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Overview

Australians aspire to leave the world a better place for future generations. And previous generations have largely succeeded in doing so. Australia's population is healthier, wealthier and better housed than 100 or even 20 years ago. Generation-on-generation economic progress has been the norm for the past century.

But continuing progress is not guaranteed. Older Australians today have substantially greater wealth, income and expenditure than older Australians three decades ago, but living standards have improved far less for younger Australians.

The wealth of households under 35 has barely moved since 2004. Poorer young Australians have less wealth than their predecessors and are far less likely to own a home. In contrast, older households' wealth has grown by more than 50 per cent over the same period because of the housing boom and growth in superannuation assets.

There is no evidence that young people's spending habits are to blame for their stagnating wealth – this is not a problem caused by avocado brunches or too many lattes. In fact, younger people are spending less on non-essential items such as alcohol, clothing and personal care, and more on necessities such as housing, than three decades ago.

Economic pressures on the young have been exacerbated by recent wage stagnation and rising under-employment. Older households are better cushioned from low wage growth because they are more likely to have other sources of income. If low wage growth and fewer working hours is the 'new normal', then we could have a generation emerge from young adulthood with lower incomes than the one before it. This has already happened in the US and UK.

Young Australians will also bear the brunt of growing pressures on government budgets. The ageing of the population means higher government spending on health, aged care and pensions. But there will be fewer working-age people for every person over 65 to pay for it.

Governments have supercharged these demographic pressures by introducing generous tax concessions for older people. The share of households over 65 paying tax has halved over the past two decades. And average income tax paid has barely changed for people over 65 despite strong growth in their incomes and wealth. Working-age Australians are underwriting the living standards of older Australians to a much greater extent than the Baby Boomers did for their forebears, straining the 'generational bargain' to breaking point.

Inheritances will not fix the problem. Instead, they exacerbate inequality, because the biggest inheritances tend to go to people who are already wealthy.

Policy change is required. Boosting economic growth and improving the structural budget position are wins for all, but especially for the young. Changes to planning rules to encourage higher-density living in established city suburbs would make housing more affordable. And a fair go for younger people means reducing or eliminating age-based tax breaks that are pushing a growing tax burden on to working Australians.

Just as policy changes have contributed to pressures on young people, they can help redress them. The time for action is now: none of us wants the legacy of a generation left behind.

Recommendations

Recommendation	\$ value / impact	Implementation challenge	Political challenge
Economic growth			
Improve the efficiency of taxation	High	Hard (broad structural	Hard
· Land tax/stamp duty swap		changes)	
Make the tax treatment of savings more consistent			
Company tax reform			
GST/income tax swap	1.2.1		N.A. 11
Improve labour force participation and productivity	High	Medium (mainly straight-	Medium
Increase pension age and superannuation preservation age		forward)	
 Increase childcare rebates to reduce income traps Education reforms 			
Make strategic investments in infrastructure	High	Easy (straight-forward policy)	Medium
Reduce the role of politics in project selection	High	Easy (straight-iorward policy)	Medium
Require published independent assessment of all proposed projects			
Housing affordability	Madium High	Madium (asmalay nalisy)	Llowd
Boost housing supply by changing planning rules to allow more homes in the inner and middle rings of capital cities	Medium-High	Medium (complex policy)	Hard
Reduce the capital gains tax discount to 25 per cent and wind back negative	\$5.5-6 billion p.a.	Easy (straight-forward policy)	Medium
gearing	ψο.σ-ο billion p.a.	Lasy (straight-iorward policy)	Medium
Age-based tax breaks Tax superannuation earnings in retirement at 15 per cent	\$2 billion + p.a.	Easy (straight-forward policy)	Medium-Hard
Wind back the Seniors and Pensioners Tax Offset (SAPTO) and match the	\$700 million p.a.	Easy (straight-forward policy)	Medium Medium
Medicare levy for senior Australians to that of working-age Australians	φ700 million p.a.	Lasy (straight-iorward policy)	Medium
Match the private health insurance rebate rates for seniors to those of working-age	\$250 million p.a.	Easy (straight-forward policy)	Medium
Australians	φ200 mmon p.α.	Lady (diraigint forward policy)	Wodiam
Intergenerational transfers			
IGTT/income tax swap	Medium	Medium-Hard (structural)	Very Hard
Broaden the super death benefits tax	Low-Medium	Easy (straight-forward policy)	Medium
Keep the Superannuation Guarantee at 9.5 per cent	\$2-2.5 billion p.a.	Easy (straight-forward policy)	Medium
Include the family home in the Age Pension assets test	\$1-2 billion p.a.	Easy (straight-forward policy)	Medium-Hard

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1 Introduction

Australia's recent history has been characterised by remarkable economic progress. Strong economic growth has produced growing wealth and incomes for much of the past century. And with that progress, each generation of Australians has enjoyed a better material standard of living than the one that came before it.

But younger Australians – Millennials and Gen Z (see Box 1) – are not making the same economic gains as their predecessors.

This report examines their stalled progress and what governments can do to help. It reviews indicators of financial wellbeing – wealth, income, employment, expenditure, and government taxes and spending – for people of different ages and how they have changed over time.

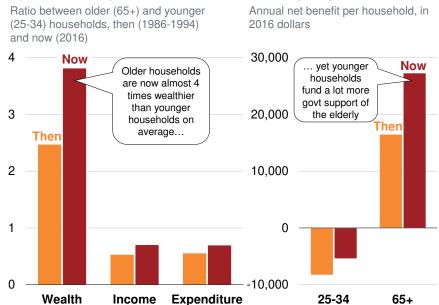
The report identifies policy settings that have contributed to differences in outcomes across generations. And it looks ahead to what an ageing population might mean for the economic future of today's young.

1.1 The economic gap between old and young has widened

Older Australians today have substantially greater wealth, income and expenditure than older Australians three decades ago. Younger Australians have not made the same progress.

Yet over the same three decades the tax and transfer system has become increasingly generous to older Australians (Figure 1.1). The sheer size of these transfers exacerbates the costs of an ageing population, leaving younger Australians to carry the burden and threatening the sustainability of the 'generational bargain'.

Figure 1.1: Older Australians have made large gains in wealth, income, expenditure and government benefits relative to younger Australians



Notes: The starting point ('then') reflects the first survey available, which was 1986 for income, 1989 for expenditure, taxes and benefits, and 1994 for wealth data. The end point ('now') refers to 2016. The ratio is the difference between the average household aged 65+ and the average household aged 25-34. Age group is the age of the household reference person. Wealth is net of liabilities; Income is equivalised disposable income; Expenditure is equivalised and after-tax, Net benefits are cash and in-kind social assistance, net of income tax and indirect taxes (equivalised). Later chapters in this report examine the trends in greater depth and for all age groups. Sources: ABS (2018a) and ABS (2018b).

1.2 The generational bargain is under threat

The generational bargain is an implicit contract between generations. It is underpinned by a recognition of the obligation of one generation to another.¹

The bargain is evident in the private sphere, most obviously in families – where people of different ages provide financial and care-giving support to others at different points in their lives.

But this intergenerational dependence is also evident in society more broadly.²

In public finances, working-age families pay more in taxes than they receive in benefits. This helps support older Australians who are no longer in the workforce. Working-age Australians expect that when they reach retirement, the next group of working-age Australians will support them.

Many public investments – such as infrastructure and national parks – are long-lived and are motivated by the benefit to future and not just current generations.

This society-wide bargain is sustained by a sense of fairness and even generosity between generations: most people aspire to leave the world a better place for future generations.³

Box 1: Talking about the generations

Generational cohorts are defined (loosely) by birth year. Generations are shorthand for groups with similar experiences because of the economics, culture and events of certain periods.

In this report, we refer loosely to generations to communicate the age group we are talking about. The age breakdown of the generations is outlined below:

- Gen Z, iGen, or Centennials: Born 1996 TBD (under 24)
- Millennials or Gen Y: Born 1981-ish 1995 (24 to 38-ish)
- Generation X: Born 1965 1980-ish (39-ish to 54)
- Baby Boomers: Born 1946 1964 (55 to 73)
- Traditionalists or Silent Generation: Born 1945 or before (74+)

^{1.} Collard (2000).

^{2.} Weiss (1992); and Intergenerational Commission (2018, p. 8).

^{3.} An ABS survey of aspirations found 'Australians aspire to an economy that sustains or enhances living standards into the future' and 'Australians aspire to manage the environment sustainably for future generations': ABS (2013). A survey by the UK Intergenerational Commission found strong support for the statements 'The success of our society is measured by how well we provide for older generations' and 'Each generation should have a higher standard of living than the one that came before it': Intergenerational Commission (2018, p. 8).

But if this sense of fairness breaks down, the bargain can come under threat. A sense that one generation is drawing down more than is sustainable or constraining opportunities for subsequent generations can undermine the compact.

Growing wealth disparities and government transfers between young and old are straining the bargain in Australia. This strain has emerged partly because of economic and demographic shifts but also because of policy choices – particularly housing and tax policies. Both the young and old have a stake in responding to these challenges.

