

# SA: THE HEAPS UNFAIR STATE

## The Statistical Report



# SA: The Heaps Unfair State - The Statistical Report

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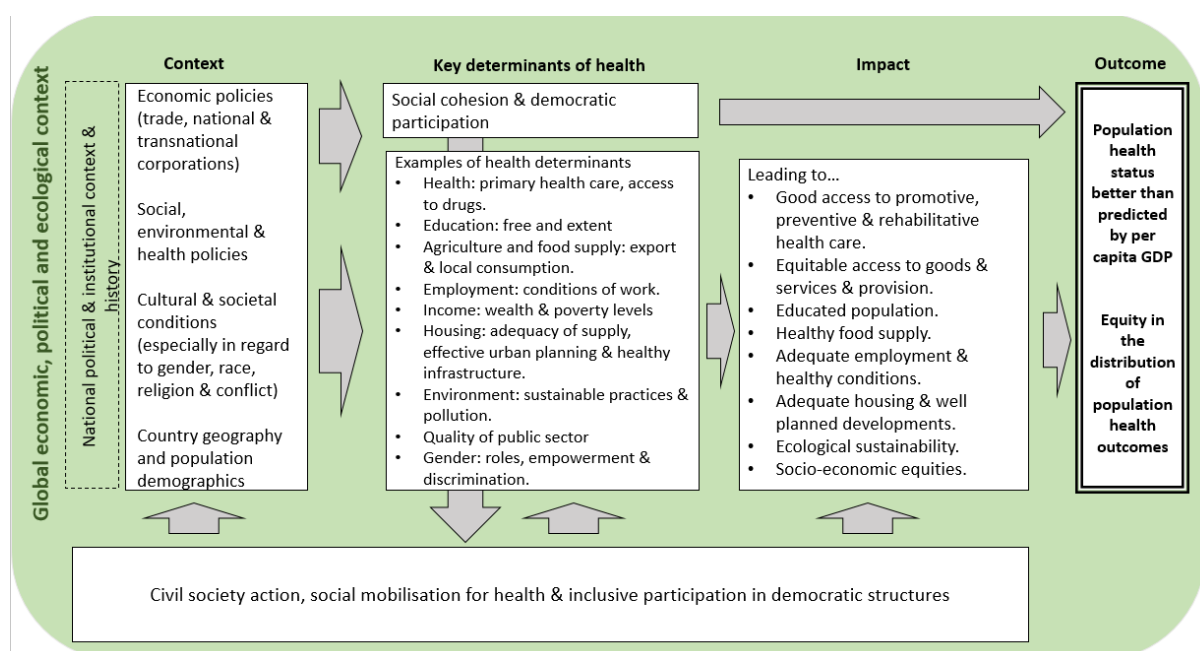
## Overview

This is a companion report to *SA: The Heaps Unfair State: Why have health inequities increased in South Australia and how can this be reversed?*

Australia is a prosperous country. Our relatively small population has benefitted from sustained economic growth, and continual progress across a range of social and economic indicators including health, learning and knowledge, jobs, living standards and participation (1, 2). South Australia has shared in this progress, but throughout the country there has been uneven distribution of these benefits, resulting in growing inequities, including a steepening socio-economic gradient. People in South Australia have good health in general, but the burden of age-related disease is increasing, social connectedness and mental wellbeing are being cited as significantly affecting health, and there are variations in health outcomes resulting from the circumstances in which people live (3).

This report draws on publicly available data on health and health inequalities in Australia and data on the social determinants of health. The primary source used to measure inequalities is the Social Health Atlas developed by the Public Health Information development Unit (PHIDU), which has compiled current and historical data at national, regional and small area levels for Australia from sources including the Australian Bureau of Statistics, the Department of Health and the Australian Institute of Health and Welfare (4). The data available from PHIDU does not capture all key indicators, therefore statistics have also been obtained from publicly available ABS publications, the census, and relevant reports published by government and non-government organisations.

**Figure 1: Preliminary framework to investigate why some countries punch above their weight in terms of health (Adapted from Baum et al., 2018) (5)**



There are multiple dimensions to health. Health is influenced by social and environmental factors, living and working conditions, individual and cultural elements and government policy (6). The social determinants of health (SDH) describe the circumstances into which people are born, grow, work, live, and age, and include the wider set of forces and systems shaping the conditions of daily life, largely responsible for unfair and avoidable differences in health status (7). The SDH can be grouped into broad themes to understand and highlight the extent of inequalities and how these might

explain health outcomes. For the purposes of this report the following themes have been chosen: income, housing, education, employment, social exclusion, and access to health care. The choice of themes is informed by the framework in Figure 1 and a SACOSS report on social determinants of health (5, 6).

The aim of this report is to provide quantitative examination of potential underlying factors that might explain the increase in socio-economic health inequalities in South Australia between the late 1980s and the period 2011-2015. Health has improved, as measured by life expectancy, but the distribution of that improvement has been uneven with the lowest socio-economic quintile particularly falling behind. The chosen themes reflecting the socioeconomic determinants of health represent some of the most prominent underlying factors that have the potential to cause growing inequalities.

Health occurs on a gradient, where on average the higher one's socioeconomic status, the better their health. A flat gradient suggests a more equal society, where a steep gradient suggests great inequalities. The gradient of health inequities in South Australia, and Australia more generally, has been getting steeper over the past decades. Disadvantage is primarily measured by socioeconomic quintile throughout the report. Socioeconomic status is based on the ABS Index of Relative Socioeconomic Disadvantage for data sourced from PHIDU (4)<sup>1</sup>. The quintiles represent the socioeconomic status of the area in which the population is living. Inequality ratios are the primary measure of inequality in the report, and these are the ratio of the rate for the 20 per cent of the population living in the lowest socioeconomic status area to that for the 20 per cent living in the highest socioeconomic status area. An inequality ratio of 1 represents equality. An inequality ratio greater than 1 represents inequality for undesirable outcomes (e.g. premature mortality, avoidable deaths). An inequality ratio below 1 represents inequality for desirable outcomes (e.g. participation in higher education, labour force participation).

A number of indicators have been selected from multiple sectors, along with additional indicators that describe social inequalities that might have implications for health and health inequalities. The indicators chosen represent areas of importance to inequality and for which data is available. We appreciate that these indicators do not capture the complete picture, but the report aims to provide the available quantitative evidence on broader inequalities in South Australia, with particular focus on:

- The trend between the late 1980s and the present, where available
- Contribution of indicators and themes toward the increase in health inequalities

The report contains findings for each of these selected indicators, providing a picture of inequality in South Australia.

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<sup>1</sup> Refer to explanatory notes in appendices for more information on the ABS Index of Relative Socioeconomic Disadvantage and use of area-based measures of socioeconomic status.

## Health

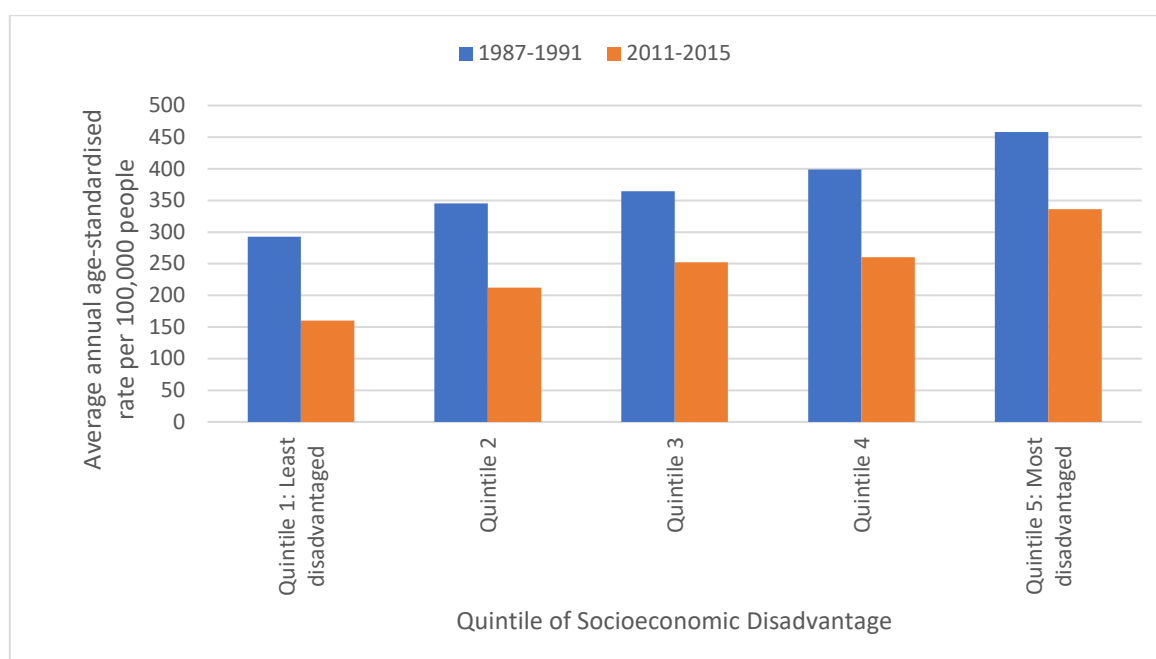
### Key findings

- Health inequalities in Australia, as measured by the inequality ratio, have worsened in the past two to three decades. In South Australia, inequalities have grown by more than the national average for most causes of premature mortality and avoidable deaths.
- There have been improvements in key health indicators for SA, with falls in premature mortality, deaths by avoidable causes and infant deaths, but the social gradient has become more pronounced. Median age of death has also risen, but inequality has worsened.
- Socioeconomic position is a major determinant of health. Prevalence of both morbidity and mortality differs by socioeconomic quintile, being highest for the most disadvantaged, and the gap between best off and worst off is widening in SA.

### Indicators

Inclusion of health indicators is based on indicators where data are available on socioeconomic inequalities for the period of interest. It is designed as an overview of trends in health inequality for key indicators of mortality and morbidity, rather than a comprehensive discussion of all indicators of population health. Many estimates of prevalence of specific diseases by socioeconomic status are not comparable over time, or not available at time points spanning a long enough period to capture changes in inequality, therefore this section primarily focuses on inequalities in indicators of mortality from the specific diseases that are leading causes of death.

### Premature Mortality and Avoidable Deaths

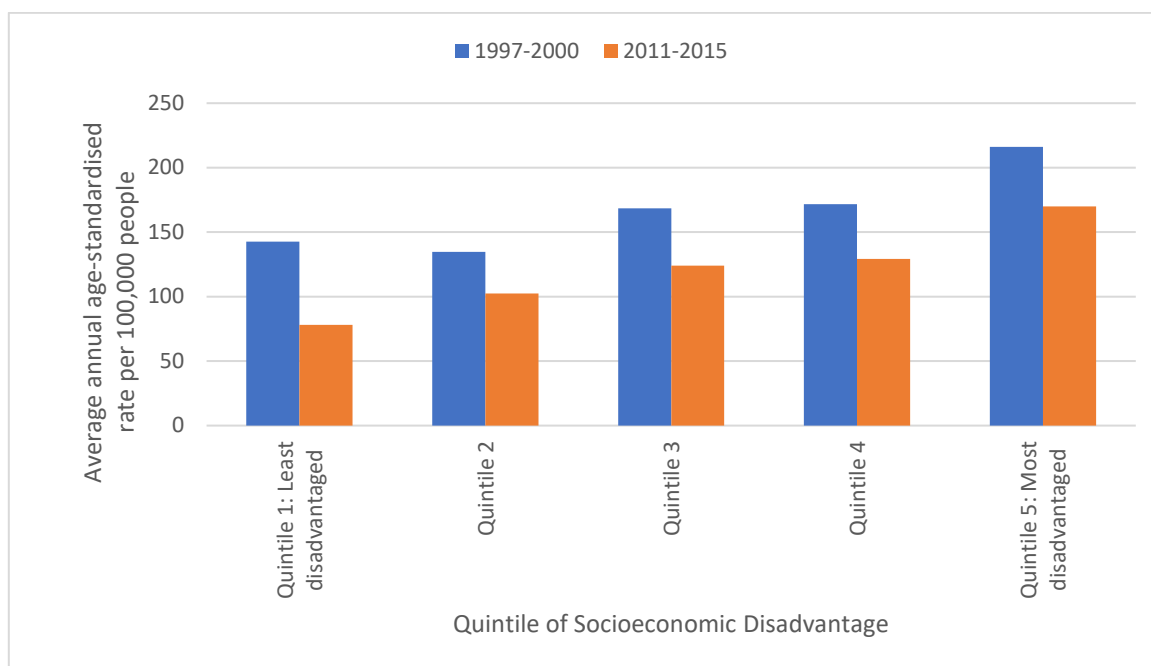


**Figure 2: Rates of Premature Mortality in South Australia, ages 0 to 74, by quintile of socioeconomic disadvantage, 1987-1991, and 2011 to 2015** (Data source: Social Health Atlas, PHIDU, 2018)

- Figure 2 indicates that rates of premature mortality have fallen in SA between 1987-1991 and 2011 to 2015. There has been a similar numerical decrease in premature mortality for each quintile of socioeconomic disadvantage, but this represents an uneven proportional

decrease, favouring the least disadvantaged<sup>2</sup>. The social gradient has not only persisted, it has worsened, as represented by a higher inequality ratio (2.10 in 2011-15 compared with 1.55 in 1987-1991)<sup>3</sup>.

- Rates of death from avoidable causes show a similar improvement in SA between 1997-2000 and 2011-15 (see Figure 3). The larger numerical and proportional improvement for the least disadvantaged has exacerbated the worsening social gradient for this indicator, with the inequality ratio increasing from 1.52 to 2.18, and all quintiles experiencing lower proportional improvement compared with quintile 1, the least disadvantaged.



**Figure 3: Rates of Death from Avoidable Causes in South Australia, ages 0 to 74, by quintile of socioeconomic disadvantage, 1997-2000, and 2011 to 2015** (Data source: Social Health Atlas, PHIDU, 2018)

### Changes in Inequalities

- Inequality ratios have increased in all states and territories but at different rates (see Table 1). SA ranks second worst in terms of greatest raw increase in inequality ratio between 1997-2001 and 2011-2015. SA's inequality ratio increased by 43.4 per cent, well above the national average<sup>4</sup>.

<sup>2</sup> These rates are age-standardised rates. Refer to explanatory notes in the appendices for more information on age standardisation.

<sup>3</sup> An inequality ratio greater than 1 represents inequality in the case of undesirable outcomes (e.g. premature mortality, avoidable deaths). For example, an inequality ratio of 2.10 for premature mortality means that the rate of premature mortality for quintile 5 is 2.1 times the rate of premature mortality for quintile 1.

<sup>4</sup> The age-standardised rate of deaths by avoidable causes is higher for some other states and territories compared with SA in both time periods (notably in the Northern Territory, Tasmania, Queensland). We have focused on the trends in inequality for the states and territories in Table 1 as the focus in this report is inequality of health outcomes.

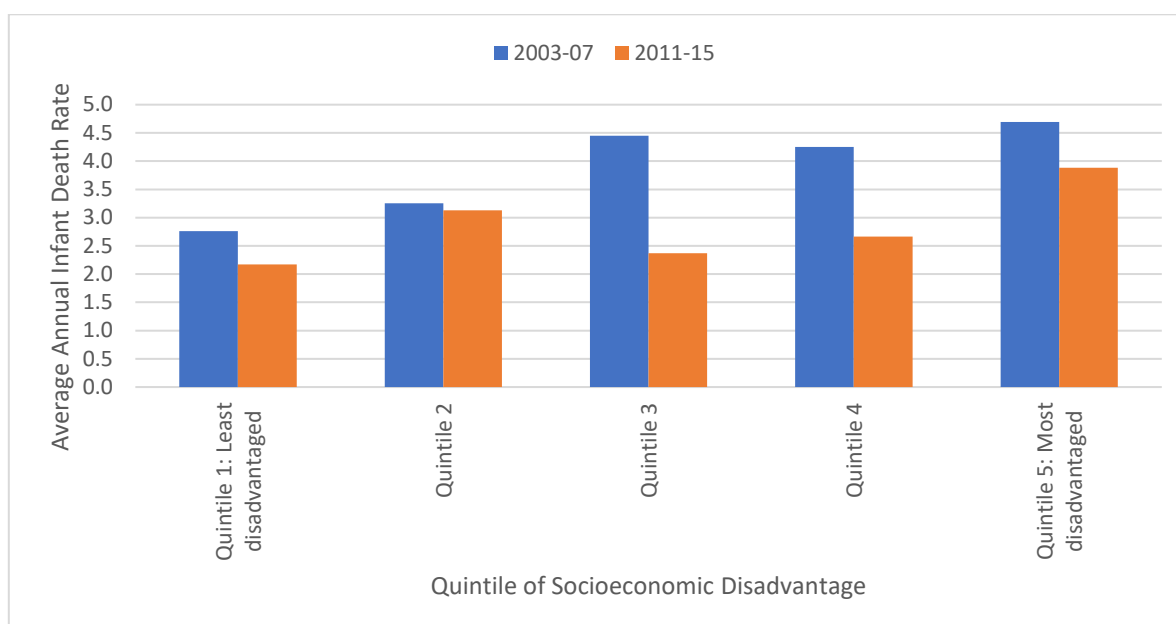
**Table 1: Changes in the Health Inequality Ratio from 1997-2000 to 2011-2015 for Deaths from all Avoidable Causes** (Data source: Social Health Atlas, PHIDU, 2018)

State	Health inequalities ratio 1997-2001	Health inequalities ratio 2011-2015	Increase in inequality ratio
New South Wales	1.59	2.11	0.52
Victoria	1.32	1.85	0.53
Queensland	1.58	1.89	0.31
South Australia	1.52	2.18	0.66
Western Australia	1.64	2.26	0.62
Tasmania	1.4	2.03	0.63
Northern Territory	3.5	4.23	0.73
Australian Capital territory	1.39	1.87	0.48
<b>Australia</b>	1.55	2.06	0.51

## Other Key Indicators

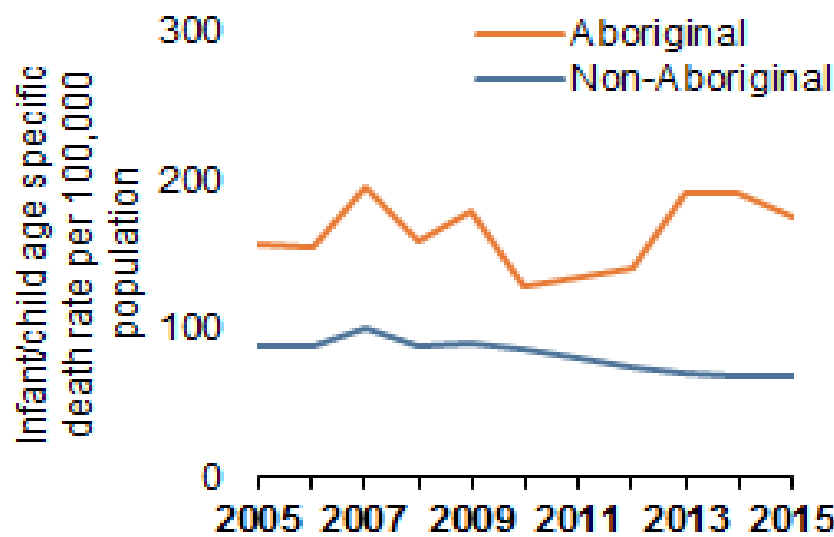
### Infant and Child Death Rates

- Infant death rates, like premature mortality, are a key indicator representing advances in health and longevity and progress in treatment. As with premature mortality, infant death rates have fallen in SA, but the social gradient has worsened slightly between 2003-07 and 2011-15 (see Figure 4). This trend corresponds with the decrease and uneven distribution of infant death rates in Australia as a whole over the same period (8). The inequality ratio in SA has increased from 1.70 to 1.79. This can be attributed to a much lower proportional decrease in infant death rates for quintile 5, the most disadvantaged.



**Figure 4: Average Annual Infant Death Rate in South Australia, by quintile of socioeconomic disadvantage, 2003-2007 and 2011-2015** (Data source: Social Health Atlas, PHIDU, 2018)





**Figure 5: Infant and child death rates in South Australia by Aboriginal status**  
 (Source: Health Performance Council 2017, Figure 7) (9)

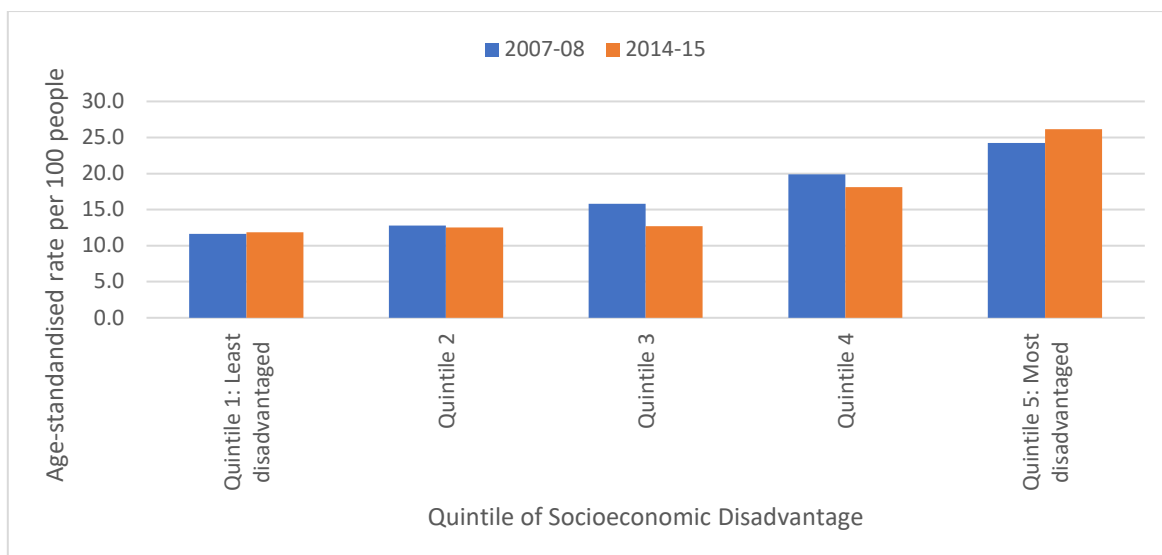
- Aboriginal and Torres Strait Islander infant and child death rates are 2.5 times higher than the rate for non-Indigenous infants and children in SA (9).<sup>5,6</sup> The age-specific death rate has not fallen amongst Aboriginal and Torres Strait Islander infants and children as it has for the non-Indigenous population between 2005 and 2015 (Figure 5). The small numbers underlying the calculations for the Aboriginal and Torres Strait Islander population require caution in interpreting trends, but the difference between the death rates of Aboriginal and Torres Strait Islander and non-Indigenous infants and children does appear persistent.

**Self-Assessed Health**

- Self-assessed health is a strong predictor of morbidity and mortality (11, 12, 13, 14). Figure 6 presents the proportion of people reporting fair or poor self-assessed health in SA between 2007-08 and 2014-15. This period of time cannot capture the longer-term trend over our period of interest, but it is indicative of the degree of inequality in self-assessed health. The rate observed for quintile 5 was double that of quintile 1 in 2007-08, and this gap increased in 2014-15. The inequality ratio increased from 2.08 to 2.21. This increase is primarily due to a higher rate of people in quintile 5 reporting fair or poor health in 2014-15, compared with no increase or a reduction in the rates for the other quintiles. The greater prevalence of fair and poor self-assessed health for the more disadvantaged quintiles predicts higher rates of morbidity and mortality for these groups, which is borne out by the results on premature mortality and avoidable deaths (Figures 2 and 3).

<sup>5</sup> The underlying factors behind the relatively poorer outcomes for Aboriginal and Torres Strait Islanders are complex, resulting from not only the social determinants of health but also the impact of colonisation and subsequent socioeconomic disadvantage (10).

