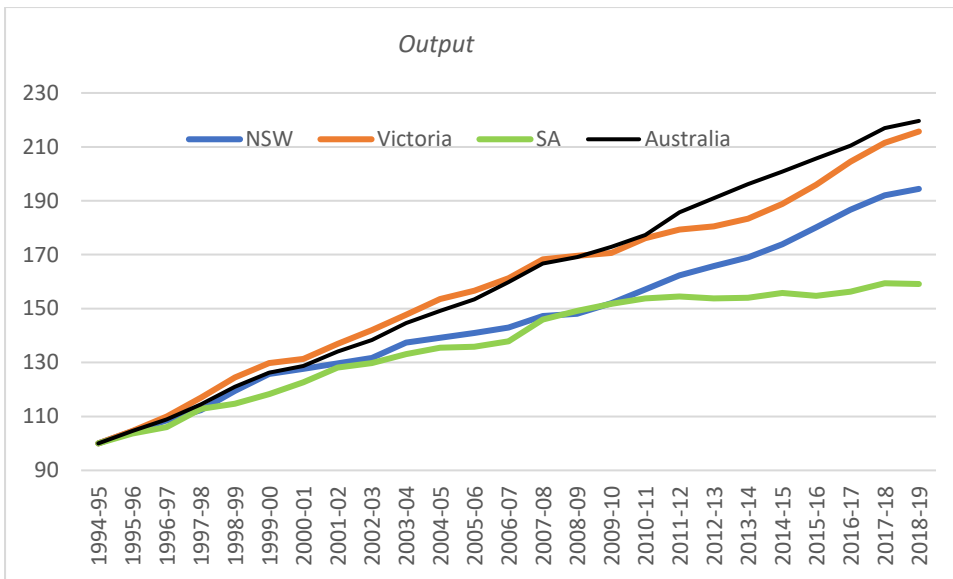


Table 15: Output growth in all States and Territories

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	3.53	2.09	2.79	1.26
Victoria	4.34	2.42	2.76	1.94
Queensland	5.02	3.80	2.16	0.31
South Australia	3.18	1.87	0.52	-0.20
Western Australia	4.88	5.96	2.84	1.67
Tasmania	1.86	2.81	1.16	2.94
Northern Territory	4.43	5.86	3.24	-1.10
ACT	3.95	2.89	3.24	2.81
Australia	4.10	3.13	2.59	1.24

As noted previously, the weak growth in output in the 2010s also had a bearing on SA’s capital productivity performance. Capital productivity growth was maintained at a negative rate through growth in capital continuing at around the same rate as output.

However, SA’s growth in capital in the 2010s was not as strong as it was in other jurisdictions, apart from Tasmania (Figure 33 and Table 16). Nevertheless, the mismatch between output growth and capital growth meant that SA joined the resource-rich jurisdictions in having negative capital productivity growth (Figure 34).

Figure 33: Indexes of capital services in NSW, Victoria and Australia, 1994-95=100

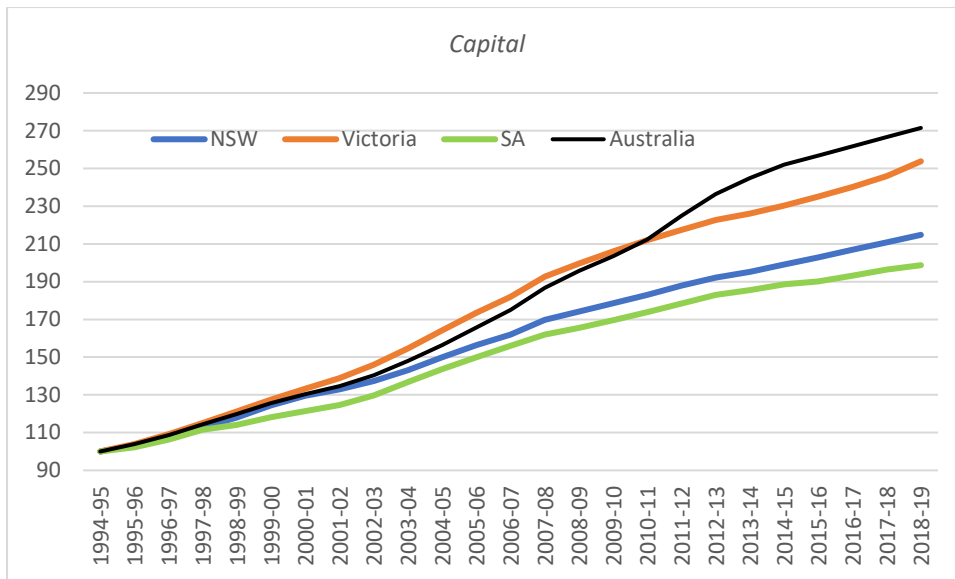
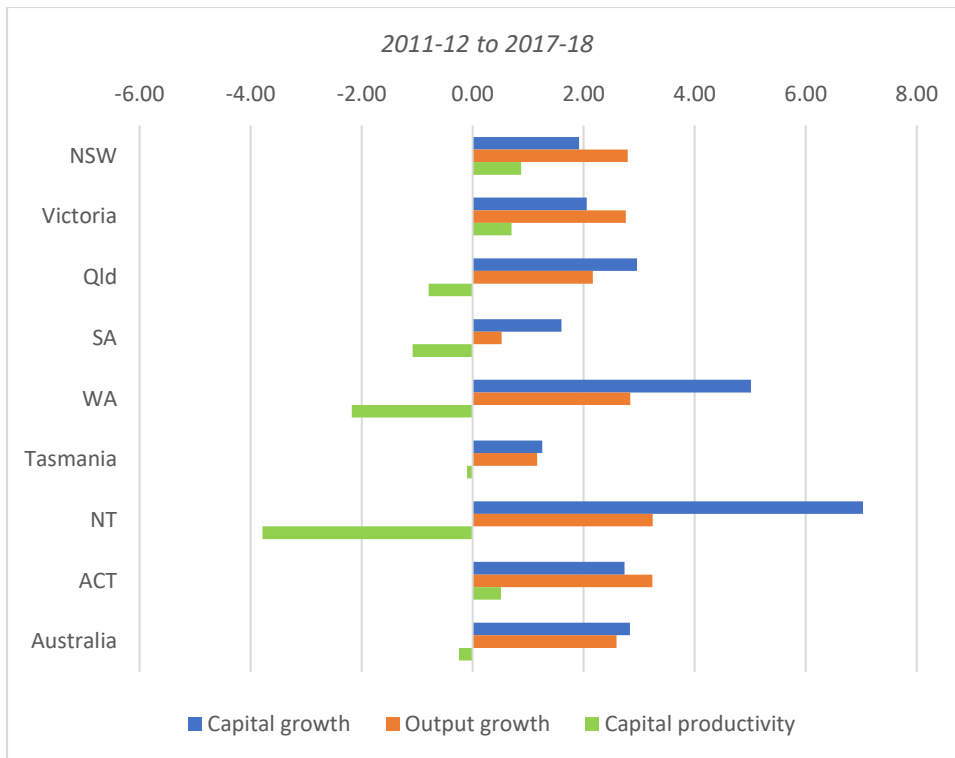


Table 16: Growth rates in capital services in all jurisdictions, % per year

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	3.98	3.40	1.92	1.88
Victoria	4.84	4.26	2.06	3.14
Queensland	5.34	7.21	2.96	1.63
South Australia	3.48	3.32	1.60	1.14
Western Australia	4.34	8.63	5.02	0.93
Tasmania	2.34	4.08	1.26	1.54
Northern Territory	4.99	6.71	7.03	1.22
ACT	8.12	7.35	2.73	1.48
Australia	4.36	5.23	2.84	1.78

Figure 34: Growth rates in output, capital and capital productivity in all jurisdictions over 2011-12 to 2017-18



A reduction in use of labour – as opposed to continued growth in labour in other jurisdictions (Figure 35) – worked against the effect of the weak output growth on relative labour productivity growth. Hours worked declined at 0.47% a year in SA between 2011-12 and 2017-18, compared with strong growth in NSW and Victoria and a rate of 0.93% a year for Australia.

Thus the relatively slow rate of LP growth in SA of 0.99% a year in the 2010s (Table 13) can be explained as weak growth in output of 0.52% a year in combination with a reduction in labour input at the rate of 0.47% a year.

The combination of output growth and labour growth effects on labour productivity growth in the 2011-12 to 2017-18 period can be seen for all jurisdictions in Figure 36.

Figure 35: Indexes of hours worked in NSW, Victoria, SA and Australia

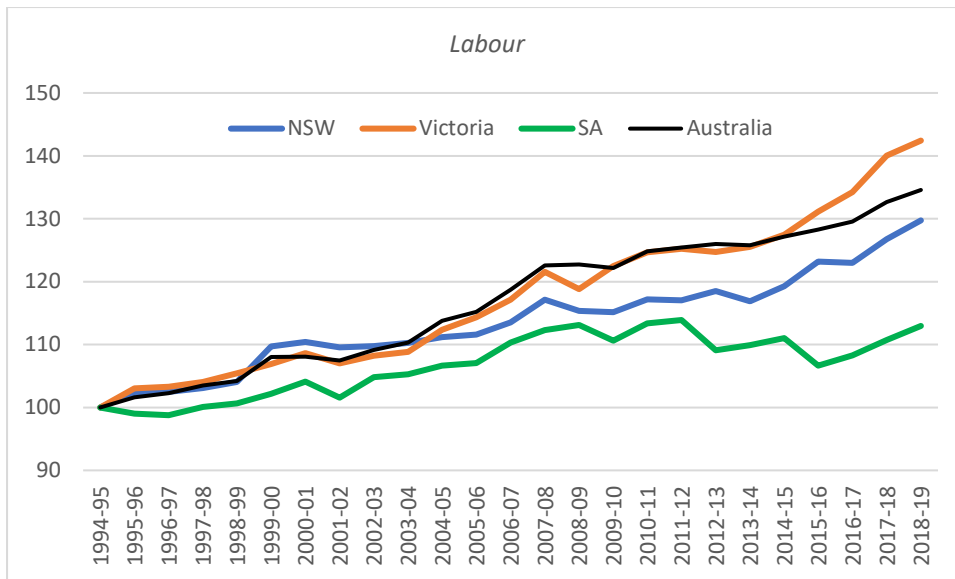
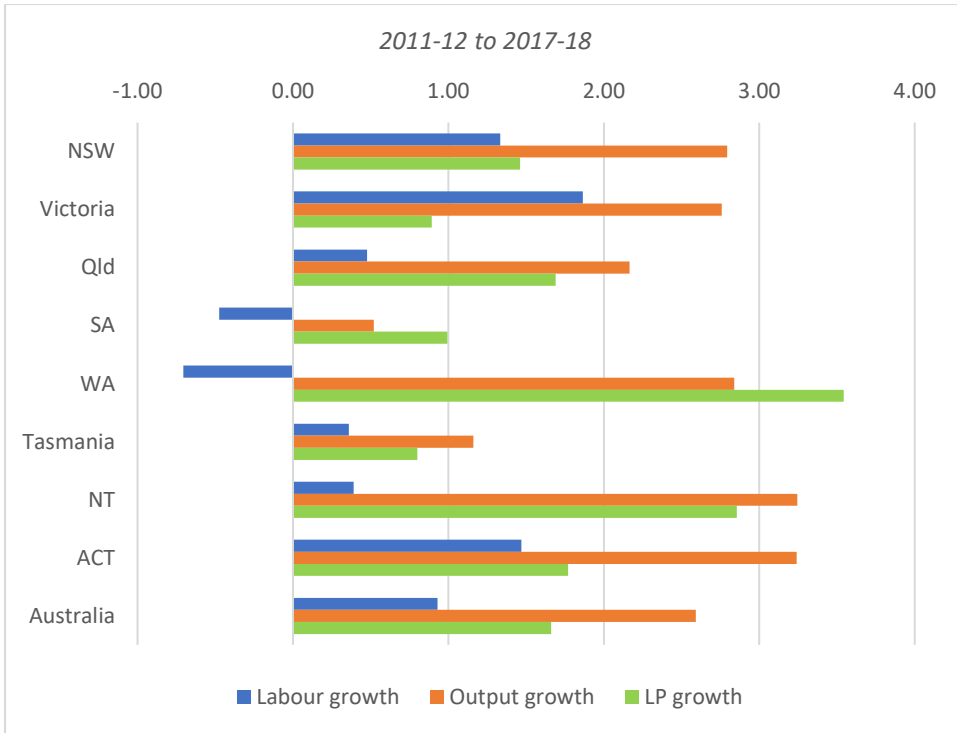


Table 17: Annual rates of growth in hours worked in all States and Territories

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	1.08	0.74	1.33	2.31
Victoria	0.94	1.75	1.87	1.70
Queensland	1.62	2.34	0.48	-0.59
South Australia	0.57	0.99	-0.47	2.04
Western Australia	1.56	3.26	-0.70	1.82
Tasmania	0.51	0.32	0.36	-3.24
Northern Territory	0.18	3.97	0.39	-8.13
ACT	0.46	1.01	1.47	-4.36
Australia	1.09	1.61	0.93	1.45

Figure 36: Growth in output, labour and labour productivity in all States and Territories over 2011-12 to 2017-18



SA also had relatively weak MFP growth during the principal 2010s period examined (Table 14). The relatively weak growth in output was the explanation. SA's growth in combined inputs was not as strong as in other jurisdictions since the early 2010s (Figure 38 and Table 18).

Figure 37: Indexes of combined inputs in NSW, Victoria, SA and Australia, 1994-95=100

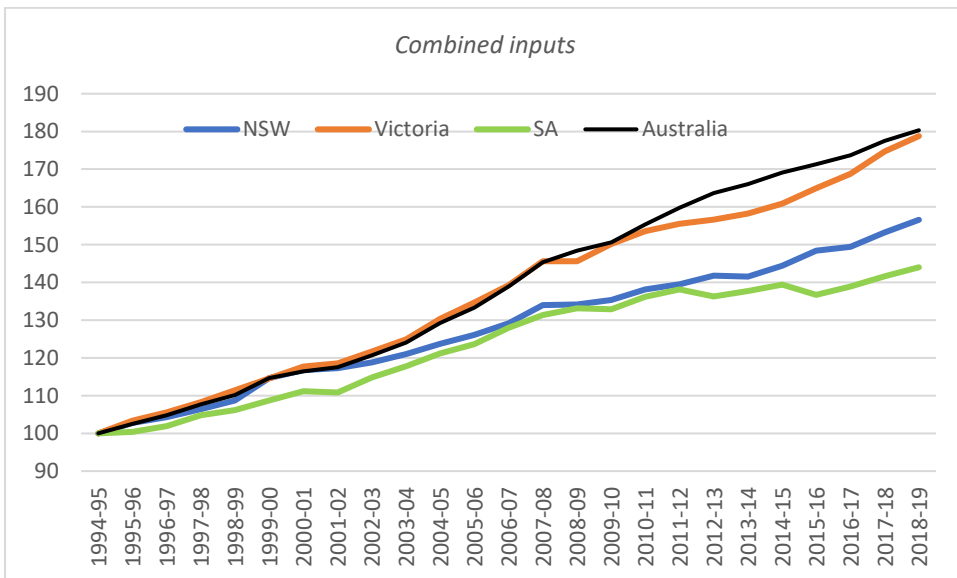
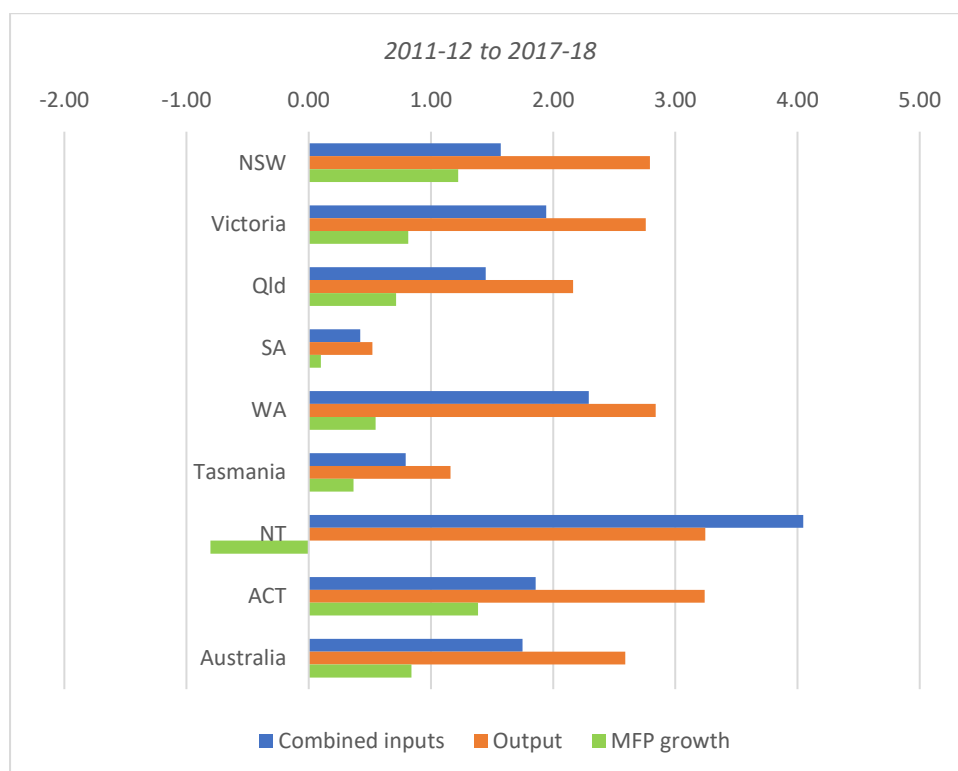


Table 18: Growth rates in combined inputs in all jurisdictions, % per year

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	2.12	1.78	1.57	2.14
Victoria	2.47	2.74	1.94	2.28
Queensland	3.11	4.37	1.45	0.43
South Australia	1.82	1.99	0.42	1.66
Western Australia	2.94	6.19	2.29	1.32
Tasmania	1.35	2.08	0.79	-0.97
Northern Territory	2.81	5.56	4.05	-2.97
ACT	2.90	3.16	1.86	-2.35
Australia	2.40	3.16	1.75	1.60

Figure 38: Growth rates in combined inputs, output and MFP in all jurisdictions over 2011-12 to 2017-18



Finally, the effects of capital deepening² on labour productivity can be assessed. SA's capital-labour ratio flattened later than in NSW, Victoria and Australia as a whole (Figure 39). This meant that the rate of capital deepening in SA was strong compared with other non-mining jurisdictions (Table 19).

² Capital deepening is growth in the capital-labour ratio (or capital growth less labour growth), multiplied by values of the capital share in total production costs.

With little contribution from MFP growth to LP growth, SA's labour productivity growth in the 2010s period was nearly all due to capital deepening (Figure 40). This contrasts with comparators, NSW and Victoria, where MFP growth was overwhelmingly the source of LP growth.