1.3 Why we focus on economic wellbeing

This report focuses on the current and future economic position of Australians of different ages.

There are of course many other contributors to wellbeing. The environment, health, social interactions, freedom and agency are all important to quality of life.⁴ In most of these areas, life has substantially improved over the past 50 years.⁵

But there are also future risks.⁶ Most obviously, climate change is a substantial and growing threat to the health, safety and economic position of today's young people and their children.⁷

Focusing on economic wellbeing keeps the discussion tractable and picks up a lot of what we care about. Money isn't everything, but

4. Treasury (2012); and Sen (1994).

incomes are well-correlated with overall welfare.⁸ This is partly because greater resources can support improvements in other things we care about such as health and environmental sustainability.

1.4 How we assess economic wellbeing

Comparing outcomes across generations requires an assessment of lifetime economic wellbeing – that is, consumption opportunities across the lifecycle. The long-term economic position of households depends on a number of factors:

- net wealth the store of resources that can be spent in future –
 which depends on past savings, plus appreciation in asset values;
- future income;
- future government spending and its incidence by age;
- future taxes which depend on future government spending, plus interest on accumulated government debt; and
- future inheritances and gifts.

Unfortunately the data to comprehensively assess lifetime economic outcomes for each generation is limited. This report draws on ABS surveys that provide a picture of the financial wellbeing of households over three to four decades (see Box 2).⁹ This is a substantial period, but still not long enough to assess a generation's financial position over its full lifecycle.

^{5.} Sternberg (2019).

CSIRO Futures looked holistically at what kind of country Australia could be in 2060 – economically, socially and environmentally – and mapped out two plausible but very different paths depending on the choices we as a nation make between now and then: CSIRO (2019).

^{7.} CSIRO and BOM (2018); Garnaut (2011); and Morrissey et al. (2015).

^{8.} Wellbeing rises with income, whether comparing people of different incomes within a country, across countries, or comparing the economic growth (GDP) of countries: Stevenson and Wolfers (2008) and Stevenson and Wolfers (2013).

Regular surveys of household income and expenditure have been running since the 1980s (ABS Survey of Income and Housing and Household Expenditure Survey), and household wealth has been measured since the 1990s (ABS Survey of Household Income and Wealth).

An important part of the story is yet to come. The economic future of Millennials, Gen Z and subsequent generations will depend on the future course of productivity and income growth. Strong per-person economic growth almost inevitably leaves a generation better off than the one that came before it. But continued high levels of growth are not guaranteed. There are real fears that lower growth may be the 'new normal' for the rich world, including Australia.¹⁰

We shouldn't just assume that future strong growth will resolve the pressures highlighted in this report. To do so is to transfer the entire risk of low growth onto today's young. Policy settings can help (Chapter 7).

1.5 Intergenerational inequality exacerbates broader inequality

This report compares outcomes between generations. It does not focus on issues of *intra*-generational fairness or inequality more generally; other reports have explored this issue in detail (Box 3).

Considering the average (and median) outcomes for different age groups conceals a huge amount of variability within each age group. The wealth of some young people has grown rapidly, just as some older people struggle to make ends meet.

But intergenerational inequality and intragenerational inequality are linked.¹¹

If a generation does relatively badly, opportunity and mobility for the poor of that generation may be particularly restricted. Indeed, people today who are both young and poor are probably the most financially

Box 2: Data sources used in this report

- ABS surveys of household wealth, income, expenditure, taxes, and government benefits over time. We use Confidentialised Unit Record Files (CURFs) from the Survey of Income and Housing, the Household Expenditure Survey, the Survey of Household Income and Wealth, and the Fiscal Incidence Study. We use equivalisation methods, where appropriate, to standardise for households of different sizes (see Appendix A).
- The Household, Income and Labour Dynamics in Australia (HILDA) Survey, which includes information on gifts and inheritances (see Chapter 6).
- Probate records from the Victorian Public Records Office, which include information on inheritances (see Chapter 6 and Appendix B).

^{10.} Minifie et al. (2017, Chapter 1).

^{11.} The Productivity Commission found that countries with higher income inequality tend to have low intergenerational mobility, that is, an individual's income depends more on their parents' income: PC (2018a, Chapter 5).

vulnerable group in society.¹² On the flip side, if a generation does relatively well, the inheritances they leave to their children actually increase inequality in subsequent generations (see Chapter 6).

The reforms we propose in Chapter 7 to reduce intergenerational inequality are likely to reduce intragenerational inequality too.

This report is structured as follows:

Chapter 2 highlights the growing wealth gap between older and younger Australians.

Chapter 3 examines differences in income growth and employment across age groups, including the effects of recent wage stagnation.

Chapter 4 shows how people's spending patterns have changed over time.

Chapter 5 highlights how current tax and transfer policies are exacerbating budget pressures caused by the ageing of the population.

Chapter 6 shows why inheritances cannot be relied on to reduce intergenerational inequality.

Chapter 7 recommends a range of policy reforms to improve economic opportunity for younger Australians and future generations.

The Productivity Commission (PC) recently reviewed the evidence on inequality, poverty and disadvantage in Australia.^a It found that wealth inequality had increased over the past 15 years – with the richest 10 per cent enjoying faster growth in wealth than others.

In contrast, income and consumption inequality in Australia rose only slightly over the past three decades (and not at all according to some measures).^b Grattan analysis suggests that disposable income after housing costs became more unequal over the past decade.^c

Income mobility is relatively high in Australia compared to other countries, but some households still face entrenched disadvantage. Persistent and recurrent poverty affects a small but significant proportion of the population.^d

Box 3: Inequality in Australia

a. PC (2018a).

b. Income inequality, as measured by the Gini coefficient, increased a little in the mid-2000s, from 0.31 in 2004, to peak at 0.34 just before the GFC. Since then the Gini coefficient has oscillated between 0.32 and just above 0.33 (based on household equivalised disposable income): Wood et al. (2018, pp. 32-33).

c. Coates (2019a, Slide 7).

d. PC (2018a).

^{12.} Younger Australians are more likely to suffer financial stress than older Australians (see Section 4.2). Financial comfort is particularly low among students, renters, single parents with young children, the unemployed, and casual workers (ME Bank (2019)) – groups that all tend to be younger.

2 Australia's growing generational wealth gap

Australian household wealth has grown strongly over the past 30 years. Real net wealth has more than tripled, from \$2.8 trillion in 1990 to \$10.3 trillion in 2018.¹³

But the wealth bonanza has been far from equally spread. Most of the increase in wealth has been accumulated by older households, 14 who benefited most from the housing boom and growth in superannuation assets.

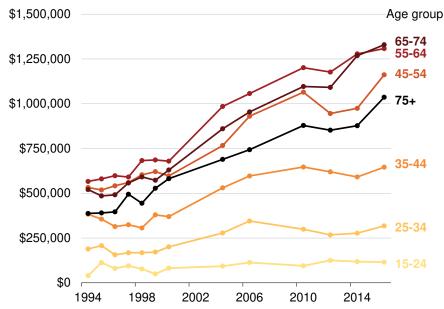
For younger Australians, wealth has barely shifted in the past decade. And poorer younger Australians today have even less wealth than their predecessors. Younger Australians are less likely to own a home than their parents at the same age, and those who do are taking on a lot more debt.

The conditions that precipitated the rapid growth in wealth for older Australians are unlikely to be repeated.¹⁵

2.1 The wealth gap between young and old is growing

There is a growing gap in wealth between older and younger Australians (Figure 2.1).¹⁶

Figure 2.1: The wealth gap between young and old is growing
Average household net wealth by age of head of household, 1994 to 2016, in
2016 dollars



Notes: ABS summary data was not available for the 75+ age group in 2004 and 2006, so microdata was used instead. In all other missing years no survey took place. Age group is the age of the household reference person. Net wealth is not equivalised. See Figure 2.2 for equivalised net wealth.

Sources: ABS (2017a) and ABS (2002).

^{13.} Figures reported in 2018 dollars: ABS (2019a).

Two-thirds of the real increase in average wealth between 1994 and 2016 was among households over 55 (and 86 per cent was among households over 45).

^{15.} Daley et al. (2018a, Section 10.1) and Chapter 7.

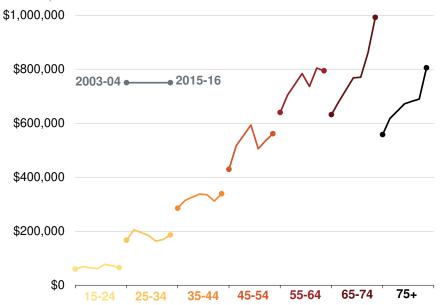
^{16.} Our analysis of wealth uses the ABS Survey of Household Income and Wealth, which includes demographic information about households. Total household wealth in this survey is about 10 per cent less than in the National Accounts. The survey appears to underestimate wealth because very-high-wealth households are rare and unlikely to be sampled. Nonetheless, this survey remains the best available source of information because National Accounts data do not include any breakdown by age. Our estimates are therefore likely to underestimate the wealth

The average household headed by someone aged 65-74 now has more than \$1.3 million in net assets, up from \$530,000 in real terms for a household of the same age in 1994.¹⁷ Wealth for an average household headed by someone aged 25-34 increased only modestly – from an average of \$190,000 in net assets in 1994 to \$300,000 today.¹⁸ Over the past decade, wealth for younger households has barely shifted.