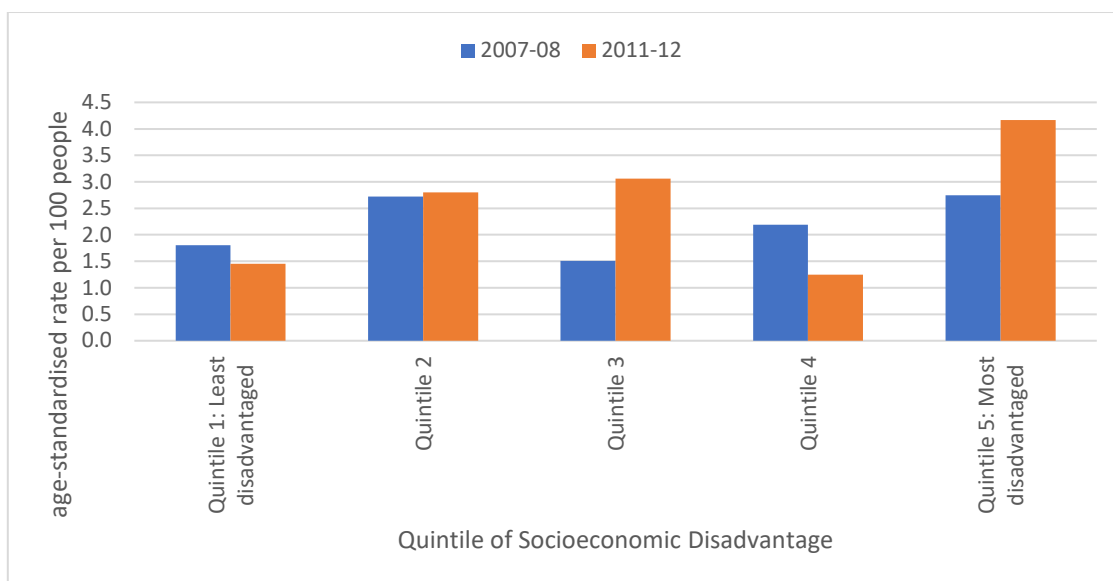
<sup>6</sup> Aboriginal and Torres Strait Islander peoples experience profound effects of social and economic inequalities due to historical and ongoing colonisation. While most indicators are not disaggregated by Aboriginal status, some are and we have endeavoured to present these to represent Aboriginal health and determinants of Aboriginal health and wellbeing.



**Figure 6: Estimated population in South Australia, aged 15 years and over, with fair or poor self-assessed health, by socioeconomic quintile of disadvantage 2007-08 and 2014-15** (Data source: Social Health Atlas, PHIDU, 2018)

### Prevalence of Disease

- There has been a dramatic increase in the inequality ratios for premature mortality and avoidable deaths by chronic obstructive pulmonary disease in SA (8). The growth in inequalities in premature deaths for this disease are a by product of the growing inequality in prevalence of chronic obstructive pulmonary disease. Figure 7 presents the prevalence of chronic obstructive pulmonary disease by socioeconomic quintile, confirming that the prevalence is highest amongst the most disadvantaged. The inequality ratio was estimated to be 1.52 in 2007-08, and 2.87 in 2011-12. The effects of the smoking epidemic are likely to have contributed to this outcome, particularly as smoking is also connected to the social gradient.

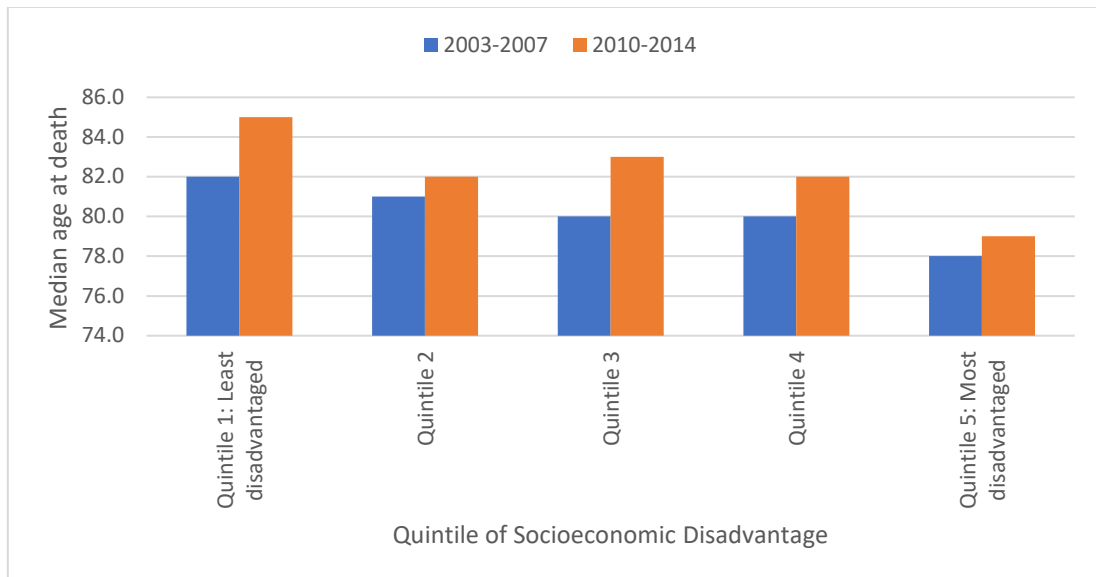


**Figure 7: Estimated proportion of population in South Australia, aged 15 years and over, with chronic obstructive pulmonary disease, by socioeconomic quintile of disadvantage 2007-08 and 2011-12** (Data source: Social Health Atlas, PHIDU, 2018)

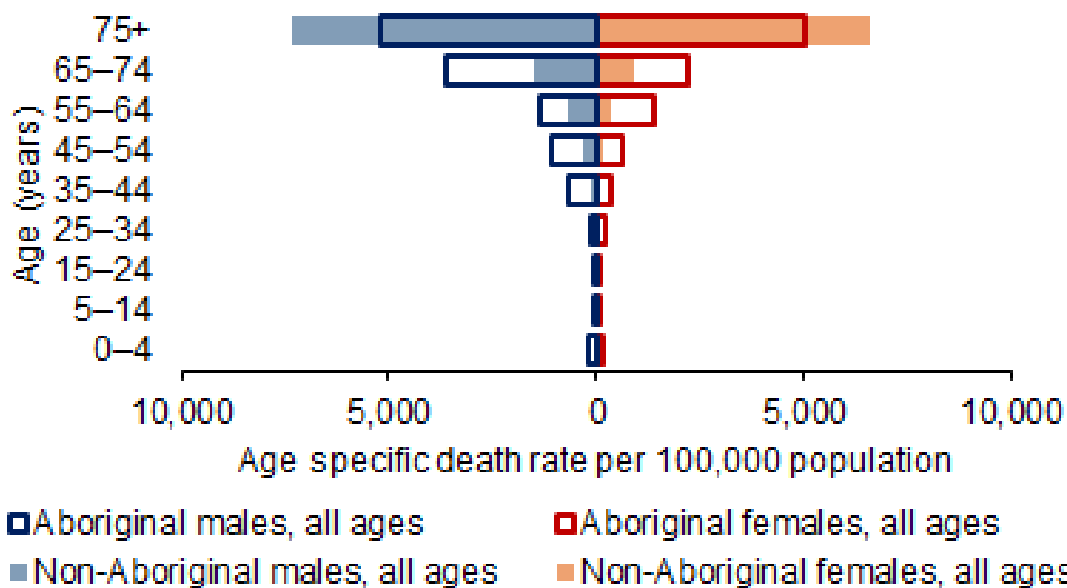
- Aboriginal and Torres Strait Islander people fare worse as a group in terms of prevalence of fair or poor self-assessed health. In 2002, 21 per cent of South Australian Aboriginal and Torres Strait Islander people were estimated to be in fair or poor self-assessed health, and the figure rose to 27 per cent in 2008 and 2014-15 (15, 16). Prevalence of psychological distress is also higher amongst the Aboriginal and Torres Strait Islander population, impacting on 34 per cent in 2014-15 (compared with 13.5 per cent for the non-Indigenous population) (17).

### Median age at death

- The median age at death has risen in SA, corresponding with the fall in premature mortality, avoidable deaths and infant deaths (see Figure 8). Although median age at death rose for every quintile between 2003-07 and 2010-2014, the gap between the most disadvantaged and least disadvantaged has increased. The median age of death for quintile 1 in 2010-14 is 85 years compared with 79 years for quintile 5, a gap of 6 years. The inequality ratio is little changed, at 0.95 in 2010-14 (compared with 0.93 in 2003-07). This is comparable with the inequality ratio for Australia (0.96) which was unchanged over this period (8).



**Figure 8: Median age at death of persons in South Australia, by socioeconomic quintile of disadvantage, 2003 to 2007 and 2010 to 2014** (Data source: Social Health Atlas, PHIDU, 2018)



**Figure 9: Age-specific death rates in South Australia by gender and Aboriginal status, 2015** (Source: Health Performance Council 2017, Figure 3A)

- The median age at death for the Aboriginal and Torres Strait Islander population is much lower than for the non-Indigenous population, and this is represented by the difference in age-specific death rates in SA in 2015 (Figure 9). The age-specific death rate for Aboriginal and Torres Strait Islander people exceeds that of non-Indigenous people for every age group except for ages 75 and over. There is an estimated 25 year gap in life expectancy, with the median age of death in 2015 estimated at 62 years for women and 55 years for men for the Aboriginal and Torres Strait Islander population, compared with 86 years for non-Indigenous women and 80 years for non-Indigenous men (9).

#### **Inequalities in Premature Mortality and Avoidable Deaths by Cause**

- The inequality ratio more than doubled in SA between 1997-2001 and 2011-2015 for avoidable deaths by chronic obstructive pulmonary disease, respiratory system diseases and diabetes (see Table 2). SA's increase in inequality ratio is larger than the national average for almost all of the selected causes included in Table 2 (the exceptions are cancer and suicide and self-inflicted injuries), but it is most strikingly larger for chronic obstructive pulmonary disease, respiratory system diseases, diabetes and ischaemic heart disease.
- The picture is similar for the increase in inequality ratios for premature mortality between 1987-1991 and 2011-2015 (Table 3). The increase in inequality ratio for chronic obstructive heart disease in SA is worrying, not only for being worse than the national average but for the sheer magnitude. The increases in socioeconomic disparity of premature mortality for ischaemic heart disease and circulatory system diseases are also concerning, and worse than the Australian average. The ageing population in SA is likely to be a contributing factor in the worsening health inequalities in the state.

**Table 2: Health inequality ratios in 1997-2001 and 2011-2015 for Australia and South Australia: Deaths by avoidable causes (Data source: Social Health Atlas, PHIDU, 2018)**

Cause	Australia		South Australia	
	Health inequalities ratio 1997-2001	Health inequalities ratio 2011-2015	Health inequalities ratio 1997-2001	Health inequalities ratio 2011-2015
All avoidable causes	1.55	2.06	1.52	2.18
Diabetes	2.02	3.77	2.43	4.95
Circulatory system diseases	1.65	2.37	1.56	2.63
Ischaemic heart disease	1.68	2.42	1.69	2.81
Cerebrovascular diseases	1.48	2.07	1.34	2.00
Respiratory system diseases	2.16	3.62	1.96	4.70
Chronic obstructive pulmonary disease	2.16	3.61	2.06	4.72
Cancer	1.06	1.31	1.10	1.31
Suicide and self-inflicted injuries	1.41	1.77	1.59	1.74

**Table 3: Health inequality ratios in 1987-1991 and 2011-2015 for Australia and South Australia: Premature Mortality (Data source: Social Health Atlas, PHIDU, 2018)**

Cause	Australia		South Australia	
	Health inequalities ratio 1987-1991	Health inequalities ratio 2011-2015	Health inequalities ratio 1987-1991	Health inequalities ratio 2011-2015
Premature mortality	1.55	1.92	1.57	2.10
Circulatory system diseases	1.67	2.28	1.63	2.66
Ischaemic heart disease	1.62	2.42	1.57	2.81
Cerebrovascular diseases	1.66	2.07	1.60	2.00
Respiratory system diseases	1.95	2.97	2.14	3.11
Chronic obstructive pulmonary disease	1.96	3.61	2.19	4.72
Cancer	1.25	1.53	1.26	1.63
Lung cancer	1.62	2.10	1.90	2.21
Suicide and self-inflicted injuries	1.52	1.77	1.88	1.74

○

## Social Determinants of Health

Population health is influenced by the social and economic environment. There have been major social and economic developments in South Australia between the late 1980s and the present (10). These include:

- Significant rates of poverty and financial hardship
- Reductions in public housing
- Major changes to the nature of work and opportunities for employment
- Persistent disparities in educational opportunities
- Challenges in dealing with social exclusion

The distribution of factors such as income, housing, education and employment impact upon health. Economic and social inequalities interact, and it is their combined impact that results in increasing inequality, differences in opportunity and disadvantage.

This report considers evidence on each of the identified social determinants of health in turn, considering the implications for health and interaction with other social determinants. We can better understand how these factors influence the health of South Australians by considering the quantitative evidence, by describing the levels of aspects of social and economic outcomes over time, illustrating trends and highlighting the extent of inequalities.

### Income

Higher income is closely linked with higher social status. The analysis of health outcomes illustrated the close relationship between socioeconomic status and health. Individuals with low income experience economic and social disadvantage, while people with high income tend to live longer, and to be in better health.

#### Key findings

- Poverty rates have been persistently high in SA compared to the national average, explained in part by the high rate of receipt of government income support payments, low income and low wealth in the state.
- There has been no improvement in income inequality in SA, and growth in incomes has not kept pace with growth in expenditure on goods and services. The increase in expenditure has been much larger for households in the lowest quintile of disposable income.
- Worsening social gradients and inequalities for sole parent households, people in receipt of unemployment benefits and low income, welfare dependent families have elevated the risk and prevalence of low income, poverty and child poverty for the most disadvantaged.

#### Indicators

##### Poverty

- The rate of household poverty rose dramatically in SA between 1981-82 and 1997-98, from 10 per cent to 23.3 per cent (18)<sup>7</sup>. SA had the highest poverty rate of all states and territories in 1997-98 (18). Explanations for this high poverty rate include lower wage rates and the high proportion of people receiving government income support payments in SA

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<sup>7</sup> This estimate used the Henderson methodology to estimate poverty.

compared with the rest of Australia. Poverty increased during the recessions in the early 1980s and late 1990s (18).

- SA's lower housing costs moderate the poverty rate after accounting for housing. Even after accounting for housing costs poverty in SA increased from 5.2 per cent in 1981-82 to 11.8 per cent in 1997-98 (18). SACOSS suggests that low rates of labour force participation, high rates of unemployment and the ageing population in SA were major reasons behind low income in SA and high poverty rates over this period (18).
- People living in SA continue to face the highest risk of poverty according to estimates for 2015-16 (19)<sup>8</sup>. Poverty rates declined in 2009 with the increase in the single rate of pension in that year, but the rate of poverty among unemployed sole parents rose after many of this group were transferred to Newstart Allowance in 2013 (19, 20). The poverty rate is sensitive to the economic cycle. It rose during the years of strong economic growth before the GFC, as median incomes grew faster than incomes for people on low wages, not working and/or receiving government benefits (19).
- Those in receipt of government income support continue to make up a large proportion of the cohort experiencing poverty in 2015-16, with 81 per cent of households in poverty having at least one family member receiving a benefit or pension (20). Almost two-thirds of households in poverty (64 per cent) have pensions and benefits as their main source of income. The poverty rate in Adelaide is lower than in the rest of the state, with households living outside Adelaide being twice as likely to be in poverty (20).

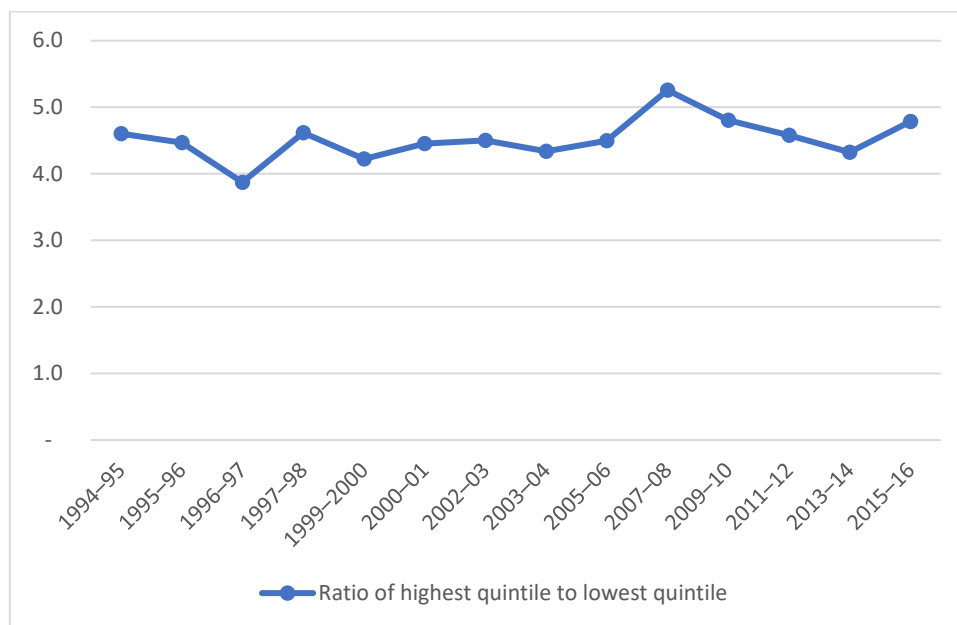
## Income

- Incomes have grown in SA for all quintiles of equivalised disposable income between 1994-5 and 2015-16, but inequality of income has not improved (21). Figure 10 presents calculations of the ratio of income in the highest quintile to that of the lowest quintile. This ratio has changed little between 1994-95 and 2015-16. Equivalised household disposable income for the highest quintile was 4.8 times that received by the lowest quintile in 2015-2016. It must be noted that these data do not cover our whole period of interest. Data from the world top incomes database show that income inequality rose in Australia between 1980 and 2000 (22), and it is possible that SA followed the same trend.
- Equivalised disposable household income growth in the lowest quintile of disposable income in SA was comparable with growth in average household income, but this did not decrease inequality as it did not decrease the gap in percentage terms in 2015-16 between the low mean income per week in the lowest quintile (\$368) and that of the highest quintile (\$1,762) (21).
- SA had the lowest income levels of any state or territory in 1997-98, followed closely by Tasmania (18). SA is still below the national average for every indicator of income levels as of 2015-16. SA has the second lowest mean and median equivalised disposable income of all states and territories, the second lowest median private income, and the second highest

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<sup>8</sup> The poverty rates in the most recent reports are estimated using a different methodology and are therefore not comparable with earlier reports. Observations for 2015-16 are restricted to trends to avoid confusion, and due to a preference for the Henderson methodology.

mean receipt of government pensions and allowances (in each case only Tasmania reports poorer outcomes) (23).



**Figure 10: Trends in Income Inequality: Ratio of Mean Weekly Equivalised<sup>9</sup> Disposable Household Income in the Highest Quintile to the Lowest Quintile, South Australia, 1994-95 to 2015-16<sup>10</sup>** (Data source: Household Income and Wealth, Australia, ABS, 2015-16)

- SA is not only a low income state, it is also a low wealth state, exacerbating disadvantage. SA has the second lowest mean net worth of all states and territories (after Tasmania) and the third lowest median net worth (after Tasmania and the NT) (23). Mean household net worth for the lowest household net worth quintile in SA was estimated to be only \$29,200 in 2015-16, compared with \$1,974,400 for the highest quintile, and an average net worth for all households of \$667,700 (23).
- The disparity in household net worth in SA has not improved between 2003-04 and 2015-16, mirroring the national trend of persistent wealth inequality (23). Wealth inequality, measured by the gini coefficient in net worth, is at its highest level in Australia since 1993-94 when the ABS commenced their survey of income and wealth (21). Low wealth households have not experienced any real increase in household net worth in Australia since 2003-04, while the highest quintile increased their share of wealth from 59 per cent in 2003-04 to 63.4 per cent in 2017-18 (21). The top 1 per cent owned 22.4 per cent of all wealth in Australia in 2018 (24).

### Expenditure

- Income growth in SA has not kept pace with growth in expenditure. The lowest equivalised disposable household income quintile in SA experienced the largest percentage increase in

<sup>9</sup> Equivalised disposable household income is used to facilitate comparisons between quintiles. Refer to explanatory notes in the appendices for more information on the equivalised measure.

<sup>10</sup> Note that there was a break in the series in 2007-08. Caution should be used in comparing estimates of income from 2007-08 onwards with those from earlier years.



total weekly expenditure on goods and services between 2009-10 and 2015-16 (23). Income growth was stagnant over the same period, for all quintiles. The increase in expenditure for the lowest quintile was more than double that of the overall average between 2009-10 and 2015-16.

- In real terms (adjusted for inflation), there has been a 42 per cent increase in household expenditure on goods and services in SA between 1998-99 and 2015-16 (see Table 4), which is slightly lower than the 48 per cent increase for Australia. The real increase in household expenditure has been much larger for households in SA in the lowest quintile of equivalised disposable household income, just over 76 per cent<sup>11</sup>.

**Table 4: Average real weekly total goods and services expenditure, equivalised disposable household income quintiles, South Australia** (Data source: Household Expenditure Survey, ABS, various years)<sup>12</sup>

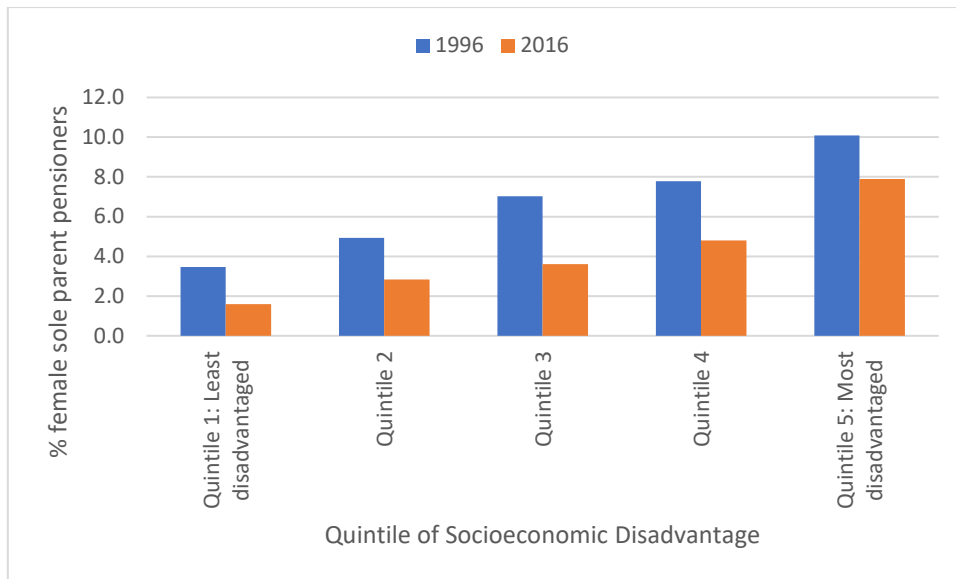
	1998-99	2003-04	2009-10	2015-16	% change 1998-99 to 2015-16
Lowest quintile	406.84	566.07	614.48	716.34	76.1%
Second	575.84	783.01	914.43	840.04	45.9%
Third	794.60	1146.83	1178.27	1157.39	45.7%
Fourth	982.13	1420.70	1469.79	1401.55	42.7%
Highest quintile	1438.82	1693.10	2047.34	1990.21	38.3%
All households	838.17	1050.74	1179.00	1191.73	42.2%
Australian average	960.90	1130.86	1397.09	1425.03	48.3%

#### Groups in vulnerable circumstances

- The reports on poverty identified sole parent households as facing higher risks of poverty, greater depth of poverty, and high poverty rates within this group are identified as a major source of child poverty (18, 20). Figures 11 and 12 illustrate the social gradient in SA for female sole parent pensioners and single parent families with children aged under 15. There has been a slight reduction in the percentage of female sole parent pensioners between 1996 and 2016, but the social gradient has worsened (Figure 11). The inequality ratio has increased from 2.91 in 1996 to 4.95 in 2016, mirroring the trend across Australia of worsening disadvantage for this group (8).