Figure 39: Indexes of the capital-labour ratio in NSW, Victoria and Australia, 1994-95=100

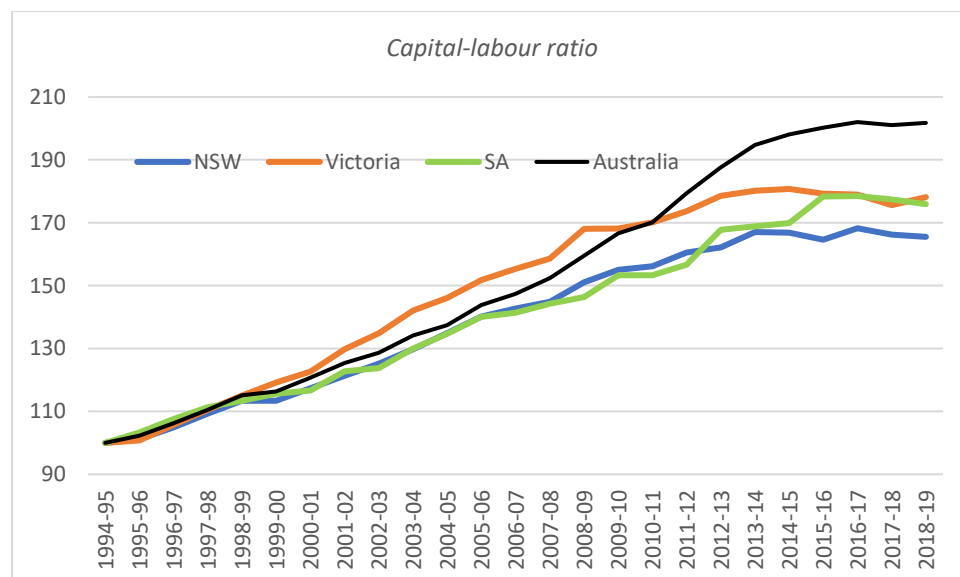
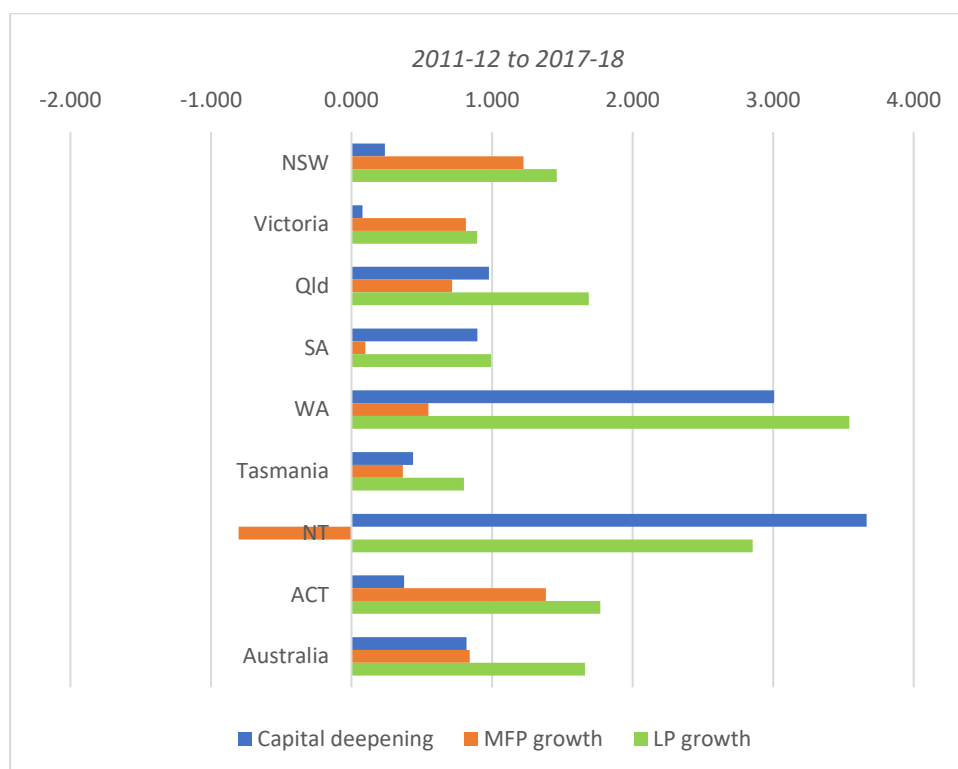


Table 19: Rate of capital deepening in all jurisdictions, % per year

	1994-95 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18	2017-18 to 2018-19
New South Wales	1.03	1.03	0.24	-0.18
Victoria	1.53	0.99	0.08	0.58
Queensland	1.48	2.03	0.98	1.02
South Australia	1.25	1.01	0.90	-0.38
Western Australia	1.38	2.95	3.01	-0.51
Tasmania	0.84	1.76	0.44	2.27
Northern Territory	2.65	1.60	3.67	5.14
ACT	2.42	2.14	0.38	2.02
Australia	1.30	1.55	0.82	0.15

Figure 40: Rates of capital deepening, MFP growth and LP growth in all jurisdictions over 2011-12 to 2017-18, % per year



4.4 Summary points

- SA has had the second lowest average living standards of any State or Territory. In 2017-18, SA's GSP per capita was 83% of the national average, leaving a gap of a little over \$13,000 per person.
- SA had the weakest growth in living standards since 2011-12. At 0.32% a year, SA's growth rate was about one-third of the national average of 0.94% a year.
- This weak growth in living standards has been associated with both weak growth in productivity (against the resource-rich jurisdictions) and weak growth in labour utilisation (against NSW, Victoria and the national average).
- The rise and fall in SA's rate of labour utilisation was not replicated in other jurisdictions. This meant that at one stage SA enjoyed some temporary catch-up with other jurisdictions.
- While SA's capital productivity has continued to decline, it has stabilised and turned positive in NSW and Victoria.
- SA's labour productivity growth has been relatively weak since the early 2000s.
- SA has also had comparatively weak MFP performance. MFP growth remained absent in SA after 2010-11, whereas it resumed in other jurisdictions. It was weighed down by weaker capital productivity.
- SA had the weakest rate of output growth after 2011-12, which contributed to its relatively weak productivity performance.
- SA's growth in capital in the 2010s was not as strong as it was in other jurisdictions, apart from Tasmania. Nevertheless, the mismatch between output growth and capital growth meant that SA joined the resource-rich jurisdictions in having negative capital productivity growth.

- SA reduced its use of labour over the 2010s period, whereas most other jurisdictions increased their use of labour.
- With ongoing capital growth and a cutback in labour, SA had much stronger capital deepening than NSW and Victoria. While LP growth in those States was based on MFP growth, LP growth in SA was based on capital deepening.
- SA had the largest falls in labour productivity and MFP in the final year and the second largest fall in capital productivity.

5. AN INDUSTRY PERSPECTIVE

This section takes an industry perspective on SA's economic performance. It examines the effects that differences with other jurisdictions in industry structure and industry productivity have on SA's generation of output and income.

The exercises are based on measures of labour productivity by industry and State. Output data have been drawn from the annual State Accounts (ABS Cat. No.5220.0, Tables 2-10). They are measured at basic prices and therefore overlook taxes and subsidies. Hours worked data were taken from monthly ABS Labour Force data (Cat. No. 6291.0.55.001, EM1b) and were summed to provide annual labour inputs.

The industries included cover more than the market sector. They include Public Administration and safety, Education and training and Healthcare and social assistance. On the output side, Ownership of dwellings is also included, although there are no associated labour inputs.

As output is not as well measured in these additional industries, their productivity measured should be treated with additional caution.

5.1 The influence of different industry mixes

The first observation is that States and Territories have quite different industry structures. Table 20 shows industry distributions of economic activity in 2017-18. The significance of Mining in Queensland, NT and especially WA stands out. Finance and insurance services are more significant in NSW and Victoria. The importance of Agriculture is another one to differ across jurisdictions.

South Australia has important differences in structure, even with comparator States such as NSW and Victoria. Figure 41 shows the percentage of SA's production in an industry less the percentage in other jurisdictions. The major differences are that SA has proportionately:

- a lot more Agriculture and Healthcare production;
- a lot less Mining (than the Australian average), Finance (than NSW and Victoria) and Professional, scientific and technical services.

Industry structures vary across jurisdictions for a lot of good reasons and may not be amenable to anything more than marginal change. There are differences in resource endowments, climate, historical pathways, geography and so on.

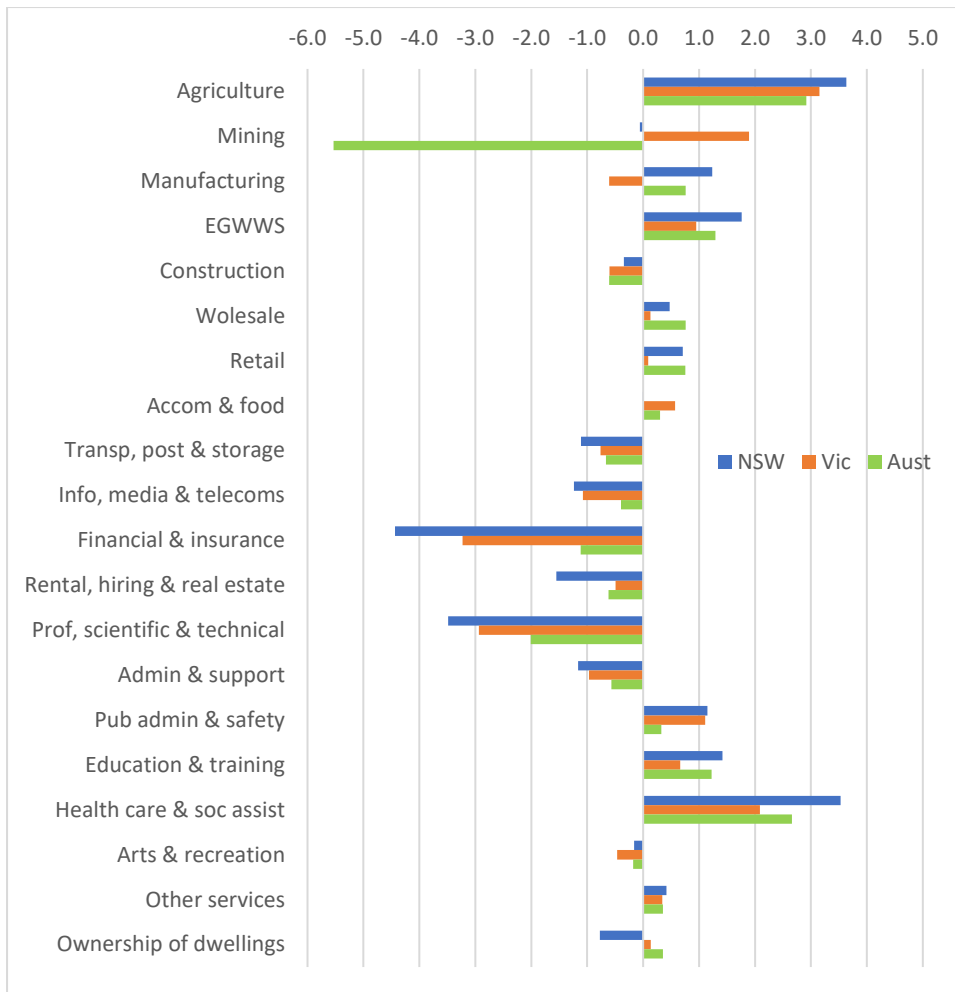
It is of interest, nevertheless, to explore what effect SA's industry structure has on its production and living standards. To do this, the total hours worked in SA are distributed to industries in the proportions evident in other jurisdictions and SA's labour productivity (output per hour) for each industry is applied to those industry hours. Since Ownership of dwellings has no labour input, its output is retained unchanged.

Table 20: Industry distribution of economic activity in all jurisdictions in 2017-18^a (%)

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Agriculture	1.9	2.4	3.0	5.5	2.4	10.4	3.1	0.1	2.6
Mining	3.3	1.3	12.6	3.2	31.5	3.8	14.1	0.1	8.8
Manufacturing	5.7	7.6	6.3	7.0	5.5	6.4	4.0	1.0	6.2
EGWWS	2.2	3.0	3.3	4.0	1.9	3.4	1.9	2.1	2.7
Construction	7.9	8.2	8.7	7.6	8.2	6.8	13.2	7.2	8.2
Wholesale	4.4	4.7	3.7	4.8	3.3	3.2	2.3	1.1	4.1
Retail	4.5	5.2	4.5	5.2	3.3	5.0	3.1	3.6	4.5
Accom & food	2.8	2.2	2.7	2.8	1.8	2.6	2.8	2.1	2.5
Transp, post & storage	5.4	5.1	5.4	4.3	4.1	4.4	3.9	1.9	5.0
Info, media & telecoms	3.4	3.3	1.5	2.2	1.1	3.7	0.5	3.5	2.6
Financial & insurance	12.6	11.4	6.4	8.2	4.7	6.2	2.8	3.4	9.3
Rental, hiring & real estate	4.1	3.0	3.0	2.5	2.1	1.8	1.7	2.6	3.2
Prof, scientific & technical	8.8	8.2	6.0	5.3	5.4	3.2	5.2	9.4	7.3
Admin & support	4.1	4.0	3.4	3.0	2.3	1.9	1.9	3.2	3.6
Pub admin & safety	4.7	4.8	5.5	5.9	4.2	6.0	14.2	29.7	5.5
Education & training	4.9	5.6	5.1	6.3	3.7	6.7	5.3	6.2	5.1
Health care & soc assist	6.5	7.9	7.6	10.0	5.7	12.8	7.4	11.9	7.4
Arts & recreation	0.9	1.2	0.8	0.7	0.5	1.1	1.4	0.8	0.9
Other services	1.8	1.9	2.1	2.2	1.7	1.7	1.9	2.0	1.9
Ownership of dwellings	10.0	9.1	8.2	9.2	6.7	9.0	9.4	8.2	8.8
Total industries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: a. Percentages are calculated from current price data

Figure 41: Differences in industry structure between SA and other jurisdictions (% pts)



The results are displayed in Table 21. If SA had NSW’s industry structure, its output would be 7.2% higher, while it would be 1.6% higher with Victoria’s industry structure. With the national average industry structure, SA’s output would be 5% higher.

These calculations are not intended to imply that SA should change its industry structure. Rather, they can be used to interpret comparisons of average income. Roughly speaking, 7 percentage points of the 24% higher average income in NSW can be attributed to differences in industry structure, 2 percentage points of the 10% higher average income in Victoria and 5 percentage points of the 21% higher national average. To stress, these are only ‘back of the envelope’ orders of magnitude.

Table 21: The effects of alternative industry structures on SA's GSP

	Industry structure	Industry productivity	SA's GSP ^a (\$m)	Change on A. (%)
A.	SA	SA	98,437	
B.	NSW	SA	105,504	7.2
C.	Victoria	SA	100,058	1.6
D.	Australia	SA	103,388	5.0

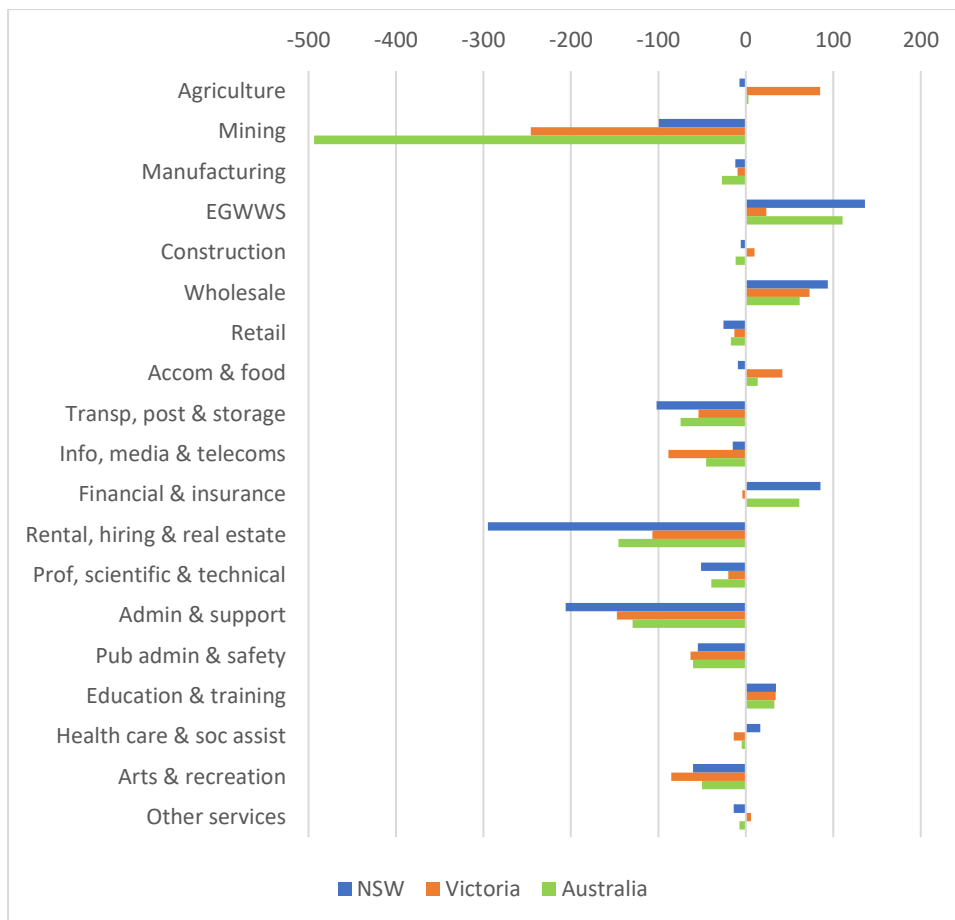
Note a. Measured at basic prices

5.2 The influence of different industry productivity levels

The industry labour productivity can also be used to examine the implications of SA achieving the same level of labour productivity as other jurisdictions had in 2017-18.

Estimates of industry productivity levels in all jurisdictions are presented in the Appendix. The differences between SA and other jurisdictions in their industry productivity levels are shown in Figure 42. Bars to the right of the zero line show where SA has superior productivity and bars to the left show where it has inferior productivity. From this, SA appears to have a productivity advantage in the utilities and Wholesale trade, but a disadvantage in Mining, Rental and Administrative support, as well as other industries.

Figure 42: Differences between SA and other jurisdictions in industry productivity levels (\$)



The effects of SA's generally lower productivity on production and income are examined by assuming that SA keeps its industry structure but adopts the productivity levels of other jurisdictions. This is a simplistic exercise that overlooks the demand side and general equilibrium effects. Nevertheless, it gives a rough idea of the importance of productivity differences.

Results are in Table 22. Achieving NSW's productivity levels would raise SA's GSP by 15.9%, while achieving Victoria's would generate a 4% increase. The Australian industry productivity averages would bring a 7.6% increase in State output and income.

Table 22: Effects of different jurisdictions' industry productivity on SA's GSP

	Industry structure	Industry productivity	SA's GSP (\$m)	Change on A (%)
A.	SA	SA	98,437	
B.	SA	NSW	114,105	15.9%
C.	SA	Victoria	102,368	4.0%
D.	SA	Australia	105,929	7.6%

[Drafting note: A more selective industry-by-industry scenario could be introduced here.]

5.3 Summary points

- The SA economy is more prominent in Agriculture and Healthcare than other jurisdictions. It is less prominent in Mining, Finance and Professional services.
- SA's output and income is lower because of its industry structure. With the industry mix of NSW, Victoria or Australia, its GSP would (notionally) be higher by 7%, 2% and 5% respectively.
- SA has generally-low levels of productivity compared with other jurisdictions. If it had the industry productivity profile of NSW, Victoria or Australia, it would have GSP 16%, 4%, and 8% higher, all other things being equal.

6. INDUSTRY CONTRIBUTORS TO SA PRODUCTIVITY TRENDS

Data are not available at the industry level for State and Territory's use of capital and labour. To fill the gap, hours worked data were taken from quarterly estimates in ABS Labour Force Cat. No. 6291.0.55.003, Table EQ06). Data based on the national accounts concept of capital services could not be accessed. In their place, data based on the net capital stocks measure were drawn from the ABS State Accounts (Cat. No. 5220.0, Table 24).

6.1 Labour productivity growth

Industry contributors to growth in output, hours worked and labour productivity over the 2010s period, 2011-12 to 2017-18, are shown in Figure 43.

Manufacturing was the main detractor from output growth and from hours worked growth. However, because the cutback in labour was not as strong as the cutback in output, the industry was a detractor from the State's LP growth.

Transport and Health were the main detractors from LP growth over this period. There was a large increase in use of labour in Health and to a lesser extent in Transport. Output growth did not match the growth in labour in these industries. In the Transport case, there was a decline in output.

Positive contributions to LP growth came from Wholesale trade and Finance, where reductions in input use were combined with output growth.