Households typically are at their wealthiest between ages 55 and 74. The peak has more than doubled in two decades – from an average of about \$0.5 million in net assets per household in 1994, to more than \$1.3 million in 2016.¹⁹

The trends are the same in 'equivalised' terms – which takes into account household size and estimates the net wealth equivalent to a single-adult household (Figure 2.2).²⁰ Average net wealth is naturally lower in equivalised terms. Households headed by someone aged 65-74 have an average equivalised net wealth of \$1 million today, up from about \$600,000 just 12 years ago. Meanwhile younger households have made barely any gains compared to a household of the same age 12 years ago.²¹

Figure 2.2: The net wealth of older households has grown substantially Average equivalised net wealth by age of head of household, 2003-04 to 2015-16. in 2015-16 dollars



Notes: Equivalised net wealth accounts for households of different sizes. Microdata enabling equivalisation was only available from 2003-04. Age group is the age of the household reference person.

Source: ABS (2018a).

gap between young and old, because most very-high-wealth households will be older.

^{17.} For the median household headed by someone aged 65-74, net wealth was \$800,000 in 2016, up from \$300,000 in 1994, in real terms.

^{18.} For the median household headed by someone aged 25-34, net wealth was \$160,000 in 2016, up from \$90,000 in 1994, in real terms.

^{19.} Figures reported in 2016 dollars. Median net wealth for households headed by someone aged 55-74 was about \$300,000 in 1994, compared to more than \$800,000 in 2016.

^{20. &#}x27;Equivalised' net wealth is household net wealth adjusted by an equivalence scale to facilitate comparisons between households of differing size and composition. See Footnote 36 on page 19 and Appendix A.

^{21.} Households headed by someone aged 25-34 had an average equivalised net wealth of \$190,000 in 2016, compared to \$170,000 in 2004, in real terms.

2.2 Housing and superannuation were the big wealth drivers

Most of the growth in household wealth is in property and superannuation assets (Figure 2.3). Booming property prices since the turn of the century have made many long-term property owners unexpected millionaires.

Alongside the housing boom, compulsory superannuation contributions²² and tax benefits encouraging further contributions²³ have substantially increased the nest eggs of households nearing retirement.

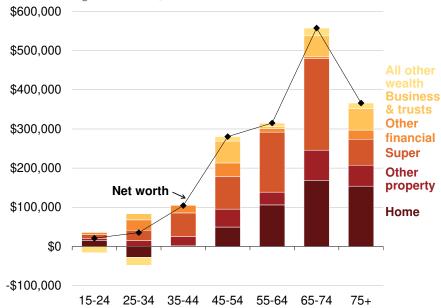
2.3 Generational gains in wealth are not guaranteed

For most of the 20th century, each generation was wealthier than the one before it at the same age.

But in the US, UK and many European Union countries, Millennials have lower wealth than members of earlier generations at the same age.²⁴ There is a risk Australia could go down the same path (Figure 2.4).

Younger Australians are now less likely to own a home than young people were in the past.²⁵ In 2016, 45 per cent of 30-year-olds owned a home; in 1981, the figure was 67 per cent.²⁶ By contrast, older people are just as likely to own a home now as they were then – with about 80 per cent of 65-year-olds owning a home.

Figure 2.3: Housing and superannuation were the big wealth drivers Change in mean wealth per household in 2015-16, compared to households of the same age in 2003-04, in 2015-16 dollars



Notes: Each asset type is net of liabilities. Change in equivalised wealth per household shows the same trends. Age group is the age of the household reference person.

Source: ABS (2018a).

^{22.} A compulsory contribution by employers to employees' superannuation was introduced in 1986 at a level of 3 per cent. Between 1992 and 2002 compulsory contributions were progressively increased from 3 per cent to 9 per cent, and they were raised again in 2014, to 9.5 per cent. Under current legislation, compulsory contributions will rise progressively to 12 per cent between 2021 and 2025.

^{23.} See Chapter 5.

^{24.} Kurz et al. (2018); Intergenerational Commission (2018); and Hüttl et al. (2015).

^{25.} Home ownership has also fallen among young people in the US and UK: Kurz et al. (2018) and Intergenerational Commission (2018).

^{26.} ABS (2017b); and ABS (1983).

People who purchased homes in the 1980s faced higher interest rates, but the barriers to home ownership are much greater today (see Box 4 on page 18).

And younger Australians who do own a home are taking on a lot more debt. Average household debt has almost doubled for households headed by someone aged 35-44 – the age at which households typically carry the most debt (Figure 2.5). The average household headed by someone aged 55-64 is also carrying more debt than it used to, but this is largely because they are buying a second property.²⁷ Most households headed by someone over 65 have already paid off their mortgages.

2.4 The wealth gains of today's older Australians are unlikely to be repeated

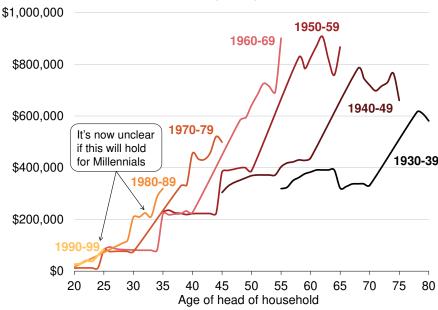
Younger Australians purchasing homes or investing in other assets cannot expect to enjoy the same capital appreciation as people who purchased homes or invested in other assets two decades ago.

House prices and superannuation earnings have grown well above incomes for the past two decades (Figure 2.6). At the height of the boom, the average capital gain for a regular house in Sydney was higher than average annual earnings: for many workers their houses earned more than they did!²⁸

Falling interest rates have been a major contributor to the divergence between incomes and asset prices.²⁹

Figure 2.4: Historically, each generation fared better than the last at the same age

Median net worth in 2015-16 dollars, by birth year



Notes: This 'quasi-longitudinal' analysis uses multiple waves of the ABS Survey of Income and Housing to infer changes in households' wealth. It is not a full longitudinal survey, because the households surveyed each time are different. But the households surveyed each time are drawn from more or less the same population of households, apart from deaths in the interim.

Sources: ABS (2017a) and ABS (2002).

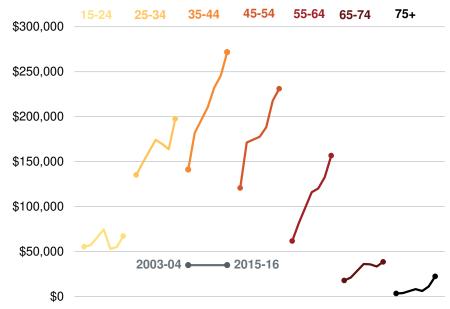
^{27.} Median household debt for this age group is only \$16,000, indicating that at least 50 per cent of households headed by someone aged 55-64 have relatively little debt. And three-quarters of Australians aged 55-64 own a home: ABS (2017b).

^{28.} For example, in the four years to December 2015, the median Sydney house increased in value from \$579,000 to \$915,000 (in 2015 dollars) – a \$336,000 real increase. Average real earnings for a full-time worker in NSW over the same period were \$322,000: ABS (2019b, Table 4) and ABS (2019c, Table 11A).

^{29.} Saunders and Tulip (2019); and Kohler (2018).

Figure 2.5: Households aged 35-64 are taking on almost twice as much debt as they were in 2004

Average household debt by age of head of household, in 2015-16 dollars

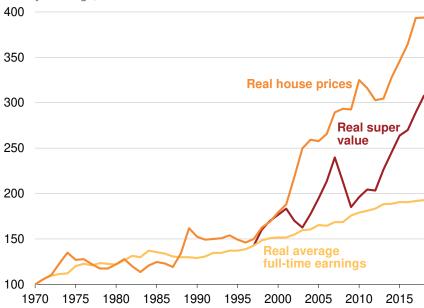


Notes: Debt includes mortgages, credit card debt, investment debt, student loans and other loans. Mortgage on the home is the main form of debt for all age groups, followed by rental property loans for older age groups and HECS/HELP liability for younger age groups. Younger households today have higher student debt than their predecessors, because of higher fees and participation rates. But these differences are small relative to mortgage debt: Daley et al. (2014, p. 9). Age group is the age of the household reference person.

Source: ABS (2018a).

Figure 2.6: Younger Australians are unlikely to enjoy the same windfall gains in asset prices

House prices, cumulative superannuation earnings, and average full-time weekly earnings, index: 1970 = 100



Notes: Superannuation index set equal to earnings index at 1997, because 1998 is the earliest date for which super returns are available. Superannuation index includes only APRA-regulated super funds. House price data for 1970 to 2010 is from Yates (2011). House price data from 2010 is six-monthly growth in the residential property price index from ABS (2019b), deflated by the CPI. Earnings data is full-time ordinary time earnings from ABS (2019c), deflated by the CPI.