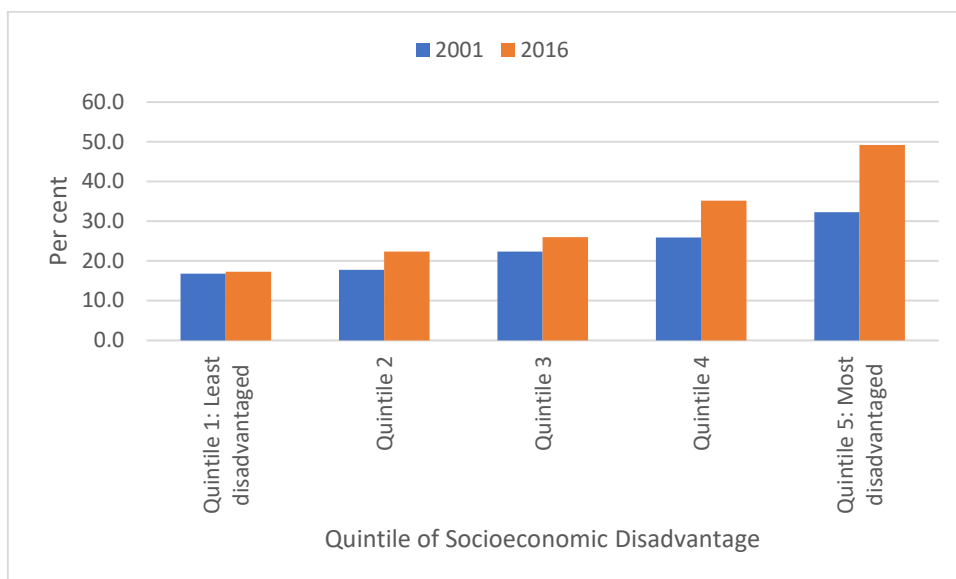
<sup>11</sup> Exact comparison with income growth is not possible due to data being collected in different years and a break in the series in 2007-08. Having said this, growth in income without adjusting for inflation was 39 per cent for the lowest quintile between 1994-95 and 2005-06, well below the 51 per cent increase in expenditure between 1998-99 and 2003-04 (see Tables A1 and A2). Average income grew by 35 per cent without adjusting for inflation between 1994-95 and 2005-06, compared with a 36 per cent growth in expenditure between 1998-99 and 2003-04.

<sup>12</sup> Figures have been inflated to 2015-16 dollars using the consumer price index (25).

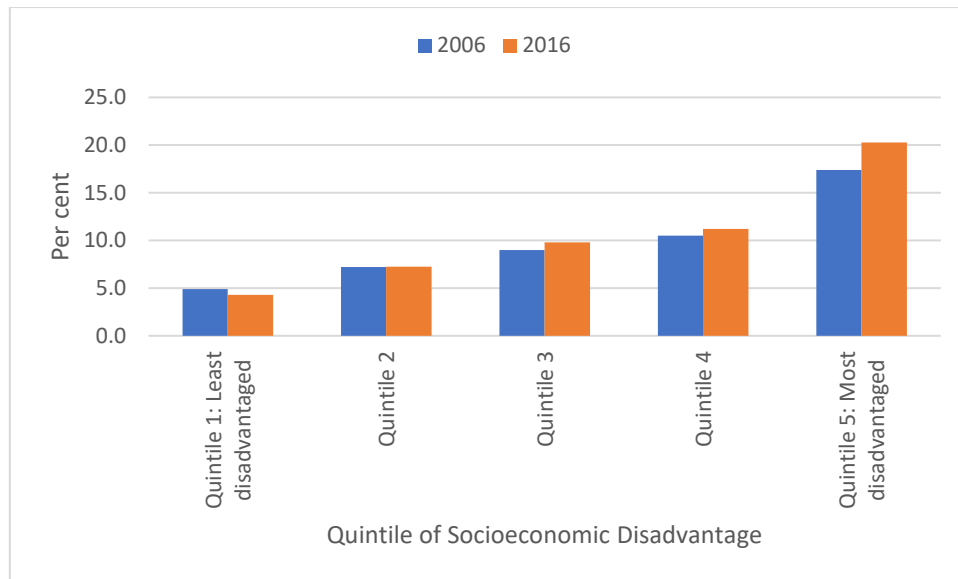


**Figure 11: Percentage of female sole parent pensioners in South Australia by quintile of socioeconomic disadvantage, 1996 and 2016** (Data source: Social Health Atlas, PHIDU, 2018)

- The reduction in pensioners reflects a tightening in welfare eligibility and higher participation in paid work for single mothers, as Figure 12 shows that the percentage of single parent families has increased between 2001 and 2016. Inequality has increased among all single parent families by a lesser but still worrying extent than that of female sole parent pensioners, from 1.92 in 2001 to 2.84 in 2016. The unemployed amongst this group is particularly prone to poverty and its associated effects on health. Reliance on a single income, and the level of the Newstart allowance received by many sole parents being well below the poverty rate, impacts on the opportunities available for sole parents and their children living in vulnerable circumstances.

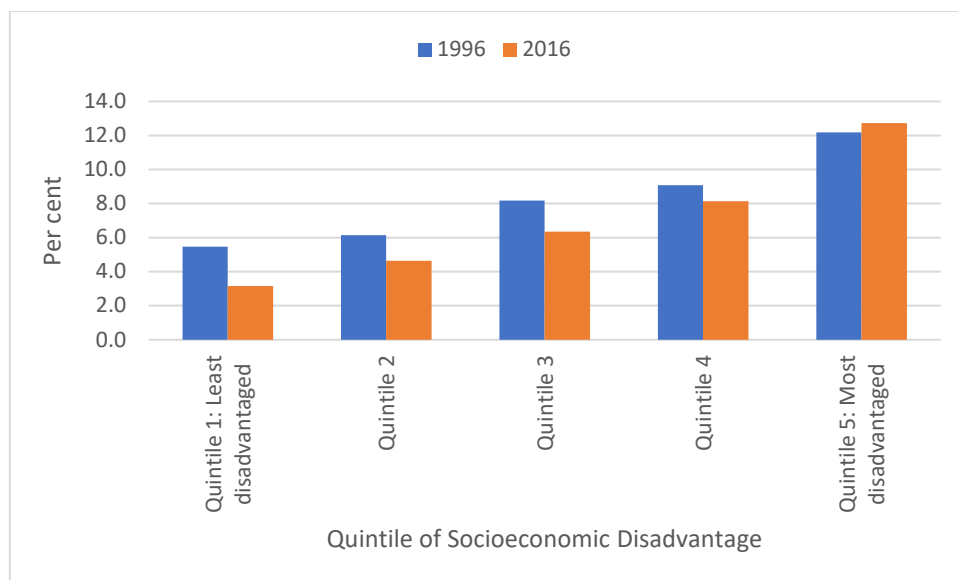


**Figure 12: Percentage of single parent families with children aged under 15 in South Australia by quintile of socioeconomic disadvantage, 2001 and 2016** (Data source: Social Health Atlas, PHIDU, 2018)

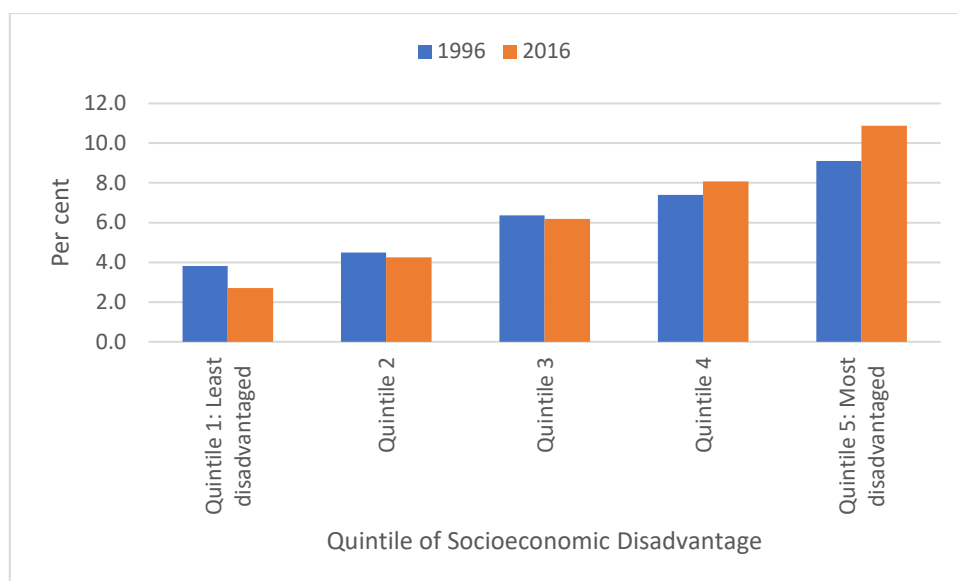


**Figure 13: Percentage of people in low income, welfare dependent families (with children) in South Australia by quintile of socioeconomic disadvantage, 2006 and 2016** (Data source: Social Health Atlas, PHIDU, 2018)

- Children in low income, welfare-dependent families have the least access to income and social and educational opportunities, resulting in lower levels of education and a higher likelihood of poorer health outcomes (10). Figure 13 shows that the social gradient of people in low income, welfare dependent families with children in SA has also worsened between 2006 and 2016, with percentages for this group increasing for quintiles 3, 4 and 5. The inequality ratio has risen from 3.55 in 2006 to 4.72 in 2016. More than 20 per cent of people in the most disadvantaged quintile are in low income, welfare dependent families as of 2016. This suggests widening inequalities for children in SA, not just in terms of experiencing poverty and low income, but for educational and health outcomes too.



**Figure 14: Percentage of people receiving an unemployment benefit in South Australia by quintile of socioeconomic disadvantage, 1996 and 2016** (Data source: Social Health Atlas, PHIDU, 2018)



**Figure 15: Percentage of disability support pensioners in South Australia by quintile of socioeconomic disadvantage, 1996 and 2016** (Data source: Social Health Atlas, PHIDU, 2018)

- Experience of unemployment is also associated with worse health and low income. Unemployment, particularly long-term unemployment, elevates the risk of poverty (18, 19, 20). The percentage of people receiving an unemployment benefit in SA has increased between 1996 and 2006 for quintile 5, the most disadvantaged, and decreased for all other socioeconomic quintiles (Figure 14). The inequality ratio amongst people receiving an unemployment benefit has increased from 2.22 in 1996 to 4.04 in 2016, reflecting the persistent social gradient and increasingly uneven socioeconomic distribution of receipt of unemployment benefits. The increase in receipt of unemployment benefits for people living in the most disadvantaged areas can be at least partially explained by trends in the socioeconomic distribution of participation in education and completion of qualifications, and the changing skills mix of employment in SA which has disadvantaged low skilled job seekers. These factors will be discussed in more detail in the education and employment sections of this report.
  
- Persons with a disability are another vulnerable subgroup of the population and have been identified as having an elevated risk of poverty (19). Receipt of the disability support pension is marginally higher in SA than the national average, and although the percentage of disability support pensioners in SA has decreased between 1996 and 2016 for the least disadvantaged quintiles, there has been an increase in the percentage of disability pensioners in the most disadvantaged quintiles (see Figure 15). The social gradient in SA has worsened as a result, and the inequality ratio has increased from 2.38 in 1996 to 4.03 in 2016.
  
- The high receipt of government income support in SA is reflected in the figures for household characteristics of income and wealth. SA has the second highest proportion of all states and territories of households with no person in the labour force (after Tasmania), and SA has the second lowest proportion of households with two or more employed persons (after Tasmania) (21). The worsening social gradient amongst those in receipt of sole parent and unemployment benefits is therefore even more concerning as it amplifies inequalities and adversity faced by groups who already experience heightened disadvantage.

## Housing

Housing costs have a major impact on finances, particularly for those living in disadvantaged circumstances. Inability to access affordable and secure housing negatively affects opportunities for employment, education and social participation. Living conditions, including suitable housing, are fundamental to health and wellbeing.

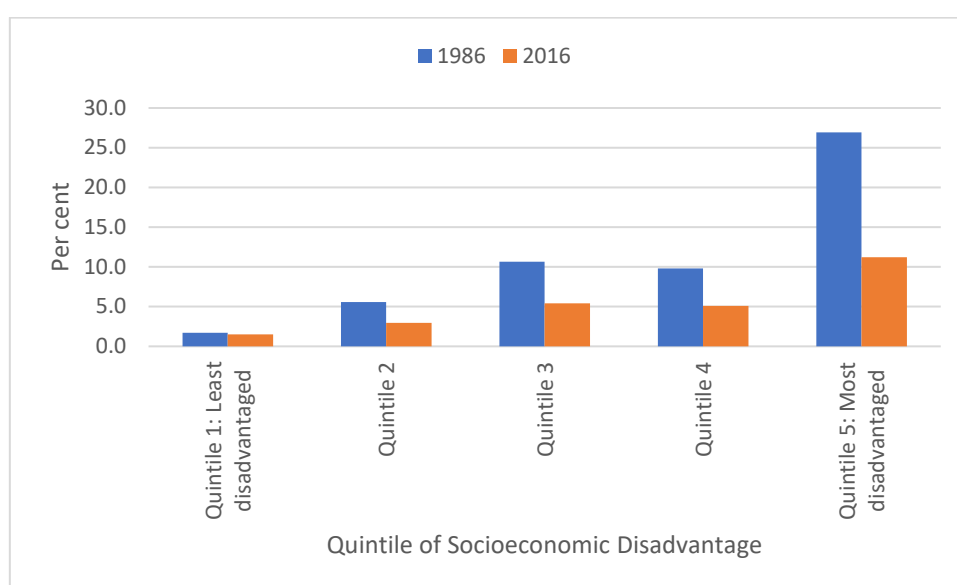
### Key findings

- The reduction in social housing stock in SA has pushed displaced disadvantaged and low income people into the private rental market, where rents have increased sharply, resulting in rising rental stress.
- SA's lower housing costs do not translate into affordable housing. Low incomes and a lack of affordable housing have contributed to a decline in home ownership and a rise in mortgage stress.

### Indicators

#### Public Housing

- Expenditure in the South Australian public housing sector has traditionally been higher than in other states, and the South Australian Housing Trust was once considered a model for good public housing assistance (18). This higher expenditure is reflected in a higher percentage of dwellings rented from the government housing authority in SA compared with Australia (8).

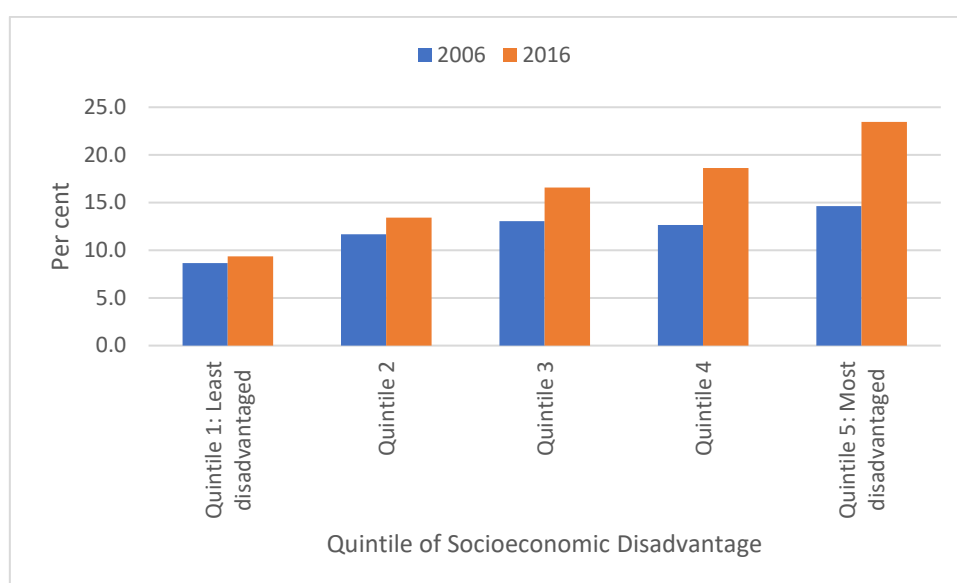


**Figure 16: Percentage dwellings rented from the government housing authority by quintile of socioeconomic disadvantage, 1986 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- The provision of public housing is targeted towards those in greatest need, and this is reflected in Figure 16 in the higher percentage renting public housing in more disadvantaged quintiles. The higher rates for the most disadvantaged resulted in a rate ratio of 15.79 in

1986. This fell to 7.39 in 2016, reflecting decreases in the percentage renting public housing in every quintile, but the steepest fall being for those in quintile 5 (the most disadvantaged). Figures 11 to 15 showed that quintile 5 is increasingly composed of high percentages of sole parents, people on unemployment benefits, disability support pensioners and low income, welfare dependent families.

- The fall in the percentage of the most disadvantaged renting public housing does not represent a reduction in need. It is the result of a reduction in the provision of public housing. There has been a decline in the number of social housing dwellings in Australia, and this has extended to South Australia (26). The total social housing stock in SA decreased from 64,491 dwellings in 1992 to 54,103 dwellings in 2003 and continued decreasing to an estimated 48,289 dwellings in 2015 (10, 26). The largest part of this decline was a fall in public housing from 60,038 dwellings in 1992 to 48,271 dwellings in 2001 (10). The number of public housing dwellings in SA has fallen further since then, from an estimate of almost 45,000 in 2006 to an estimate of less than 40,000 in 2015 (26). While this has been partially offset by an increase in non-government social housing, the number of households in social housing has continued to decline, from an estimated 43,000 households in 2006 to less than 38,000 in 2015. Decreases in funding through the Commonwealth State Housing Agreement have contributed to the decline, which has pushed more low income people into the private rental market (10, 18).



**Figure 17: Percentage of households in dwellings receiving rent assistance from the Australian Government by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

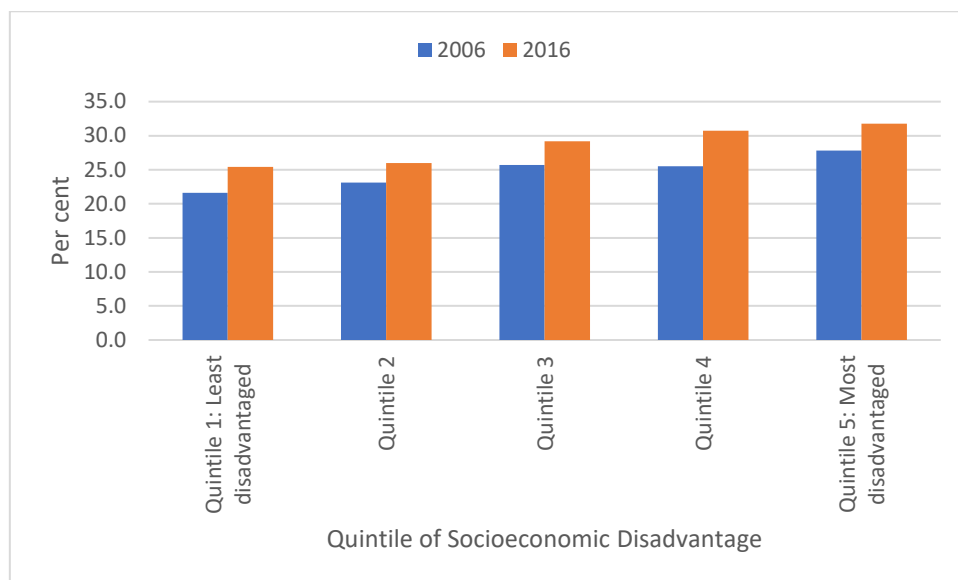
- SA has persistently reported the highest rate of underutilisation of public housing<sup>13</sup> of all states and territories, from the late 1990s up until 2015 (26). The underutilisation rate in SA stood at 26 per cent in 2015. The rate of overcrowding in SA is lower than for Australia, with

<sup>13</sup> Underutilisation is defined as being where there are two or more bedrooms additional to the number required in the dwelling.

estimates of 2.7 per cent for Greater Adelaide in 2011 and 2 per cent for the rest of SA (compared with a national average of 3.6 per cent) (27).

### Rental Stress

- Figure 17 shows that between 2006 and 2016 there has been an increase in the percentage of households in SA receiving rental assistance in every socioeconomic quintile. The increase has been larger for the more disadvantaged quintile, reflecting in part the increase in the rates of private rental for some in these groups who once might have received public housing. Rent assistance is tied to receipt of government income support, therefore inequality in receipt is to be expected, but the increase in this inequality (from an inequality ratio of 1.69 in 2006 to 2.51 in 2016) represents an increasing need for financial assistance with the cost of housing for the most disadvantaged.
- The percentage of low income households experiencing rental stress in SA has risen in every quintile of socioeconomic disadvantage between 2006 and 2016 (Figure 18). The proportion of low income households in rental stress has risen in Australia and in all states except NSW between 2007-08 and 2013-14 (26). In SA, this has been exacerbated by the sharp increase in median rents, which rose by 73 per cent between 2006 and 2016<sup>14</sup>.



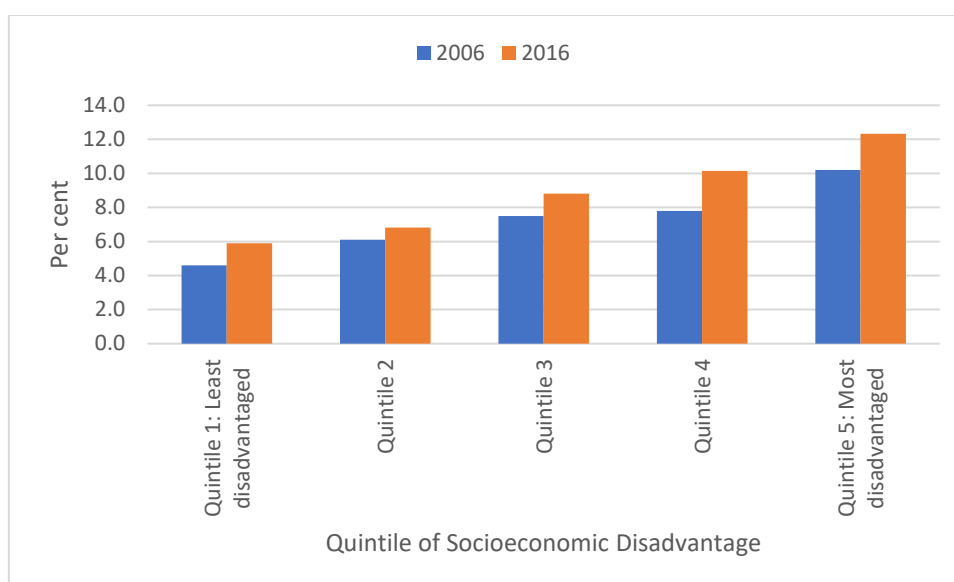
**Figure 18: Percentage of low income households with rental stress by socioeconomic quintile of disadvantage, 2006 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- SA has low housing costs compared with the Australian average. Adelaide’s median market rents were the second lowest after Tasmania (and in some years the lowest) of all capital cities for 2 and 3 bedroom houses/units in the private housing market between 2011 and 2015 (26). SA has the second lowest market rent of all states and territories, but the degree of rental stress indicates that low incomes in the state are eliminating some of the advantage that might be offered by these lower costs.

<sup>14</sup> Calculations based on ABS quickstats sourced from the Census of Population and Housing for 2006, 2011 and 2016.

## Home Ownership and Affordability

- Home ownership might be considered as an avenue out of renting, but for that to be a possibility, housing must be affordable. It is estimated that in 2013-14, only 50 homes per 1000 sold or built in SA were affordable to low and moderate income households (26). Estimates for previous years, going back to 2007-08, are even lower (26). The affordable housing system in Australia has been observed to be failing (28). South Australia did create 5,485 affordable houses between 2005 and 2015 through inclusionary planning which requires new developments to provide a certain percentage of affordable houses (28). This creation of affordable housing represented 17 per cent of new housing supply in the state, but inclusionary planning relies on private development, it is not an alternative to the government's duty to provide affordable homes and does not fulfil the unmet need for social housing (28). The current unmet need for social housing is estimated at 25,500 social housing dwellings for Greater Adelaide and 7,600 in the rest of SA (29). In addition to this, current unmet need for affordable housing is estimated at 8,400 homes in Greater Adelaide and 1,900 in the rest of SA to assist households assessed as being in housing stress (29).