Figure 43: Industry contributions to growth in SA's output, hours and LP over 2011-12 to 2017-18

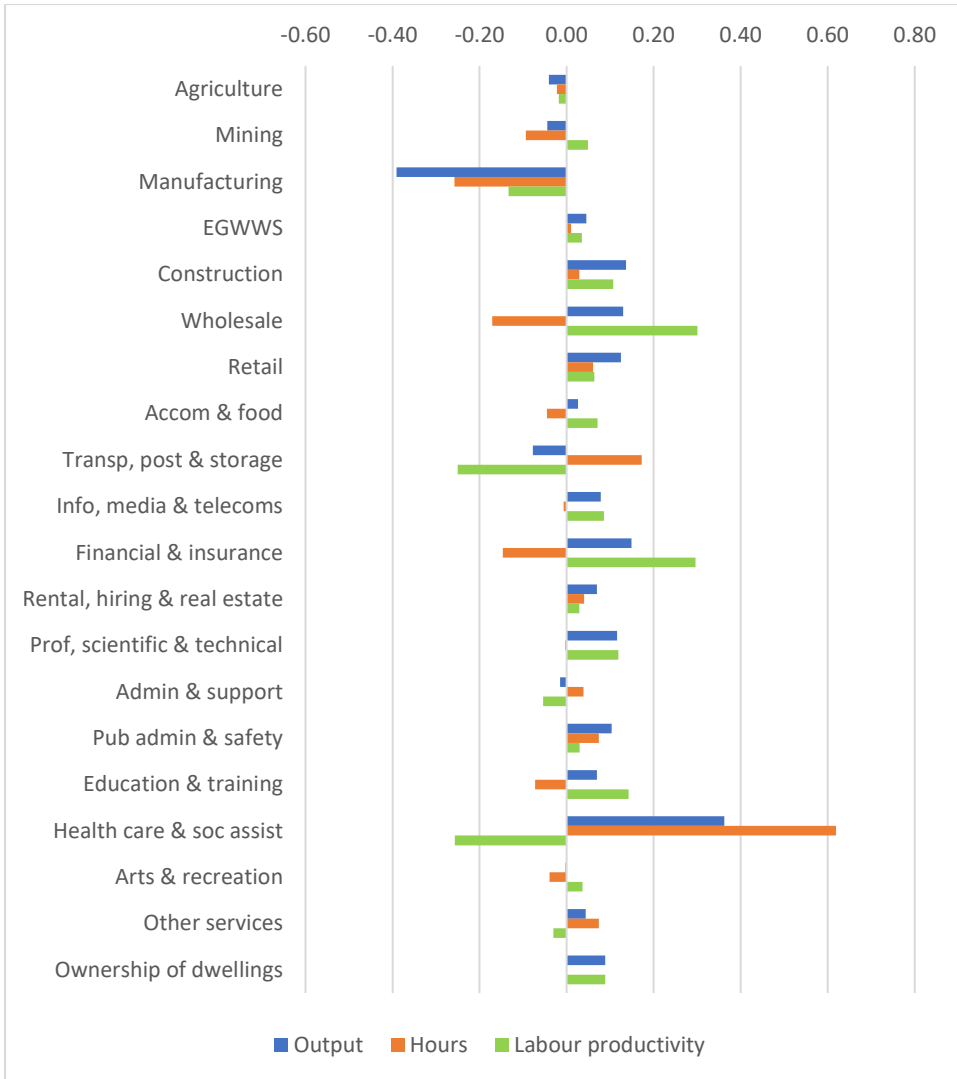
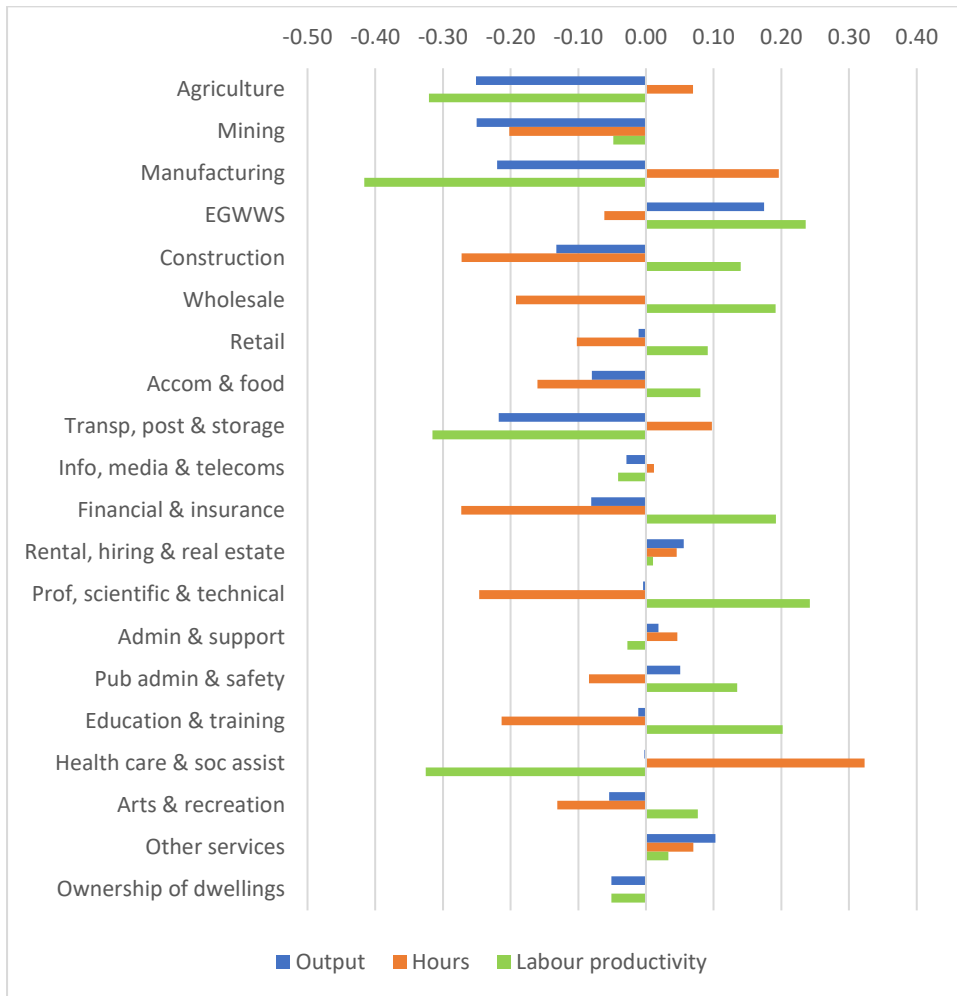


Figure 44 shows the industry contributions to the change in LP growth from the 2000s period (2003-04 to 2011-12) to the 2010s period. As noted previously there was a slight increase in overall LP growth from 0.88 to 0.99% annually.

The same industries – Manufacturing, Transport and Health – featured again as detractors from higher LP growth. The offsetting contributions were widespread among other industries.

Figure 44: Industry contributions to the change in SA's output, hours and LP growth between 2003-4 to 2011-12 and 2011-12 to 2017-18 (% pts)



6.2 Capital productivity

Growth in capital stocks by industry are shown in Table 24. Unfortunately, because the ABS does not publish separate data for Mining and Manufacturing beyond 2013-14, the entries for these two industries in the third column are not very meaningful indicators.

Table 23: Growth in industry net capital stock, chain volume measure (% per year)

	1993-94 to 2003-04	2003-04 to 2011-12	2011-12 to 2017-18
Agriculture	-0.4	0.7	0.0
Mining	6.7	6.4	8.7 ^a
Manufacturing	1.2	0.7	-2.8 ^a
EGWWS	0.3	4.7	3.3
Construction	2.2	6.6	3.3
Wholesale	-0.3	0.5	2.6
Retail	5.9	3.6	2.7
Accom & food	1.5	-0.5	0.1
Transport	1.7	3.5 ^b	1.2 ^c
Info & telecom	4.9	1.8 ^b	4.5 ^c
Financial	0.3	0.6	0.1
Rental	1.5	1.1	2.6
Professional	6.6	6.6	3.6
Administrative	3.7	1.5	1.7
Public Ad	1.8	3.9	2.7
Education	0.0	2.9	0.9
Health	1.3	4.0	2.1
Arts & rec	3.7	4.6	4.7
Other	6.5	8.3	3.2

Notes: a. To 2013-14
 b. To 2013-14
 c. From 2013-14

Putting these industries aside, the largest contributions to capital growth from 2013-14 came from the utilities, Information, media and telecommunications and Public Administration and safety (Figure 45). The first two of these industries fall within the market sector.

Industry contributors to the growth in capital and the proxy capital productivity measure over the 2010s period are shown in

Figure 46. The contributions to negative capital productivity growth were widespread.

Figure 45; Industry contributions to annual growth in net capital stock over 2011-12 to 2017-18 (% pts)

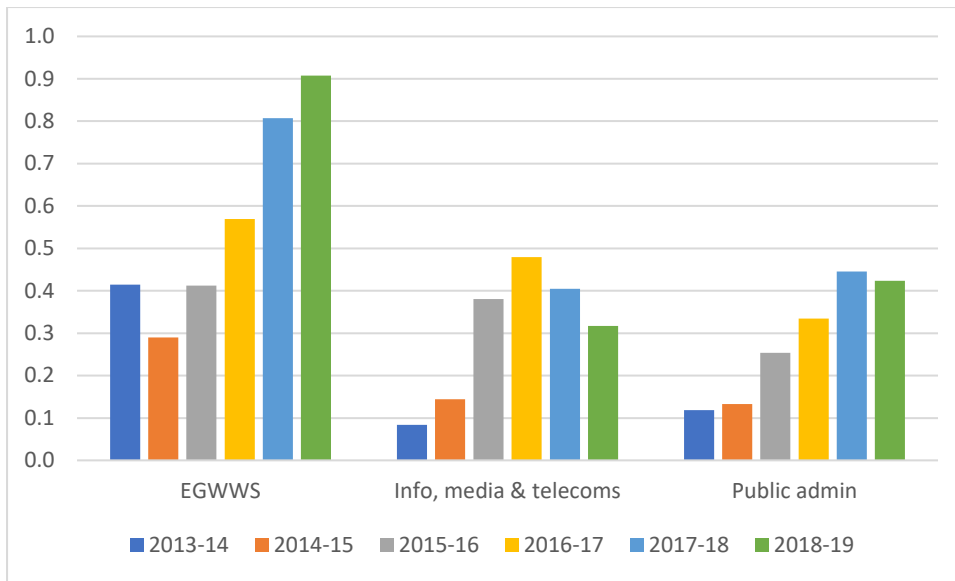
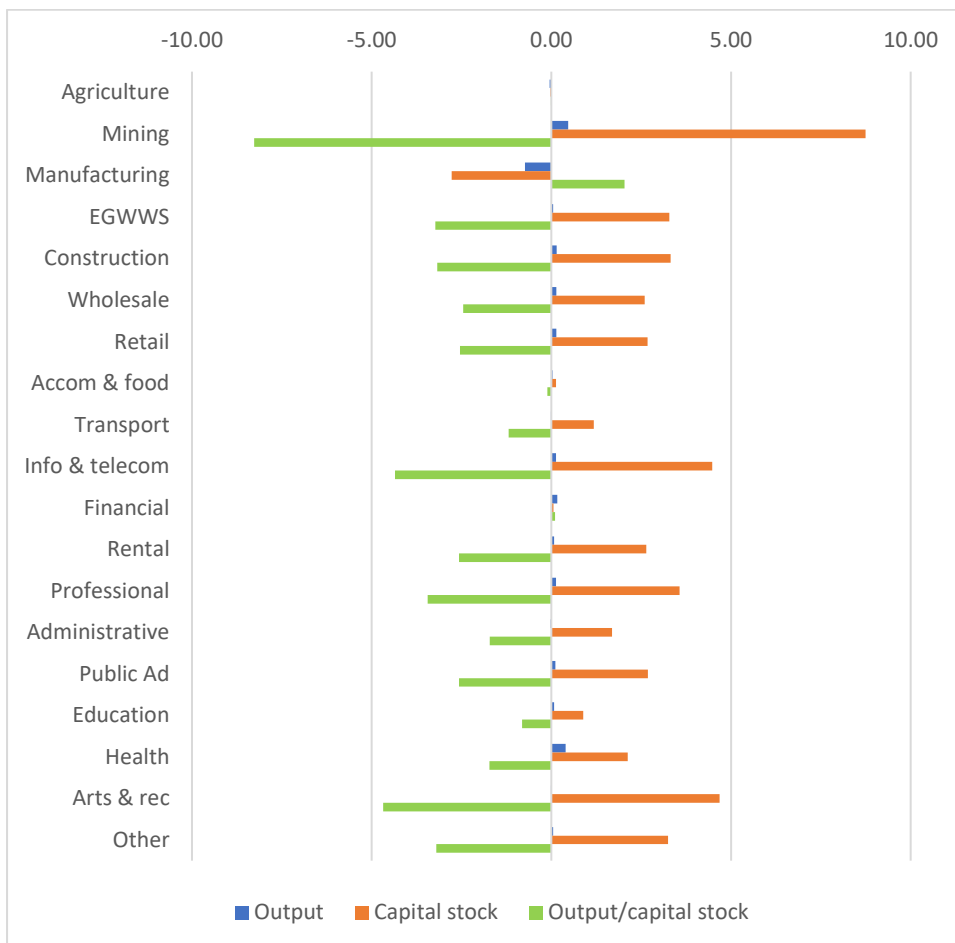


Figure 46; Industry contributors to growth in output, net capital stock and the ratio output to capital stock over the period 2011-12 to 2017-18^a

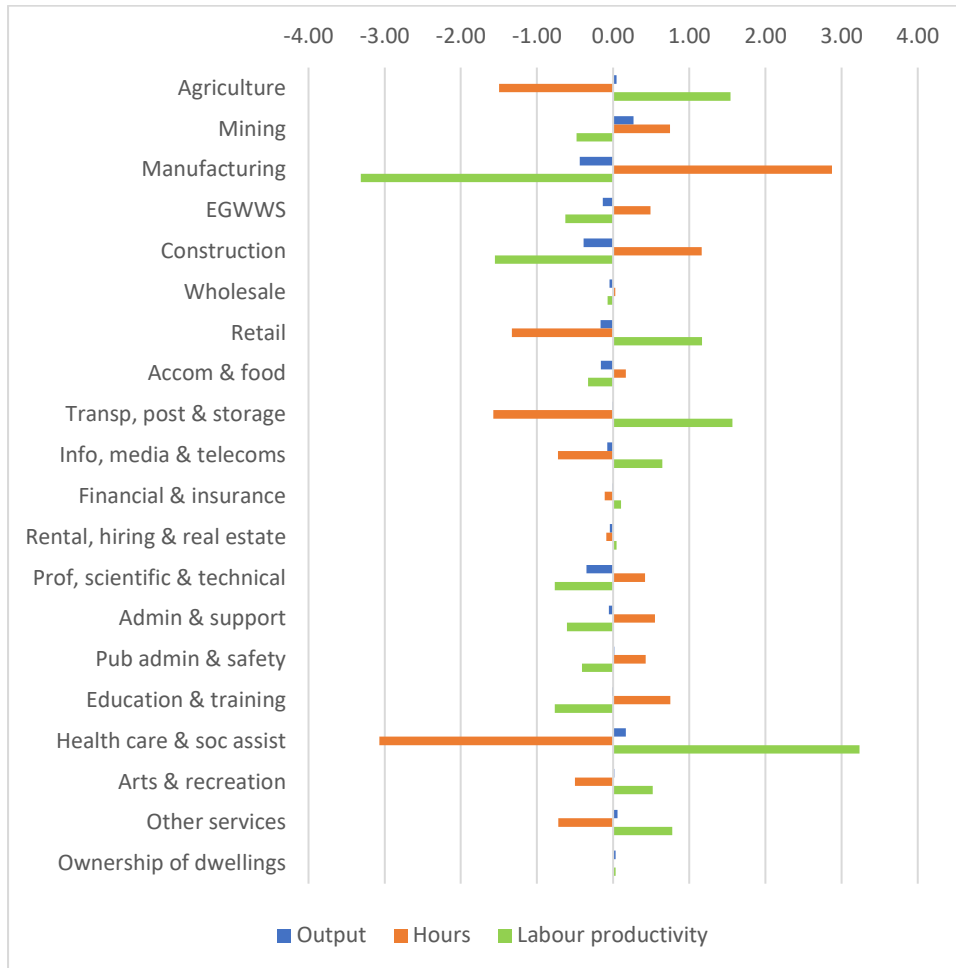


Note: a. See notes to Table 23

Contributions to the fall in LP growth in the final year

Industry contributions to the fall in LP growth in 2018-19 (from 2017-18) are displayed in Figure 47. The main detractors were Manufacturing and Construction. With a heavy reduction in contribution to hours worked, Health was the main positive contributor.

Figure 47: Industry contributions to the change in SA's output, hours and LP growth between 2017-18 and 2018-19 (% pts)



6.3 Summary points

- Over the 2010s period (2011-12 to 2017-18), Healthcare, Transport and to a lesser extent Manufacturing detracted from SA's LP growth. The main contributors were Finance and Wholesale trade.
- The largest contributions to capital growth from 2013-14 came from the utilities, Information, media and telecommunications and Public Administration and safety.
- Industry contributions to negative capital productivity growth were widespread.
- Manufacturing and Construction were the main contributors to the large deceleration in LP growth in the final year.

7. COMPARISON OF EDUCATIONAL ATTAINMENT IN EMPLOYMENT

Educational attainment data were sourced from the ABS Labour Force, detailed quarterly statistics (ABS Cat. No. 6291.0.55.003, Table 24a).

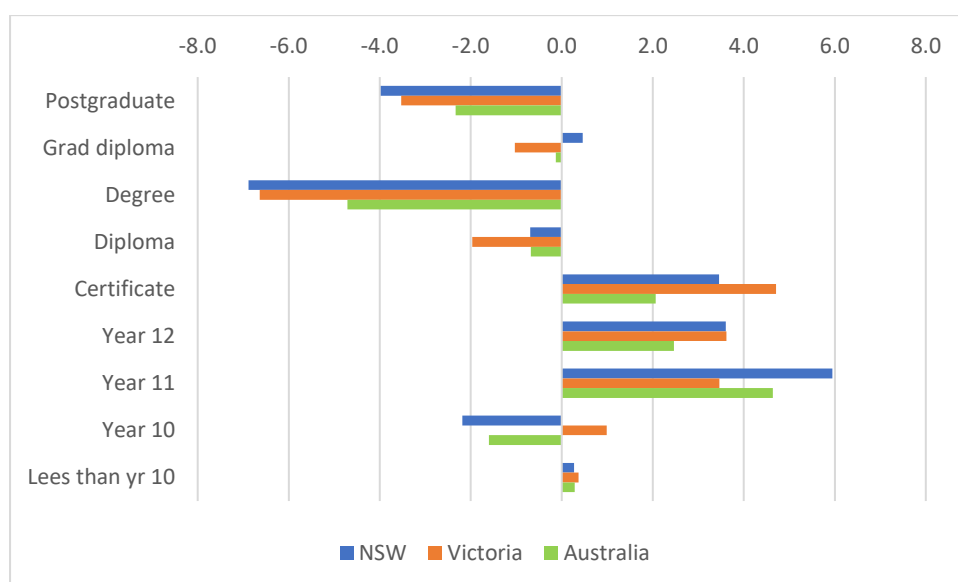
The distribution of employed persons according broad education categories is shown in Table 24. It provides information on all jurisdictions as at February 2020.

Compared with NSW, Victoria and Australia, SA is strongly underrepresented in higher education (degrees and above) and is over-represented in other categories. A more detailed picture, from which the same conclusion can be drawn, is presented in Figure 48. This figure shows the SA distribution less the distribution of the other jurisdictions, so that a negative indicates where SA has proportionately less.

Table 24: Distribution of educational attainment of the employed at February 2020 (%)

	Degree & above	Diploma or certificate	Year 12	Below year 12	Total
NSW	39.2	29.5	16.9	14.4	100.0
Victoria	40.0	29.5	16.9	13.6	100.0
Queensland	29.7	34.0	20.2	16.2	100.0
SA	28.8	32.3	20.5	18.4	100.0
WA	32.2	32.8	19.1	16.0	100.0
Tasmania	29.6	34.2	14.1	22.1	100.0
NT	29.9	32.8	16.0	21.3	100.0
ACT	47.9	21.4	21.7	9.0	100.0
Australia	36.0	30.9	18.0	15.1	100.0

Figure 48: Difference in distribution of educational attainments between SA and NSW, Victoria and Australia (% pts)



To get an idea of change over time, Table 25 shows growth rates in employment in the different education categories over the previous 4 years. This indicates that SA has seen the

strongest growth in the year 12 qualification. However, its 2.0% a year growth in higher education is the slowest in the country, well below the national average of 5.3% a year.

This does not necessarily mean that SA is not producing enough graduates. It is more likely that SA does not generate enough jobs to absorb the potential of graduates.