Sources: Yates (2011, p. 263); Grattan analysis of ABS (2019b); ABS (2019c); PC (2018b, Figure 2.2,p. 117); Grattan analysis of APRA (2018).

For housing, other contributors were easier access to credit, construction of new dwellings not keeping pace with population growth in large cities,³⁰ and policy settings – including assistance for first-home buyers, and more generous tax concessions for property investors.³¹

Even if tight supply continues to keep house prices high, 20 years of average annual growth of 5 per cent above inflation is unlikely to be repeated.³² Most observers³³ believe prices are unlikely to grow as quickly in future because income growth is likely to be slower, and official interest rates can't fall much further.³⁴

For superannuation investments, generous tax concessions also played a role in boosting portfolio values. Some of the most generous tax concessions and contribution rules for superannuation have now been wound back, and it is likely there will be further tightening given the sizeable budget cost for very little policy benefit.³⁵

2.5 Poorer young Australians are falling behind

All but the richest households headed by someone younger than 35 have *lower* real net wealth in 2016 than similar households in 2004 (Figure 2.7). And while well-off younger people in 2016 have more

wealth than their counterparts in 2004, these gains are dwarfed by those of households over 65, right across the wealth spectrum.

Home-ownership rates are also dropping fastest for the young and the poor (Figure 2.8). In 1981, 60 per cent of people in the lowest wealth quintile aged 25-34 owned a home. Today the figure is just 20 per cent.

In other words, wealth gaps are growing *within* most generations as well as *between* them, and the gaps within generations are particularly large for young people. The intergenerational transfer of wealth via inheritances will only exacerbate this problem (Chapter 6).

^{30.} Daley et al. (2018b, pp. 29-35).

^{31.} Negative gearing and the capital gains tax discount create an attractive tax environment for debt-financed property investment, particularly for high-income earners. The 50 per cent capital gains tax discount was introduced in 1999. Before then, real gains were taxed. But the discount has more than compensated investors for the effects of inflation: Daley et al. (2016a, p. 10). Since the discount was introduced, the number of negatively geared property investors has more than doubled: Daley et al. (Ibid., p. 25).

^{32.} House prices grew 4.94 per cent per annum above inflation between 1997 and 2017: Yates (2011) and ABS (2019b).

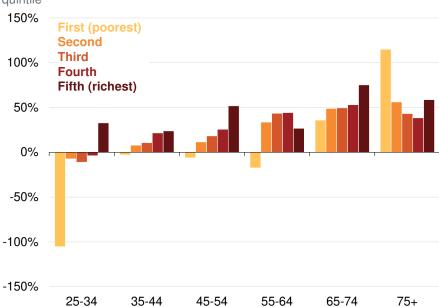
^{33.} Eslake (2014); Fox and Tulip (2014); Daley et al. (2018b); and CoreLogic (2019).

^{34.} The RBA's cash rate target today is 1 per cent (August 2019) compared to 5-7 per cent before the boom began (1995-1997): RBA (2019a).

^{35.} Daley et al. (2018a, pp. 97-100).

Figure 2.7: Richer young Australians are faring OK, but poorer young Australians are going backwards

Real change in average household net wealth, 2003-04 to 2015-16, by wealth quintile

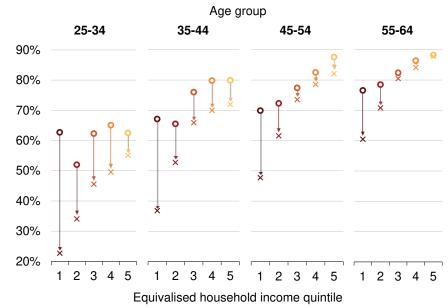


Notes: Compares households in 2015-16 to households of the same age in 2003-04. Quintiles are calculated for household net wealth at each age group. Age group is the age of the household reference person.

Source: ABS (2018a).

Figure 2.8: The young and the poor found it particularly difficult to buy a home

Home-ownership rates by age and income, 1981 and 2016



Notes: This chart updates Burke et al. (2014) using Census data obtained from the ABS. Difficulties in accurately calculating household incomes across time using Census data mean that changes in home-ownership rates by age and income are indicative and that small changes in ownership rates should be ignored. Excludes households with tenancy not stated (for 2016) and incomes not stated. Age group is the age of the household reference person.

Sources: ABS (2017b) and Burke et al. (2014).

Box 4: What about the high interest rates of the late 1980s?

Many older Australians bought their first home at a time when houses were cheaper, but interest rates were much higher. No doubt the interest rates of the 1980s – averaging 13 per cent over the decade and peaking around 1989 at 17 per cent^a – were a scarring experience for many new homeowners.^b

The initial 'mortgage burden'^c peaked for a brief period around 1989, but otherwise hasn't changed much between 1980 and today.^d Today, higher house prices offset lower interest rates.

But what has changed is that it is now harder to save a first home deposit, a first home loan now entails more risk, and borrowers live with that risk for longer. These factors together are a significant additional barrier to home ownership that earlier generations did not face.

- a. Koukoulas (2019).
- b. Hughes (2019).
- c. Defined as the proportion of mean household disposable income to service a new first home mortgage on an average residential dwelling at the interest rate of the time. See Daley et al. (2018b, pp. 21-23) for a fuller discussion.
- d. Daley et al. (2018b, p. 21).
- e. Ibid. (Chapter 2).

3 Stagnating incomes particularly affect the young

Incomes have grown across all age groups over the past three decades. But recent wage stagnation has hit young people particularly hard. Older households tend to be better cushioned from lower wage growth because they are more likely to have other sources of income.

If low wage growth is the 'new normal' then Australia could have a generation emerge from young adulthood with lower incomes than the one before. This has already happened in the US and UK.

Employment for young people is also of concern. Youth unemployment is higher than we would normally expect at this point in the economic cycle. And youth under-employment is much higher than in the past. More young people are choosing to study – which may help them earn more in future – but for now, a growing share of those studying are unsuccessfully seeking work.

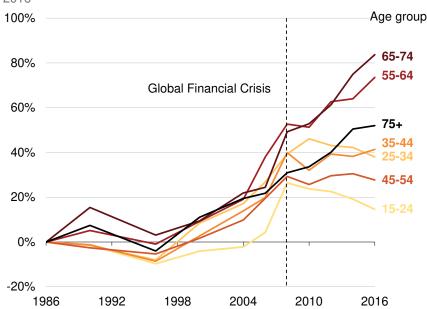
3.1 Incomes of younger households have stalled

Households of all ages have higher average incomes than households of the same age 30 years ago. But incomes of older households are growing faster than incomes of younger households (Figure 3.1).³⁶

Income trends of old and young have diverged since the Global Financial Crisis (GFC) (Figure 3.1). Incomes have continued to grow strongly for households headed by someone aged over 55, while

Figure 3.1: Incomes of younger Australians have slowed or gone backwards since the GFC

Cumulative change in median equivalised disposable income, real, 1986 to 2016



Notes: Equivalised household income accounts for households of different sizes. The ABS adjusted its measure of disposable income in 2007-08, so disposable income in earlier years is scaled-up to reflect this. Where the disposable income of a household was negative we have adjusted it to zero, as per the ABS's preferred method: ABS (2016). Age group is the age of the household reference person.

Source: ABS (2018a).

^{36.} We focus on equivalised disposable income because this is the income available to households to spend or save. A larger household would normally need more income than a smaller household to achieve the same standard of living, so the OECD and ABS 'equivalise' income by taking account of other adults and children in the household. The primary adult is given an equivalence weight of 1, with each extra person aged 15 or older adding 0.5 and each person under 15 adding 0.3. For example, the equivalised income of a couple with two young children is their total income divided by 2.1: ABS (2016).

the income of younger households has stalled, or gone backwards. Households under 45 are still substantially ahead of where households of the same age were in the 1980s, but some of their income gains have been eliminated by recent declines.

In absolute terms, working-age households typically have higher incomes than retired households. But this does not necessarily translate to higher living standards (Box 5). Households aged 25-64 have the highest equivalised disposable income, though the gap between them and households over 65 has narrowed significantly since the GFC.³⁷

It is not yet obvious that people born in the 1990s will leave young adulthood with higher incomes than people born 10 or 20 years earlier had at the same age (Figure 3.2). Indeed, if wages continue to stagnate, the well-established pattern of generation-on-generation progress in incomes may be under threat.

On the other hand, if real wage growth returns to long-run average levels, then lifetime incomes will be higher for younger generations. This is particularly likely if younger people today eventually enjoy improved health in their older years and are able to work for longer.