**Figure 19: Percentage of low income households in mortgage stress by socioeconomic quintile of disadvantage, 2006 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- There has been a 3.6 per cent increase in the proportion of people renting in both SA and Australia wide between 2001 and 2016, from 24.9 per cent to 28.5 per cent (30, 31)<sup>15</sup>. The rate of home ownership declined over the same period. Outright home ownership in SA fell by 7.6 per cent between 2001 and 2016 (from 39.8 per cent to 32.2 per cent), offset by a 6.2 per cent increase in the proportion who owned their home with a mortgage (from 29.1 per cent to 35.3 per cent) (30, 31). Figure 19 indicates that while the rate ratio of inequality of mortgage stress has not increased between 2006 and 2016, the percentage of low income households in mortgage stress does appear to have increased. This is consistent with estimates of increasing numbers of households experiencing mortgage stress. In August 2019, 96,237 households in SA were estimated to be experiencing mild mortgage stress, and 5,310 were risking default (32). Across Australia, an estimated 1,082,143 households were in

<sup>15</sup> Calculations based on ABS quickstats sourced from the Census of Population and Housing for 2001 and 2016.



mortgage stress (32). The primary explanation for this is the record high housing debt to income ratio which peaked at 191.1 in June 2019 (33). Other partial explanations include the increase in people owning their home with a mortgage and the lack of affordable housing for low and moderate income households.

- Home ownership has increased amongst the Aboriginal and Torres Strait Islander population between 1994 and 2014-15 but is still well below the rate of home ownership of the non-Indigenous population (16, 34, 35). Corresponding with this, a far higher proportion of Aboriginal and Torres Strait Islander persons (almost two-thirds in 2015-16) are renters. The rate of overcrowding is estimated to have fallen from 23.9 per cent in 2002 to 11.6 per cent in 2014-15 but is still far higher than that for the non-Indigenous population (34, 35).

## Education

Higher levels of education, like income, are related to higher social status. Skills acquired through education enable individuals to obtain employment, higher incomes, and access a wider choice of occupations. The relationship between education and the social gradient, and the control, self-confidence and literacy provided by higher levels of education, are key factors affecting health and wellbeing.

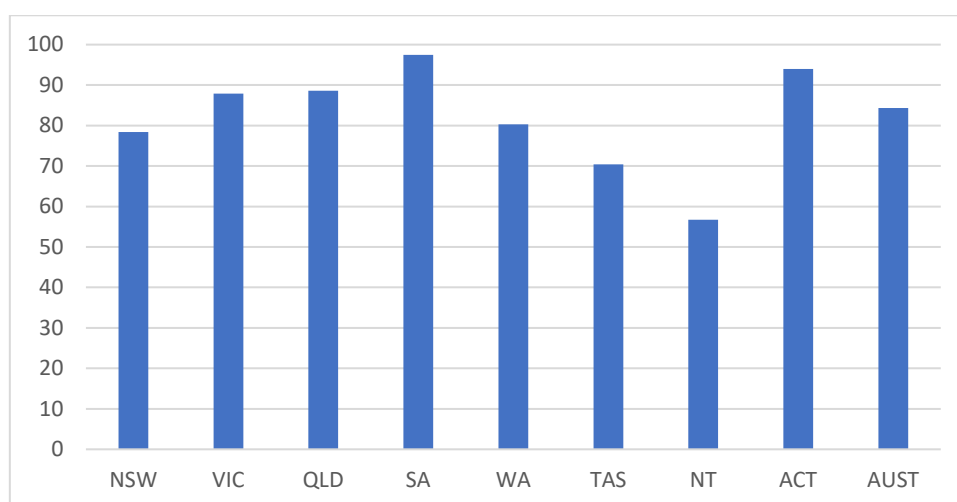
### Key findings

- Participation at all levels of education has increased, but socioeconomic inequality in participation and completion of qualifications is persistent.
- Literacy and numeracy skills of 15 year olds are declining, and inadequate levels of literacy and numeracy amongst adults is concerning. The divide between those who possess these skills and those who do not presents a challenge in enabling individuals to participate fully in education and employment.

### Indicators

#### Participation in School

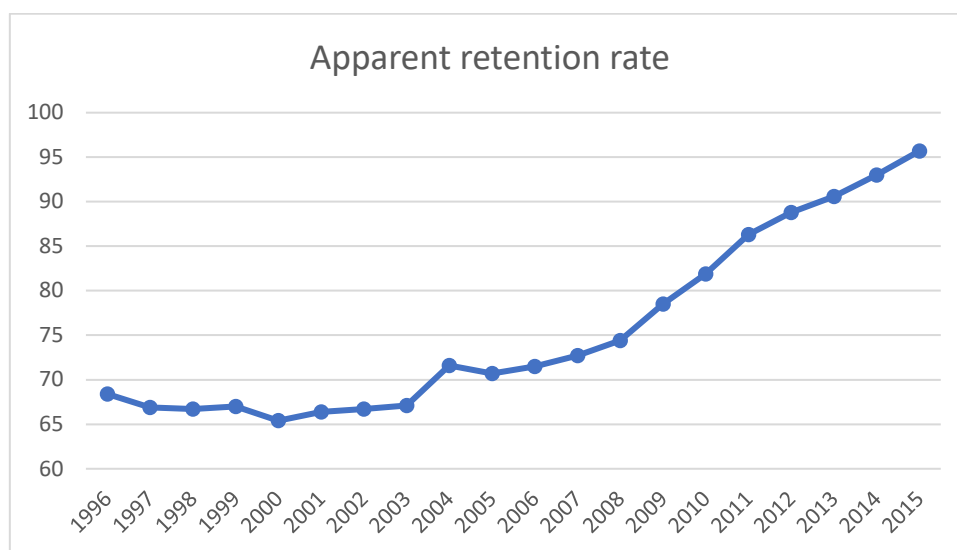
- The apparent retention rate, an estimate of the percentage of students who remain enrolled full-time in secondary school from the start through to year 12, is a commonly used measure of participation in school (36). SA has the highest apparent retention rate (97.5 per cent in 2016), well above the national average of 84.3 per cent (Figure 20). Completing year 12 improves both economic and social opportunities, providing preparation for further study and for the labour market. The apparent retention rate captures enrolment, but not successful completion. It is nonetheless an indicator of engagement in schooling.



**Figure 20: Apparent retention rate for students, Year 7/8-Year 12 by state/territory, 2016** (Data source: ACARA)

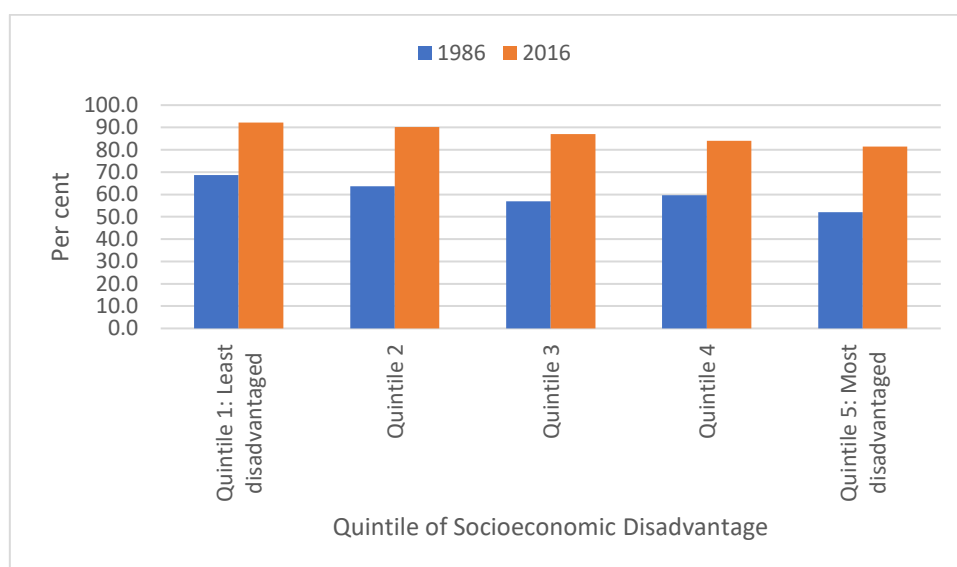
- Apparent retention rates have been rising in SA since 2005 (Figure 21). The year 12 retention rate increased from 68 per cent in 1996 to almost 96 per cent in 2015. The apparent retention rate for Aboriginal and Torres Strait Islander students has also increased, from 33 per cent in 2005 to 86 per cent in 2015 (37). This mirrors the national trend in rising retention rates. Although there is still a gap in retention between Aboriginal and Torres

Strait Islander and non-Indigenous students, the gap has closed from 35 per cent in 2005 to 10 per cent in 2015.



**Figure 21: Apparent retention rates, Year 7/8-Year 12: South Australia, 2005 to 2015** (Data source: Schools, ABS, 2015)

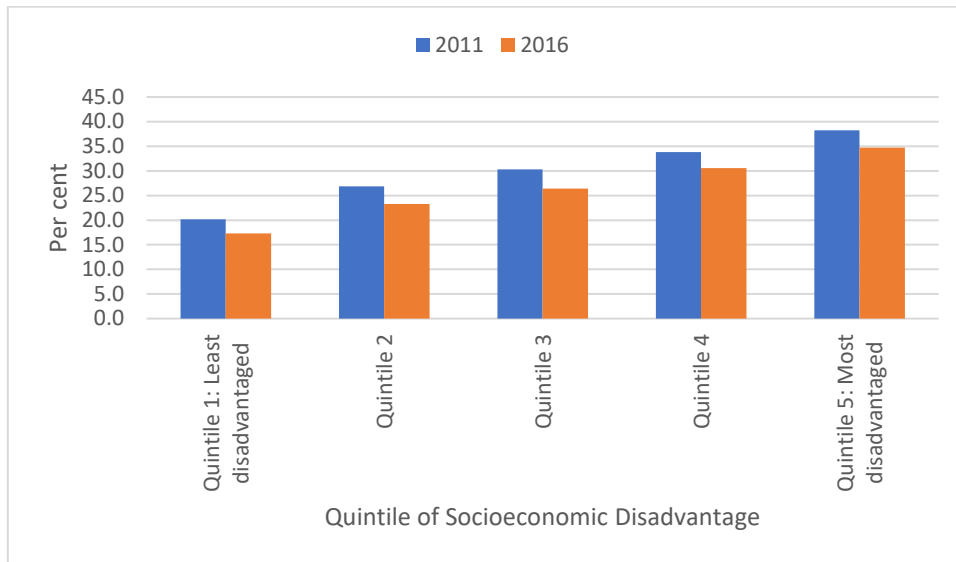
### Socioeconomic status and participation in school



**Figure 22: Percentage full-time participation in secondary school education at age 16 by socioeconomic quintile of disadvantage, 1986 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

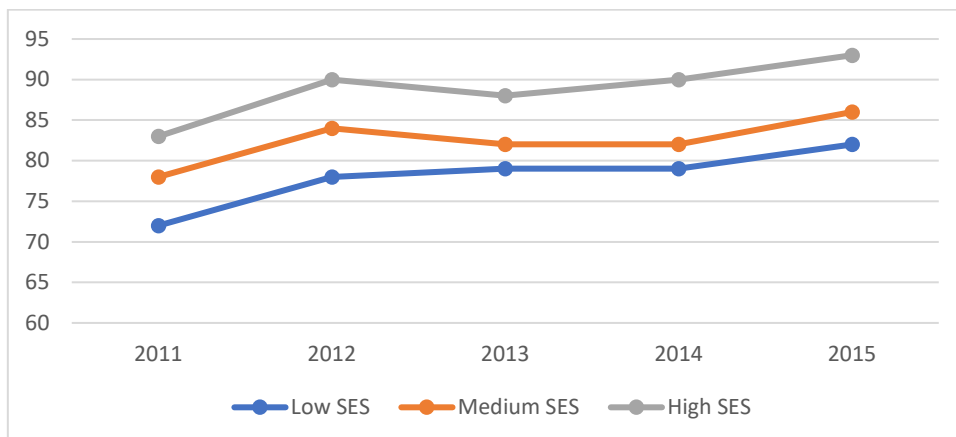
- The increase in retention rates, and an increase in the compulsory school age to sixteen in 2009, is reflected in the trend in participation in secondary school in SA at age 16 (Figure 22). There has been an increase in participation in secondary school education at age 16 in every quintile. However, people in the lowest quintile still have a much lower participation rate. There is almost 11 percentage points difference between the participation rates for the most disadvantaged and least disadvantaged. This is captured in the inequality ratio, which has increased from 0.76 in 1986 to 0.88 in 2016 but remains well below the equality ratio of 1.

- Although participation in secondary school education is much higher now than it was a decade ago, the inequality of participation for each cohort has resulted in a higher percentage of disadvantaged persons in the SA population who left school at year 10 or below or did not go to school (Figure 23). The higher participation rate has reduced the percentage who left school at year 10 or below between 2011 and 2016 for every quintile, but the inequality in participation has resulted in an increase in the ratio of inequality (from 1.90 to 2.01) even in just a five-year period.



**Figure 23: Percentage of people who left school at year 10 or below, or did not go to school, by socioeconomic quintile of disadvantage, 2011 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

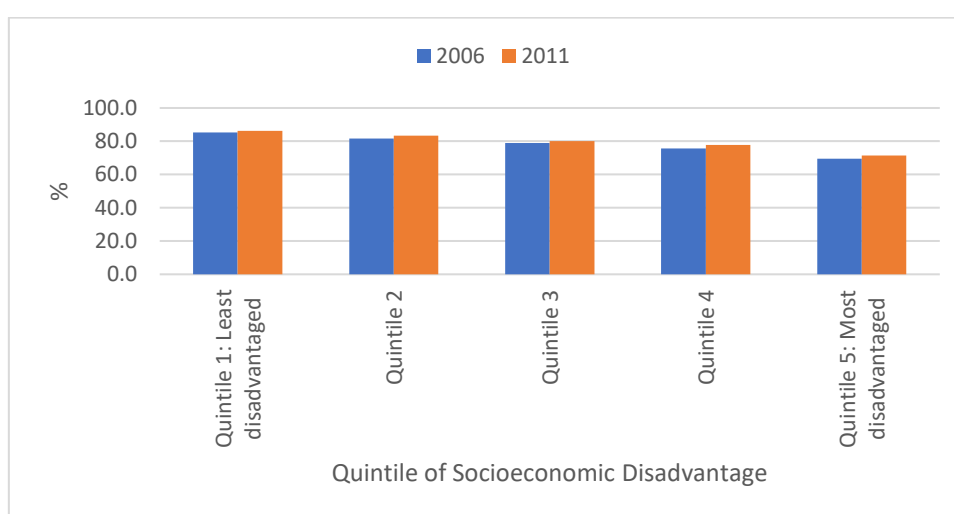
- The trend in retention rates and participation in secondary school suggest improvement in these indicators. Year 12 certification rates suggest similar improvement (Figure 24). The level of year 12 certification and completion has increased, but the gap between students with high socioeconomic status and those with low socioeconomic status remained at almost 10 per cent in 2015. Lower completion rates for more disadvantaged students impacts upon opportunities for further study and limits their labour market prospects.



**Figure 24: Year 12 certification rates in South Australia, 2011 to 2015, per cent** (Data source: ACARA) (38)

## Learning or earning 15-19

- The year 7-12 retention rates suggest that the majority of 15 to 19 year olds are engaged in education (Figures 20 and 21). The social gradient in educational participation indicates that those living in disadvantaged circumstances leave school early at higher rates (Figure 23). Young people who do not engage in school or post-school education might pursue employment as an alternative. The rates of learning or earning by socioeconomic quintile in SA show the social gradient in action again (Figure 25). The least disadvantaged are more likely to be learning or earning than more disadvantaged young people. The inequality ratio conveys continuing socioeconomic disadvantage. The estimated inequality ratio in 2006 (0.81) is similar to that in 2011 (0.83).<sup>16</sup> Young people who do not engage in employment, education and training face a significant risk of longer-term unemployment, health problems and adverse health behaviours, social exclusion and socioeconomic disadvantage (4). Figure 25 shows that it is predominantly those who are already disadvantaged who face this risk.

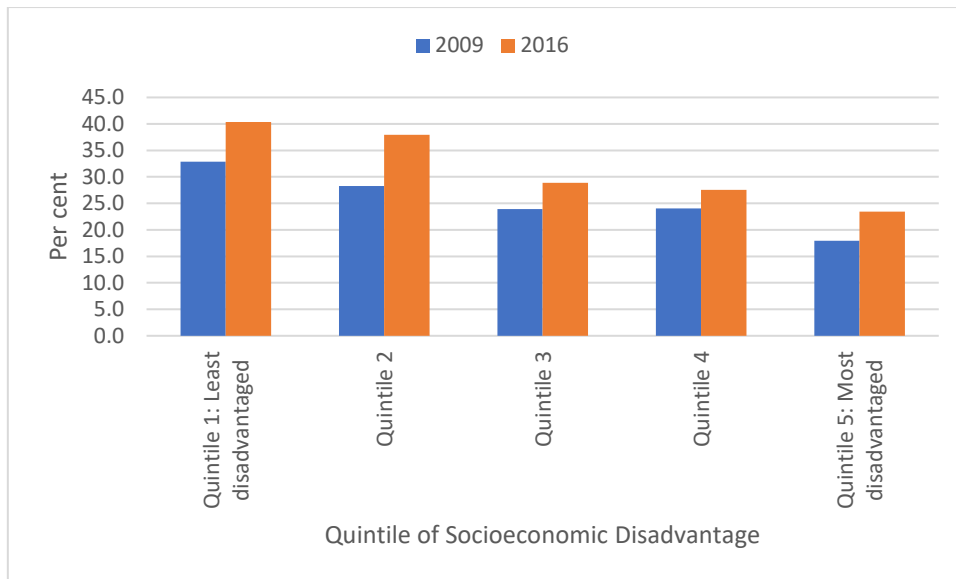


**Figure 25: Per cent of 15 to 19 year olds learning or earning by quintile of socioeconomic disadvantage, 2006 and 2011, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

## Post-school qualifications

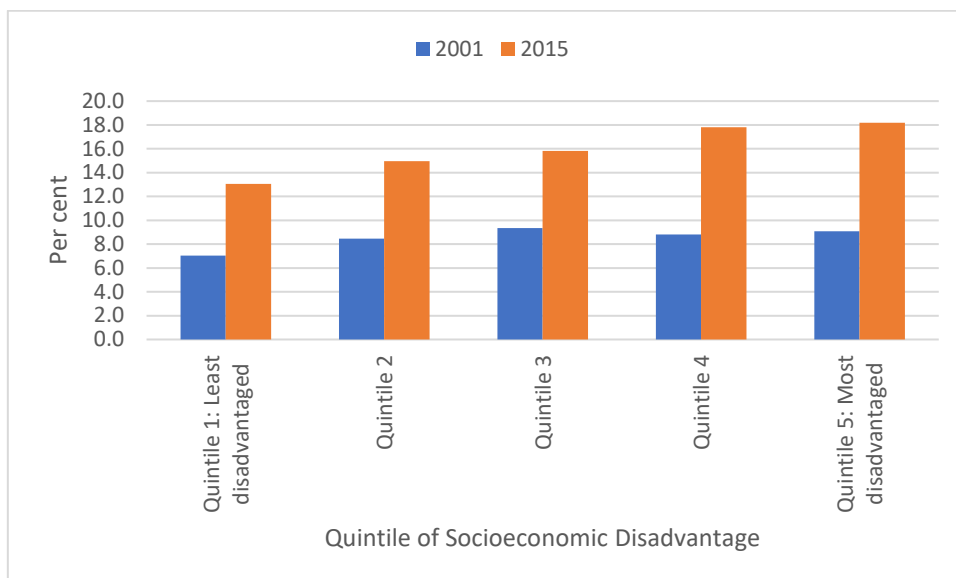
- The lower participation and completion rates of school for those experiencing disadvantage is suggestive of lower participation in higher education. Figure 26 does not capture the longer-term trend over our period of interest but the evidence from 2009 and 2016 shows that it is indeed the case that people in more disadvantaged quintiles in SA have a far lower participation in higher education. There has been an increase in participation in higher education in Australia, both preceding and during the period covered in Figure 26. This increase is apparent for every quintile in SA, but it has not translated into a significant decrease in inequality. The inequality ratio was 0.55 in 2009 and is little changed at 0.58 in 2016. The least disadvantaged participate in higher education at almost double the rate of the most disadvantaged.

<sup>16</sup> An inequality ratio below 1 represents inequality in the case of desirable outcomes (e.g. learning or earning, participation in higher education, labour force participation). For example, an inequality ratio of 0.83 for learning or earning means the rate of learning or earning for quintile 5 is 0.83 times the rate for quintile 1.



**Figure 26: Percentage school leaver participation in higher education by socioeconomic quintile of disadvantage, 2009 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- There is a higher rate of participation in vocational education and training amongst the most disadvantaged, and the rate ratio for VET participation in SA has increased slightly from 1.29 to 1.39 between 2001 and 2015 (Figure 27). This follows the national trend (8) and suggests that VET is the alternative pathway to post school qualifications for people living in more disadvantaged areas.



**Figure 27: Rate of participation in vocational education and training by socioeconomic quintile of disadvantage, 2001 and 2015, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- There is still a sizeable gap in educational attainment between Aboriginal and Torres Strait Islander and non-Indigenous population. Year 12 completion rates are estimated to have risen from 17 per cent in 2002 to 27 per cent in 2014-15 (16, 35). Half (49 per cent) have a non-school qualification in 2014-15, up from 26 per cent in 2002 (16, 35). Almost 58 per cent of non-Indigenous persons aged 20 to 64 had or were studying a non-school qualification at

certificate III level or above. The comparable figure for the Aboriginal and Torres Strait Islander population is 46 per cent (16, 35).

- The proportion of people with a post-school qualification has increased across the state, corresponding with increasing participation in school and post-school education (Table 5). This increase is of similar magnitude to the national average, but there is a persistent gap of more than 11 per cent between the proportion holding a post-school qualification in Greater Adelaide and that for the rest of SA.