Table 25: Growth rate in educational attainment of the employed between Feb 2016 and Feb 2020 (% per year)

	Degree & above	Diploma or certificate	Year 12	Below year 12
NSW	4.8	1.2	1.6	-1.4
Victoria	7.1	1.5	1.6	-2.3
Queensland	6.0	0.5	1.0	-0.8
SA	2.0	1.0	4.0	-0.3
WA	2.9	1.0	3.0	-3.1
Tasmania	7.6	-0.1	3.8	-0.3
NT	4.4	-1.0	-2.1	-0.1
ACT	4.4	-0.2	4.7	2.1
Australia	5.3	1.0	1.9	-1.5

7.1 Summary points

- Employment in SA is skewed away from higher qualifications compared with other jurisdictions.
- Rather than suggesting a shortage of graduates this is likely to suggest a mismatch in employment that attracts graduates.

8. COMPARISON OF AGE STRUCTURES

Data for this section were drawn from the ABS Labour Force tables (Cat. No. 6291.0.55.001, Pivot table RM1).

Employment in SA is skewed toward older workers, compared with other jurisdictions (Figure 49 and Table 26). Figure 49 again shows how SA's age distribution differs from other jurisdictions, so that a negative shows where SA has less in its distribution.

All else equal, this suggests more workforce experience from learning on the job than in other jurisdictions, assuming that productive learning continues beyond the age of 45. Picking up on the last section, an older workforce may also be a less-educated workforce.

Figure 49: Age distribution of SA employment less the distributions of NSW, Victoria and Australia at April 2020 (% pts)

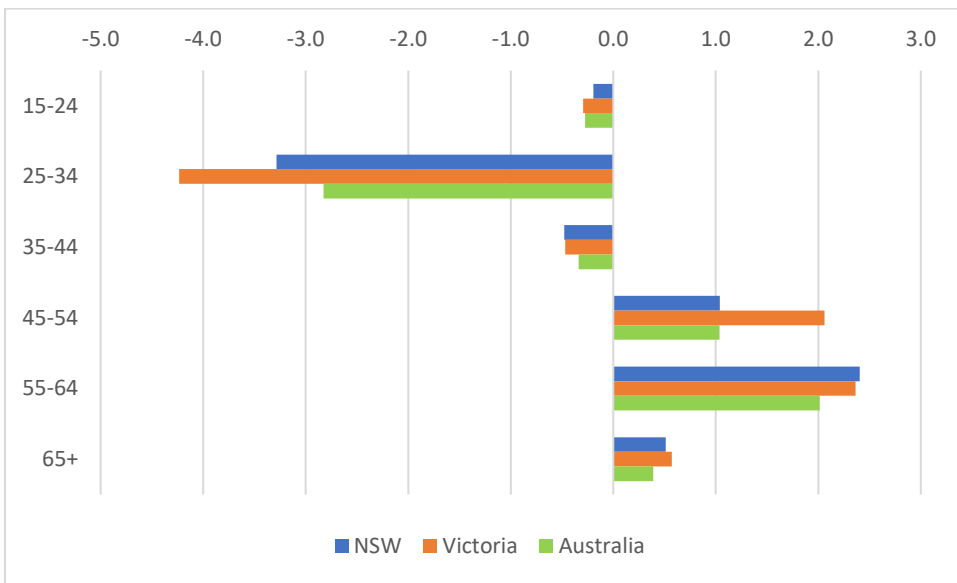


Table 26: Age distribution of employment in all jurisdictions at April 2020 (%)

	15-24	25-34	35-44	45-54	55-64	65+	Total
NSW	14.2	24.3	22.3	20.6	14.4	4.2	100.0
Victoria	14.3	25.3	22.3	19.6	14.4	4.1	100.0
Queensland	14.9	22.9	21.8	21.4	14.9	4.1	100.0
SA	14.0	21.1	21.8	21.6	16.8	4.7	100.0
WA	13.4	22.9	22.6	20.9	15.3	5.0	100.0
Tas	14.5	19.9	19.1	21.8	19.0	5.7	100.0
NT	12.0	25.7	23.2	20.5	13.8	4.8	100.0
ACT	15.3	25.4	22.9	20.6	11.4	4.5	100.0
Australia	14.3	23.9	22.1	20.6	14.8	4.3	100.0

Table 27 shows the growth in employment by age group over the past 10 years. The first thing to notice is that SA has had the slowest rate of growth in total employment at 0.37% a year. That growth has been skewed towards those 55 and over.

Table 27: Growth rates in employment by age group, all jurisdictions from April 2010 to April 2020 (% per year)

	15-24	25-34	35-44	45-54	55-64	65+	Total
NSW	0.30	2.15	1.11	0.61	1.75	4.78	1.35
Victoria	0.34	3.19	1.68	0.95	2.73	5.18	1.95
Queensland	-1.01	1.41	0.55	0.81	1.82	5.31	0.88
SA	-1.60	0.96	0.12	-0.01	1.29	4.95	0.37
WA	-1.94	1.59	1.48	0.19	2.09	7.68	1.00
Tas	-1.15	1.02	-0.87	-0.53	2.43	6.78	0.42
NT	-2.57	1.78	0.97	0.85	1.84	8.41	1.00
ACT	-0.72	1.67	1.56	1.27	0.50	7.26	1.21
Australia	-0.41	2.12	1.09	0.64	2.01	5.44	1.28

8.1 Summary points

- SA has an older employed workforce than other jurisdictions
- It has grown older over time

9. CONCLUDING POINTS

9.1 Findings

Growth in national living standards depends crucially on revitalising productivity growth. There has been little growth in recent years as the terms of trade have come off their highs.

- Growth in SA's living standards came to a standstill in the late 2000s as a previous rise in labour utilisation receded.
- SA had the weakest growth in living standards of all States and Territories since 2011-12. At 0.32% a year, SA's growth rate was about one-third of the national average.
- This weak growth in living standards has been associated with both weak growth in productivity (against the resource-rich jurisdictions) and weak growth in labour utilisation (against NSW, Victoria and the national average).
- SA has the second lowest level of income per capita. SA's income per capita was 83% of the national average in 2017-18, leaving a gap of a little over \$13,000 per person.

The decline in national capital productivity, which had a large influence on MFP from 2003-04, has now come to halt. At least some bounce back could reasonably be expected. There are signs of that happening in the Mining industry, but that recovery has been offset by falls in other industries.

- SA also experienced the same 20% fall in capital productivity from 2001-02 to 2013-14. However, while the national index has stabilised, SA's capital productivity has continued to fall.
- SA has had the weakest growth in output of any jurisdiction since 2011-12.
- Its growth in capital has also been comparatively weak, but stronger than output growth.
- The largest contributions to capital growth from 2013-14 came from the utilities, Information, media and telecommunications and Public Administration and safety.
- Industry contributions to negative capital productivity growth were widespread.

Annual growth in national labour productivity has been in decline since 2011-12 and has been especially weak in the last two years. This has primarily been associated with progressive falls in the rate of capital deepening. The Construction industry had, by far, the most effect. Manufacturing and Transport, postal and storage were also prominent.

- SA's LP growth has been even weaker than the national rate in recent years – 0.99% v. 1.66% annually between 2011-12 and 2017-18. SA has had negative LP growth in the last three years. There has not been the same clear fall in annual capital deepening, although capital shallowing has been evident in the last few years.
- SA has had comparatively weak LP growth since the early 2000s.
- Over the 2010s period (2011-12 to 2017-18), Healthcare, Transport and to a lesser extent Manufacturing detracted from SA's LP growth. The main contributors were Finance and Wholesale trade.

MFP growth re-emerged in the national economy from 2011-12 after a long absence.

- MFP has remained static in the SA economy.
- LP growth in other jurisdictions has been based on MFP growth, whereas it has been based on capital deepening in SA.

All forms of national productivity measure fell in 2018-19. Slow output growth of 1.2% was a key factor, with growth in labour and capital both being stronger. The growth in labour was above its long-term average due to increased demand from especially the Professional, Administrative and Financial industries.

- There were large falls in productivity in SA in the last year, led by a 2.25% fall in labour productivity. Output only fell slightly and so the falls in productivity were mainly due to increases in labour and capital.
- The falls were larger than in other jurisdictions
- Manufacturing and Construction were the main contributors to the large deceleration in LP growth in the final year.

Industry mix and productivity

- The SA economy is more prominent in Agriculture and Health care than other jurisdictions. It is less prominent in Mining, Finance and Professional services.
- SA's output and income is lower because of its industry structure. With the industry mix of NSW, Victoria or Australia, its GSP would (notionally) be higher by 7%, 2% and 5% respectively.
- SA has generally-low levels of productivity compared with other jurisdictions. If it had the industry productivity profile of NSW, Victoria or Australia, it would have GSP 16%, 4%, and 8% higher, respectively, all other things being equal.

Education and age.

- Employment in SA is skewed away from higher qualifications compared with other jurisdictions.
- SA has an older employed workforce than other jurisdictions
- It has grown older over time

9.2 Broader implications

South Australians do not have the level of average income seen in nearly all other jurisdictions. Arguments can be made, of course, that other 'lifestyle' benefits might make up at least some of the ground.

However, SA's weak performance on growth in living standards might be considered of concern. While it has roughly kept pace with Victoria, growth has been about a third of the national average. That could be put down to the lottery of not having the same resource riches as other jurisdictions. But, if it continues to persist, average income in SA will fall further and further behind.

The imperative for productivity growth is even stronger in SA than it is elsewhere in Australia.

The SA economy is not prominent in the strong growth industries. It has not enjoyed the growth in output that has come from Mining, Finance and Professional services in other jurisdictions. The SA economy is more prominent in industries that are contracting (Manufacturing) or are low productivity (Health care).

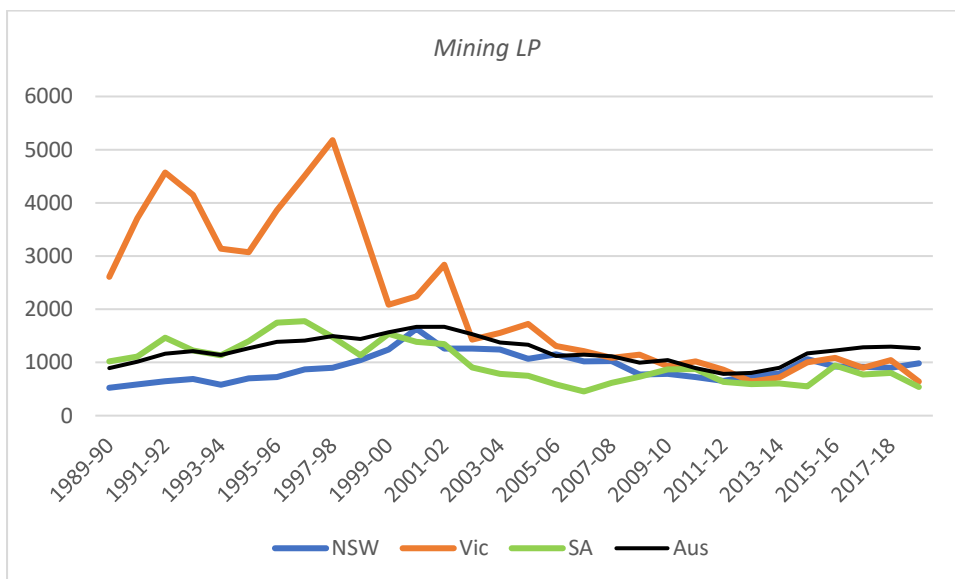
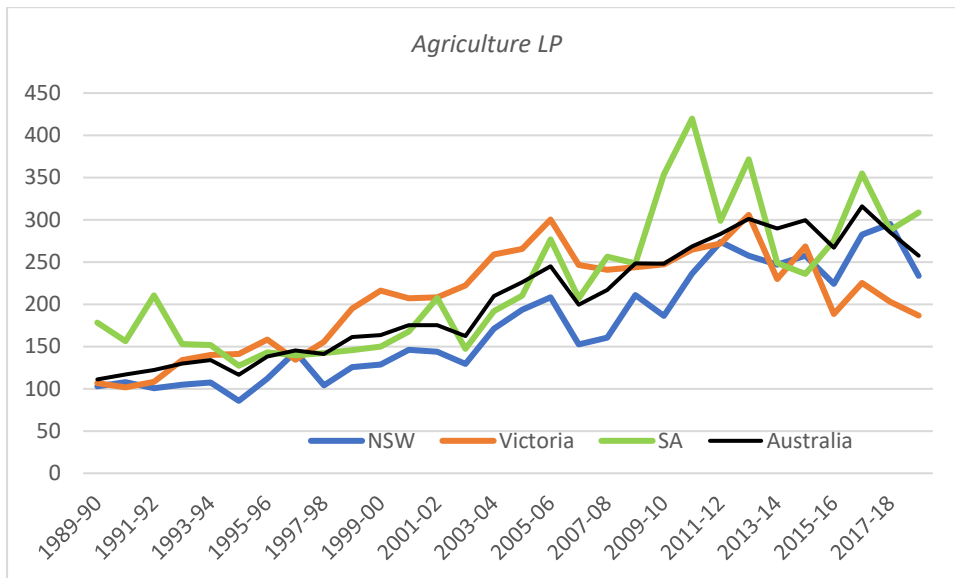
Because of its industry profile, employment opportunities for the young and educated do not open up to the same degree in South Australia. As a result, SA's workforce becomes older and less educated, as the young migrate interstate.

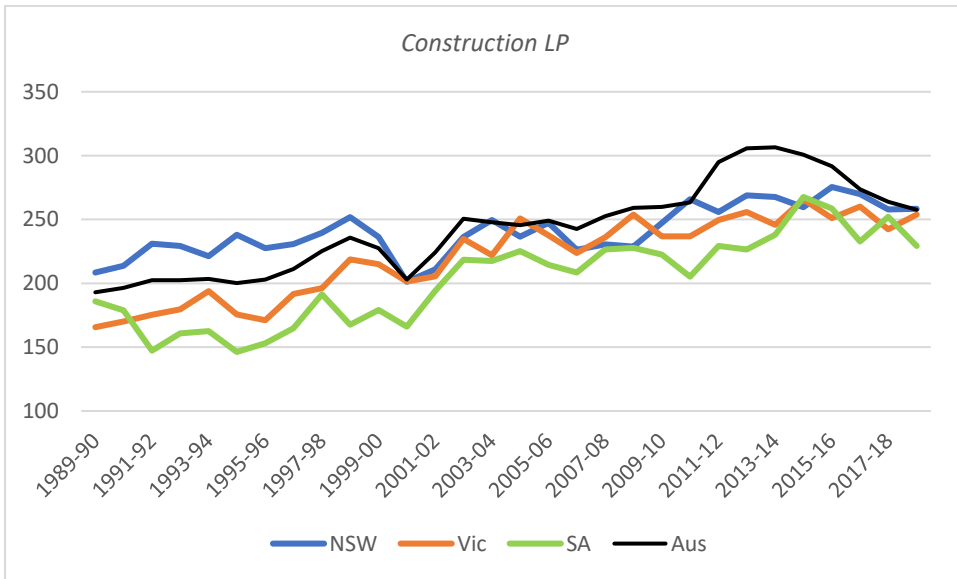
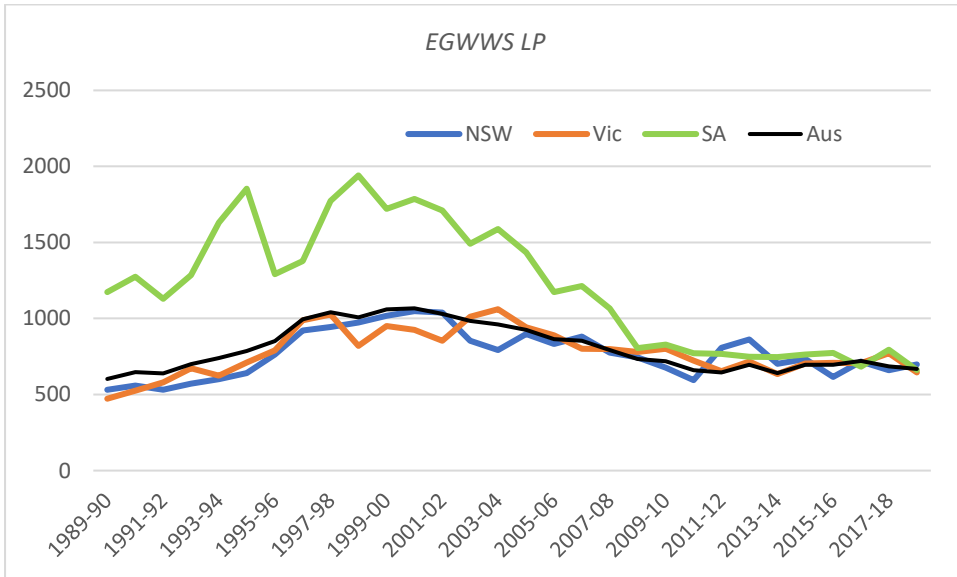
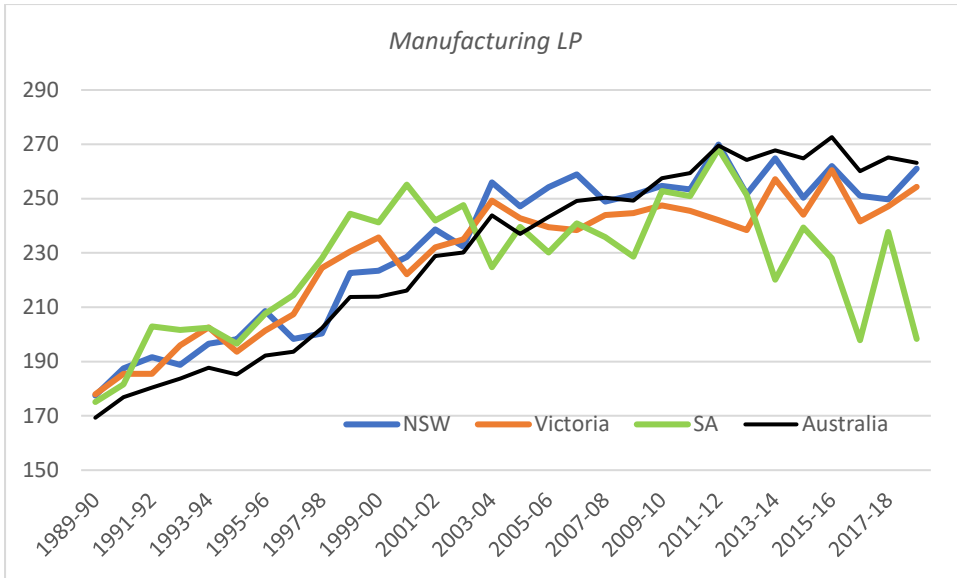
One area that SA could attend to in the near term is the productivity of its capital investments. These have been in areas of public ownership or areas subject to government regulation – the utilities, Information, media and telecommunications and Public administration and safety.