Young people are noticeably pessimistic about the chances of a turnaround. Only 32 per cent of Australia's 16-24 year-olds expect to have a better standard of living than their parents, compared with an average of 59 per cent across countries surveyed.³⁸

Box 5: Retirees need less income than when they were working

Retirees need less income than when they were working to achieve the same standard of living. A generally-accepted benchmark for an adequate income in retirement is around 70 per cent of a person's pre-retirement income.^a This is because most of life's expenses come down in retirement.

Retirees who own a home tend to have paid off their mortgage by the time they retire, and no longer need to spend money on children or work-related expenses. Pensioners also spend less because they get discounts on council rates, car registration, electricity and gas bills, public transport fares, and pharmaceuticals. Retirees' spending also tends to be lower because they have more time, and so cook at home more and eat out less.^b

Medical costs normally go up in retirement, but these are largely borne by the taxpayer.c

And retirees' spending decreases further as they age. Retirees' spending is highest in early retirement when they are healthiest, and seek to enjoy a range of activities including international travel. But as health declines they spend less on recreation and travel. Spending tends to slow around the age of 70, and decreases rapidly after 80.^d

^{37.} Average annual equivalised disposable income in 2016 for households headed by someone aged 25-34 was \$55,000, compared to \$58,000 for 35-44, \$56,000 for 45-54, \$55,000 for 55-64, \$43,000 for 65-74 and \$33,000 for households over 75. Median incomes by age reveal a similar pattern.

^{38.} International Youth Foundation (2017, p. 23).

a. Daley et al. (2018a, pp. 56-57).

b. Ibid. (pp. 28-30).

c. See Chapter 5.

d. Daley et al. (2018a, pp. 28-30).

3.2 Slow wage growth particularly hurts young people

Wage growth has been stagnant in Australia for more than five years.³⁹ The mining investment boom cushioned the impact of the GFC on wages, but more recently Australia has recorded the same low wage growth seen in other developed countries over an extended period.⁴⁰

Slower wage growth particularly hurts young people. Unlike older people, they are less likely to have other sources of income (Section 3.3) and so rely more on wages.

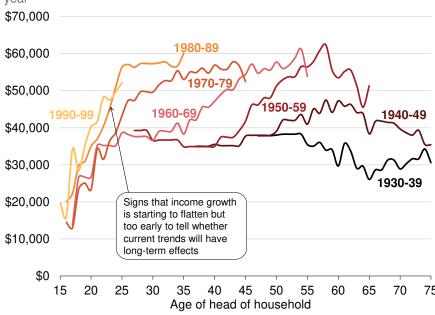
People who enter the workforce at a time of low wage growth are particularly hurt because they miss out on the stronger wage progress people normally make in their first decade in the workforce.⁴¹

Economists hotly debate whether this extended period of wage stagnation is just a longer than normal economic cycle or whether it is the 'new normal' for developed economies. 42 If low wage growth is simply a hangover from the mining boom then we would expect wages to bounce back on their own, or with the support of monetary policy. But several years on, poor wage growth persists and interest rates can't go much lower. 43

The experience in other countries with extended periods of wage stagnation provides a cautionary tale. Income of Millennials in the UK is no higher than the income of people born 15 years before them at

Figure 3.2: Younger Australians are not making the same income gains as their predecessors

Average annual equivalised disposable income in 2015-16 dollars, by birth year



Notes: Equivalised disposable income accounts for households of different sizes. This 'quasi-longitudinal' analysis uses multiple waves of the ABS Survey of Income and Housing to infer changes in households' income. It is not a full longitudinal survey, because the households surveyed each time are different. But the households surveyed each time are drawn from more or less the same population of households, apart from deaths in the interim. The ABS adjusted its measure of disposable income in 2007-08, so disposable income in earlier years is scaled-up to reflect this.

Source: ABS (2018a).

^{39.} Kalba and Meekes (2019) show wage growth has been falling since 2008, and particularly from 2013, even after controlling for individual, household and job characteristics. Wage growth has slowed in public and private sectors and all states and territories, and across all occupations, industries, and income levels: Treasury (2019a).

^{40.} Bishop and Cassidy (2017) and Treasury (2019a, p. 23).

^{41.} The Federal Reserve Bank of New York showed that earnings growth typically stagnates after the first 10 years of a career: Guvenen et al. (2015).

^{42.} See Minifie et al. (2017).

^{43.} Ellis (2019); and Dyer and Keane (2019).

the same age,⁴⁴ and in the US Millennials' incomes are lower.⁴⁵ The big question is whether these young people 'left behind' will ever catch up.

3.3 Older households have more diversified incomes and have benefited from rising female workforce participation

The incomes of older Australians are higher than previous cohorts enjoyed at the same age (Figure 3.1), despite low wage growth for all ages since the GFC.⁴⁶ There are three main contributing factors: superannuation income, the pension, and the increased workforce participation (Figure 3.3).

Superannuation and pension income have grown substantially above inflation over the decade, boosting the incomes of people over 65.

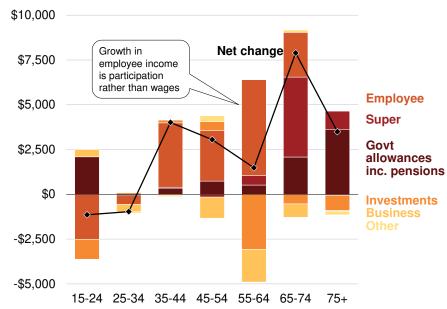
Rising female workforce participation has been a major contributor to the growth in household incomes across all age groups over the past three decades (Figure 3.4).

Over the past 20 years, growth in workforce participation of women aged 55-64 has been a standout⁴⁷ – accounting for much of the growth in the employee income for older households over this period. The proportion of over-65s in the workforce has also risen for both men and women.

The rise in female workforce participation is probably partly due to a culture shift and partly in response to policy change. In 1994 the Keating Government announced that the pension eligibility age for

Figure 3.3: Growth in superannuation and pensions has boosted older people's incomes

Real change in average annual equivalised income by source, 2007-08 to 2015-16, in 2015-16 dollars



Notes: Equivalised income accounts for households of different sizes. This chart compares households in 2015-16 to households of the same age in 2007-08. Age group is the age of the household reference person.

Source: ABS (2018a).

^{44.} Intergenerational Commission (2018).

^{45.} Kurz et al. (2018); and Duke (2016).

^{46.} Grattan analysis of ABS (2014) and ABS (2018c).

This has occurred despite age-discrimination in the workplace making it difficult for many older Australians to find work: Betts (2014), ABS (2019d, Table 16) and COTA (2018).

women would be gradually increased from 60 to 65 (to align with the pension age for men).⁴⁸ The policy took full effect in 2014.⁴⁹

3.4 Youth unemployment is rising

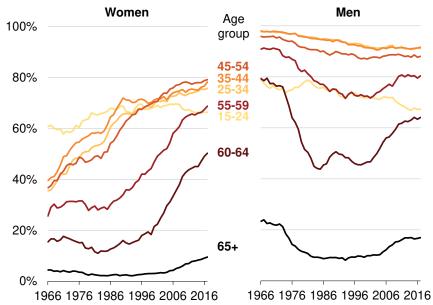
A lack of employment opportunities is also affecting the incomes of younger Australians. Both unemployment and *under*-employment are rising for young people (Figure 3.5 and Figure 3.6).

Overall unemployment in Australia has vacillated between 5 per cent and 6 per cent since the GFC. It is currently closer to 5 per cent, similar to the OECD average.⁵⁰

But unemployment for 15-24 year-olds remains stubbornly high. Youth unemployment is always higher than general unemployment.⁵¹ The gap tends to widen during economic downturns and narrow when employment markets are strong.⁵²

Given the health of the general labour market, we would expect the gap between youth employment and 'prime age' employment to be relatively low. Instead, it has continued to increase since the GFC (Figure 3.5) and is now above the OECD average.⁵³

Figure 3.4: Labour force participation is rising for older women Labour force participation by age, 1966 to 2017



Notes: The decline in workforce participation of men aged 60-64 during the 1970s is partly explained by the earlier retirement age for servicemen (age 60), as well as higher incomes and wealth enabling some to retire at the same time as their wives: Jordan (2001).

Source: OECD (2017).

^{48.} Nielson and Harris (2010); and Cowan (2016).

^{49.} Women born in 1949 or later have the same retirement age as men, which was 65 until 2017, and is now being gradually increased to 67.

^{50.} OECD (2017).

^{51.} At any point in time, youth making the transition from education to work account for a disproportionate share of job-seekers: Borland (2015, p. 232). The main challenges for unemployed people aged 15-24 are 'insufficient work experience' and 'too many applicants for available jobs': ABS (2019d, Table 16).

^{52.} The logic is that young people tend to be the marginal employees – when employment demand is soft, employers are more likely to keep their existing (older) employees and not hire the same number of new (younger) employees. See Borland (2015).