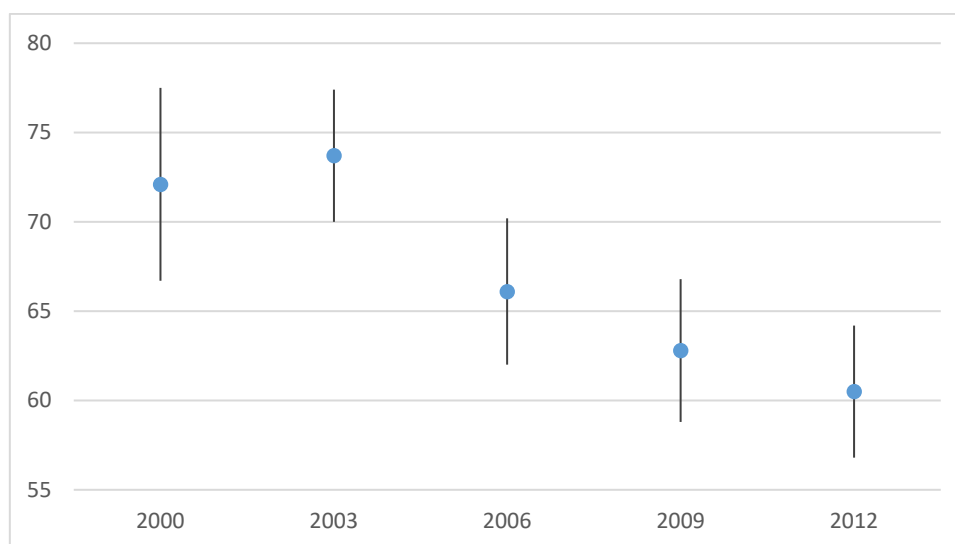
**Table 5: People with a vocational or higher education qualification, Per cent**

	2001	2006	2011	% change 2001-2011
Greater Adelaide	41.9	47.5	54.3	12.4
Rest of SA	30.8	36.1	42.7	11.9
Australia	42.4	47.9	54.6	12.1

Source: Progress in Australian Regions-Yearbook 2016

### Literacy

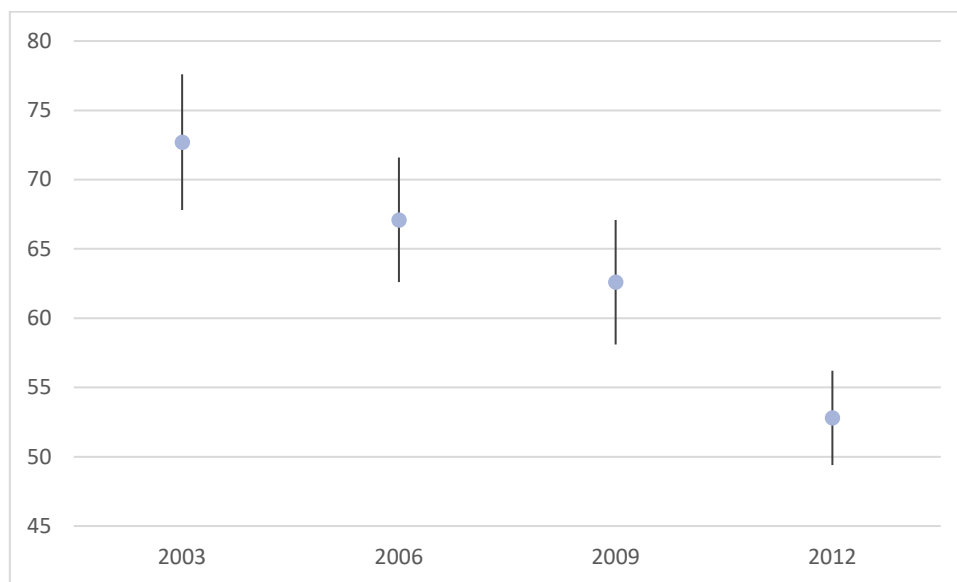
- There has been a decline in the proportion of 15 year old South Australian students achieving the national proficient standard in reading literacy between 2003 and 2012 (Figure 28). The decline is observed Australia-wide, with only Victorian students showing an improvement in reading literacy over this time period (26). SA scores are not significantly different from the Australian average. Mean scores for reading literacy in SA show that average achievement was significantly lower in 2012 compared with 2000. Mean scores steadily declined over the period 2000-2012 (26).



**Figure 28: Proportion of 15 year old students achieving level 3 or above in the overall reading literacy scale in PISA assessments, mean and 95 per cent confidence intervals (per cent)** (Data source: Report on Government Services, 2016)

- There has been a similar decline in the proportion of 15 year old South Australian students achieving the national proficient standard in mathematical literacy between 2003 and 2012 (Figure 29). This decline is observed Australia-wide, in all states and territories (26). SA

scores for mathematical literacy were significantly lower than the national average in 2012 (26). Mean scores for mathematical literacy in SA show that average achievement was significantly lower in 2012 compared with 2003. Mean scores steadily declined over the period 2003-2012 (26).



**Figure 29: Proportion of 15 year old students achieving level 3 or above in the overall mathematical literacy scale in PISA assessments, mean and 95 per cent confidence intervals, South Australia** (Data source: Report on Government Services, 2016)

- Adult literacy levels are just as concerning. Only just over half (51 per cent) of South Australians aged 15 to 74 in 2011-12 were assessed as having the literacy skills needed to meet the complex demands of everyday life and work (39). Well under half (42 per cent) were assessed as having the needed numeracy skills. These figures are lower than that for Australia, but not significantly so. Only 54 per cent of Australians were assessed as having adequate literacy skills, and only 44 per cent the numeracy skills (39). Literacy skills aid in comprehension of health care decisions, inadequate literacy skills can act as a barrier to improving health outcomes.

### **Interactions between educational outcomes and employment trends**

- Interactions between employment trends and education outcomes influence educational outcomes and skill development for young people. Table 6 presents the mean scores and percentage of year 9 students achieving at or above national standards in reading and numeracy literacy by parental occupation. There is a clear association between skill level of parental occupation and year 9 achievement, and this trend has been stable over time. Parental employment in a higher skilled occupation is associated with higher mean scores for children and a higher rate of achievement at or above the national standard. Students with a parent/guardian who had not been in paid work in the previous 12 months have significantly lower mean scores and a lower rate of achievement at national standard.
- There is a similar association between level of parental education and year 9 achievement. Mean scores and rate of achievement at or above national standards increase with higher levels of parental education (Table 7). This suggests that increasing education levels both



now and in the next generation will improve adult literacy, but it will also improve educational outcomes and skill development for young people, potentially reversing some of the observed decline in student literacy scores. The interaction between employment trends and education outcomes also requires consideration. Table 6 indicates that improvement in employment rates will also be a key factor in influencing literacy.

**Table 6: Achievement of year 9 students in reading and numeracy scores in South Australia by parental occupation, 2018** (Data source: ACARA)

Parental Occupation	Reading		Numeracy	
	Mean scale scores	% at or above national standards	Mean scale scores	% at or above national standards
Senior management and qualified professionals	606.0	97.3	610.6	98.2
Other business managers and associate professionals	586.4	95.9	592.6	97.5
Tradespeople, clerks, skilled office, sales and service staff	571.1	93.9	576.2	96.2
Machine operators, hospitality staff, assistants, labourers	558.3	90.7	564.3	93.8
Not in paid work in the previous 12 months	542.9	82.2	548.0	85.4

**Table 7: Achievement of year 9 students in reading and numeracy scores in South Australia by parental education, 2018** (Data source: ACARA)

Parental Education	Reading		Numeracy	
	Mean scale scores	% at or above national standards	Mean scale scores	% at or above national standards
Bachelor degree or above	607.2	97.7	612.4	98.4
Advanced diploma/diploma	579.4	95.2	584.4	97.0
Certificate I to IV	563.3	91.9	567.9	94.2
Year 12 or equivalent	567.6	92.2	576.0	95.1
Year 11 or equivalent	537.8	82.1	545.9	87.4

## Employment

Secure employment increases the likelihood of obtaining an adequate income. Employment, income and education interact, impacting on socioeconomic status. Socioeconomic status also impacts on the likelihood of employment. Unemployment adversely affects not just income but health as well, limiting access to health care and social opportunities.

There are two components to the theme of employment, each with a wide range of relevant indicators. Firstly, unemployment and labour force participation capture aspects relevant to access to employment and economic performance on key labour force indicators. Secondly, characteristics of employment provide insight into the nature of work for those who are employed.

## Unemployment and Labour Force Participation

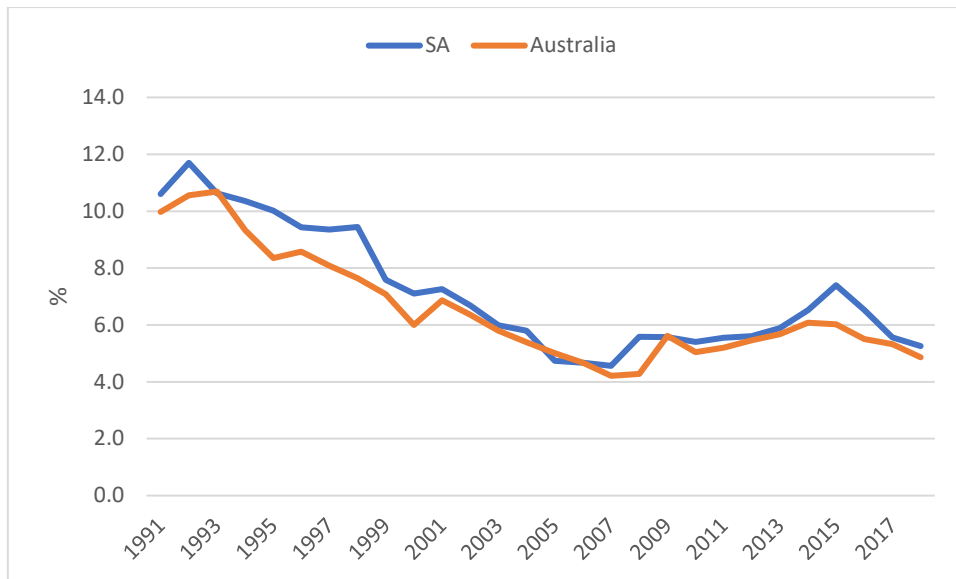
### Key findings

- Unemployment has fallen, but the unemployment rate in SA is persistently higher than the national average. Youth and Aboriginal and Torres Strait Islander unemployment rates remain much higher than the overall rate.
- The labour force participation rate in SA increased between 1991 and 2008 but has since fallen back down to the 1991 rate. The participation rate for SA is consistently lower than the Australian average.
- The increase in employment has been distributed unevenly, exacerbating the social gradient in unemployment and income and contributing to high poverty rates for those living in disadvantaged circumstances.
- The ageing population, higher rates of unemployment and lower labour force participation rates are key factors playing a part in the high rate of receipt of government benefits in SA.

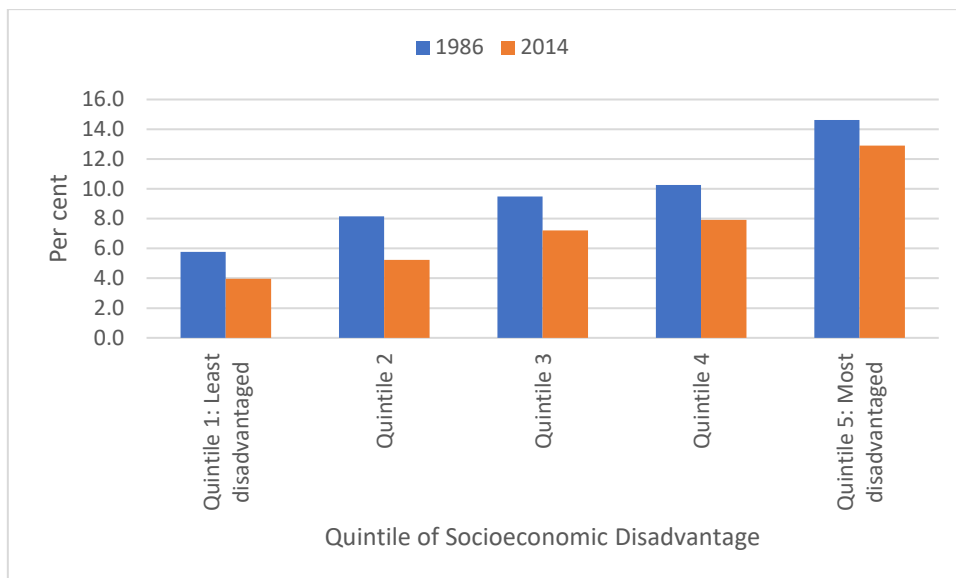
### Indicators

#### Unemployment

- Explanations for the high rates of poverty in SA in the 1980s and 1990s include poorer performances on employment indicators: low rates of labour force participation and high rates of unemployment compared to the national average (18). Figure 30 shows that the unemployment rate in SA has been higher than the Australian average in almost every year from 1991 to 2017. The unemployment rate in SA fell steadily from a high of 12 per cent in 1992 to a low of 4.6 per cent in 2007, then rose again, peaking at 7.4 per cent in 2015. The movements in unemployment in SA follow the national trend. The gap between the unemployment rate in SA and that for Australia widened over two periods in Figure 30: over the 1990s, and between 2013 and 2017. The higher rate of unemployment in SA is one source of the state's higher rate of receipt of government benefits.
- The socioeconomic distribution of unemployment in SA, presented in Figure 31, is closely related to the distribution of receipt of unemployment benefits observed in Figure 14. The rate of unemployment has fallen for every quintile between 1986 and 2014, but the social gradient has worsened. The inequality ratio of unemployment has increased from 2.53 to 3.25, indicating that the increase in employment over this period has benefitted the less disadvantaged. Changes in the nature of employment resulting from loss of manufacturing jobs in SA are also likely to have further disadvantaged low skilled job seekers.



**Figure 30: Unemployment rate, South Australia and Australia, 1991 to 2017** (Data source: Labour Force Australia, ABS, 2018)

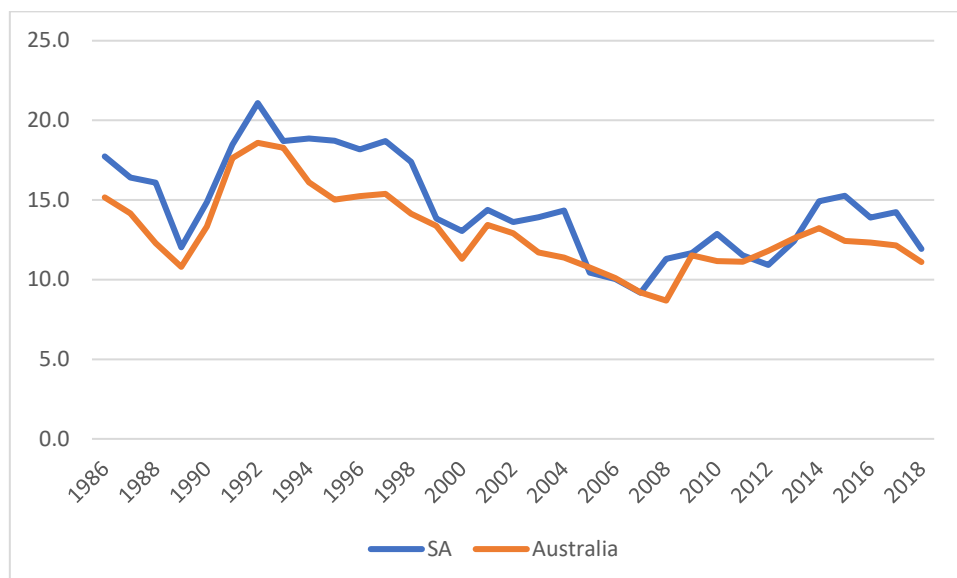


**Figure 31: Rates of unemployment by quintile of socioeconomic disadvantage, 1986 and 2014, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

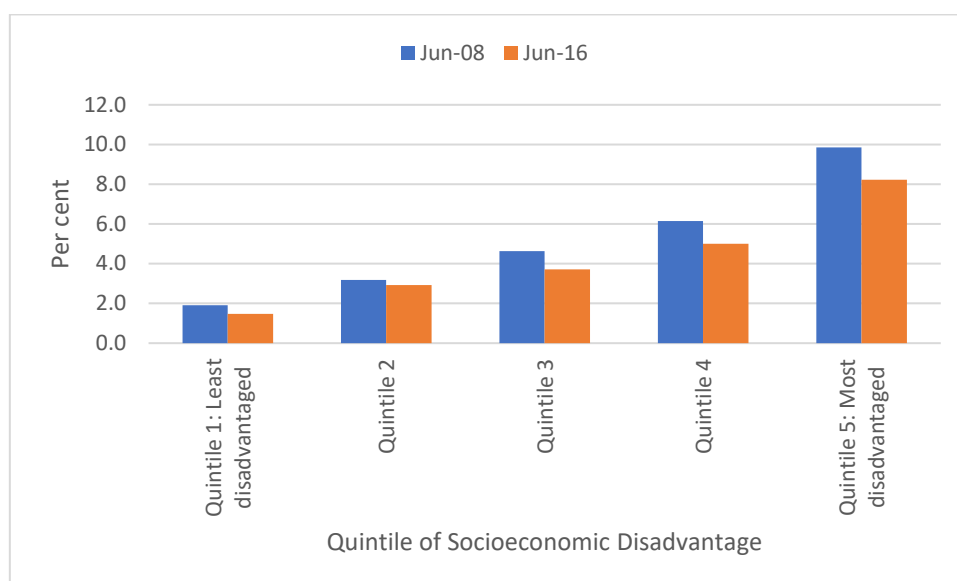
### Youth Unemployment

- Rates of unemployment are higher for some groups. The unemployment rate for Aboriginal and Torres Strait Islanders is much higher than the overall average. Aboriginal and Torres Strait Islander unemployment in SA was estimated to be 22 per cent in 2014-15, more than three times the overall unemployment rate (17). Young people also experience higher rates of unemployment. The jobless rate in SA for 15 to 24 year olds rose to as high as 21 per cent in 1992, and was at its lowest in 2007, at 9 per cent (Figure 32). Youth unemployment has been double the overall unemployment rate since 2001. The higher unemployment rate for this age group reflects their lower experience and fewer skills in comparison with older job seekers. The trend in comparison with the national youth unemployment rate mirrors that for the overall unemployment rate, with youth unemployment being higher in SA in most

years between 1986 and 2018. Youth unemployment in SA was noted to be among the highest in the country in 2001, and endemic in pockets of Adelaide, exacerbating the pronounced poverty experienced by young, single person households (40).



**Figure 32: Unemployment of 15-24 year olds, South Australia and Australia, 1986 to 2018 (per cent)** (Data source: Labour Force Australia, ABS, 2018)



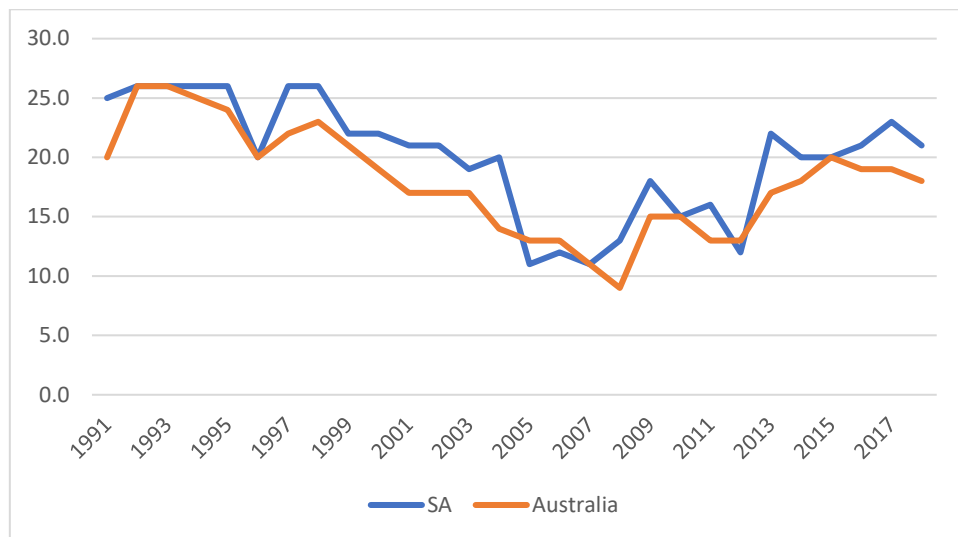
**Figure 33: Young people aged 16 to 24 receiving an unemployment benefit by quintile of socioeconomic disadvantage, 2008 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

- The social gradient in young people receiving an unemployment benefit is even more striking than the one for overall unemployment (Figure 33). The rate of receipt of benefits for this group in SA has decreased between 2008 and 2016, but the inequality ratio has risen from a very high 5.18 to an even higher 5.57. Young unemployed people living alone, particularly those reliant on Youth Allowance or Newstart Allowance, live below the poverty line (19, 20, 40). The marked inequality in this group is a vivid illustration of the impact that

socioeconomic status has on the likelihood of employment, and the resultant adversity the most disadvantaged face due to lack of adequate income and the benefits this provides.

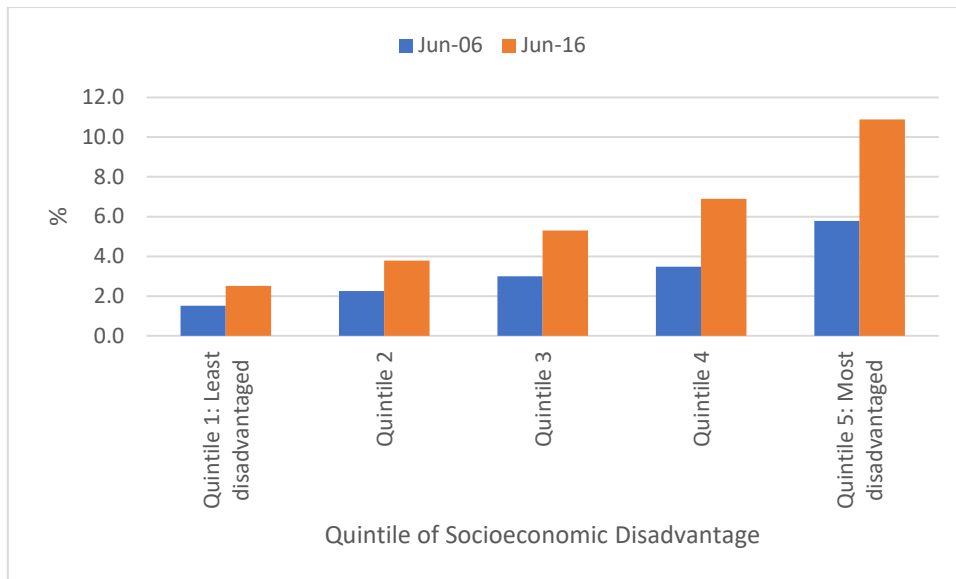
### Duration of Unemployment

- Experience of unemployment carries risk of poverty, but it is the duration of unemployment that determines the degree of this risk and the likelihood of associated hardship, poor health and loss of social and economic opportunities. A brief spell of unemployment is less likely to have the severe effects that might be experienced by the long-term unemployed. Figure 34 presents the trend in median duration of job search in weeks for SA and Australia. Duration of unemployment has followed a similar trend to the unemployment rate, gradually falling in SA from a median of 26 weeks in 1992 to 11 weeks in 2007, then rising again to as high as 23 weeks in 2017. The median duration of employment, as with the unemployment rate, follows the national trend. The SA median has been higher than the national average in most years, signalling the presence of additional disadvantage faced by South Australians in trying to find work.



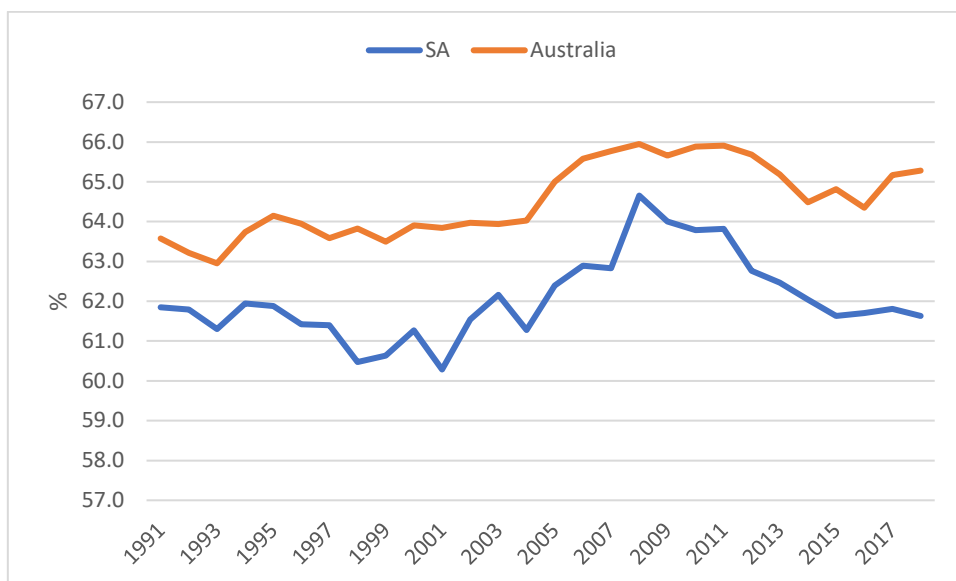
**Figure 34: Median duration of job search, weeks, South Australia and Australia, 1991 to 2018** (Data source: Labour Force Australia, ABS, 2018)

- The higher median duration of unemployment in SA suggests a higher prevalence of long-term unemployment. Figures comparing the rate of long-term receipt of unemployment benefits in SA and Australia confirm that the rate in SA is indeed higher than the national average (8). The long-term unemployed face a particularly higher risk of poverty (18). The distribution of people receiving unemployment benefits long term in SA reveals a pronounced social gradient (Figure 35). Unemployment rose between 2006 and 2016, which has resulted in an increase in the long-term rate of receipt of unemployment benefits over this period in every quintile. The inequality ratio is very high, 3.82 in 2006 and 4.33 in 2016, indicating that the most disadvantaged are four times as likely to be in long-term receipt of unemployment benefits compared with the least disadvantaged.