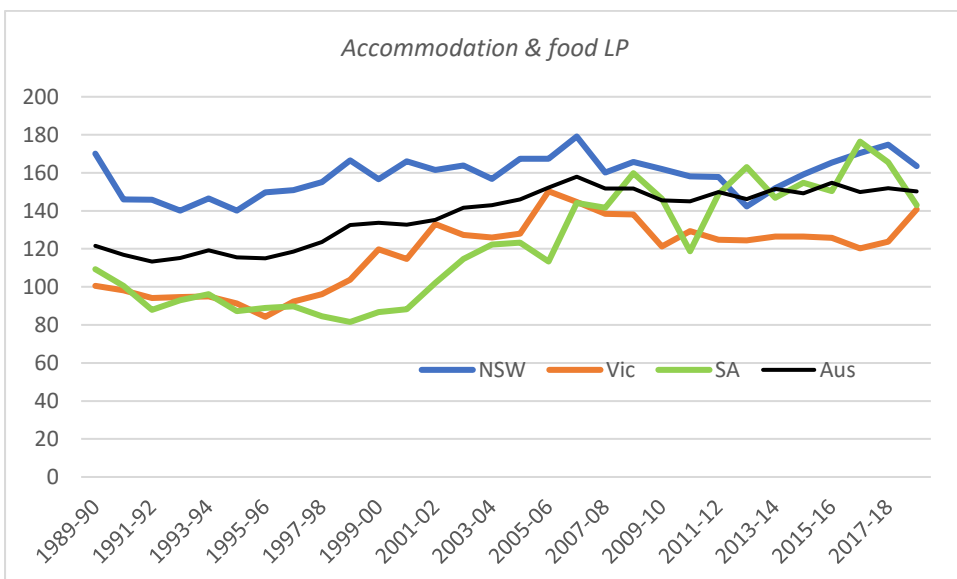
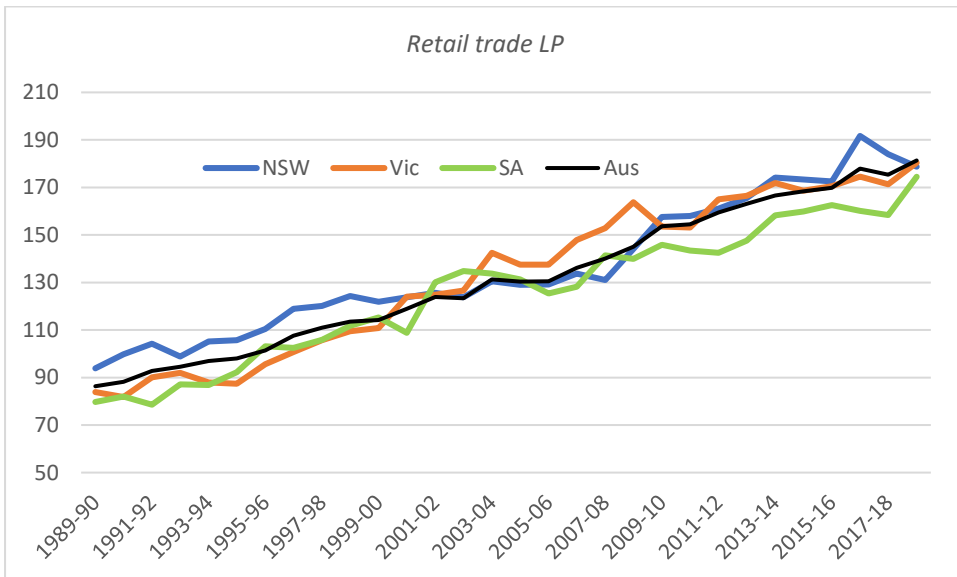
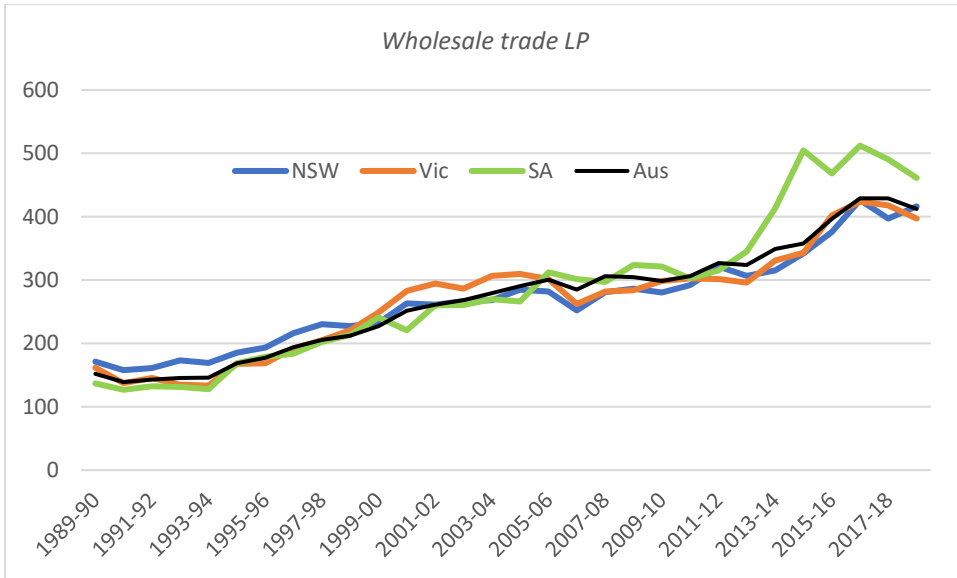
APPENDIX

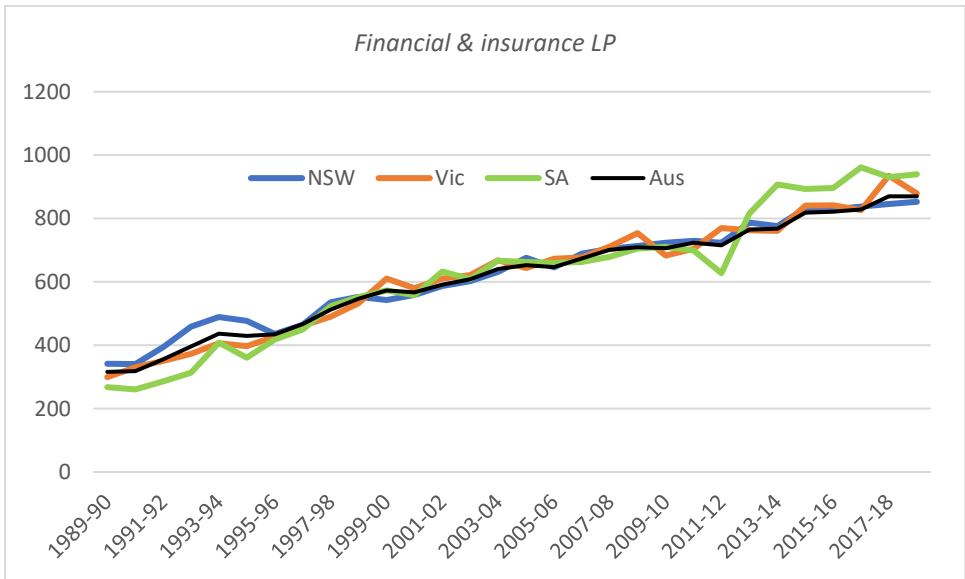
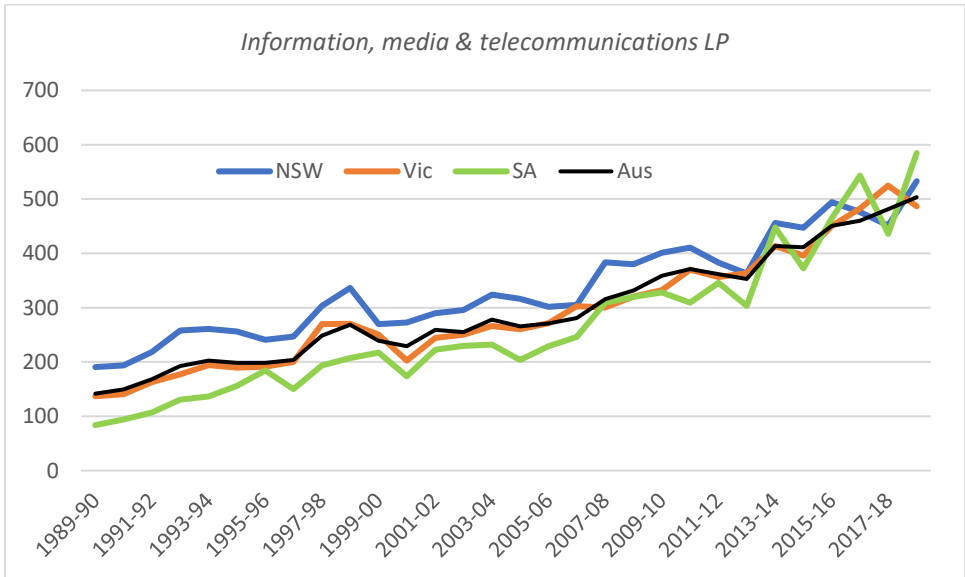
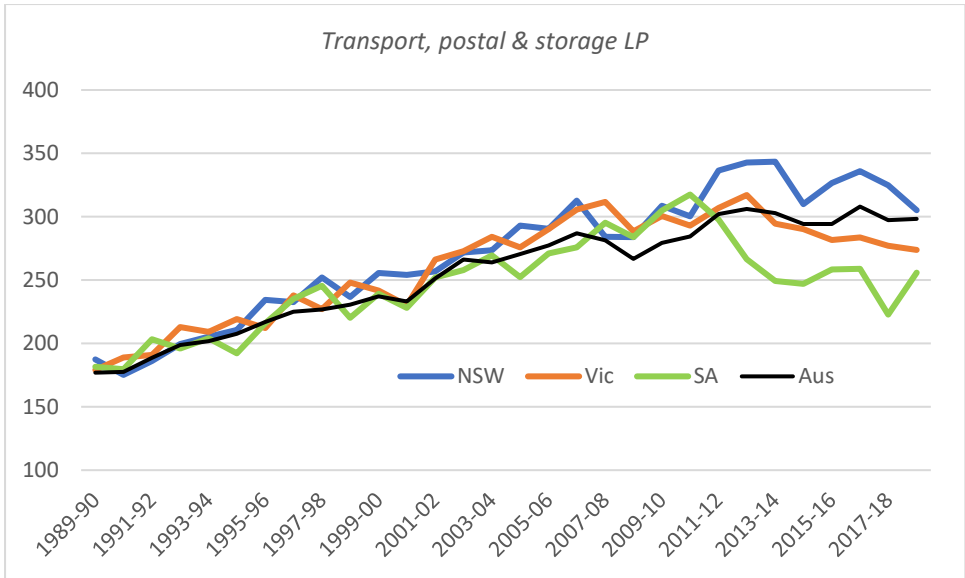
A.1 Charts of labour productivity by industry in NSW, Victoria and Australia

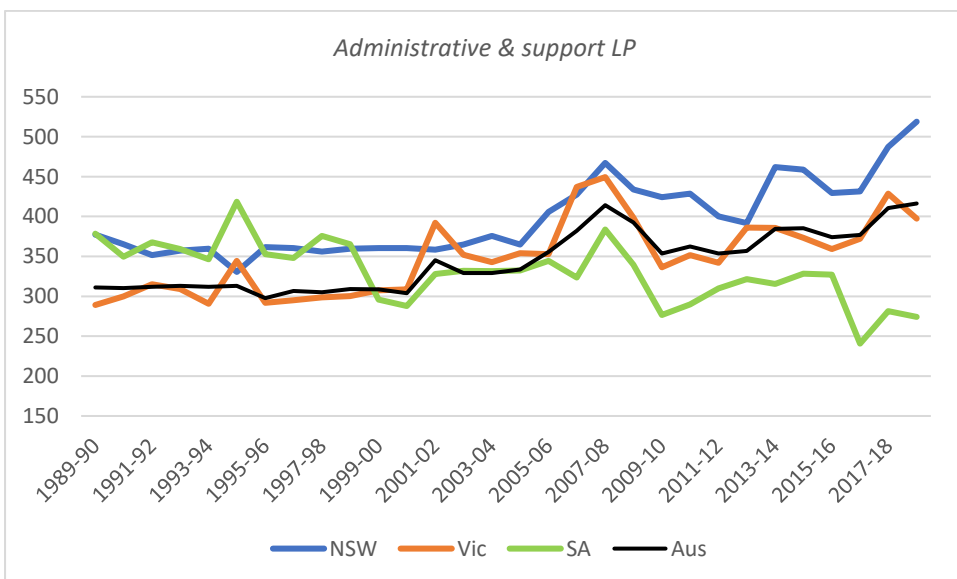
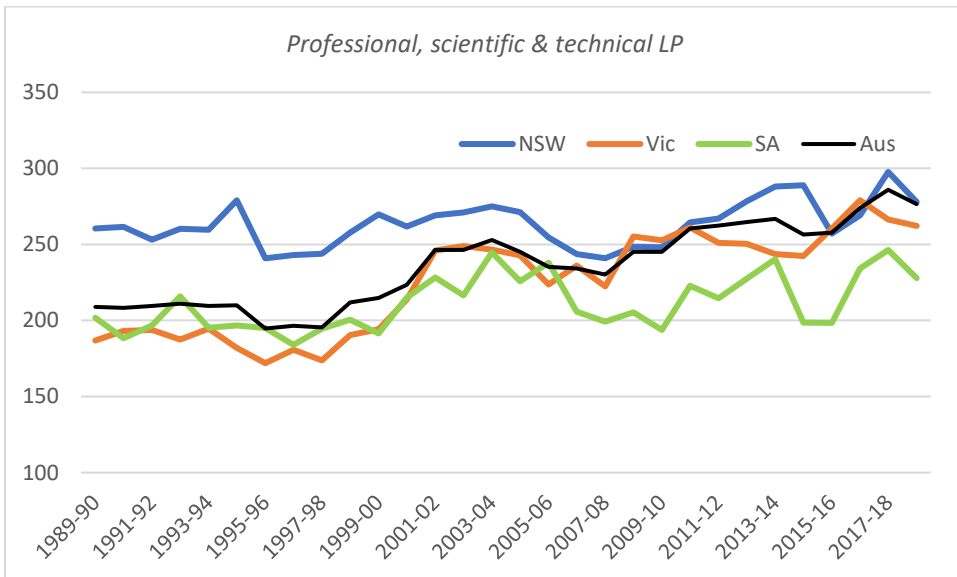
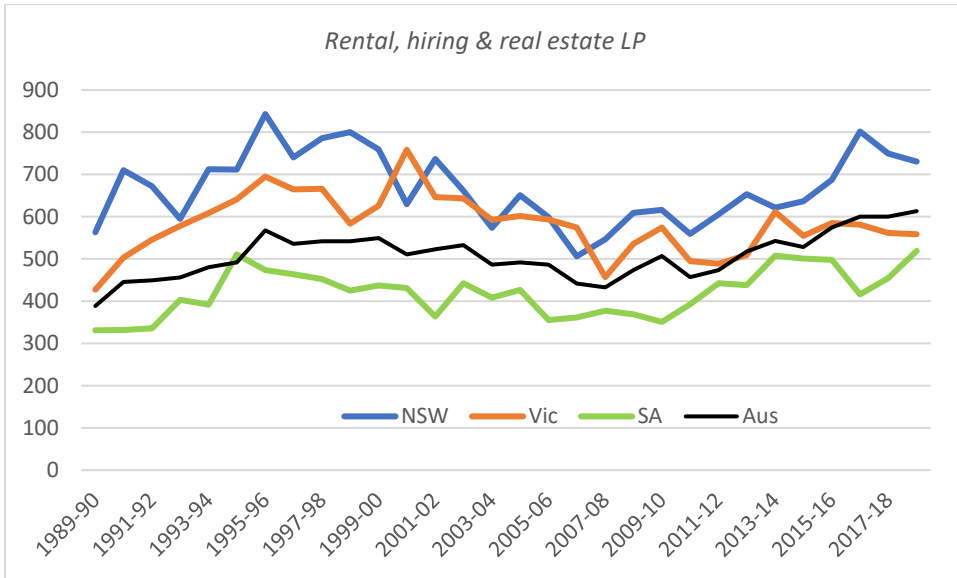
All charts measured in 2017-18 dollars per hour

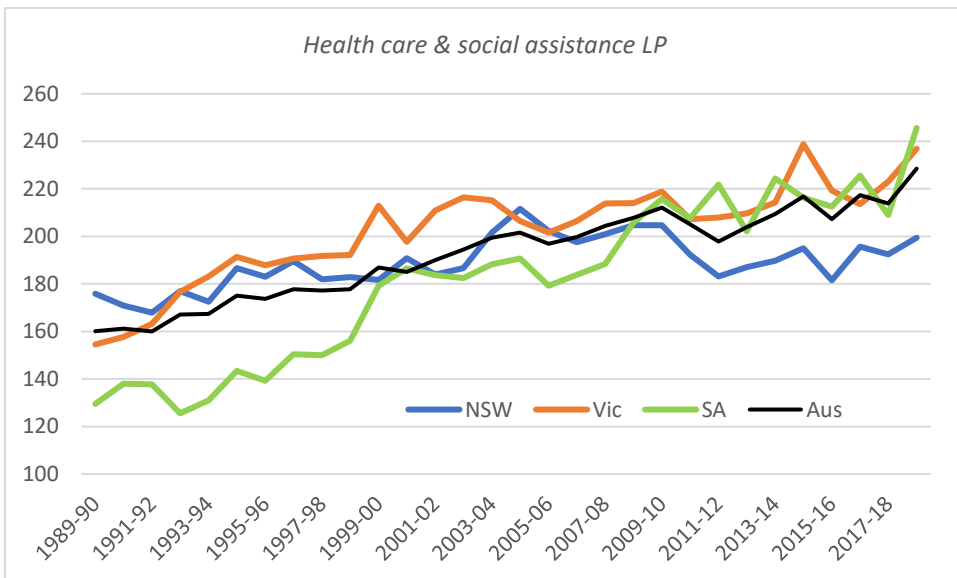
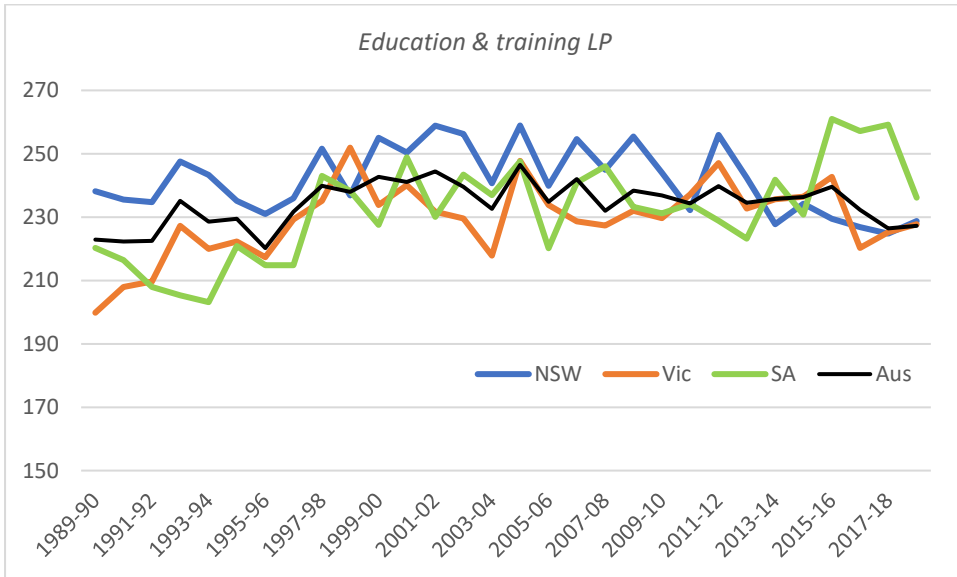
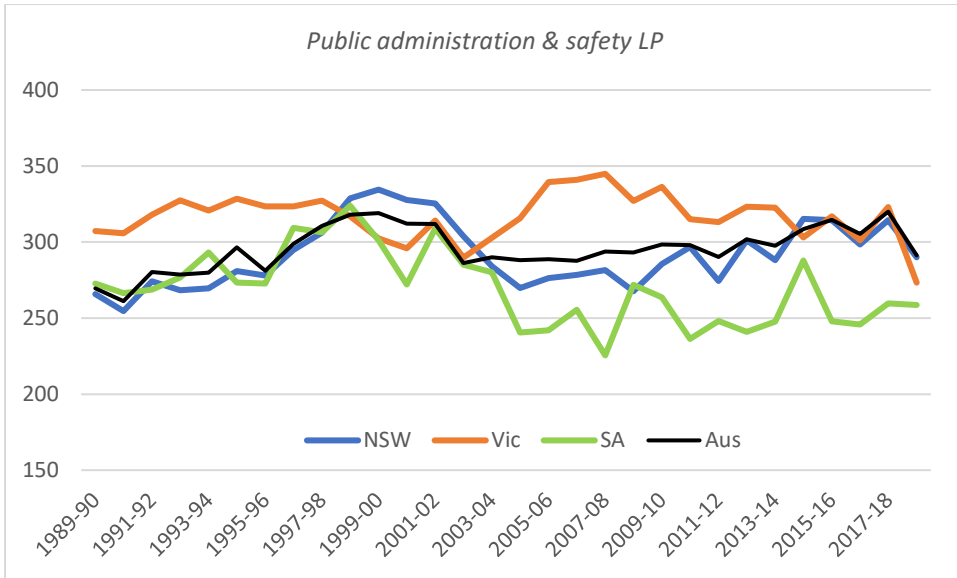