^{53.} Post-GFC, Australia had low youth unemployment relative to other countries in the OECD. But while other countries have improved since, youth unemployment

Figure 3.5: Youth unemployment is rising

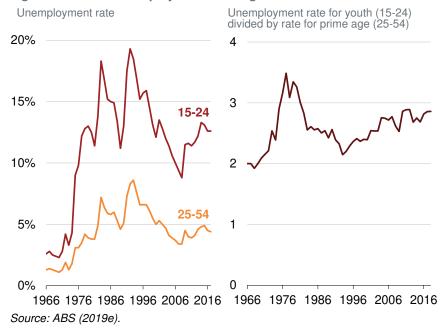
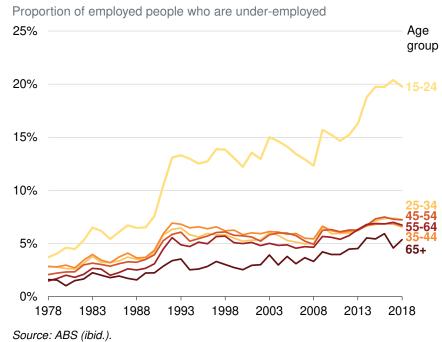


Figure 3.6: A lot more young people are under-employed now than in the 1980s



Youth *under*-employment is also rising. The share of employed young people who are actively seeking (and available for) more work has grown from 12 per cent to 20 per cent over the past decade (Figure 3.6). Rising under-employment of under-25s accounts for much of the growth in under-employment overall.

The increase in under-employment is largely caused by more young people being in part-time employment. Young people are increasingly working in part-time jobs, ⁵⁴ and in many cases those jobs do not give them the number of hours they'd like to work.⁵⁵

A study comparing pre- and post-GFC cohorts of young people found that even among those who found employment, job quality was inferior for the post-GFC cohort in terms of job security, hours of work, and earnings.⁵⁶

Various factors could be contributing to the deteriorating youth labour market: the weaker bargaining position of young workers post-GFC;⁵⁷ the changing nature of jobs towards more part-time and casual employment;⁵⁸ competition for entry-level work with temporary migrants;⁵⁹ fewer hours available as workforce participation rates among older households rises;⁶⁰ and more young people in education

in Australia has risen and overtook the OECD average in 2017: 12.6 per cent compared to 11.9 per cent: OECD (2017).

for longer.⁶¹ The biggest concern is the potential for long-term damage to the health, wellbeing, and future earnings of young Australians – as young workers in Europe, Japan, the UK and US are already experiencing.⁶²

3.5 More young people are choosing to study

More young people are finishing secondary school⁶³ and going on to higher education – partly because higher education has become more accessible in recent years, but probably also in response to the lack of employment opportunities for young people.

The proportion of young people in education has been growing, particularly since 2013 (Figure 3.7). In 2009 the Gillard Government announced it would introduce demand-driven funding for universities from 2012, sparking a substantial increase in university enrolments.⁶⁴ Young people are also studying for longer.⁶⁵

The proportion of people aged 15-29 who are 'not in employment, education or training' (NEET) has been falling (Figure 3.7), because of the dramatic increase in the proportion of young people studying. The share of people in education who are actively seeking (and available for) work has grown from 4.5 per cent in 2008 to 6.2 per cent in 2017.

The extra time spent in education by today's young people may be a factor driving relatively lower income growth (Section 3.1) and wealth accumulation (Section 2.1) to date for younger cohorts. People

^{54.} Brotherhood of St Laurence (2018); and Borland (2017).

^{55.} Most under-employed people (at any age) are typically looking for up to 20 hours of additional work. A quarter of under-employed people under 35 are looking for more than 20 hours of work: ABS (2019d, Table 6).

^{56.} Watson (2018).

^{57.} Ibid.

^{58.} Brotherhood of St Laurence (2018); and Dhillon and Cassidy (2018).

^{59.} Australia's migration program has shifted towards younger migrants over the past decade (ABS (2017b)), many of whom are students, visitors, and working holiday visa-holders (ABS (2018d)), likely to be competing for entry-level work, particularly part-time and short-term work (Daley (2019) and McDonald (2017)).

^{60.} See Figure 3.4.

^{61.} Rozenbes and Farmakis-Gamboni (2018); and Dhillon and Cassidy (2018).

^{62.} Sternberg (2019).

^{63.} Year 12 completion rates increased from 64 per cent in 2009 to 79 per cent in 2017: ACARA (2018).

^{64.} Norton et al. (2018a); and Norton (2018).

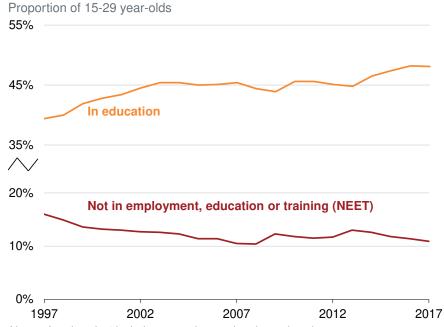
^{65.} Largely because part-time university enrolments have increased: Norton et al. (2018b).

^{66.} OECD (2017).

who are devoting time to studying will typically be working less and earning less than people who are not studying. And this effect may last after completion of studies. People who spend three or more years completing a university degree may not expect to earn significantly more in the early years after graduation than people who spent the same time gaining work experience.⁶⁷

More education typically means a premium in earnings later – so the trend towards study could improve incomes in future. But the earnings premium for university graduates aged 25-34 was lower in 2016 than a decade earlier. More early-career graduates are taking jobs that don't require a university degree (such as sales and service positions), 9 so a lower proportion of graduates are enjoying an earnings premium than in the past. This is yet another sign of the challenging job market for young people.

Figure 3.7: More young people are studying



Notes: 'In education' includes secondary and tertiary education.

Source: OECD (2017).

^{67.} Wilkins (2016, Figure 4.7) suggests that, for men, the earning premium for a bachelor degree is the equivalent of about three-to-four years of extra work experience, for the first four years after graduation, then grows significantly. For women, the earning premium for a bachelor degree is the equivalent of about five years of extra work experience immediately after graduation.

^{68.} Norton et al. (2018a, p. 93).

^{69.} This narrows the income gap between early-career graduates and people who finished their education at Year 12: Norton et al. (Ibid., p. 93).

4 Spending and saving don't explain the wealth gap

The intergenerational wealth gap cannot be explained by too many avocado brunches. In fact, today's young people spend only a little more than young people three decades ago – and the higher spending is mostly on essentials, particularly housing.

Younger households are also saving more. They have made sacrifices to do this. Spending on non-essentials such as alcohol, clothing, personal care, and household services and furniture is lower for younger Australians today than three decades ago.

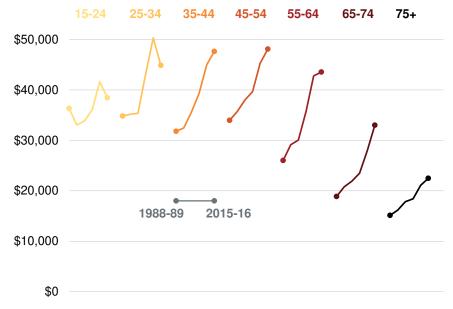
Older Australians are using their higher incomes to save *and* spend more. They spend considerably more than older Australians of three decades ago, including growing spending on non-essentials such as recreation. If current savings patterns continue, many older households will pass on substantial wealth to the next generation (Chapter 6).

4.1 Spending by older households is growing faster than younger households

Most households are spending more, in real terms. But spending by Australia's youngest households – those headed by someone under 35 – has gone backwards in the past six years (Figure 4.1).

In 2015-16, spending by households headed by someone aged 15-34 was only 10-to-30 per cent higher than that of a similar household in 1988-89 (in real terms). By contrast, spending by households headed by someone aged 55 or older was 50-to-80 per cent higher. The figure for households in the middle (headed by someone aged 35-54) was 40-to-50 per cent (Figure 4.2).

Figure 4.1: Younger households cut their spending in recent years Median annual after-tax equivalised expenditure since 1988-89, in 2015-16 dollars



Notes: Equivalised household expenditure accounts for households of different sizes. Age group is the age of the household reference person.

Source: ABS (2017c).

4.2 Younger households are cutting back on non-essentials

Households of all ages are spending more than they used to on 'essentials' – housing, power, food, medical care, and transport (Figure 4.3). Housing costs have vastly outgrown other costs – spending on housing by the median household has grown almost 4 per cent per year above inflation over the past three decades.⁷⁰

Meanwhile, younger households are cutting back on almost all 'non-essentials' – recreation, alcohol and tobacco, clothes and personal care, household services and furnishings (Figure 4.3). This suggests they are restricting their spending on 'luxuries' to accommodate the growing cost of essentials and to save and invest (see next section).⁷¹

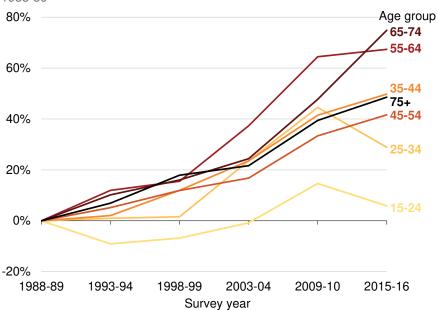
Younger households are also more likely than older households to suffer financial stress. Half of households headed by someone younger than 35 have experienced one or more indicators of financial stress – such as skipping a meal or failing to pay a bill on time – in the past 12 months (Figure 4.4).