**Figure 35: People receiving an unemployment benefit long term by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

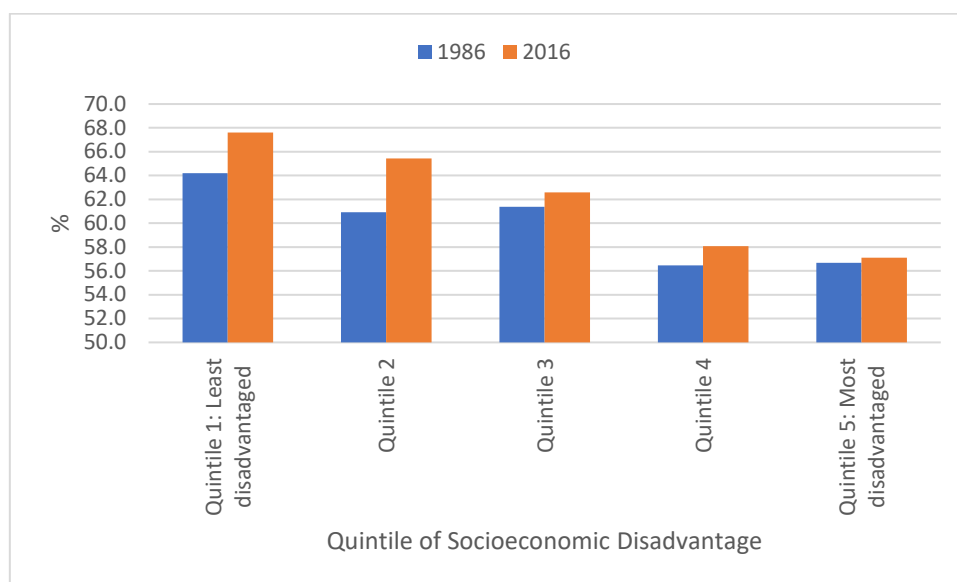
### Labour Force Participation



**Figure 36: Labour force participation rate, South Australia and Australia, 1991 to 2017 (per cent)** (Data source: Labour Force Australia, ABS, 2018)

- The labour force participation rate captures the proportion of the working population that is currently employed or seeking employment. The unemployment rate reveals the percentage of the population that is not employed and seeking employment, but there is hidden unemployment amongst discouraged workers, those who have given up looking for work or who have not been successful in finding a job. The hidden unemployment from those who are not seeking work is revealed by the participation rate (Figure 36). The labour force participation rate in SA has been persistently lower than the Australian average over the period between 1991 and 2017. The Australian labour force participation rate gradually rose from 63.6 per cent in 1991 to 65 per cent in 2005 and has remained above 65 per cent

through to 2017. The participation rate for SA followed a similar trend of growth up to 2008, rising from 61.8 per cent in 1991 to 64.7 in 2008. It has since fallen and in 2017 it returned to the 1991 rate of 61.8 per cent. Labour force participation by the Aboriginal and Torres Strait Islander population in SA is also lower than the national average (57 per cent in SA in 2014-15 compared with 61 per cent for Australia), and is lower than the overall SA rate (17). This lower labour force participation rate contributes to lower incomes for SA and adds more to the reasoning behind higher receipt of government benefits than an examination of the unemployment rate alone.



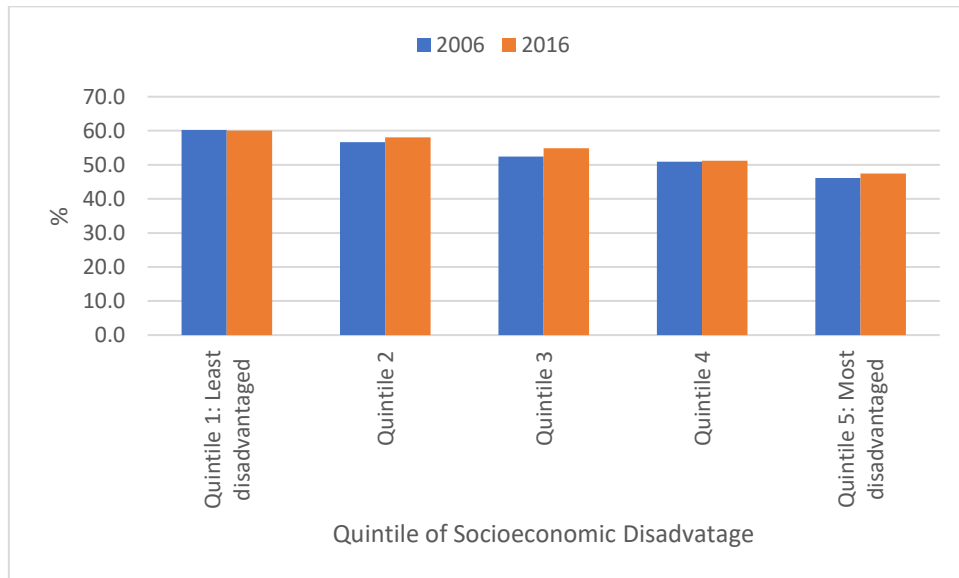
**Figure 37: Rates of labour force participation by quintile of socioeconomic disadvantage, 1986 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- Analysis of the change in labour force participation by socioeconomic quintile reveals that the increase in the participation rate between 1986 and 2016 masks a marked and worsening social gradient in labour force participation (Figure 37). There has been an uneven proportional increase in participation rates, favouring the least disadvantaged. Labour force participation increased by 3.4 per cent for quintile 1, compared with a rise of just 0.4 per cent for quintile 5. The worsening social gradient is reflected in the change in the inequality ratio from 0.88 in 1986 to 0.84 in 2016.

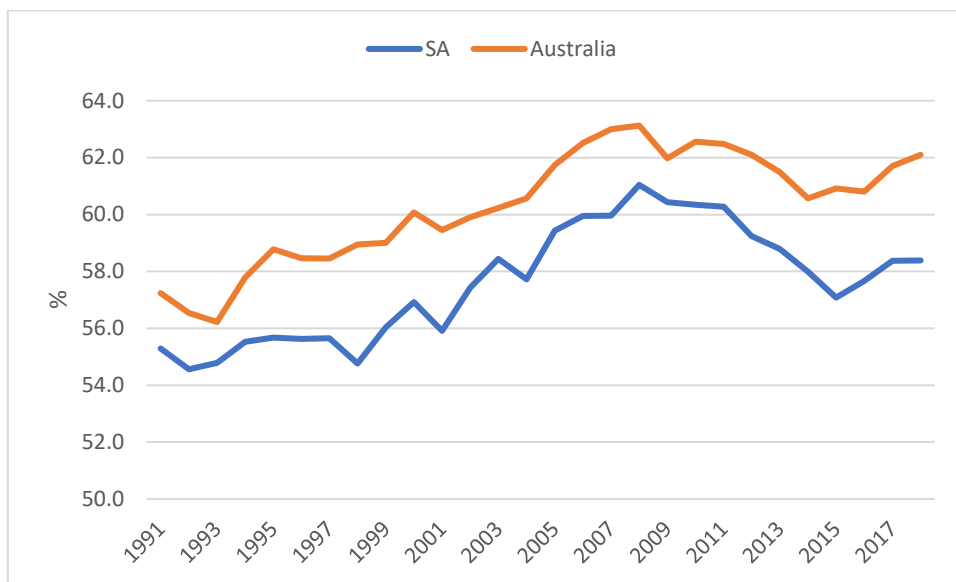
#### **Female labour force participation**

- The rise in the labour force participation rate in SA up until 2008 has been driven by an increase in female labour force participation. For men the participation rate has fallen from just under 73 per cent in 1991 to just under 67 per cent in 2017, while over the same period women's participation has increased from 51 per cent to 57 per cent (41). The increase in employment over the 1990s was unevenly distributed, and mainly benefitted families in which there was already an employed adult (36). This suggests that the result of much of the rise in female labour force participation has been to add a second income to households. This has implications for the social gradient, as the increase in employment serves to widen the gap between less disadvantaged households in receipt of two incomes and the most disadvantaged households who rely on one income, or who may not receive any employment income at all.

- Figure 38 shows that labour force participation for women is characterised by the same marked social gradient seen in Figure 37. The inequality ratio for female labour force participation is worse than that for men, as evidenced by a lower inequality ratio of 0.79 in 2016 (compared with 0.84 for the overall labour force participation rate).



**Figure 38: Rates of female labour force participation by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)



**Figure 39: Employment to population ratio, South Australia and Australia, 1991 to 2017 (per cent)** (Data source: Labour Force Australia, ABS, 2018)

- The unemployment rate and labour force participation rate provide a partial picture of level of engagement in employment for the working age population. These figures can be influenced by population growth, particularly if growth in employment is either faster or slower than growth in population. Employment in SA grew by just over 30 per cent between 1991 and 2017, faster rate than the almost 24 per cent growth in population (41). Lower

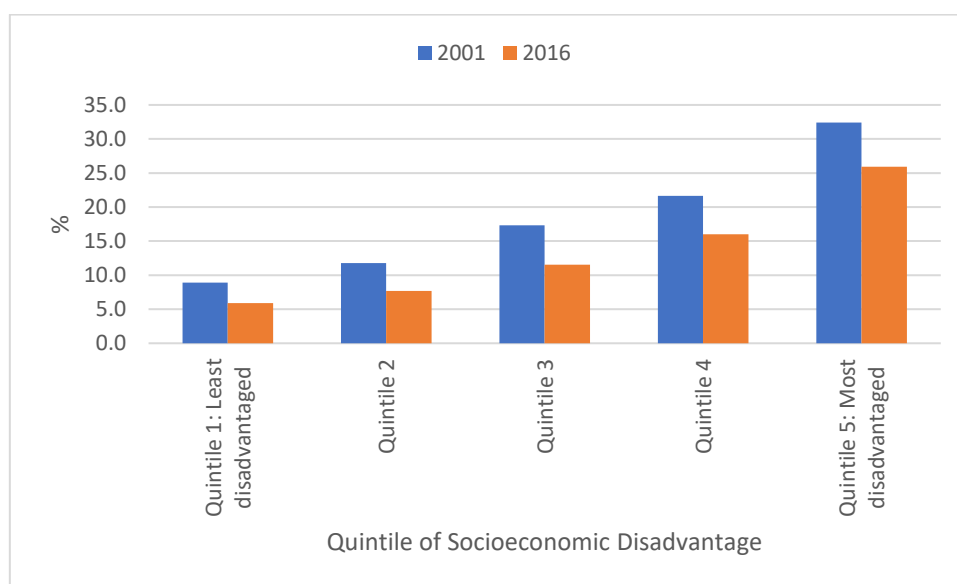


population growth compared to the national average of 48 per cent is the main factor behind the growth in employment being only half the Australian average of 60 per cent over the same period (41).

- Employment growth outpacing population growth has contributed to improvements in the unemployment rate and participation rate. It has also contributed to a rise in the employment to population ratio (Figure 39). The employment to population ratio in SA has been consistently lower than the Australian average over the period from 1991 to 2017, mirroring the trend in the participation rate. The gap between SA and the national average for this indicator narrowed slightly during the boom years in the early 2000s but has widened again post global financial crisis.

### Jobless Families

- Employment growth and its resultant lowering of unemployment has decreased the percentage of jobless families with children in SA between 2001 and 2016 (Figure 40). The uneven distribution of the increase in employment is evident from the persistent and worsening social gradient for jobless families. The inequality ratio rose from an already high 3.64 in 2001 to 4.39 in 2016. Inequality for this indicator is not dissimilar to that observed for low-income, welfare dependent families with children (Figure 13). There is overlap between these groups. Jobless families represent 26 per cent of the most disadvantaged quintile in 2016, supporting the observation made earlier that there are widening inequalities for children in SA. A high proportion of children and adults in the most disadvantaged quintile do not have access to adequate income and are vulnerable to adversity this brings.



**Figure 40: Jobless families with children aged less than 15 years by quintile of socioeconomic disadvantage, 2001 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

- SA has the second lowest proportion of households where employee income is the main source of income (after Tasmania) (23). The higher unemployment rate and lower labour force participation rate in SA provide a partial explanation for this. The ageing population in the state is another contributing factor. The ageing population increases the dependency ratio in the state, meaning that a smaller proportion of the population falls within the

working age population of 15 to 64 years of age. The evidence on employment indicators shows that factors other than the ageing population are also contributing to SA's poorer performance. It is the combination of these factors that gives rise to lower incomes, and affects health, but lack of employment is not the only source of low income. Underemployment plays an important part too and will be considered in the next section.

## Characteristics of Employment

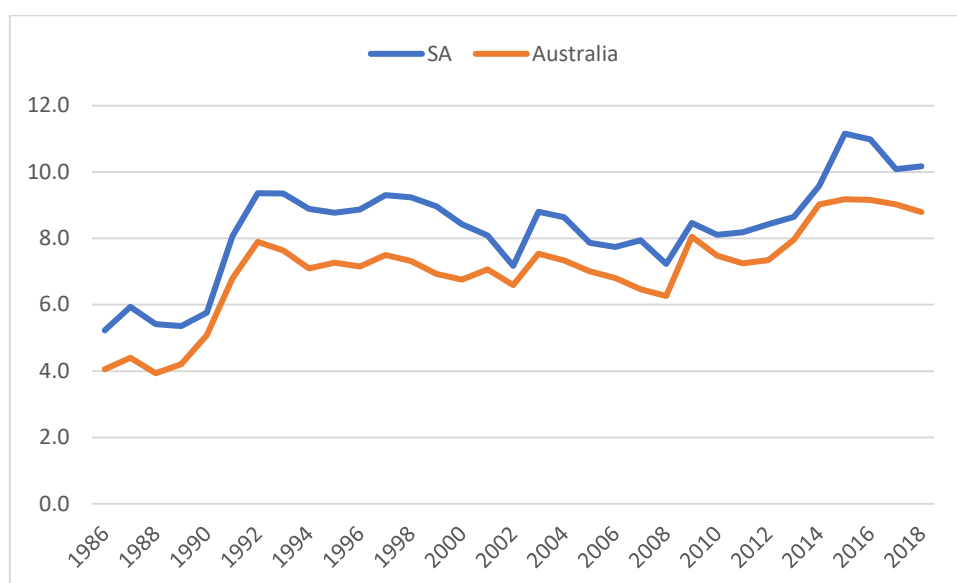
### Key findings

- Adjusting for underemployment, disguised unemployment, the underutilisation rate in SA reveals that a considerably higher proportion of people have a desire for work that is not being met.
- Changes in the terms of employment have resulted in a decline in full-time employment across Australia and an increase in part-time and casual employment. The higher rates of part time employment in SA contribute to low incomes.
- SA has the highest prevalence of casual employment. This represents the higher share of employment in industries that hire higher rates of casuals.
- The reduction in manufacturing jobs and rise in employment in the service sector has changed the skill mix of new jobs in SA, making it more difficult for those living in disadvantaged circumstances to find jobs that match their skills.

### Indicators

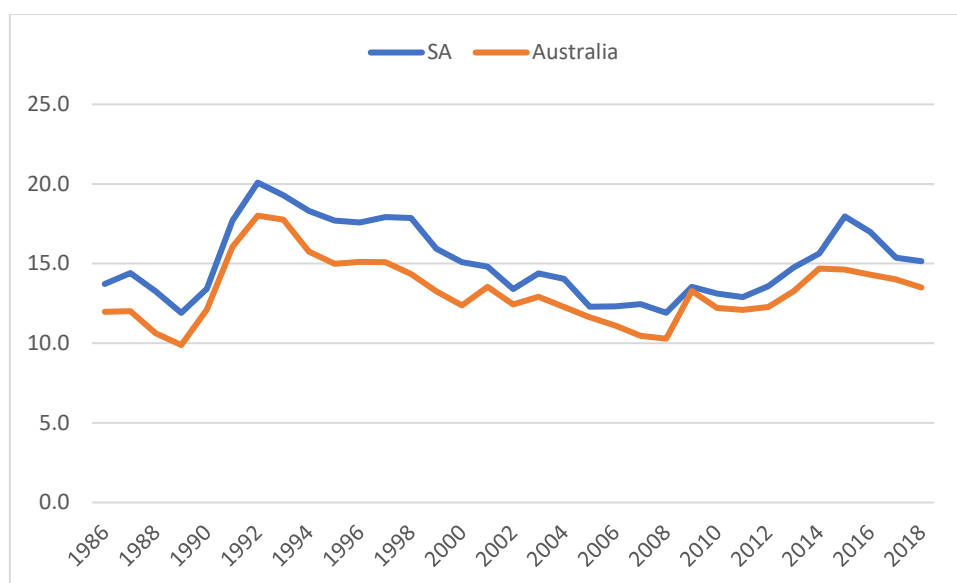
#### Underutilisation

- Employment rose in SA over our period of interest, but underemployment also increased as evidenced by the underemployment ratio between 1986 and 2018 (Figure 41). The underemployment ratio calculates underemployment as a proportion of employed persons, providing a measure of the proportion of employed persons who want and are available for more hours than they currently work. This ratio increased in SA from just over 5 per cent in 1986 to as high as 11 per cent in 2017. The underemployment rate in SA is consistently higher than the Australian average.



**Figure 41: Underemployment ratio, South Australia and Australia, 1986 to 2018 (per cent)** (Data source: Labour Force Australia, ABS, 2018)

- The underutilisation rate adds the unemployed and underemployed together, offering a measure that captures the percentage of the labour force that is underutilised. Figure 42 shows that underutilisation decreased in the mining boom years but has since increased. The underutilisation rate in SA has been higher than the 1986 rate of just under 14 per cent since 2013. This follows the national trend. SA has a higher utilisation rate than the national average, which is unsurprising given that unemployment and underemployment rates in SA exceed the national average. The underutilisation rate in SA has fluctuated but has remained within the 12 to 15 per cent range since 2000 (with the exception of a peak in 2015 and 2016). In 2015-16, one in every six workers in SA was underutilised.

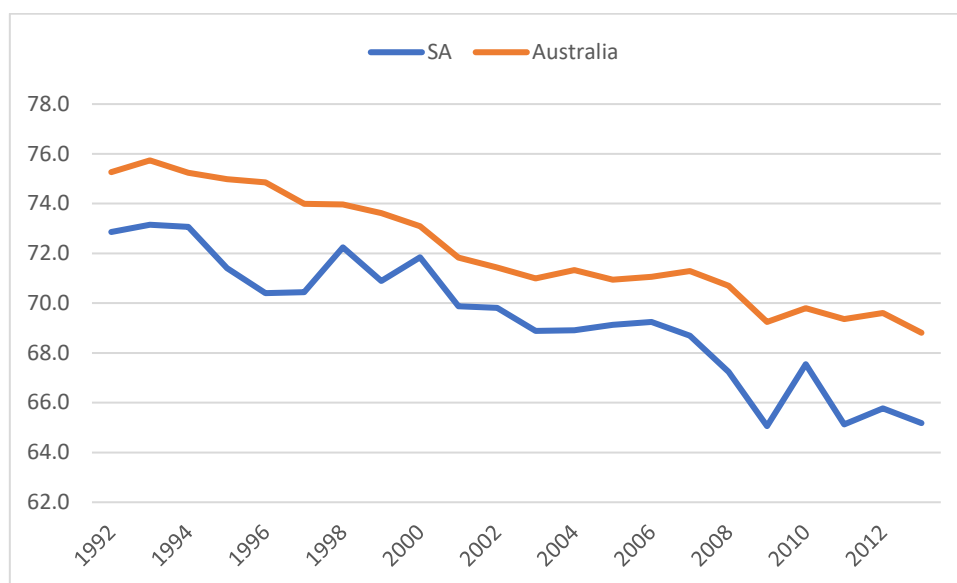


**Figure 42: Underutilisation rate, South Australia and Australia, 1986 to 2018 (per cent)** (Data source: Labour Force Australia, ABS, 2018)

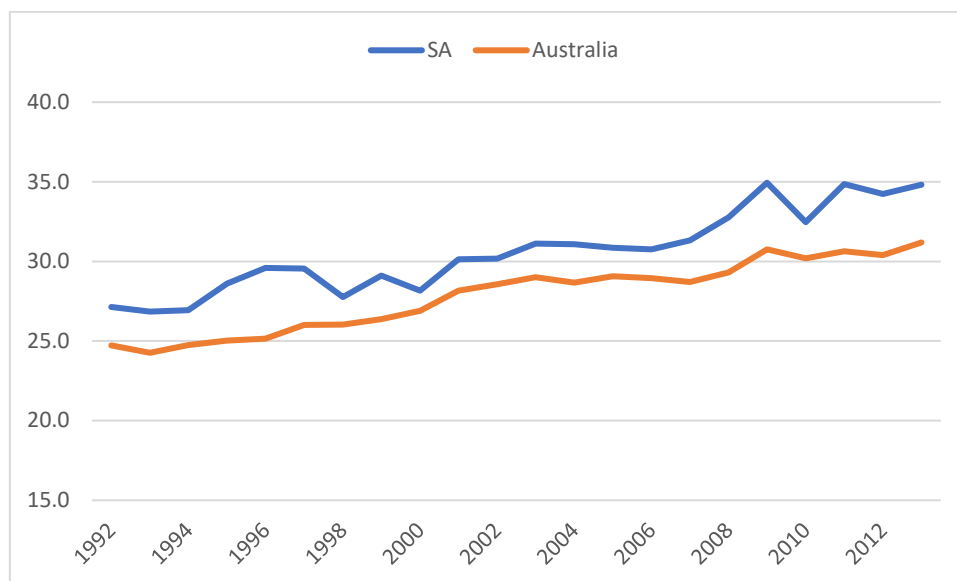
### Terms of Employment

- There has been a nation-wide change in the terms under which Australians are employed in recent decades (42). Full-time and permanent employment was once the norm, with 75 per cent of Australians and 73 per cent of South Australians employed full-time in 1992 (Figure 43). Employment grew by 28 per cent between 1992 and 2013 in SA, but full-time employment only grew by 15 per cent over the same period (43). The slower growth in full-time employment has resulted in a decline in the percentage of people employed on a full-time basis. SA has had a persistently lower rate of full-time employment compared to the national average. The decline in the share of full-time employment in SA has followed the national trend, retaining the gap in the rate of full-time employment observed in Figure 43.
- There has been a corresponding increase in the share of part-time employment between 1992 and 2013 (Figure 44). Part-time employment grew by 65 per cent in SA over this period, more than double the overall growth in employment and four times the rate of growth of full-time employment (43). This increased the share of part-time employment in SA from 27 per cent in 1992 to 35 per cent in 2013. The rate of part-time employment is higher in SA than the national average. This higher rate of part-time employment

contributes to lower incomes in SA. It could also explain the higher rate of underemployment in SA.