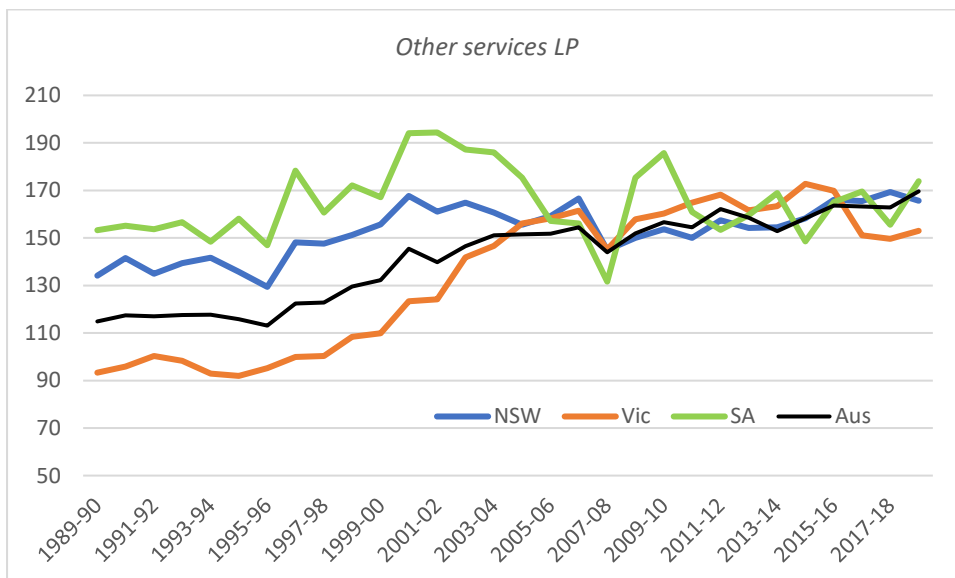
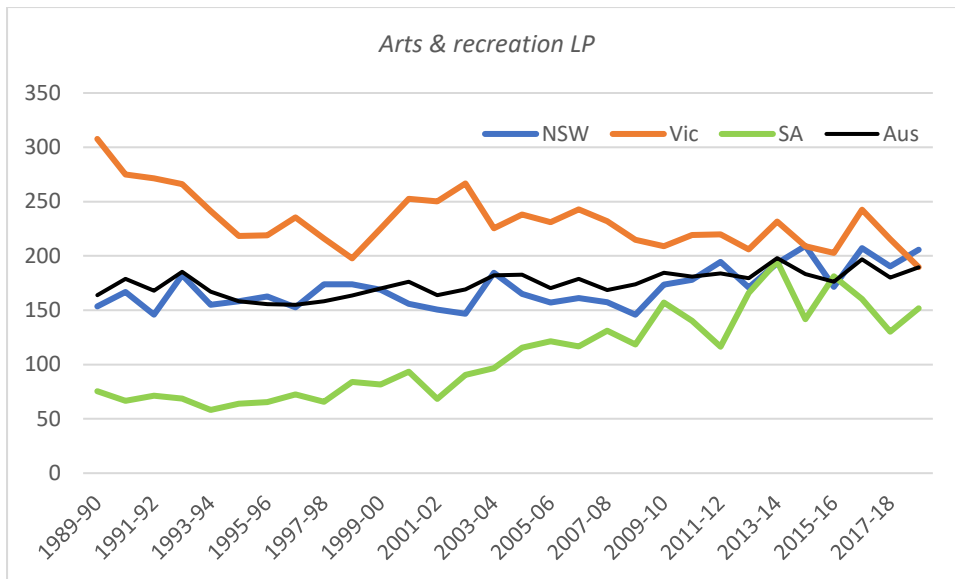












A.2 Tables of labour productivity by industry in all jurisdictions

All estimates are measured in 2017-18 dollars per hour

Agriculture LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	103.0	106.6	102.0	178.1	123.4	196.8	166.1	195.0	111.1
1990-91	107.9	101.7	120.0	156.4	150.7	179.9	198.5	212.6	116.7
1991-92	100.5	108.0	129.9	210.4	165.8	175.9	191.6	147.5	122.0
1992-93	104.7	134.1	143.3	153.0	164.0	197.4	313.9	87.9	129.8
1993-94	107.5	139.9	142.0	151.8	187.8	181.1	416.0	75.6	134.1
1994-95	85.7	141.2	120.6	127.3	124.5	185.3	380.6	58.1	116.4
1995-96	112.0	158.3	149.0	143.0	135.5	221.4	538.9	137.1	138.1
1996-97	143.7	134.4	168.6	139.8	143.2	215.4	450.6	153.4	145.5
1997-98	103.9	155.6	173.6	142.3	157.3	214.0	373.6	87.1	141.1
1998-99	125.8	195.0	172.0	145.6	209.0	218.9	319.2	73.8	161.3
1999-00	128.7	216.3	161.5	149.9	221.3	220.7	201.9	103.8	163.5
2000-01	146.1	207.1	198.0	167.8	183.2	221.1	300.6	106.8	175.3
2001-02	143.7	208.2	173.7	207.3	187.4	237.4	316.7	93.5	175.4
2002-03	129.5	222.3	164.6	147.2	145.1	234.5	514.2	128.6	162.5
2003-04	171.2	259.0	202.3	192.1	224.4	262.0	523.9	213.0	209.8
2004-05	193.4	265.3	240.1	210.0	202.2	295.3	500.9	92.9	226.0
2005-06	208.3	300.2	260.4	276.9	192.3	279.2	504.5	64.5	245.1
2006-07	152.4	246.6	211.5	206.9	172.0	326.1	289.5	85.4	199.6
2007-08	160.4	240.9	221.1	256.2	202.7	301.7	356.7	162.4	217.1
2008-09	211.0	244.0	261.5	248.4	268.3	316.7	552.4	256.8	248.4
2009-10	186.3	247.1	242.1	353.7	289.7	308.4	485.0	85.0	248.0
2010-11	236.3	264.7	287.3	419.8	178.8	365.5	455.9	194.0	268.4
2011-12	273.6	272.0	289.8	298.8	284.9	403.2	229.8	211.5	283.4
2012-13	257.5	305.9	310.7	371.5	274.9	472.2	325.0	113.7	301.0
2013-14	246.8	229.8	341.1	248.7	476.2	434.0	941.2	152.6	289.8
2014-15	257.5	268.4	379.0	235.8	351.0	451.7	827.5	98.0	299.7
2015-16	224.0	188.7	342.0	275.3	392.1	462.8	1363.8	68.5	267.0
2016-17	282.3	225.2	400.7	354.9	374.0	503.5	731.6	72.4	316.0
2017-18	295.1	203.1	331.5	288.0	305.0	500.9	798.2	121.3	285.1
2018-19	233.4	186.8	248.9	308.7	340.9	508.1	730.4	335.3	257.3

Mining LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	523.8	2606.4	673.8	1017.1	1015.7	515.1	1287.8	169.0	892.4
1990-91	586.3	3709.8	796.1	1109.5	1190.0	506.7	994.7	239.7	1014.3
1991-92	644.6	4573.1	939.7	1462.8	1251.2	739.7	1880.5	194.0	1166.5
1992-93	686.2	4147.0	981.4	1227.5	1297.9	1086.8	2108.1	258.9	1211.6
1993-94	581.3	3139.3	1107.3	1134.3	1315.6	1318.9	1155.0	715.5	1142.1
1994-95	701.4	3072.8	1338.6	1400.3	1420.9	1518.1	755.4	592.1	1265.1
1995-96	724.3	3861.4	1233.3	1745.2	1729.6	1151.4	1091.9	712.6	1385.0
1996-97	869.8	4508.6	1315.9	1776.4	1623.6	642.6	943.0	311.3	1410.4
1997-98	899.7	5179.1	1193.6	1476.0	1822.1	960.4	1063.3	656.4	1494.9
1998-99	1041.5	3657.9	1378.3	1134.1	1624.1	739.1	1234.7	308.8	1438.6
1999-00	1245.6	2084.4	1753.1	1537.8	1638.4	651.0	1867.8	1805.8	1566.3
2000-01	1632.6	2240.4	2273.9	1388.3	1477.3	630.5	3193.5	na	1669.0
2001-02	1262.0	2835.3	2101.5	1347.7	1652.6	823.2	2990.1	1100.5	1668.8
2002-03	1263.4	1430.4	2144.9	906.2	1603.8	825.7	1551.9	1151.0	1528.6
2003-04	1241.7	1558.2	1820.8	782.5	1389.0	781.8	1844.6	166.2	1374.9
2004-05	1067.4	1724.7	1814.5	750.4	1370.8	753.2	1639.1	1400.5	1333.2
2005-06	1150.0	1308.8	1161.2	586.3	1207.7	689.3	2761.5	na	1124.9
2006-07	1020.6	1210.2	1346.4	455.1	1238.1	604.5	3278.5	189.8	1145.6
2007-08	1023.4	1088.0	1324.6	617.2	1174.0	737.2	1933.0	695.9	1118.5
2008-09	771.9	1144.1	1058.1	731.0	1099.2	1029.6	1315.3	na	993.7
2009-10	785.6	929.0	1208.5	872.0	1123.8	704.0	1769.2	310.1	1041.6
2010-11	727.0	1018.4	860.3	873.9	963.8	722.5	1479.4	446.2	891.5
2011-12	651.7	861.4	744.5	632.0	859.0	544.7	1428.0	550.5	784.9
2012-13	751.4	641.0	746.4	590.3	915.6	517.9	1254.0	1195.0	805.9
2013-14	791.7	719.1	731.0	603.3	1109.3	611.5	1259.9	1647.4	898.0
2014-15	1059.2	1004.7	994.7	547.7	1406.4	905.9	1540.7	1060.0	1170.2
2015-16	923.4	1088.9	1279.6	940.1	1363.6	708.5	1093.2	na	1225.8
2016-17	917.6	901.4	1376.4	770.5	1506.0	632.8	1133.8	na	1286.8
2017-18	899.9	1046.3	1354.6	800.6	1521.4	493.7	1108.9	na	1294.0
2018-19	982.2	643.1	1251.9	540.0	1512.0	759.6	2545.4	na	1267.8

Manufacturing LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	177.5	177.9	158.8	175.1	142.7	185.7	340.5	213.6	169.3
1990-91	187.5	185.4	173.9	181.6	136.3	191.4	271.1	179.7	176.8
1991-92	191.6	185.5	167.9	203.0	150.6	184.4	208.8	199.6	180.4
1992-93	188.7	196.0	171.7	201.6	152.8	212.6	218.5	187.4	183.7
1993-94	196.6	202.6	173.2	202.4	144.6	207.5	239.3	202.7	187.8
1994-95	198.2	193.7	170.5	196.6	149.7	226.7	172.6	175.9	185.2
1995-96	208.6	201.3	174.3	207.6	148.5	217.6	318.6	150.0	192.2
1996-97	198.3	207.4	186.7	214.5	152.4	214.7	289.8	153.1	193.6
1997-98	200.3	224.5	191.9	228.1	156.3	252.9	252.4	164.2	202.4
1998-99	222.6	230.6	196.4	244.4	160.7	236.3	274.5	213.7	213.8
1999-00	223.5	235.7	191.0	241.3	165.8	199.0	239.2	146.4	213.9
2000-01	228.5	222.1	200.1	255.1	186.9	185.7	197.0	170.3	216.1
2001-02	238.6	232.0	223.5	242.0	218.7	184.1	238.4	161.7	228.9
2002-03	232.3	235.0	229.8	247.6	221.4	178.2	274.7	234.3	230.2
2003-04	256.0	249.3	230.5	224.8	253.9	205.4	394.7	227.9	243.9
2004-05	247.1	242.8	217.5	239.6	242.2	182.6	476.3	294.2	237.1
2005-06	254.3	239.5	245.7	230.2	247.0	195.6	566.4	235.2	243.2
2006-07	258.9	238.4	253.8	240.9	260.4	215.1	523.9	225.2	249.1
2007-08	248.9	244.0	256.0	235.8	278.1	218.7	429.7	382.6	250.3
2008-09	251.3	244.7	242.3	228.7	281.6	231.2	445.8	247.7	249.3
2009-10	254.7	247.5	247.7	252.8	317.1	231.6	412.8	292.6	257.5
2010-11	253.3	245.5	255.6	250.9	331.9	227.9	570.5	203.4	259.4
2011-12	269.9	242.1	270.2	268.3	325.5	308.5	788.2	284.3	269.5
2012-13	251.6	238.4	295.2	251.4	317.2	257.9	709.6	310.3	264.3
2013-14	264.8	257.2	260.8	220.2	349.7	257.1	551.9	253.8	267.7
2014-15	250.4	244.0	278.7	239.3	361.3	243.3	652.4	228.9	264.9
2015-16	262.0	260.5	267.8	228.0	391.6	251.1	639.5	192.4	272.7
2016-17	251.0	241.6	277.2	197.9	377.2	238.6	512.6	191.5	260.1
2017-18	249.7	247.2	274.2	237.7	384.4	240.8	441.0	225.3	265.2
2018-19	261.1	254.3	273.6	198.4	321.5	242.4	583.8	215.3	263.2

Electricity, gas, water and waste LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	531.3	472.7	744.2	1174.1	526.1	511.3	1192.0	1077.9	602.5
1990-91	559.5	525.5	848.2	1274.8	527.6	542.3	842.2	947.4	646.5
1991-92	532.5	580.7	810.2	1128.5	513.6	564.5	690.2	953.7	638.0
1992-93	570.7	673.6	851.5	1285.4	551.4	602.6	883.9	1319.5	700.7
1993-94	600.4	624.6	929.4	1630.7	630.8	653.5	1602.4	1323.1	739.4
1994-95	640.2	711.2	896.9	1853.8	653.9	773.4	1016.2	1179.0	786.1
1995-96	764.2	791.6	911.3	1292.0	728.2	769.8	808.0	2085.1	851.4
1996-97	920.4	987.8	969.2	1378.7	827.9	999.4	995.5	1885.5	994.1
1997-98	943.7	1026.5	971.2	1774.2	907.1	909.9	1060.3	1850.9	1041.1
1998-99	973.9	820.4	952.7	1940.9	932.2	1009.9	1173.6	1772.6	1008.1
1999-00	1018.1	949.8	1068.6	1721.2	788.6	1276.5	1348.0	1887.7	1059.1
2000-01	1048.4	924.2	1236.8	1786.1	718.0	1033.0	709.5	2006.6	1067.0
2001-02	1039.3	853.4	1012.9	1709.8	963.6	859.6	764.5	2074.2	1031.5
2002-03	853.3	1011.1	1120.3	1491.0	785.3	866.2	849.6	1071.8	983.9
2003-04	792.4	1061.1	1026.6	1589.4	868.0	646.5	473.7	1235.6	960.2
2004-05	898.4	941.9	984.0	1435.2	634.3	592.7	417.9	1678.0	925.1
2005-06	833.6	890.0	805.9	1173.5	825.7	676.0	486.8	1232.5	863.8
2006-07	882.0	801.1	973.4	1214.3	568.0	551.9	452.8	1445.2	853.5
2007-08	776.6	799.5	834.2	1065.5	550.2	678.8	787.5	1464.9	792.2
2008-09	743.9	779.1	817.0	805.5	480.3	624.7	467.7	1299.6	733.0
2009-10	676.0	801.5	728.8	828.4	584.9	510.8	501.5	1705.9	718.1
2010-11	595.7	722.3	677.2	772.0	609.7	699.1	420.3	939.3	660.4
2011-12	807.2	654.7	496.5	767.3	605.8	660.4	307.3	675.2	645.1
2012-13	861.6	716.0	663.9	747.7	487.6	597.4	351.3	538.2	696.0
2013-14	702.6	633.8	597.7	747.0	529.4	694.7	360.6	1411.8	641.1
2014-15	734.4	704.0	669.1	762.9	708.9	510.9	381.1	601.9	695.5
2015-16	615.0	708.6	761.1	773.0	760.1	573.0	375.8	902.5	695.4
2016-17	717.6	705.5	937.2	684.0	566.4	537.1	359.2	966.7	721.6
2017-18	659.5	772.0	716.2	795.6	521.4	542.7	410.4	748.7	684.8
2018-19	698.5	644.4	806.8	661.5	477.7	625.4	342.6	1210.2	668.1

Construction LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	208.4	165.6	194.8	185.9	211.2	165.0	145.4	244.7	193.0
1990-91	213.8	170.0	198.9	178.8	217.0	158.7	142.8	216.1	196.4
1991-92	231.0	175.2	207.8	147.3	214.4	198.5	118.2	195.8	202.5
1992-93	229.2	179.7	204.5	160.9	203.9	172.8	119.9	216.0	202.4
1993-94	221.2	193.9	204.1	162.5	207.7	129.8	175.8	218.8	203.4
1994-95	237.9	175.7	207.1	146.2	178.7	134.1	161.6	203.1	200.1
1995-96	227.4	171.1	210.5	153.1	221.2	159.4	132.6	193.8	202.8
1996-97	230.7	191.6	226.9	164.9	209.8	156.8	163.6	179.4	211.3
1997-98	239.5	196.1	244.6	191.3	243.2	161.0	174.7	193.9	225.2
1998-99	251.9	218.8	233.9	167.5	251.6	150.8	350.4	287.9	235.8
1999-00	236.2	215.0	245.0	179.2	226.0	172.8	225.9	266.4	227.5
2000-01	201.2	201.5	236.0	166.2	189.2	151.6	180.5	172.6	202.9
2001-02	210.8	205.5	252.2	194.2	245.1	259.8	433.3	266.7	224.1
2002-03	236.4	234.8	258.3	218.4	321.6	191.0	385.9	239.6	250.5
2003-04	249.5	222.1	237.6	217.5	325.1	178.4	402.6	257.5	247.8
2004-05	236.6	250.9	230.4	225.3	298.1	176.2	394.3	224.6	245.6
2005-06	247.4	237.4	232.7	214.6	318.5	201.5	349.4	235.3	249.0
2006-07	226.3	223.7	239.8	208.5	332.1	185.8	394.9	270.5	242.5
2007-08	230.5	236.0	248.0	226.6	354.0	187.3	329.9	247.4	252.5
2008-09	228.7	253.8	256.2	227.7	351.2	176.2	403.6	308.4	259.0
2009-10	247.3	236.8	255.5	222.6	355.9	189.5	267.5	350.0	259.9
2010-11	266.0	236.8	257.2	205.1	348.7	189.8	253.8	321.4	263.4
2011-12	255.7	249.5	315.8	229.3	468.2	169.8	269.2	338.9	295.0
2012-13	268.8	255.9	312.3	226.4	482.4	199.9	461.6	319.5	305.8
2013-14	267.5	245.7	335.5	238.1	467.9	211.7	367.3	333.0	306.5
2014-15	259.7	265.7	314.5	267.6	437.7	249.5	283.5	335.4	300.7
2015-16	275.4	251.0	288.0	258.6	418.1	204.3	336.7	354.3	291.6
2016-17	269.9	260.2	256.1	232.7	353.7	172.9	409.7	371.5	273.5
2017-18	257.9	242.3	258.8	252.1	325.7	186.2	429.7	344.5	263.8
2018-19	258.4	253.7	243.6	229.1	301.1	225.1	298.1	333.7	257.7

Wholesale trade LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	171.2	161.5	139.6	136.9	108.8	150.9	63.7	89.5	152.2
1990-91	157.8	137.2	128.7	126.9	117.5	123.5	66.2	83.9	139.0
1991-92	161.2	145.6	130.6	132.3	116.7	125.0	71.1	92.1	143.2
1992-93	173.2	134.8	130.7	131.6	125.1	151.7	86.9	104.3	145.5
1993-94	169.5	133.5	142.4	127.8	127.0	159.9	99.8	106.5	146.2
1994-95	185.4	168.0	160.2	168.6	140.5	160.3	112.7	109.6	168.9
1995-96	193.5	168.8	172.4	178.8	160.3	167.5	132.8	119.4	177.5
1996-97	216.3	191.8	182.3	183.9	160.5	183.4	108.6	150.5	194.0
1997-98	230.5	205.1	193.0	202.5	159.8	221.6	115.1	135.1	205.6
1998-99	227.2	221.0	197.9	213.3	169.5	244.4	133.5	174.3	212.2
1999-00	232.4	249.0	218.5	240.9	176.1	241.3	160.7	166.3	227.3
2000-01	263.0	282.9	231.8	220.9	217.8	192.2	149.9	229.6	251.4
2001-02	261.4	294.7	257.3	260.2	223.5	177.6	148.8	203.8	261.0
2002-03	266.8	286.5	284.3	260.8	236.2	177.3	153.7	215.3	268.3
2003-04	268.5	306.7	281.9	269.6	263.8	213.4	220.6	350.0	279.4
2004-05	285.0	309.5	301.4	266.3	283.1	231.5	123.0	229.4	290.3
2005-06	281.8	301.9	324.4	312.4	346.9	199.7	164.9	208.5	300.4
2006-07	252.3	262.0	353.8	301.7	357.8	247.0	183.7	309.2	284.8
2007-08	281.1	281.9	363.9	297.0	391.1	246.3	368.5	234.9	306.3
2008-09	286.7	284.2	361.9	323.9	349.8	183.0	214.6	260.8	304.5
2009-10	280.6	298.5	296.2	321.2	356.9	262.8	308.7	243.1	298.4
2010-11	292.2	302.5	313.6	302.8	370.5	236.7	279.4	249.5	306.1
2011-12	321.4	301.7	346.0	315.5	397.0	266.6	330.6	299.0	326.7
2012-13	306.8	296.2	328.9	345.2	443.2	331.0	332.3	284.2	324.0
2013-14	315.2	330.8	362.6	413.3	461.3	340.1	350.1	295.7	349.0
2014-15	342.0	343.2	351.2	504.6	400.9	259.8	390.4	304.2	357.6
2015-16	375.9	402.0	366.2	468.5	475.6	372.5	385.9	372.5	396.6
2016-17	426.3	423.9	403.9	512.2	467.7	338.5	444.6	331.7	429.0
2017-18	396.9	418.0	410.2	490.7	588.1	459.5	465.7	549.8	429.0
2018-19	416.2	397.2	380.8	461.5	468.6	380.1	490.9	376.8	412.0