4.3 Most households are saving more than they used to

Households of all ages are saving more than they were in the early $2000s^{72}$ – both in absolute terms and as a proportion of income

Figure 4.2: Spending by older households is growing faster than younger households

Cumulative real change in median after-tax equivalised expenditure since 1988-89



Notes: Equivalised household expenditure accounts for households of different sizes. Age group is the age of the household reference person.

Source: ABS (2017c).

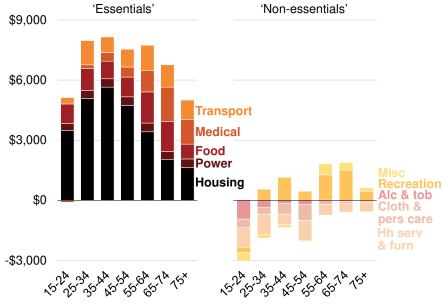
^{70.} Equivalised expenditure on housing for the median household has grown from \$2,780 per year in 1988-89 to \$7,190 per year in 2015-16, in real terms.

^{71.} Distinguishing between 'essential' and 'non-essential' expenditure is of course a generalisation. We assume that *most* of the expenditure in the 'essentials' categories is necessary to live and work. We deem all other categories 'non-essentials'. For example, we classify clothing among the 'non-essentials' even though some spending on clothing is 'essential'. And we classify transport as 'essential' even though some spending in this category is likely to be optional.

^{72.} The RBA's household savings ratio was low in the decade before the GFC, picked up for several years after the GFC, and has been dropping back since 2015, although it remains above the levels of the early 2000s: RBA (2019b). Our measure of savings is the difference between disposable income and goods and

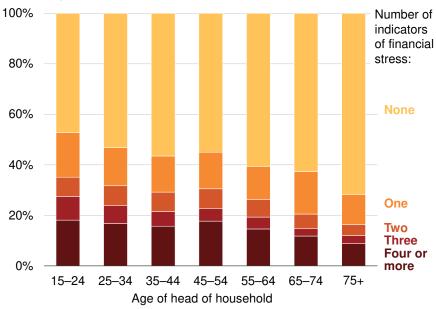
Figure 4.3: All households are spending more on 'essentials'; younger households are spending less on 'non-essentials'

Change in median annual household equivalised expenditure on goods and services, 1988-89 to 2015-16, in 2015-16 dollars



Notes: Equivalised household expenditure accounts for households of different sizes. The 'Misc' (miscellaneous) category includes a wide range of goods and services such as stationary, jewellery, donations, and fines. Housing includes rent or mortgage repayments (interest only) on the main home and other associated costs (e.g. insurance, rates, repairs). Age group is the age of the household reference person. Source: ABS (2017c).

Figure 4.4: Younger households are more likely to suffer financial stress Proportion of households experiencing indicators of financial stress in the past 12 months, 2015-16



Notes: The ABS has nine indicators of financial stress. They are whether, due to a shortage of money, a household: skipped meals; did not heat their home; failed to pay bills on time; failed to pay registration on time; spent more money than received; pawned or sold something; sought assistance from community organisations; sought financial help from friends or family; or would be unable to raise \$2000 in a week for something important.

Source: ABS (2017a).

(Figure 4.5). In 2016, the typical (median) household saved at a fairly consistent rate across ages, except retirees who save a little more.⁷³

Households save for various reasons, including to make large purchases such as buying a house or car, to insure against unexpected loss of income, and to fund their retirement.⁷⁴

Younger households are saving more despite spending more on essentials. Their incomes grew before the GFC (see Chapter 3), but the growth in their savings seems to be mainly due to cutting spending on non-essentials (Figure 4.3).

Older households are saving more despite also spending a lot more. They are able to do so because their incomes have grown substantially (Figure 4.6).

For households in the middle of the age distribution, income and expenditure have grown at similar rates. Most of these households are saving a little more than they used to, but households typically don't save much at this age when expenses and debt are highest (see Chapter 2).

Figure 4.5: Most households are saving more than they used to

Notes: Savings = disposable income minus total expenditure on goods and services, divided by household equivalisation factor. Savings rate = savings as a proportion of equivalised disposable income. Where the disposable income or expenditure of a household was negative we have adjusted it to zero, as per the ABS's preferred method: ABS (2016). Age group is the age of the household reference person. Source: ABS (2017c).

-5%

Grattan Institute 2019 30

-\$2,500

Median annual savings, in 2016 dollars

\$10,000

2004 2010 2016

\$7,500

\$5,000

\$2,500

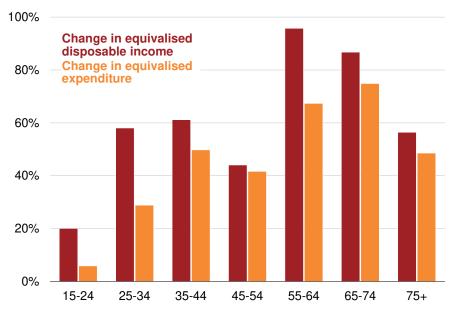
\$2,500

services expenditure. Employer contributions to superannuation are therefore additional, as are capital gains on the home, but mortgage repayments and voluntary super contributions after-tax are included.

^{73.} Daley et al. (2018a).

^{74.} See RBA (2016) for a discussion of changing attitudes towards saving.

Figure 4.6: Older households are both earning and spending a lot more Real change in median household income and expenditure, 1988-89 to 2015-16



Notes: Equivalising household income and expenditure accounts for households of different sizes. Where the disposable income or expenditure of a household was negative we have adjusted it to zero, as per the ABS's preferred method: ABS (2016). Household expenditure includes investments such as mortgage and super payments, but excludes income tax. Age group is the age of the household reference person. Source: ABS (2017c).

5 Tax policy and an ageing population exacerbate challenges for younger Australians

Current tax and spending policies are underwriting unprecedented transfers from younger households to older ones.

Net transfers to older generations have always been a feature of Australia's tax and transfer system, largely driven by health and Age Pension spending. But in the past two decades, policy decisions have boosted per-person spending on health and pensions for older Australians at the same time as cutting taxes for this group. Working-age Australians are underwriting the living standards of older Australians to a much greater extent than the Baby Boomers or earlier generations did for their forebears.

The increasing transfers to older households will supercharge the structural budget pressures already coming down the line from population ageing.

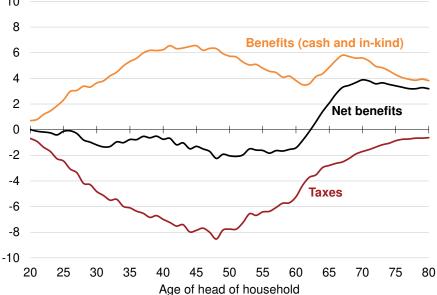
5.1 The generational bargain is under threat

Australia's tax and welfare system supports an implicit generational bargain. Working-age Australians, as a group, are net contributors to the budget. Their contributions support older Australians, who take a lot more out in spending and pension payments than they contribute in taxes (Figure 5.1).⁷⁵

Today's working-age Australians of course anticipate that the generation after them will support them in the same way as they age. But this long-standing bargain is under threat.

Figure 5.1: Young Australians are net contributors to the budget; older Australians are net drawers

Total household taxes, benefits, and net benefits by age in 2015-16, \$ billions 10



Note: Net benefits refers to all tax paid minus all social transfers (cash and in-kind). Source: ABS (2018b).

^{75.} The highest level of benefits is typically between the ages of 35 and 44, when households have children attending school. Taxes are also relatively high for this group of households.

The ageing of the population will substantially increase the burden on current and future young Australians. And government policy has supercharged the demographic challenge.

5.1.1 Australia's population is ageing

Australia's population is ageing⁷⁶ and this increases pressure on health, aged care and pension costs.⁷⁷ It also erodes the tax base, because older households are less likely to be working (although some have substantial investment income).

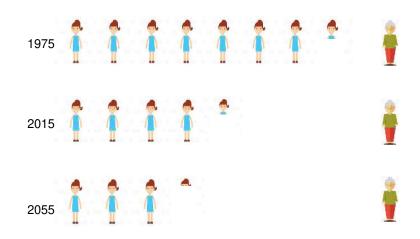
The budget pressures from population ageing will become more acute over the next few decades. As the large Boomer generation reaches retirement and people live longer, there will be fewer working-age Australians for each person over 65.

This demographic shift is substantial. The number of working-age (15-64-year-old) Australians for every person aged 65 or older fell from 7.4 in the mid-1970s to 4.4 in 2014-15 and is projected to fall further to 3.2 in 2054-55 (Figure 5.2).⁷⁸

Baby Boomers won the demographic lottery: the sheer number of Boomers meant their average contribution to support older generations was relatively small. And while it is fair and appropriate to make sure Baby Boomers are assisted in the same way as they age, Generation Xers and particularly Millennials and Gen Z will need to shoulder a greater burden per person to do so.