**Figure 43: Full-time employment, South Australian, 1992 to 2013 (per cent)** (Data source: Australian Labour Market Statistics, ABS, 2014)

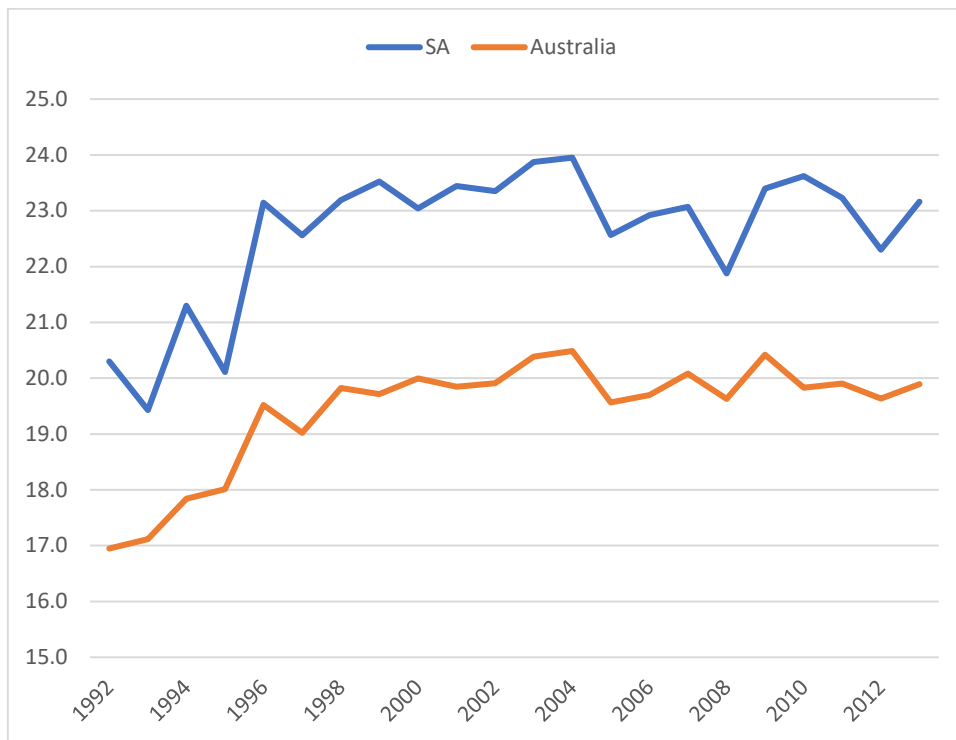


**Figure 44: Part-time employment, South Australia and Australia, 1992 to 2013 (per cent)** (Data source: Australian Labour Market Statistics, ABS, 2014)

### Casual employment

- Casual employment also grew more rapidly than overall employment, increasing by 47 per cent in SA between 1992 and 2013 (43). As with part-time employment, the rate of casual employment in SA is higher than the national average over this period (Figure 45). SA and Queensland have the highest prevalence of casual employees of all states and territories (44). Casual employment grew strongly over the 1990s, from 20 per cent of total employment in SA in 1992 to 23 per cent in 2000. It has fluctuated around the 23 per cent share ever since. The higher rate of casual employment in SA is the result of larger shares of

employment in industries that hire higher rates of casuals (e.g. retail, administrative and support services and health care and social assistance) (44).



**Figure 45: Casual employment, South Australia and Australia, 1992 to 2013 (per cent)** (Data source: Australian Labour Market Statistics, ABS, 2014)

### Occupation and industry

- The largest occupation category in SA (and in Australia) is Professionals, and this occupation has increased its share of employment between 2006 and 2016 (Table 8). Technicians and trade workers are the second largest category in SA, though it should be noted that the employment share of this occupation has declined. There is also a lower percentage of clerical and administrative workers, managers and labourers in 2016 compared with 2006. Community and personal service workers has been the fastest growing occupation category in SA, growing 28 per cent between 2006 and 2016.

**Table 8: Occupation, South Australia, Employed People Aged 15 and Over (per cent)** (Data Source: Census of Population and Housing, ABS, various years)

	2006	2011	2016
Professionals	18.4	19.6	20.3
Technicians and trades workers	14.2	14.1	13.4
Clerical and administrative workers	14.5	14.4	13.3
Managers	13.4	12.6	12.6
Community and personal service workers	9.4	10.5	12
Labourers	12.4	11.1	11.1
Sales workers	9.6	9.6	9.6
Machinery operators and drivers	6.4	6.4	6.1

- The manufacturing industry has historically represented a larger proportion of SA’s economic output compared with the national average (45). The loss of manufacturing jobs over the period 1989-90 to 2015-16 has transformed employment and economic output in the state, while the Health Care and Social Assistance industry has grown to become the largest industry in the state in terms of workers as of 2016 (Table 9). Retail trade is the second largest industry in SA, followed by Education and Training. This transformation, including an increase in the service sector and reduction in blue collar jobs has lessened the reliance on manufacturing for economic output. It has also changed the skill mix required in the workforce. This explains some of the uneven distribution of growth in employment and worsening social gradient, as the more disadvantaged are more likely to find a mismatch between their skills and the new jobs available.

**Table 9: Largest Industries in terms of workers, South Australia** (Data Source: Census of Population and Housing, ABS, various years)

	2006	2011	2016
Health Care and Social Assistance	86,220	100,602	110,479
Retail Trade	81,399	83,070	79,742
Education and Training	52,377	58,637	64,506
Manufacturing	88,489	77,890	59,579
Construction	46,085	55,599	56,635
Public Administration and Safety	44,876	52,263	52,914
Accommodation and Food Services	40,373	46,249	49,738
Professional, Scientific and Technical Services	36,178	40,551	41,499

## Social Exclusion

There are four main elements of social exclusion: social interaction, consumption, production and political engagement (6). Exclusion from these elements results in a loss (or lack) of connection to family, friends and the community an individual lives in. Indicators were located for three of these elements: incapacity to purchase needed goods and services, lack of economic and social participation and lack of social interaction.

The effects of social exclusion have been correlated with poorer health outcomes, including adverse health behaviours, stress, anxiety and poorer self-assessed health (6).

### Key findings

- Growing multi-dimensional inequality and disadvantage in income, education, employment and housing in SA are creating the structural conditions which mean low socioeconomic groups are more likely to be socially excluded.
- SA performs poorly on digital inclusion and inequality in access to the internet is rising, compounding the disadvantage that already disadvantaged households are experiencing and exacerbating risk of social exclusion.

### Indicators

#### Multi-dimensional disadvantage and social exclusion

- Experience of social exclusion is strongly connected to inequalities arising from indicators previously discussed within this report under other themes. The lack of opportunity for adults and children to engage in education, training and employment are examples of societal processes that create social exclusion (10). Income levels, the income and wealth distribution, and experiences of poverty and financial exclusion interact and result in social exclusion. Low incomes and high poverty rates in SA create the conditions for social exclusion. Persistent income inequality and the worsening social gradient for sole parent households, the long-term unemployed, people in receipt of unemployment benefits, people with disabilities and low income, welfare dependent families highlight the increased likelihood of financial hardship and social exclusion for those living in the most disadvantaged circumstances in the state. These groups face elevated risk of poverty and the associated incapacity to purchase needed goods and services. The increases in inequality across dimensions of education, employment and income are likely to result in increases in social exclusion amongst disadvantaged groups.

#### Housing and homelessness

- Secure housing enables opportunities for employment, education and social participation. Homelessness is not just a housing issue, it is an extreme form of social exclusion where health behaviours, health status and the social environment each contribute towards material and social deprivation (46). The estimated rate of homelessness in SA (37 persons per 10,000) is lower than the national average (50 persons per 10,000), but the rate is persistent, showing little improvement between 2001 and 2016 (Table 10)<sup>17</sup>. The rate is higher in the rest of SA than in greater Adelaide, and highest in the outback, particularly the North and East Outback where it was as high as 130 persons per 10,000 in 2006 (27). The

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<sup>17</sup> Refer to the explanatory notes in the appendices for an explanation of how the ABS defines homelessness.

Aboriginal and Torres Strait Islander population experience homelessness at much higher rates, with 30 per cent reporting that they have experienced homelessness (17). The reduction in public housing stock since the early 1990s has also given rise to a lack of secure housing for low socioeconomic groups.

**Table 10: Homelessness in South Australia and Australia (persons per 10,000)** (Data source: Census of Population and Housing, ABS, various years)

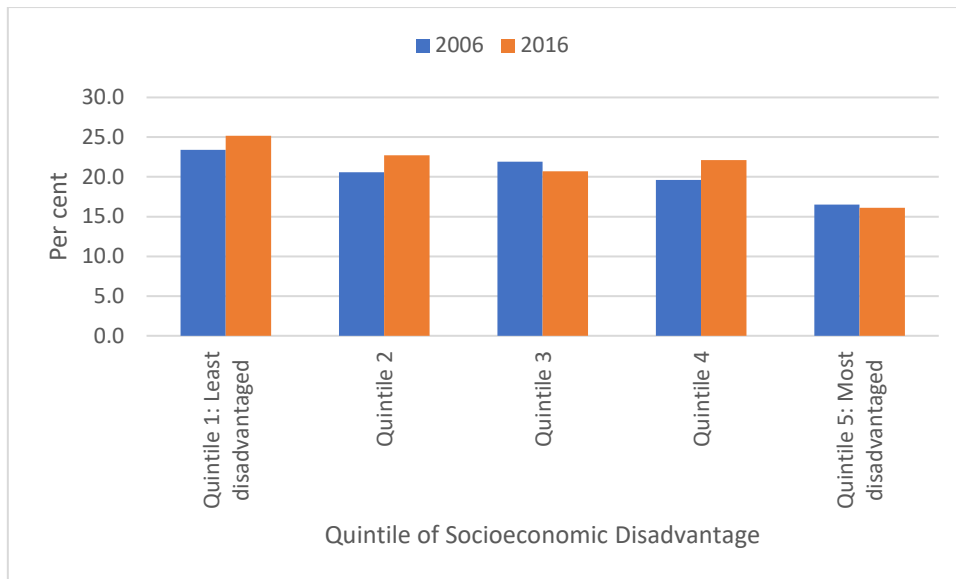
	2001	2006	2011	2016
Australia	50.8	45.2	47.6	49.8
SA	39.8	37	36.4	37.1

- Specialist homelessness services assisted 288,800 people across Australia in 2017-18, representing 1.2 per cent of the population (47). In South Australia almost 20,000 people received assistance from specialist homelessness services in 2017: 18–60 per cent were female, 16 per cent were aged under 10, 12 per cent were aged 10 to 17 and approximately 5 per cent were aged 55 and over (48). People from single parent families were overrepresented amongst persons receiving assistance. People from single parent families represent 12 per cent of the population, but more than a quarter (28 per cent) of people receiving assistance were from single parent families (48, 31).

### **Voluntary work**

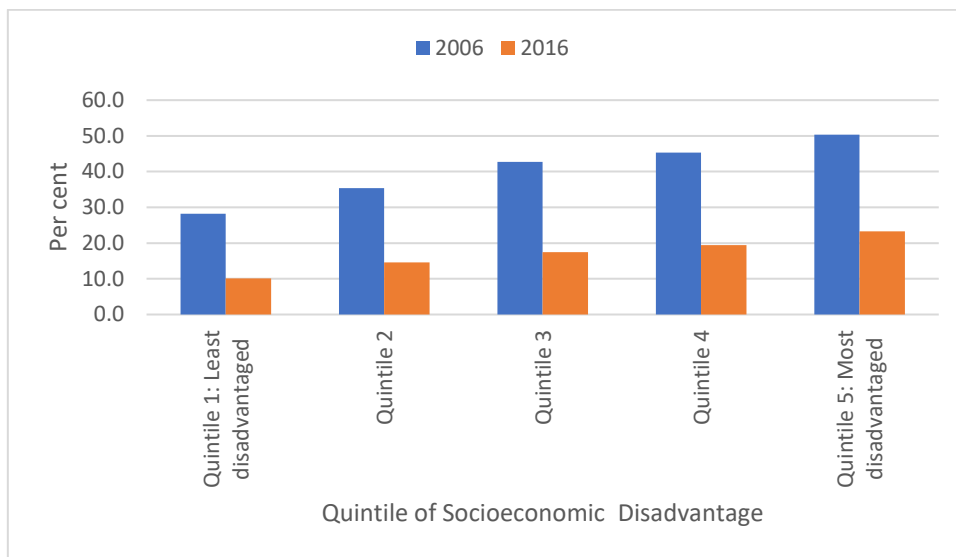
- Employment, education and training enable economic and social participation and offer opportunities for social interaction. The social gradient in educational participation and completion at school and for higher education impedes the likelihood of economic participation for the most disadvantaged, exposing them to a higher likelihood of both short-term and longer-term social exclusion. The social gradient in labour force participation compounds this risk, particularly in SA where labour force participation rates are lower. Voluntary work provides an alternative route to social participation and interaction within the community, providing social connectedness that contributes to positive wellbeing (6). Rates of volunteering are a little higher for each quintile in SA compared to the Australian average (8). Figure 46 shows the rate of voluntary work decreases with disadvantage and is much lower for the most disadvantaged quintile of socioeconomic disadvantage. This trend is evident across Australia (8). Participation in voluntary work has become even more unequal between 2006 and 2016, as the inequality ratio decreased from 0.71 to 0.64. Unequal participation in voluntary work, combined with inequality in participation in education and employment serves to widen inequality of social networks and social support.





**Figure 46: Rates of Voluntary Work for an Organisation or Group by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

### Digital Exclusion



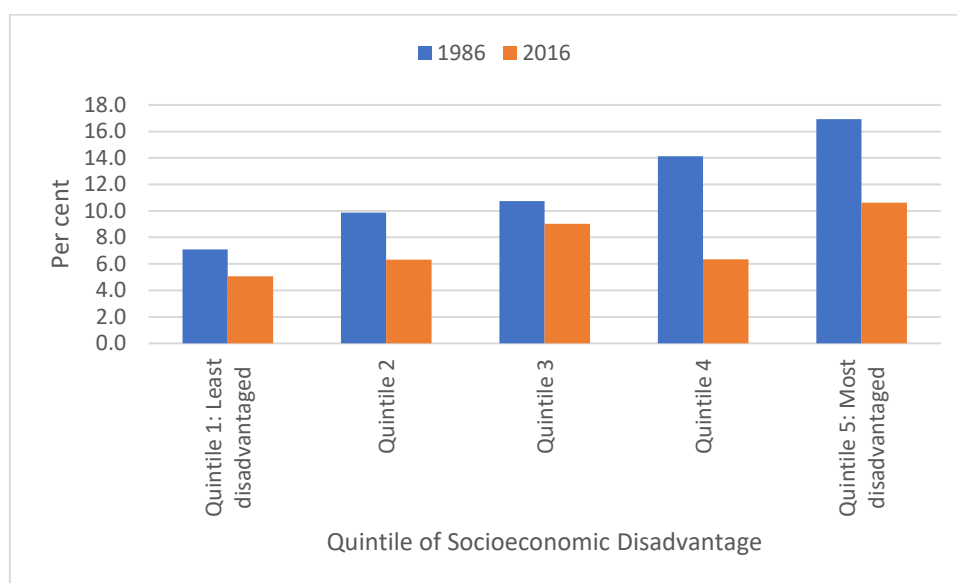
**Figure 47: Dwellings where internet was not accessed by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

- Digital inclusion is the capability to access the social and economic benefits provided by the internet. The digital divide, inequality in access to the internet, is illustrated by the socioeconomic distribution of dwellings where the internet is not accessed (Figure 47). There has been a rapid decrease in the proportion of households without internet access in every quintile, but as more people access the internet it has become widely used for job searching, education and training and social interaction, deepening the divide for people who remain digitally excluded. The inequality ratio in digital exclusion has worsened, from 1.92 in 2006 to 2.76 in 2016. The inequality ratio has increased by 44 per cent over this period in SA, a higher increase than the national average of 29 per cent (8). SA rates poorly on the Australian Digital Inclusion Index and had the lowest rate of household internet

access of all states and territories in 2016-17 (49, 50). Households in the lowest income quintiles are substantially less likely to have internet access (49). Digital inclusion, in terms of digital literacy and affordable access, has become a key vehicle to social and economic inclusion (51). Digital exclusion compounds the disadvantage that already disadvantaged households experience in education, employment and other areas, exacerbating their risk of social exclusion (50, 51).

### Access to a motor vehicle

- Access to opportunities to purchase goods and services and to participate in social and economic activities can be limited for people who do not have access to a motor vehicle and do not live close by such services. There is a social gradient in the distribution by quintile of dwellings with no motor vehicles, reinforcing the higher likelihood of social exclusion for the most disadvantaged (Figure 48). The proportion of dwellings with no motor vehicle fell for every socioeconomic quintile between 1986 and 2016, and the ratio of inequality improved slightly. This has improved the social gradient, but inequality remains high in SA. The fall in the inequality ratio in SA was 12 per cent, much lower than the 45 per cent decrease for Australia (8).



**Figure 48: Dwellings with no motor vehicle by quintile of socioeconomic disadvantage, 1986 and 2016, South Australia (per cent)** (Data source: Social Health Atlas, PHIDU, 2018)

### Aboriginal and Torres Strait Islander cultural factors

- Care must be taken in considering determinants of social inclusion for the Aboriginal and Torres Strait Islander population. A narrow view focused on mainstream values can ignore determinants that are of particular relevance to Aboriginal and Torres Strait Islander people, including racism, discrimination and cultural factors such as language and customary use of traditional lands (52). The application of mainstream values can also fail to recognise cultural differences, and the culturally determined preferences of Aboriginal and Torres Strait Islander people (53). Disadvantages that Aboriginal and Torres Strait Islander people face in terms of lower employment rates, lower education completion rates, lower incomes, lower rates of home ownership and higher rates of homelessness put them at high risk of social

exclusion, but cultural factors add to this picture. Identification with a clan, tribe or language group could provide social support and interaction, and connection to communities can be strengthened by living in traditional country or having customary use of traditional lands (52). One quarter of the Aboriginal and Torres Strait Islander population in SA spoke an Australian Indigenous language in 2014-15 and 61 per cent identify with a clan, tribal or language group (17). Three quarters recognise an area as traditional country or homelands (17). The proportion of Aboriginal and Torres Strait Islander persons living in their traditional lands is low and has declined from 22 per cent in 1994 to 18 per cent in 2008 (16, 34). Absence of these cultural factors can add to the exclusion and isolation experienced by the Aboriginal and Torres Strait Islander population.

## Access to Health Care

Access to health care services enables prevention and the treatment of disease. Those who are born into disadvantaged circumstances and who live in disadvantaged areas have a higher prevalence of morbidity and die earlier. Appropriate access to health care can impact on experience of health and outcomes for those living in disadvantaged circumstances. Equitable provision of health services necessitates the removal and mitigation of barriers to access.

### Key finding

- There are financial barriers in accessing treatment which disproportionately affect low income households and people living in low socioeconomic areas in SA. Increases in health costs and expenditure have exacerbated these barriers, particularly in SA where expenditure on health care represents a higher proportion of total expenditure for the lowest income quintile compared with the national average.

### Indicators

#### Barriers to health care access

- Australia has a health system with universal coverage, but barriers remain for some groups in accessing services, particularly people on low incomes and living in disadvantaged and isolated areas. Equity indicators for primary care provide some context for this. In 2014-15, 92 per cent of PBS prescriptions were filled at the concessional rate in SA and 83 per cent of GP visits were bulk billed (26). In public hospitals in SA, 66 per cent of patients were seen on time in 2014-15 (26). The public system, PBS concession and bulk-billing are means of providing equitable access to health care. Financial barriers remain, with between 4.5 and 6.5 per cent of people in SA estimated to defer GP visits due to financial barriers, and an estimated 7.3 to 9.9 per cent of people deferring treatment due to financial barriers to PBS medicines (26). The ABS provide some estimates of financial barriers by socioeconomic status for Australia and SA, and these indicate that people in more disadvantaged areas delay or decide against getting prescribed medications due to cost at higher rates compared with people from less disadvantaged areas (54). The higher burden of disease amongst those living in disadvantaged circumstances increases the cost burden of health care amongst this group, making it more likely that they are overrepresented amongst people reporting that they defer seeking health care due to financial barriers.

#### Expenditure on Health Care

- Expenditure on health care for the best off and the worst off differs not just due to different rates of utilisation, but also due to different levels of coverage with private health insurance. Almost 60 per cent of adults in SA have private health insurance, but much higher rates of private health insurance are observed for the employed and people living in high socioeconomic areas than for the unemployed, disabled or people living in low socioeconomic status areas (55). People on lower incomes in SA face a higher cost burden to access health care even with this differential in purchases of insurance, with expenditure on medical care and health expenses representing a higher proportion of total expenditure for households in the lowest income quintile compared to households in the highest income quintile (Table 11).

- The proportion of household income spent on medical care and health expenses by the lowest income quintile in SA is double the estimated national average of 2.7 per cent in 2003-04 and 3 per cent in 2009-10 (56).
- Average weekly expenditure on health care rose substantially in SA between 2003-04 and 2009-10, by 53 per cent (56). The increase in average weekly expenditure on health care in SA was 23 per cent between 1998-99 and 2003-04, and the increase was of a similar magnitude between 2009-10 and 2015-16 (22 per cent) (56).
- Households in the lowest income quintile experienced an even higher 72 per cent increase in expenditure on health care between 2003-04 and 2009-10 (56). The increase in health costs is likely to have exacerbated financial barriers to access, especially for low income earners with chronic health conditions requiring higher levels of health care.

**Table 11: Household Expenditure on medical care and health expenses by gross income quintile, proportion of total expenditure of goods and services** (Data source: Household Expenditure Survey, ABS, various years).

Quintile:	Lowest	Second	Third	Fourth	Highest
1998-99	6.0	4.2	5.1	5.6	5.0
2003-04	5.1	4.7	5.1	4.4	4.6
2009-10	7.1	5.8	4.8	5.6	5.9

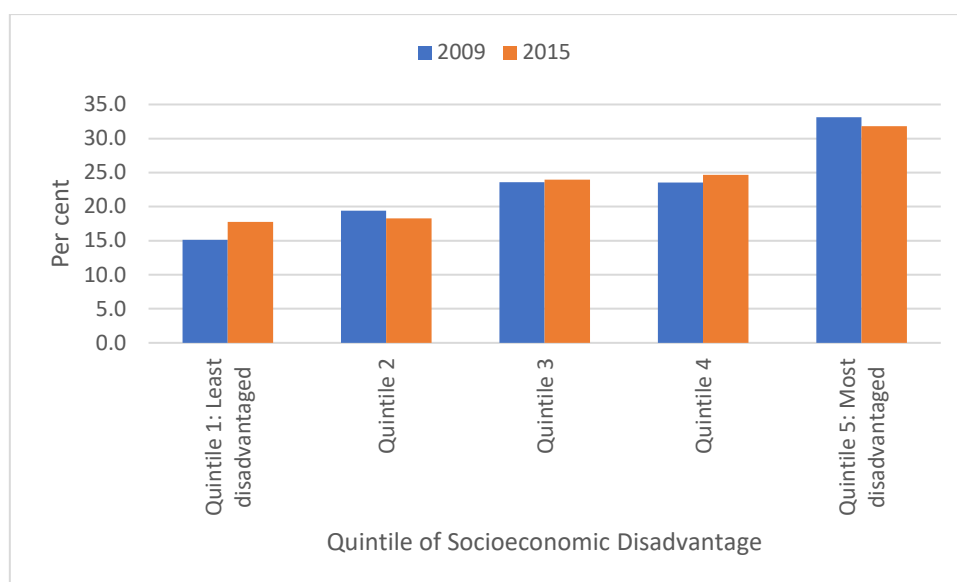
## Other Indicators

The major themes discussed thus far cover many of the available indicators, but not all. There are other social determinants of health which are of equal importance, but for which fewer indicators are available. These include early life factors, lifestyle factors, food supply, energy, justice and child protection.

### Early Life Factors

Risks and experiences of health in early life have the potential to impact on educational, social, economic and health outcomes in adulthood and later years.

- The Australian Early Development Census (AECD) measures the development of children in their first year of full-time schooling for five domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills and communication skills and general knowledge (57). Figure 49 presents the socioeconomic distribution of children in SA who are developmentally vulnerable on one or more domains in the 2009 and 2015 data collections. There is a social gradient in early development in the data for SA and for Australia (8). Higher rates of children living in more disadvantaged socioeconomic areas are developmentally vulnerable on one or more domain compared with least disadvantaged children (Figure 49). The inequality ratios in early development have decreased between 2009 and 2015, but a high degree of inequality remains. Children in the most disadvantaged quintile in SA are almost twice as likely to be developmentally vulnerable on one or more domains in 2015 compared with the least disadvantaged quintile (an inequality ratio of 1.79). The inequality ratio is even higher (and the social gradient is steeper) when considering the percentage of children who are developmentally vulnerable on two or more domains (an inequality ratio of 2.15 in 2015) (8).