Retail trade LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	93.9	83.9	86.3	79.6	77.6	68.8	87.3	85.1	86.3
1990-91	99.8	81.8	85.8	82.0	78.6	68.6	114.8	97.5	88.2
1991-92	104.3	90.0	89.6	78.6	85.5	75.6	106.5	86.6	92.8
1992-93	98.8	91.9	92.8	87.1	97.8	77.9	106.6	105.3	94.5
1993-94	105.2	87.9	97.1	86.8	106.3	79.2	106.6	98.0	97.0
1994-95	105.7	87.5	105.1	92.3	101.3	69.3	100.5	94.6	98.1
1995-96	110.4	95.6	100.1	103.1	94.4	74.4	116.1	91.7	101.4
1996-97	118.9	100.7	103.7	102.5	106.2	82.7	106.6	101.5	107.6
1997-98	120.1	105.7	112.7	105.8	107.0	85.1	92.2	91.8	110.9
1998-99	124.2	109.5	106.9	111.8	110.6	83.5	107.2	111.1	113.5
1999-00	121.9	110.8	111.3	115.2	110.4	87.6	116.5	101.6	114.2
2000-01	123.8	124.0	113.6	108.8	120.9	80.2	108.3	119.9	119.0
2001-02	125.7	124.9	124.9	130.0	115.9	91.8	120.8	133.6	123.9
2002-03	123.8	126.6	122.0	134.7	115.3	104.4	104.3	125.2	123.4
2003-04	130.5	142.4	130.2	133.7	120.1	96.5	109.4	135.3	131.3
2004-05	129.0	137.5	126.4	131.3	132.2	104.0	129.4	127.4	130.4
2005-06	129.1	137.5	127.9	125.4	136.0	103.6	108.5	131.4	130.5
2006-07	133.7	147.9	128.8	128.3	142.8	123.2	132.0	132.7	136.1
2007-08	131.1	152.9	133.8	141.4	154.8	115.5	145.0	168.8	140.0
2008-09	144.1	163.7	132.8	140.0	143.0	120.4	123.5	161.8	145.1
2009-10	157.6	153.5	146.0	145.9	166.5	133.7	129.9	189.9	153.7
2010-11	158.0	153.2	151.3	143.5	160.0	151.3	125.4	192.1	154.4
2011-12	161.1	164.9	158.1	142.5	157.8	143.0	145.3	195.8	159.5
2012-13	165.6	166.5	155.7	147.6	170.4	148.8	161.4	219.1	163.2
2013-14	174.1	171.8	148.1	158.3	177.0	140.3	168.4	218.2	166.6
2014-15	173.4	168.7	157.0	159.9	178.7	146.9	195.5	211.5	168.4
2015-16	172.5	170.5	159.0	162.5	182.5	151.4	177.0	242.4	169.9
2016-17	191.7	174.6	164.6	160.1	183.0	161.6	155.3	265.7	178.0
2017-18	184.0	171.4	162.3	158.4	198.6	156.4	172.6	228.4	175.4
2018-19	178.8	180.4	178.5	174.5	197.6	168.0	178.1	257.4	181.3

Accommodation and food LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	170.1	100.5	99.8	109.3	73.4	113.1	120.5	170.7	121.6
1990-91	146.0	98.2	106.6	100.6	78.3	142.3	129.0	186.7	116.8
1991-92	145.8	94.2	102.1	87.9	83.6	122.4	120.6	150.4	113.3
1992-93	140.2	94.6	107.8	93.0	94.4	124.8	155.4	148.3	115.1
1993-94	146.6	95.0	111.6	96.2	101.8	114.7	137.5	183.4	119.2
1994-95	140.1	91.3	112.1	87.3	97.7	125.9	143.7	170.4	115.5
1995-96	149.7	84.3	103.0	89.0	100.1	118.2	186.9	157.3	115.1
1996-97	150.8	92.2	102.0	89.7	108.1	125.8	154.7	180.8	118.6
1997-98	155.1	96.1	114.5	84.6	109.1	146.2	165.2	184.4	123.7
1998-99	166.5	103.7	130.6	81.5	115.2	154.7	177.7	182.3	132.6
1999-00	156.6	119.7	126.2	86.7	116.5	146.7	177.1	199.8	133.8
2000-01	166.1	114.7	121.3	88.3	100.6	137.1	150.8	224.6	132.7
2001-02	161.6	133.0	115.1	102.1	99.3	148.1	150.7	255.9	135.3
2002-03	163.9	127.3	129.2	114.7	124.0	142.9	181.4	212.0	141.7
2003-04	156.9	126.0	133.6	122.3	154.8	124.4	199.9	201.5	142.9
2004-05	167.4	128.1	128.6	123.3	154.7	134.2	205.4	198.8	146.1
2005-06	167.3	150.3	138.9	113.4	159.6	141.1	129.4	211.5	152.2
2006-07	179.1	144.7	148.0	144.2	161.9	129.3	127.2	158.9	158.0
2007-08	160.2	138.5	146.1	141.7	180.3	141.4	114.1	173.0	151.7
2008-09	165.8	138.2	144.7	159.9	147.6	127.3	180.1	156.8	151.8
2009-10	162.0	121.2	144.0	146.3	142.6	141.3	199.4	173.6	145.5
2010-11	158.2	129.3	143.8	118.8	161.9	140.2	142.3	162.4	145.0
2011-12	157.8	124.8	156.4	148.9	174.9	120.1	173.9	153.6	149.9
2012-13	142.3	124.5	148.9	163.0	189.3	139.8	172.8	184.3	146.2
2013-14	151.8	126.5	174.4	146.9	169.9	121.5	199.1	156.6	151.6
2014-15	159.1	126.5	145.5	154.8	169.8	130.6	194.1	170.4	149.2
2015-16	165.4	125.9	170.6	150.3	167.2	118.1	183.5	150.8	154.7
2016-17	170.5	120.3	147.9	176.4	152.1	114.3	179.0	158.0	149.9
2017-18	174.7	123.7	155.0	165.5	140.5	143.0	175.8	138.8	151.9
2018-19	163.5	140.9	146.3	143.0	143.4	129.1	145.8	170.5	150.3

Transport, postal and storage LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	187.4	179.1	156.7	181.6	184.3	176.9	129.7	141.7	177.0
1990-91	175.2	189.0	177.4	179.7	171.9	178.9	116.0	139.3	177.6
1991-92	186.2	190.9	193.2	203.3	178.1	192.5	140.6	208.9	188.7
1992-93	199.5	213.0	196.2	196.1	182.8	186.8	133.2	176.4	198.7
1993-94	205.4	209.0	196.8	204.1	190.6	199.7	148.1	177.3	201.8
1994-95	210.5	219.1	200.3	192.1	200.7	239.2	154.8	195.4	207.7
1995-96	234.3	212.2	198.0	216.1	216.8	216.9	171.4	178.4	217.1
1996-97	232.6	237.8	205.1	235.1	219.7	214.5	112.7	204.6	225.1
1997-98	252.1	227.0	196.2	245.6	216.5	183.7	133.0	193.7	226.9
1998-99	236.8	248.0	212.8	220.2	217.7	194.6	133.2	244.9	230.5
1999-00	255.7	241.8	215.4	239.2	217.3	214.7	135.8	223.6	237.3
2000-01	254.2	230.1	218.0	228.0	213.0	232.0	120.2	195.3	233.2
2001-02	256.9	266.2	234.4	252.2	245.6	284.6	98.2	221.9	251.3
2002-03	271.7	272.7	266.0	257.8	266.4	295.2	88.1	216.1	266.3
2003-04	273.6	284.1	246.5	269.6	250.4	237.9	103.5	212.2	263.9
2004-05	293.1	275.7	256.3	252.2	252.8	259.3	121.5	201.5	270.5
2005-06	290.5	290.2	262.2	271.1	259.4	261.2	151.6	233.1	277.2
2006-07	312.8	305.6	245.1	275.8	296.9	264.2	161.6	183.6	287.0
2007-08	284.2	311.8	260.9	295.2	272.3	262.6	144.1	189.5	281.3
2008-09	284.0	288.5	232.8	284.0	246.5	260.9	181.5	209.4	266.8
2009-10	308.7	300.5	248.7	304.9	230.5	249.0	166.6	204.9	279.5
2010-11	300.4	293.0	249.1	317.5	289.1	257.5	221.8	196.8	284.4
2011-12	336.4	306.9	262.3	297.9	293.2	267.0	205.9	268.3	302.0
2012-13	342.7	317.1	258.2	266.4	324.5	239.4	197.6	272.6	306.1
2013-14	343.4	294.6	272.1	249.3	309.6	251.8	265.1	314.8	302.9
2014-15	309.8	290.3	267.7	246.9	343.7	226.5	264.7	338.4	294.2
2015-16	326.6	281.7	261.1	258.4	323.1	247.7	289.3	259.9	294.4
2016-17	335.9	283.6	286.1	258.8	366.4	254.9	284.7	290.4	308.0
2017-18	324.7	277.0	278.1	222.8	360.8	276.2	287.9	292.4	297.4
2018-19	305.1	273.7	305.2	255.9	355.6	281.0	288.5	265.5	298.4

Information, media and telecommunications LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	190.6	136.9	83.5	83.8	90.1	149.2	38.6	204.2	141.7
1990-91	193.7	140.9	101.6	94.1	95.5	139.5	43.1	201.2	149.5
1991-92	218.6	162.7	109.3	107.0	113.2	130.2	47.2	217.0	168.3
1992-93	258.1	177.0	127.3	130.8	118.8	170.6	54.8	233.1	192.3
1993-94	261.1	194.3	131.5	136.7	137.1	205.1	48.0	240.1	202.5
1994-95	256.2	189.6	119.7	156.2	138.0	198.5	43.6	226.4	198.3
1995-96	240.7	191.0	132.6	184.2	132.5	228.5	46.2	252.4	198.1
1996-97	246.6	200.1	147.3	150.1	120.8	264.0	59.3	309.0	203.4
1997-98	303.1	269.9	158.8	193.8	151.2	327.4	81.7	260.5	248.7
1998-99	336.1	270.2	171.3	207.3	181.6	326.7	71.6	309.7	268.5
1999-00	269.7	250.5	154.8	217.5	208.7	263.0	75.5	302.7	239.1
2000-01	272.4	202.2	192.9	173.6	185.1	318.9	76.0	304.4	229.0
2001-02	289.9	244.5	221.2	222.4	196.6	305.5	96.4	377.3	259.1
2002-03	295.7	250.5	170.7	229.7	201.7	358.0	86.9	365.2	254.9
2003-04	323.7	266.3	201.2	231.7	232.5	324.5	68.9	419.7	278.2
2004-05	316.3	260.1	178.1	203.4	218.5	344.7	137.8	369.1	265.6
2005-06	301.3	271.3	204.1	229.2	219.3	353.3	101.0	424.2	270.7
2006-07	305.3	302.8	188.4	246.1	247.9	498.5	79.8	417.0	280.9
2007-08	383.3	300.3	190.0	309.4	313.4	442.7	108.0	415.6	315.5
2008-09	380.1	320.4	221.2	320.0	338.3	543.6	119.8	404.6	331.7
2009-10	401.4	332.1	304.8	328.3	324.8	434.3	139.9	477.4	358.6
2010-11	410.3	369.6	277.6	309.4	382.2	437.9	114.1	547.7	371.3
2011-12	383.0	356.2	278.2	345.5	404.3	465.8	155.5	469.8	361.7
2012-13	362.9	363.2	291.1	303.1	325.3	535.4	125.6	649.1	352.6
2013-14	456.2	413.5	298.6	447.6	379.5	511.7	143.3	476.5	413.4
2014-15	447.3	396.0	312.5	372.3	477.9	530.8	145.8	572.1	411.1
2015-16	494.2	450.4	323.3	464.5	404.1	646.0	243.3	623.5	450.4
2016-17	475.8	482.2	319.4	543.4	455.4	663.4	220.5	761.7	460.1
2017-18	451.1	524.7	437.6	436.1	505.8	873.3	202.8	771.5	481.5
2018-19	532.8	486.5	351.4	584.5	564.6	936.3	186.9	1026.8	503.3

Financial and Insurance LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	341.5	299.4	325.1	268.0	317.5	335.0	231.6	274.8	316.0
1990-91	340.6	331.0	295.2	260.6	305.3	295.7	296.6	253.2	318.4
1991-92	394.2	350.9	321.9	286.1	308.0	383.3	488.8	408.5	355.8
1992-93	459.3	372.7	342.1	312.9	372.7	387.6	407.4	392.7	396.1
1993-94	489.5	406.2	389.5	408.3	392.6	490.9	514.1	483.7	436.8
1994-95	477.0	397.2	389.7	360.3	422.4	489.5	582.4	458.9	429.1
1995-96	435.6	427.8	437.5	418.7	448.9	518.5	565.4	376.3	434.5
1996-97	465.0	462.2	471.9	449.4	479.9	464.0	523.0	575.2	466.7
1997-98	535.2	490.4	492.1	523.0	490.4	555.5	477.3	538.7	512.2
1998-99	552.9	532.2	569.8	551.4	521.5	506.9	672.9	635.9	546.9
1999-00	542.5	610.3	611.6	573.0	587.6	582.3	553.0	544.7	573.0
2000-01	558.5	579.8	563.9	558.2	581.6	634.3	597.5	536.1	567.0
2001-02	586.7	610.3	568.1	632.3	569.0	558.8	757.7	549.6	591.1
2002-03	601.8	621.6	615.6	608.9	598.2	588.3	553.3	630.2	608.5
2003-04	632.0	668.3	604.5	666.8	613.7	672.6	728.4	872.8	640.4
2004-05	676.4	644.1	600.3	663.3	640.6	701.3	699.3	568.8	652.8
2005-06	645.8	673.4	602.6	660.1	635.2	670.3	660.3	589.4	646.3
2006-07	689.4	676.8	654.0	663.1	646.0	659.8	550.9	598.9	674.4
2007-08	704.4	711.0	727.5	679.4	673.1	624.8	562.9	520.3	701.1
2008-09	713.4	753.5	645.2	705.7	694.6	662.1	690.6	622.3	709.1
2009-10	723.9	683.2	702.9	710.0	676.5	763.3	820.7	692.3	706.0
2010-11	729.4	704.7	765.2	699.7	710.6	775.5	892.4	660.7	724.0
2011-12	723.7	769.7	641.3	627.9	684.9	797.4	708.9	662.7	715.0
2012-13	787.0	763.1	738.4	815.3	666.2	806.2	829.4	657.2	764.7
2013-14	775.8	760.5	790.8	907.6	633.0	847.0	761.2	737.9	767.8
2014-15	831.4	840.6	732.6	893.1	782.2	889.2	822.6	689.3	818.3
2015-16	828.9	841.8	715.9	895.9	906.9	821.0	847.1	638.7	821.5
2016-17	837.2	826.8	784.8	961.5	799.1	775.1	935.2	794.0	828.8
2017-18	845.7	935.1	784.7	931.1	950.3	782.6	836.2	774.0	870.1
2018-19	852.7	878.7	790.7	939.9	1034.4	1043.5	1079.2	1082.9	869.9

Rental, hiring and real estate LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	563.3	427.3	199.0	331.2	327.2	173.0	106.8	337.6	388.6
1990-91	709.8	503.2	214.9	332.0	335.5	240.3	131.6	652.9	446.0
1991-92	672.5	545.7	222.0	335.9	365.2	223.8	125.8	375.6	449.3
1992-93	594.9	578.5	224.5	403.0	457.1	254.9	177.7	319.4	456.3
1993-94	712.6	608.6	230.3	391.5	386.1	255.1	235.2	469.3	480.5
1994-95	711.7	640.9	231.6	510.8	451.5	198.3	96.5	409.5	491.9
1995-96	843.0	694.7	289.6	473.5	498.0	309.6	122.1	492.3	567.8
1996-97	740.5	664.9	287.7	463.5	477.3	300.7	113.7	442.4	535.7
1997-98	785.7	666.3	276.9	452.6	473.3	280.7	95.6	552.1	542.2
1998-99	800.0	583.3	291.5	425.2	506.9	253.0	105.6	497.4	541.7
1999-00	759.7	626.3	327.3	437.1	407.6	258.0	125.7	547.3	549.3
2000-01	630.0	758.5	277.2	430.9	377.8	323.9	149.3	464.3	510.4
2001-02	736.3	646.6	315.4	363.6	382.3	240.3	128.5	425.8	522.7
2002-03	661.6	643.3	345.4	442.7	431.7	281.2	263.9	636.7	533.1
2003-04	573.3	592.7	360.8	408.3	367.7	304.8	283.4	497.0	486.7
2004-05	651.2	601.4	323.0	426.7	360.7	262.0	550.0	398.8	491.6
2005-06	598.3	593.2	339.6	355.6	438.7	245.2	508.1	555.5	486.3
2006-07	506.3	574.4	335.5	361.3	367.5	249.9	370.9	446.6	442.0
2007-08	546.4	457.3	349.1	377.4	354.1	209.4	308.8	501.6	432.9
2008-09	609.0	535.7	355.8	368.8	390.3	229.9	297.5	645.5	473.3
2009-10	616.1	574.2	372.9	350.8	517.2	350.7	280.4	702.2	506.7
2010-11	559.3	494.7	315.6	392.5	491.8	296.7	290.5	822.1	457.0
2011-12	605.4	488.7	357.6	442.3	405.8	324.1	316.9	585.0	473.8
2012-13	653.0	509.2	384.8	437.9	553.6	352.4	305.7	532.9	517.6
2013-14	621.6	611.6	442.4	507.7	465.1	308.3	363.8	695.4	542.6
2014-15	636.8	554.7	431.2	501.1	424.8	310.4	426.8	607.1	528.0
2015-16	687.0	585.1	453.6	497.6	549.2	323.5	351.5	612.4	574.1
2016-17	801.4	581.1	464.2	416.1	522.7	383.7	345.3	668.2	600.5
2017-18	749.4	561.4	495.1	454.5	546.5	333.7	355.5	1136.0	600.2
2018-19	730.8	558.3	556.5	519.1	520.2	370.3	418.0	1112.2	613.2