**Figure 49: Percentage of children who are developmentally vulnerable on one or more domains, by quintile of socioeconomic disadvantage, 2009 and 2015, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- There are similar inequality ratios for all five domains in terms of the percentage of children in SA who are developmentally “on track” (Table 12). For every domain the inequality ratio is below 1 and little changed between 2009 and 2015, reinforcing socioeconomic disadvantage

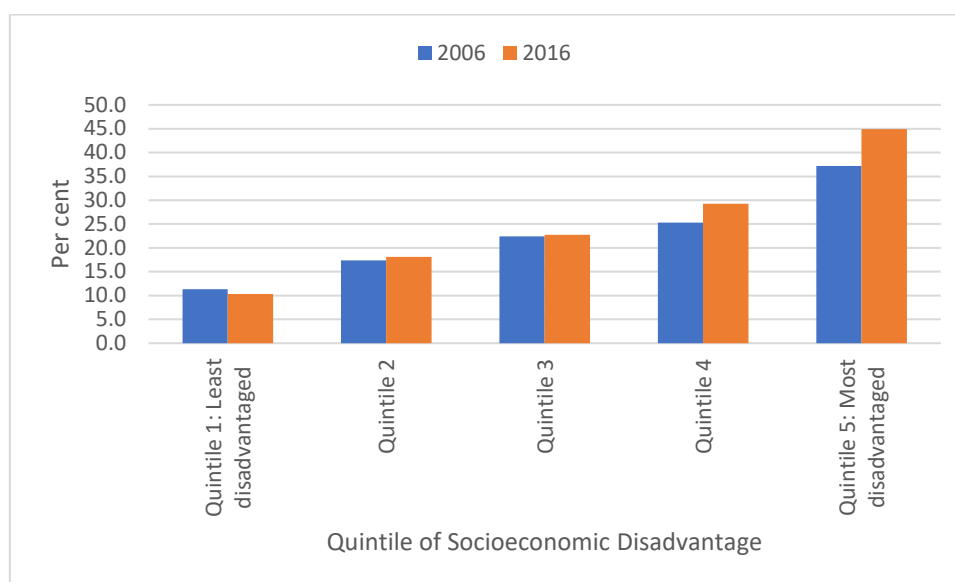
even from early in life as the most disadvantaged are less likely to be “on track” in their early development.

**Table 12: Inequality ratios for percentage of children who are developmentally “on track” for domains of early childhood development, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

	2009	2015
Physical health and wellbeing	0.84	0.87
Social competence	0.84	0.86
Emotional maturity	0.85	0.88
Language and cognitive skills (school based)	0.80	0.82
Communication skills and general knowledge	0.81	0.85

*Numbers lower than 1 represent lower rates of developmentally “on track” for the most disadvantaged compared to the least disadvantaged.*

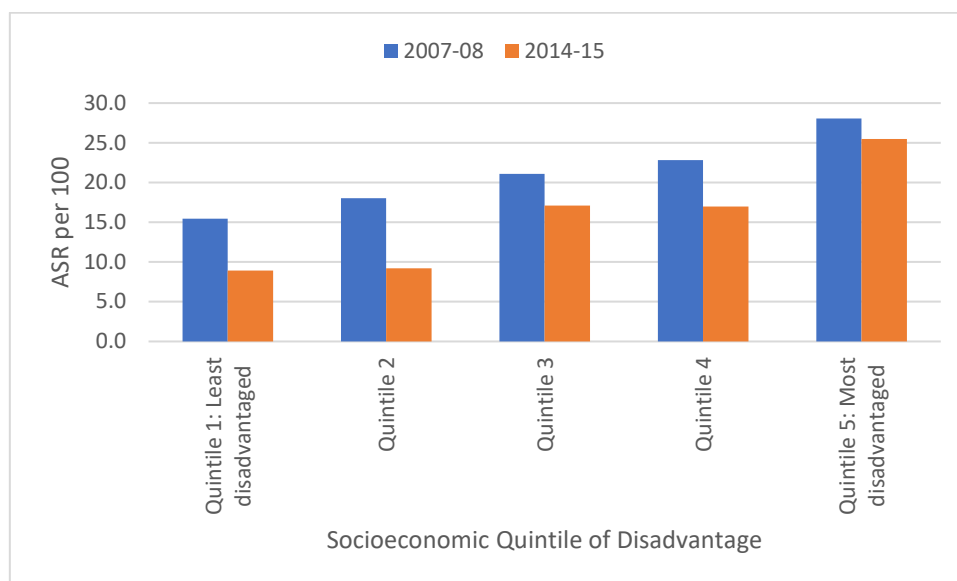
- The socioeconomic distribution of children in low income, welfare dependent families is presented in Figure 50. Almost 45 per cent of children living in the most disadvantaged areas in 2016 are in low income, welfare-dependent families. The percentage of children in low income, welfare dependent families has fallen for quintile 1 (the least disadvantaged) and risen for every other quintile between 2006 and 2016. The inequality ratio has risen from 3.29 in 2006 to 4.34 in 2016, reflecting the increase in prevalence for every quintile except quintile 1 over this period. Low income and dependence on welfare, as observed earlier, elevates the risk of child poverty. Low income and associated impacts on opportunities for the most disadvantaged, combined with the social gradient in early development that affects health and performance in education, highlights the contribution of early life factors in widening the gap between the best off and worst off in adulthood.



**Figure 50: Percentage of children in low income, welfare dependent families by quintile of socioeconomic disadvantage, 2006 and 2016, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

## Smoking, weight and diet

Smoking, weight and diet all affect disease outcomes. Choices regarding smoking and diet are shaped by social and economic environments.

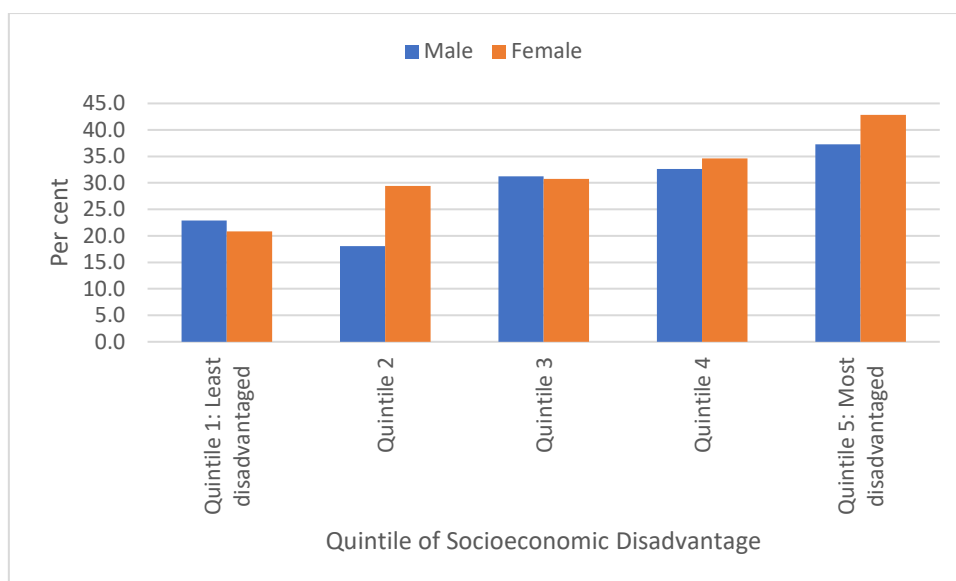


**Figure 51: Estimated population aged 18 years and over who were current smokers by quintile of socioeconomic disadvantage, 2007-08 and 2014-15, South Australia** (Data source: Social Health Atlas, PHIDU, 2018)

- Smoking has been connected to the social gradient, so that the health of people of low socioeconomic status are most affected by smoking (10). The social gradient in smoking in SA is illustrated in Figure 51. There has been a decrease in the rate of smoking between 2007-08 and 2014-15 but the inequality ratio has increased over the same period, from 1.82 to 2.86. People living in the most disadvantaged areas are almost three times as likely to be current smokers compared with the least disadvantaged. The high rate of inequality and much higher rate of smoking amongst the most disadvantaged may partially explain the worsening inequalities in chronic obstructive pulmonary disease observed in the health section of this report, however the rates of smoking in SA do not differ significantly from the Australian average (8).
- Obesity results from a complex interaction of factors, including food supply and especially the marketing, advertising and consumption of high fat and sugar foods. The modern obesity epidemic is highlighted by recent rates of obesity in the SA population, which are even higher for more disadvantaged socioeconomic quintiles (Figure 52). More than 20 per cent of both men and women are estimated to be obese even in the least disadvantaged socioeconomic quintile. This figure rises to 37 per cent of men and 43 per cent of women in the most disadvantaged quintile. The socioeconomic distribution is reflected in inequality ratios of 1.63 for men and 2.05 for women. Estimates of the prevalence of unhealthy weight<sup>18</sup> in SA between 2002 and 2015 find that the prevalence has increased significantly, from 54 per cent of the population aged 15 years and over in 2002 to 62 per cent in 2015 (58).

<sup>18</sup> Unhealthy weight is defined as overweight or obese, measured as BMI greater than or equal to 25.





**Figure 52: Estimated population aged 18 years and over who were obese by quintile of socioeconomic disadvantage, 2014-15, South Australia**

- Food supply contributes to diet-related disease rates. The Australian Dietary Guidelines outline the daily amounts of fruit and vegetables people need to consume for a healthy diet. It is estimated that in 2015 only 11 per cent of people in SA consumed the recommended five serves of vegetables per day, and only 42 per cent consumed the recommended two or more serves of fruit per day (58). People living in the most disadvantaged socioeconomic areas were less likely to consume the recommended serves of fruit and vegetables. This trend has been persistent between 2002 and 2015 (58).
- Hypertension and high cholesterol put people at risk of premature mortality. The prevalence of high cholesterol has increased in SA from an estimated 13.2 per cent of the population aged 15 years and over in 2003 to 18.1 per cent in 2015 (58). The prevalence of hypertension has likewise increased over the same period, from just under 18 per cent in 2003 to just under 22 per cent in 2015 (58). The prevalence differs by education level for both indicators. Rates of hypertension and high cholesterol are lower for people who have a degree or higher (58).

### Food Insecurity

Food insecurity is interrelated with experiences of poverty, but also captures broader aspects of the availability of food. People experiencing food insecurity do not have reliable access to a sufficient quantity of food. It measures not only food availability, but food accessibility, which includes aspects of affordability. Insufficient availability and access to food negatively affects health and wellbeing.

- The prevalence of food insecurity in SA and Australia has been rising (59). The number of people seeking (and receiving) food relief in SA increased by 47 per cent between 2014 and 2016 (compared with a national increase of 25 per cent) (59). Concerningly, 46 per cent of people assisted with food relief in SA in 2016 were children. Australia-wide, 14 per cent of the population in 2017 was eating less food than they needed due to a lack of money or resources (59). Thus, there is a strong relationship between income and food insecurity.

- There is no breakdown of food insecurity statistics by circumstances or region for SA but the national statistics are informative. Regional and remote areas account for 29 per cent of all people seeking food relief (59). Low income families and individuals are more prevalent in seeking food relief than the unemployed in the 2012, 2013, 2014 and 2017 Hunger Reports. In 2017, 48 per cent of people seeking food relief were employed (59). The characteristics of people seeking food relief align with the groups who are at higher risk of poverty, and these groups are predominantly the most disadvantaged in both SA and Australia. The most common reasons given for seeking food relief are bill shock, low income and the high cost of living. Consequences of food insecurity include stress and depression, and the main reported impacts of lack of food were feeling tired/lethargic, inability to focus and concentrate and poor mental health (59).

## **Energy**

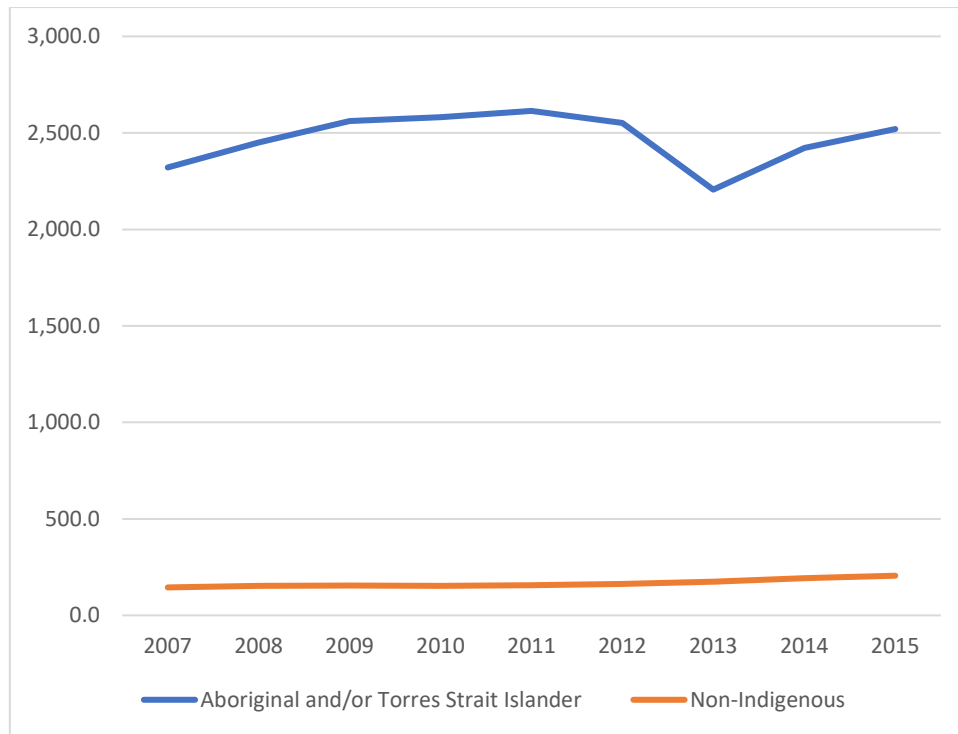
Domestic fuel and power costs such as gas and electricity are modern basic needs. Access to these essential services is required by all, and affordability of energy is a concern given that bill shock can leave the most vulnerable without money for other basics such as food, pushing them further into poverty.

- Energy costs are high in SA according to numerous indicators. SA has consistently had the highest average annual electricity bills of all states and territories between 2013 and 2017 (60). SA also has the second highest average annual gas bills of all states and territories, with only Queensland having fractionally higher gas bills (60). Combining gas and electricity, SA has the highest energy bills of all states and territories. Energy bills represented more than 10 per cent of disposable income between 2013 and 2017 for low income households (where they have electricity and gas), the highest share of all states and territories with the exception of Victoria (60). Adding to this, the increase in expenditure on energy for the lowest quintile of equivalised household disposable income in SA was 50 per cent higher than the average increase in expenditure for all households between 1998-99 and 2015-16 (56). High energy bills increase the likelihood of bill shock and put additional pressure on the budgets of disadvantaged households who are more likely to be facing the challenges and limited opportunities associated with low income.

## **Justice**

Incarceration and juvenile detention are both associated with socioeconomic status but also exacerbate social and economic inequalities that affect health and wellbeing.

- Aboriginal and Torres Strait Islander people are overrepresented in the criminal justice system in Australia, and the high rates of Aboriginal imprisonment are also seen in South Australia (Figure 53). It has been noted that the higher Aboriginal and Torres Strait Islander involvement in the criminal justice system contributes to economic and social disadvantage, particularly given that low income, high unemployment, low educational attainment, racism and discrimination are factors identified as increasing the likelihood of offending behaviour (10). Imprisonment rates in SA have been between 12 and 16 times higher for the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population over the period from 2007 to 2015 (61). This has been a longstanding trend, with Aboriginal and Torres Strait Islander imprisonment rates at least 15 times greater than the rates for non-Indigenous persons over the decade prior to 2003 (10).



**Figure 53: Incarceration rates per 100,000 of the adult population by Aboriginal and Torres Strait Islander Status, 2007 to 2015, South Australia** (Data Source: Corrective Services, ABS, Various years)

- A very large majority of Aboriginal and Torres Strait Islander people who are imprisoned have previously been involved in juvenile detention, with one estimate stating that 95 per cent of Aboriginal and Torres Strait Islander prisoners had history with the juvenile justice system (10). Aboriginal and Torres Strait Islander people are overrepresented in youth detention and comprised more than half (53 per cent) of all young people in detention in Australia on an average night in 2017 (62). The national rate of young Aboriginal and Torres Strait Islander people in detention on an average night fluctuated between 23 and 27 times the non-Indigenous rate over the period from 2013 to 2017 (62). In SA the rate of Aboriginal and Torres Strait Islander youth detention ranged from approximately 17 and 32 times the non-Indigenous rate between 2013 and 2017 (62).

### Child Protection

Involvement in the child protection system, and the precursors which lead to child protection orders, are stressful events that are associated with adverse effects on the physical and psychological health of children.

- Estimates of the rates of children on care and protection orders and in out of home care between 2005-06 and 2014-15 rose in SA and in Australia (26). The rates in SA are not significantly different from the Australian average. The rate of Aboriginal and Torres Strait Islander children on care and protection orders in SA ranged from 6 to 9 times the rate of non-Indigenous children over the same period, and the rate of Aboriginal and Torres Strait Islander children in out of home care ranged from 7 to 9 times the rate of non-Indigenous children (26). Approximately 30 per cent of all children in out of home care in 2014-15 were Aboriginal and Torres Strait Islander children, and almost half of these children (47 per cent) have spent 5 years or more in continuous out of home care (26).

## Further determinants

There are some further determinants which have previously been identified as elements and factors influencing health and wellbeing but for which appropriate and easily accessible indicators could not be located. These include:

- Agriculture and food supply
- Environment: sustainable practices
- Effective urban planning and healthy infrastructure
- Violence and crime

These factors contribute to explaining population health performance and are listed here for the sake of completeness. The indicators that were able to be included in this report, while not exhaustive, are those that measure social conditions and whether they have improved or degraded. These capture a social determinants based understanding of health to determine the effects of socioeconomic status on health and health inequalities. It is hoped that the report will be used to build on the work of earlier reports by SACOSS (2008) and Hetzel, Page, Glover and Tennant (2004) in raising awareness of the extent of inequalities in South Australia and the trends that have led to growing disadvantage and social inequalities.

## Summary

It is of vital importance to explore why there has been an increase in the degree of socio-economic health inequalities in South Australia between the 1980s and the period 2011 to 2015. A successful state requires more equal outcomes in health and the major social and economic determinants of health. This report has built on previous evidence for SA by analysing publicly available quantitative data on health and the social determinants of health, focusing on trends, interactions between indicators and themes and identifying their contribution toward the increase in socioeconomic health inequalities.

The analysis has identified substantial inequalities in the distribution of health, income, housing, education and employment, unemployment and labour force participation in South Australia. The pervasive social gradient evident in these themes represents unfair barriers to social and economic participation which negatively impact on health and wellbeing. The majority of these inequalities are observed both in Australia and in South Australia, but poorer performances on employment indicators, an ageing population, low incomes and poor digital inclusion are key factors contributing to worse outcomes for the state.

There have been overall improvements in some indicators compared with the 1980s: overall health has improved, participation in education has increased and unemployment has fallen. Female labour force participation rates have also risen, a positive step toward decreasing gender inequality. It is the uneven distribution of these improvements that has resulted in persistent and increasing inequality. Poverty is persistently high and income inequality has not improved. Increases in expenditure have outpaced growth in income in the latter part of this period, particularly for the lowest income quintile, and a reduction in the social housing stock combined with unaffordable housing is putting increasing pressure on household budgets. SA's higher labour underutilisation rates and social gradient in unemployment and labour force participation contribute toward low incomes and a high rate of receipt of government benefits for the more disadvantaged. Higher rates of part time employment and a change in the skills mix of new jobs in SA resulting from the decline in manufacturing and growth in the service sector has reinforced low income levels and added to the challenges faced by disadvantaged job seekers. Increasing socioeconomic inequality across the multiple and interrelated dimensions comprising the social determinants of health puts lower socioeconomic groups at much higher risk of social exclusion, particularly given that multi-dimensional inequality is combined with poor digital inclusion. All of these factors, along with barriers in accessing health care, play a part in the worsening health inequalities in SA.

The analysis in this report is exploratory, presenting visual evidence and describing trends and changes in inequality. Good data are required to determine the extent of socioeconomic health inequalities, and up-to-date evidence on the relevant social determinants of health (7). The publicly available data, while not exhaustive, does cover a comprehensive set of indicators on the major underlying factors that have the potential to have health effects.

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## Appendices

### Explanatory notes

#### Index of Relative Socio-Economic Disadvantage

Rate ratios are calculated by using the Index of Relative Socio-Economic Disadvantage (IRSD) which is based on the ABS Socio-Economic Indexes for Areas (SEIFA). The IRSD is defined in terms of people's access to material and social resources, and their ability to participate in society (1). SEIFA is one of the most commonly used indicators of socio-economic status. One limitation of SEIFA is that the relationship between socio-economic status of an area and socio-economic status of a household (or individual) within that area is far from perfect. It is acknowledged that there can be high socioeconomic status households living within low socioeconomic status areas, and conversely low socioeconomic households live within high socioeconomic areas (2). Use of SEIFA-based measures of disadvantage are justified by the influence of area characteristics on status, and the likelihood of availability of services and environmental and economic conditions within an area affecting socioeconomic status of individuals living within that area.

#### References

1. ABS. Census of population and housing: Socio-economic indexes for areas (SEIFA), Australia, 2016. Catalogue no. 2033.0.55.001.
- 2 Peter Saunders. Report for the NSW Child Death Review Team on measuring socioeconomic status. Social Policy Research Centre Report Series, 08/12. 2012.

#### Age Standardisation

Age standardisation is used to enable meaningful comparisons over time and to allow comparisons between areas with different age profiles. The age-standardised rate is the rate that a population would have if it had a standard age structure (the standard in PHIDU data being the Australian population). Standardisation accounts for differences in age profile between SA and Australia and is important because age has a powerful influence on many indicators, and particularly on disease patterns. Quintiles may have different proportions of age groups. There are more young children in the more disadvantaged areas in the capital cities and more people aged 65 years and over in the most disadvantaged quintile in regional areas. The age profile of quintiles would also change over time, but this process is slow and unlikely to influence the results in this report.

#### Equivalent Disposable Household Income

Equivalent disposable household income is reported rather than gross household income. The equivalent measure takes into account the size and composition of the household and the amount paid in tax and can be viewed as an indicator of economic resources available to a standardised household. This facilitates comparisons of income levels between quintiles that are likely to differ in size and composition of households.

#### ABS Definition of Homelessness

The ABS defines homelessness as 'home'lessness rather than rooflessness. It is the lack of one of more elements that represent 'home'. The ABS statistical definition defines a person as homeless when they do not have suitable accommodation alternatives and if their current living arrangement is: in a dwelling that is inadequate; has no tenure, or if their initial tenure is short and not

extendable; or does not allow them to have control of, and access to space for social relations. This includes living in severely crowded dwellings, living in supported accommodation for the homeless and rough sleepers.

#### Reference

ABS. Information Paper—A Statistical Definition of Homelessness, 2012. Catalogue no. 4922.0.

## Additional tables

**Table A1: Unadjusted average weekly total goods and services expenditure, equivalised disposable household income quintiles, South Australia** (Data source: Household Expenditure Survey, ABS, various years)<sup>19</sup>

	1998-99	2003-04	2009-10	2015-16	% change 1998-99 to 2003-04
Lowest quintile	293.30	441.86	544.25	716.34	50.7%
Second	415.14	611.20	809.92	840.04	47.2%
Third	572.85	895.19	1043.61	1157.39	56.3%
Fourth	708.05	1108.96	1301.81	1401.55	56.6%
Highest quintile	1037.29	1321.59	1813.36	1990.21	27.4%
All households	604.26	820.18	1044.26	1191.73	35.7%
Australian average	699.07	892.83	1236.28	1425.03	27.7%

**Table A2: Equivalised disposable household income, South Australia** (Data Source: Household Income and Wealth, ABS, 2015-16)

	1994-95	2005-06	% change 1994-95 to 2005-06
Lowest quintile	236	328	39.0%
Second	365	516	41.4%
Third	503	677	34.6%
Fourth	671	915	36.4%
Highest quintile	1,086	1,475	35.8%
All households	572	<b>782</b>	36.7%

<sup>19</sup> Figures on household expenditure on goods and services were adjusted for inflation in Table 4 using the consumer price index (25)