Professional, scientific and technical LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	260.6	186.9	148.6	201.7	218.9	126.8	82.8	180.4	209.0
1990-91	261.5	193.1	146.9	188.2	226.0	123.2	61.3	154.3	208.2
1991-92	253.1	193.9	154.8	196.7	217.8	159.0	78.6	168.5	209.7
1992-93	260.2	187.4	149.6	215.8	226.0	155.5	81.2	156.8	211.0
1993-94	259.6	194.5	150.9	195.2	205.9	149.9	89.8	167.0	209.6
1994-95	279.1	181.9	144.1	196.7	221.0	161.6	92.1	155.1	210.0
1995-96	240.9	171.9	144.8	195.1	210.8	155.9	70.7	144.4	194.7
1996-97	243.1	180.7	145.0	184.0	202.6	128.9	67.6	148.3	196.5
1997-98	243.9	173.8	140.5	194.7	207.1	133.8	89.6	139.7	195.4
1998-99	257.8	190.4	161.7	200.5	217.6	158.2	61.4	161.7	212.0
1999-00	269.7	194.3	153.4	191.5	202.4	147.0	72.4	164.7	214.8
2000-01	261.9	213.9	158.8	215.0	225.2	144.0	119.6	170.7	223.5
2001-02	269.1	245.9	193.1	228.4	275.4	155.5	78.2	202.7	246.3
2002-03	271.1	248.9	194.0	216.5	267.8	151.2	134.2	201.8	246.4
2003-04	275.1	246.7	214.3	244.7	276.4	176.4	169.2	189.6	253.0
2004-05	271.2	242.8	197.1	225.9	271.7	172.5	203.0	194.2	245.2
2005-06	254.7	223.7	205.9	238.1	252.8	174.4	229.8	212.5	235.2
2006-07	243.6	236.1	217.1	205.8	266.3	161.0	197.7	183.5	234.2
2007-08	241.0	222.4	218.0	199.3	263.1	175.4	196.3	205.5	230.2
2008-09	248.5	255.2	210.1	205.3	332.4	145.4	193.4	196.5	245.2
2009-10	248.1	252.8	228.6	193.9	298.2	160.9	168.3	220.7	245.1
2010-11	264.5	261.0	241.3	222.9	320.1	148.7	181.7	265.5	260.6
2011-12	267.1	251.0	256.3	214.7	318.3	178.7	232.8	275.3	262.4
2012-13	278.4	250.4	241.4	227.4	327.7	158.9	256.6	262.1	264.8
2013-14	288.1	243.7	234.1	240.4	330.9	187.2	242.2	303.3	266.9
2014-15	288.9	242.4	221.6	198.6	286.7	162.9	185.0	291.6	256.5
2015-16	257.1	260.6	234.1	198.5	334.1	157.6	258.0	301.2	257.8
2016-17	269.1	279.1	266.0	234.2	329.6	174.9	296.4	265.6	274.1
2017-18	297.7	266.5	270.4	246.4	349.3	191.7	408.8	301.3	286.0
2018-19	278.0	262.1	284.6	227.9	319.1	172.6	403.7	329.2	276.6

Administrative and support LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	377.3	289.1	256.0	378.5	232.0	256.2	78.2	253.0	311.0
1990-91	365.1	299.9	253.3	349.5	255.2	232.3	99.2	234.1	310.1
1991-92	351.4	314.9	263.9	367.7	245.7	258.1	96.9	237.2	312.0
1992-93	357.1	309.1	267.3	359.1	249.8	249.4	96.4	232.5	313.0
1993-94	359.6	290.8	287.2	346.4	240.4	259.4	88.1	293.4	311.8
1994-95	330.5	344.2	261.1	418.5	241.9	225.9	79.5	294.2	313.2
1995-96	361.6	292.0	227.3	353.0	219.8	228.2	64.3	304.1	297.6
1996-97	360.3	294.9	263.9	348.1	221.5	257.8	65.8	420.7	306.6
1997-98	356.2	298.6	242.8	375.7	244.0	199.9	99.5	331.1	305.1
1998-99	359.8	300.2	280.9	365.3	221.6	247.0	93.5	251.4	309.0
1999-00	360.5	307.6	254.1	295.6	263.8	221.9	102.6	325.1	308.8
2000-01	360.4	308.6	226.4	287.8	266.4	241.4	126.0	298.2	304.0
2001-02	358.5	392.3	282.1	328.0	338.9	287.4	135.2	292.7	345.2
2002-03	364.9	352.0	255.6	332.0	315.9	253.5	122.4	310.9	329.2
2003-04	375.6	342.9	272.4	331.4	293.1	200.7	125.8	298.6	329.2
2004-05	364.8	353.9	305.5	332.2	265.3	249.8	167.3	324.6	333.3
2005-06	405.6	352.7	315.6	344.2	328.6	219.2	211.8	325.5	355.4
2006-07	427.3	437.1	316.5	323.6	341.3	232.4	180.8	460.0	381.9
2007-08	467.3	449.3	340.2	383.6	359.6	256.5	252.7	656.3	414.0
2008-09	433.8	398.5	351.0	339.7	409.8	208.7	196.1	497.7	392.4
2009-10	424.3	336.2	290.8	276.7	383.5	300.7	212.7	408.0	353.4
2010-11	428.4	351.4	306.1	289.6	382.1	227.4	239.3	343.3	362.2
2011-12	400.2	341.9	287.2	309.7	410.1	255.4	223.9	409.9	353.4
2012-13	391.6	386.0	290.4	321.7	357.7	205.6	272.0	393.7	356.7
2013-14	461.9	385.8	286.3	315.5	436.0	237.6	280.1	379.5	384.5
2014-15	458.8	373.3	300.1	328.4	421.2	194.7	283.4	538.2	385.4
2015-16	429.6	359.2	299.8	327.1	428.6	277.6	260.6	389.4	374.0
2016-17	431.5	372.2	346.4	240.7	377.0	273.7	259.2	561.0	376.8
2017-18	487.1	428.5	354.1	281.2	358.3	270.2	278.7	516.4	410.7
2018-19	518.8	397.4	370.2	274.2	388.3	316.3	184.4	486.2	416.3

Public administration and safety

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	265.7	307.2	266.8	272.8	237.5	152.2	333.8	249.0	269.5
1990-91	254.6	305.8	245.8	266.3	228.7	154.8	381.7	237.7	261.1
1991-92	274.1	318.0	286.6	268.7	272.7	171.7	390.6	231.3	280.4
1992-93	268.3	327.5	285.5	276.7	259.6	166.7	341.0	231.5	278.7
1993-94	269.6	320.8	291.4	293.2	250.6	144.2	325.8	255.0	279.8
1994-95	280.9	328.6	322.4	273.4	291.6	148.8	356.9	295.1	296.4
1995-96	277.9	323.6	274.2	272.8	264.0	137.0	431.6	261.9	281.2
1996-97	294.8	323.5	300.5	309.4	319.8	140.0	419.6	259.9	298.8
1997-98	306.2	327.2	341.8	306.5	304.2	150.3	397.3	281.1	310.7
1998-99	328.8	316.9	346.9	323.9	278.2	203.6	512.1	258.7	318.0
1999-00	334.5	302.5	350.5	301.1	289.9	215.5	518.6	268.0	319.1
2000-01	327.7	295.9	315.6	272.1	304.2	223.6	423.5	323.7	312.0
2001-02	325.3	314.2	313.6	309.0	284.3	262.1	341.9	295.9	311.8
2002-03	303.9	289.8	247.4	285.1	262.8	264.0	418.5	296.2	286.1
2003-04	284.1	302.9	262.1	280.1	319.2	281.6	380.3	292.8	290.0
2004-05	269.7	315.7	289.1	240.6	278.9	274.0	421.6	306.6	288.2
2005-06	276.4	339.4	270.7	241.9	274.4	287.8	404.6	290.9	288.8
2006-07	278.4	341.0	255.2	255.4	267.7	260.4	432.8	307.8	287.8
2007-08	281.6	344.9	275.5	225.5	286.8	279.1	377.7	326.4	293.7
2008-09	267.6	327.0	280.7	271.8	271.4	250.0	413.9	357.6	293.2
2009-10	285.5	336.2	276.9	263.7	293.0	224.5	409.6	337.6	298.4
2010-11	296.7	315.0	288.5	236.2	281.1	262.1	392.3	339.1	298.0
2011-12	274.4	313.2	270.3	248.1	291.5	244.9	407.5	350.8	290.3
2012-13	301.1	323.3	265.9	241.0	312.6	266.6	409.3	356.6	301.8
2013-14	288.0	322.6	266.9	247.6	316.7	279.7	319.1	356.8	297.6
2014-15	315.3	303.1	273.5	287.8	319.5	265.5	329.6	392.7	308.6
2015-16	314.4	316.9	288.4	247.8	356.3	251.8	310.0	401.0	314.6
2016-17	298.4	301.2	284.5	245.9	344.4	260.3	348.1	392.2	305.5
2017-18	314.4	323.0	300.2	259.7	317.2	275.8	426.9	411.3	320.0
2018-19	289.9	273.3	275.3	258.7	287.6	258.8	373.0	399.0	291.2

Education and training LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	238.2	199.8	209.5	220.3	237.3	232.6	326.5	281.1	222.9
1990-91	235.5	208.0	196.9	216.5	240.1	269.1	314.5	262.0	222.3
1991-92	234.7	209.7	212.7	207.9	219.2	266.9	298.9	263.1	222.5
1992-93	247.6	227.3	216.0	205.3	249.8	282.3	410.4	252.2	235.1
1993-94	243.3	219.9	210.0	203.2	238.1	291.4	280.4	250.9	228.5
1994-95	235.1	222.3	209.5	220.9	237.3	268.2	332.0	313.9	229.5
1995-96	231.0	217.3	196.7	214.8	217.9	245.3	304.9	267.2	220.2
1996-97	235.9	229.2	216.3	214.9	232.7	293.9	382.8	269.8	231.7
1997-98	251.6	235.1	214.1	243.0	234.2	278.5	349.0	282.2	239.9
1998-99	236.8	251.9	217.2	238.2	230.8	298.7	276.3	260.4	238.0
1999-00	255.1	233.8	237.5	227.6	229.7	273.7	346.9	254.9	242.7
2000-01	250.4	240.1	223.7	248.8	235.4	294.3	275.9	220.8	241.1
2001-02	258.8	231.7	229.1	230.0	248.7	305.1	312.4	272.5	244.4
2002-03	256.3	229.5	230.3	243.4	222.9	267.5	247.8	248.1	239.6
2003-04	240.7	217.8	235.4	237.0	218.4	292.8	314.6	241.0	232.6
2004-05	258.9	247.7	222.4	247.6	247.0	290.5	240.2	252.5	246.5
2005-06	239.9	233.8	213.8	220.2	253.6	308.9	307.8	251.8	234.8
2006-07	254.6	228.7	237.1	240.8	242.1	276.1	281.2	238.5	242.0
2007-08	245.0	227.4	214.1	246.0	218.5	242.6	282.8	281.4	232.0
2008-09	255.5	232.0	216.5	233.2	244.1	259.8	233.7	285.6	238.4
2009-10	244.0	229.7	237.9	231.2	224.0	290.4	237.0	265.0	236.9
2010-11	232.2	237.1	221.2	234.1	233.7	275.1	254.0	328.9	234.3
2011-12	255.9	247.1	214.2	228.9	229.2	259.3	223.6	283.6	239.8
2012-13	242.4	232.7	217.6	223.3	249.9	239.0	232.5	283.1	234.6
2013-14	227.7	235.6	239.4	241.8	233.8	228.4	244.1	319.4	235.7
2014-15	234.2	236.4	235.3	230.7	230.4	232.1	259.7	322.2	236.3
2015-16	229.5	242.7	225.6	261.0	256.8	259.7	254.5	329.7	239.6
2016-17	226.9	220.2	234.1	257.1	244.9	246.7	238.9	307.0	232.3
2017-18	224.8	225.3	221.7	259.2	211.0	255.7	232.2	266.0	226.5
2018-19	228.7	227.7	212.5	236.2	226.9	245.9	257.9	281.1	227.2

Healthcare and social assistance LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	175.8	154.5	162.7	129.5	136.1	168.9	114.8	263.6	160.2
1990-91	170.9	157.6	155.9	138.0	139.5	193.6	190.7	264.8	161.2
1991-92	167.9	163.2	152.1	137.7	131.1	184.7	175.3	314.9	160.0
1992-93	177.0	176.7	167.5	125.5	134.0	208.6	132.5	251.0	167.1
1993-94	172.5	183.1	158.0	131.0	140.8	223.5	163.8	234.6	167.4
1994-95	186.7	191.4	159.3	143.5	135.7	220.8	166.4	249.8	175.1
1995-96	183.0	187.8	159.9	139.2	141.8	211.3	159.0	298.9	173.8
1996-97	189.7	190.6	160.0	150.5	138.0	220.0	179.6	294.5	177.7
1997-98	181.9	191.7	163.0	149.9	144.4	246.2	170.9	316.2	177.2
1998-99	182.8	192.2	161.8	156.1	152.6	199.8	150.0	322.8	177.8
1999-00	181.6	212.9	169.1	179.2	164.4	219.5	160.4	269.3	186.9
2000-01	190.8	197.6	162.7	186.5	154.3	221.5	179.5	244.5	185.0
2001-02	183.9	210.8	174.5	183.6	172.8	238.7	160.8	256.0	190.0
2002-03	186.6	216.4	175.0	182.5	185.6	261.5	163.5	284.9	194.5
2003-04	201.5	215.1	170.3	188.2	182.8	252.6	188.2	337.9	199.4
2004-05	211.6	206.5	175.2	190.7	179.3	273.1	179.0	320.5	201.6
2005-06	202.3	201.6	182.8	179.3	172.9	251.8	170.6	364.5	196.8
2006-07	197.6	206.5	185.0	183.8	187.4	261.5	177.2	409.8	199.7
2007-08	201.0	213.9	195.2	188.3	179.2	246.7	176.6	477.1	204.4
2008-09	204.7	214.0	194.1	205.7	183.9	266.5	205.8	411.5	207.8
2009-10	204.7	218.9	194.7	215.8	199.6	280.2	212.3	443.0	212.1
2010-11	192.3	207.3	190.1	207.6	214.6	272.5	219.5	483.5	205.1
2011-12	183.2	207.9	178.1	221.8	190.5	260.8	213.2	465.5	197.9
2012-13	187.0	209.7	185.7	202.1	225.8	274.1	213.9	463.6	203.8
2013-14	189.8	214.2	181.2	224.3	246.3	303.7	230.3	482.5	209.4
2014-15	195.1	238.8	194.0	216.3	227.9	299.0	226.6	444.1	216.8
2015-16	181.5	219.2	190.1	212.5	233.4	280.2	255.5	500.0	207.3
2016-17	195.7	213.5	207.2	225.5	251.5	295.6	254.8	479.5	217.4
2017-18	192.4	223.0	200.9	209.0	239.3	274.4	208.2	465.3	213.9
2018-19	199.4	236.8	215.3	245.6	262.1	292.3	221.8	519.4	228.5

Arts and recreation LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	153.5	307.7	119.2	75.4	138.9	203.0	58.3	67.9	163.7
1990-91	166.8	275.1	176.3	66.7	163.5	205.1	74.6	85.4	178.9
1991-92	145.9	271.4	165.2	71.2	158.8	212.0	58.9	97.8	168.1
1992-93	182.3	266.2	191.2	68.5	168.8	190.1	61.4	81.6	185.2
1993-94	155.0	241.3	191.8	58.2	161.5	190.2	40.9	73.2	167.0
1994-95	158.2	218.4	151.8	63.9	148.9	179.7	45.5	79.9	158.4
1995-96	162.8	218.8	150.5	65.3	117.8	208.2	38.0	78.3	155.5
1996-97	152.7	235.4	126.8	72.5	133.6	209.4	43.5	105.3	155.0
1997-98	173.7	216.0	144.0	65.8	133.2	169.1	46.5	62.9	158.2
1998-99	174.0	197.6	144.2	83.9	161.2	228.5	60.6	86.2	163.5
1999-00	169.0	225.1	155.0	81.7	134.6	228.9	68.8	101.1	169.9
2000-01	155.8	252.6	150.2	93.4	155.8	191.4	99.8	117.0	176.3
2001-02	150.5	250.2	141.1	68.3	128.5	164.9	104.9	93.2	164.0
2002-03	146.9	266.6	140.2	90.4	146.6	188.3	90.3	101.9	169.3
2003-04	184.4	225.6	165.6	96.8	155.2	238.3	106.2	111.9	182.2
2004-05	165.1	238.2	177.3	115.6	159.2	182.3	91.5	138.5	182.8
2005-06	157.2	231.2	161.7	121.6	121.5	153.5	113.7	120.3	170.2
2006-07	161.1	242.8	170.6	116.7	146.3	169.2	130.3	108.6	178.9
2007-08	157.4	231.8	145.1	131.0	119.9	171.4	160.8	121.8	168.5
2008-09	146.0	214.7	199.3	118.4	145.1	221.2	125.6	149.7	173.9
2009-10	173.5	208.9	168.7	157.1	191.4	209.7	177.8	152.3	184.5
2010-11	178.0	219.2	163.4	140.4	152.9	174.5	151.9	156.8	181.1
2011-12	194.6	219.9	161.6	116.3	171.5	157.4	161.2	153.9	184.0
2012-13	171.1	206.0	174.1	165.9	152.7	179.1	200.7	151.4	179.6
2013-14	193.3	231.6	166.5	194.9	183.5	225.5	161.5	226.4	198.0
2014-15	209.2	208.8	157.8	141.7	138.5	234.8	193.9	131.5	183.3
2015-16	171.5	202.7	155.6	181.3	150.7	186.0	220.1	182.7	176.4
2016-17	207.2	242.5	162.1	160.3	154.1	182.3	249.7	156.9	196.7
2017-18	190.5	215.3	166.2	130.2	141.9	138.7	184.6	138.7	180.1
2018-19	205.7	189.7	184.5	151.8	172.2	156.7	185.5	227.4	189.4

Other services LP

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aus
1989-90	134.1	93.3	110.6	153.2	73.9	115.2	109.1	222.7	114.9
1990-91	141.5	95.8	109.0	155.2	76.7	116.1	99.2	188.0	117.4
1991-92	135.0	100.4	113.4	153.6	74.7	114.8	84.2	181.1	117.0
1992-93	139.4	98.3	109.4	156.7	75.4	109.5	100.8	202.5	117.6
1993-94	141.7	93.0	117.2	148.4	73.8	123.5	117.4	189.3	117.7
1994-95	135.7	91.9	113.4	158.2	74.4	122.8	119.7	190.6	115.8
1995-96	129.4	95.3	110.8	147.0	72.7	115.2	92.6	184.8	113.1
1996-97	148.2	99.9	111.5	178.4	73.4	120.6	95.8	189.7	122.5
1997-98	147.6	100.4	113.8	160.7	79.3	123.8	104.0	196.3	122.8
1998-99	151.2	108.4	123.2	172.1	82.9	136.8	107.5	204.4	129.6
1999-00	155.7	109.9	127.4	167.2	84.9	133.8	133.8	194.1	132.3
2000-01	167.8	123.3	135.3	194.1	91.3	143.9	180.1	252.6	145.4
2001-02	161.1	124.1	132.1	194.4	83.7	128.1	175.0	206.9	139.8
2002-03	164.9	141.9	143.9	187.2	81.0	130.1	130.8	252.5	146.6
2003-04	160.7	146.7	153.3	185.9	95.6	115.7	156.3	274.9	151.1
2004-05	155.6	156.1	152.0	175.3	98.7	148.3	178.9	257.1	151.5
2005-06	159.2	158.2	146.2	157.2	106.2	129.0	177.5	278.3	151.7
2006-07	166.5	161.5	139.0	156.1	126.0	126.7	139.1	247.5	154.4
2007-08	144.9	145.2	152.3	131.6	119.4	130.9	132.7	274.7	143.9
2008-09	150.1	157.9	147.1	175.4	131.3	131.9	131.6	245.6	151.9
2009-10	153.6	160.3	159.1	185.8	132.6	125.4	130.7	260.2	156.7
2010-11	150.0	164.9	161.0	160.9	133.8	121.6	139.8	212.2	154.5
2011-12	157.4	168.3	165.3	153.5	156.7	126.0	175.2	246.3	162.2
2012-13	154.2	161.6	156.8	159.6	153.5	147.9	185.1	264.5	158.5
2013-14	154.5	163.3	134.5	169.0	153.2	128.7	134.9	229.9	152.8
2014-15	158.3	172.8	144.8	148.5	161.1	113.7	156.5	247.8	158.3
2015-16	166.0	169.9	152.2	165.2	158.2	145.2	161.5	261.8	163.7
2016-17	165.5	151.1	161.8	169.5	169.2	156.2	162.0	298.9	163.2
2017-18	169.3	149.6	158.4	155.5	187.4	114.4	158.7	251.4	162.8
2018-19	165.6	153.1	179.9	173.9	195.8	144.0	169.4	215.5	169.6



**Government
of South Australia**

For more information

W: www.sapc.sa.gov.au

E: sapc@sa.gov.au

P: (08) 8226 7828

30 Wakefield Street
ADELAIDE SA 5000