Demographic bad luck is one thing, but policy changes have made this burden heavier by substantially increasing net transfers to older households.

Figure 5.2: Baby Boomers won the demographic lottery; Gen Z lost



Australians aged 15-64 for every Australian 65+

Sources: Treasury (2015, p. 12) and ABS (2018e).

^{76.} Australians are living longer, healthier lives, fertility rates remain below replacement rate, and the Baby Boomer generation has begun to retire. The net result is an ageing population: Treasury (2015) and PBO (2019).

^{77.} PBO (2019).

^{78.} This is the ABS median estimate: Treasury (2015, p. 12) and ABS (2018e).

5.1.2 Government policies have increased transfers to older households

Net government benefits – benefits and spending minus taxes – are much higher *per household* for people over 65 than they were 30 years ago (Figure 5.3). And they grew particularly strongly in the past 15 years.

The increase in net government benefits is partly because of higher health and pensions spending per person (Section 5.2), but also because of the increasing generosity of tax concessions for older Australians (Section 5.3).

5.2 More health spending and higher pension payments account for most of the increased benefits for older Australians

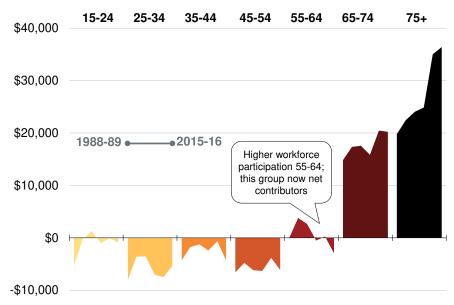
Government spending increased for households of all ages over the past 30 years (Figure 5.4). But the increase was largest for households headed by someone aged 65 or older. The biggest components of this increase were strong growth in health spending and higher cash payments – mainly pensions.

5.2.1 Pensions increased more than other benefits

Governments are spending more on cash payments – including family support payments, pensions and other welfare payments,– to all groups except 55-64 year-olds (because more of them are working rather than getting pension payments).⁷⁹

Governments increased many payments – including the Age Pension and family tax benefits – during the 2000s when government revenues

Figure 5.3: Net transfers to older households are increasing Average annual net benefits per household (equivalised) in 2015-16 dollars, by age of head of household



Notes: Net benefits are social assistance benefits in cash plus support in kind minus income and sales taxes. Equivalisation accounts for households of different sizes. Age group is the age of the household reference person.

Source: ABS (2018b).

^{79.} Female workforce participation has grown substantially for 55-64 year-olds over the past two decades, partly due to the change in retirement age for women (see Section 3.3).

were growing strongly off the back of the mining boom and a strong economy.⁸⁰

Unemployed working-age Australians were excluded from the largesse. Newstart has barely moved in real terms in more than 20 years (Figure 5.5). Unemployment benefits have fallen further behind pensions because of less-generous indexation and the absence of one-off boosts. People on Newstart now have to live on \$40 a day, compared to \$65 for full-rate pensioners.⁸¹

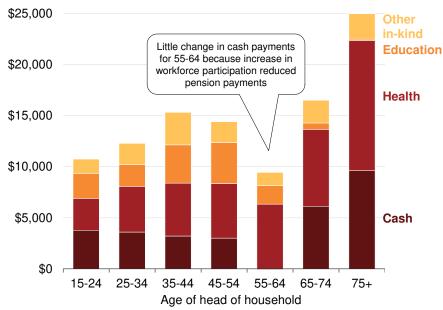
More recently, governments have sought to constrain the growth in transfer payments by tightening eligibility to various programs⁸² and freezing the indexation of some benefits. These changes have mainly wound back benefits for working-age households rather than seniors.⁸³

5.2.2 Rising health spending also contributed to greater spending on older households

Rising health spending has also been a major contributor to increases in government spending across all age groups, but particularly on older Australians (Figure 5.4).

Figure 5.4: Cash payments and health are the biggest contributors to higher spending on older Australians

Change in government benefits per household (1988-89 to 2015-16), in 2015-16 dollars



Source: ABS (2018b).

^{80.} For example, there was a reduction in the taper rate of the Age Pension asset test in 2006-07, and the base rate of the pension was increased by more than 10 per cent in 2009. There was a further increase in the pension rate in 2010-11 to compensate for the introduction of the carbon price – and the increase stayed after the tax was repealed: see Daley et al. (2014, p. 24) and PBO (2018, p. 29). Family tax benefits were increased and their eligibility substantially expanded in 2000. A 'baby bonus' was introduced in 2004: see Redmond and Whiteford (2013).

^{81.} Australian Government (2019a).

^{82.} Examples include a doubling of the asset taper rate for the pension in 2017, and new assessment tables for work-related impairment for the disability support pension in 2012: Wood et al. (2019, p. 11).

^{83.} Between 2010-11 and 2016-17, governments achieved savings of \$7.1 billion through changes to family payments, compared to \$3.2 billion saved through changes to the pension: Daley and Coates (2016).

More and better services per person has been the major driver of the growth in health spending over the past two decades.⁸⁴ Pressure on governments to subsidise new and better treatments is unlikely to go away. In every OECD country other than Iceland, health spending as a share of the economy has grown as countries have got richer.⁸⁵

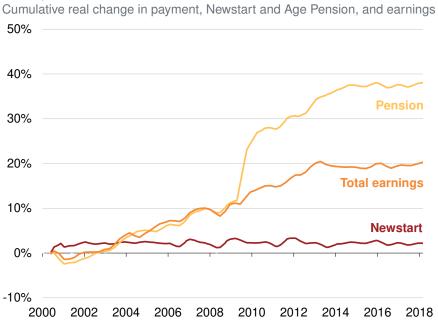
The payoffs from health spending – longer and healthier lives – are a wonderful thing. But services have to be paid for. In Australia 70 per cent of health spending is paid for by state and federal governments. The combination of increasing costs per person for people in their 70s and 80s with a rising share of Australians in these age groups will exacerbate the pressures on government budgets.

5.3 Tax changes have reduced the contributions from older households

Income taxes paid by households over 65 have risen only slightly in the past 30 years – far less than for households under 35. Yet incomes for over-65s have increased much more than incomes for under-35s over the same period (Figure 5.6). The share of households over 65 paying income tax has fallen from 27 per cent in the mid-1990s to 17 per cent today.⁸⁷

A series of tax policy decisions over the past three decades – tax-free superannuation income in retirement, refundable franking credits, and special tax offsets for seniors – mean we now ask older Australians

Figure 5.5: The pension has grown significantly since the turn of the century, but Newstart has flat-lined



Sources: ABS (2019c) and Australian Government (2019b, Table 6).

^{84.} Daley et al. (2014, pp. 25-27).

^{85.} Palmer and Jeyaratnam (2016).

^{86.} Daley et al. (2019a, p. 92).

^{87.} Grattan analysis of ATO (2019a) and ABS (2018f), 1994-95 to 2015-16. Calculated based on the number of taxable individuals over 65 compared to the total population over 65. Some of the taxable individuals may still pay net tax of zero.

to pay a lot less income tax than we once did.⁸⁸ These policies have typically benefited self-funded retirees.

Older Australians make more of a contribution through consumption taxes, because their spending has grown faster than other groups, but the overall increase in their tax burden is far less than for working-age households.⁸⁹

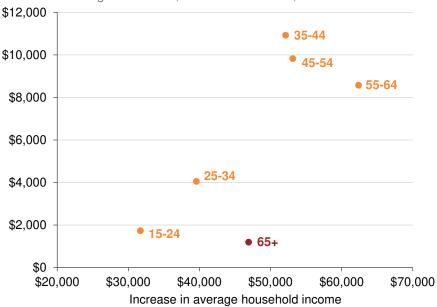
These and other changes have substantially reduced the amount of tax an older Australian pays compared to a younger Australian on the same income (Figure 5.7). An older household on \$100,000 pays on average less than half the tax of a working-age household on the same amount. Or considered another way, an older household on \$100,000 pays the same amount of tax as a working-age household on around \$50,000.

Age trumps income in determining how much tax people pay. Thirty years ago, age played a smaller role – particularly at higher income levels. For example, in 1989, an average household with an income of around \$100,000⁹⁰ paid 1.5x more tax if they were under 65 than if they were over 65. Today, it is 2.4x more tax if they are under 65 than if they are over 65.⁹¹ There is simply no policy justification for this degree of age segregation.

Low taxation of older households combined with concessional taxation of some forms of wealth (Chapter 7) means that all but the most well-off older households are net recipients from government (Figure 5.8).

Figure 5.6: Income taxes increased only slightly for households aged 65+, despite their large increase in income

Increase in average income tax, 1988-89 to 2015-16, in 2015-16 dollars



Note: Age group is the age of the household reference person.

Source: ABS (2018b).

^{88.} For a full history of relevant tax policy changes, see Daley et al. (2016b, pp. 15-17).

^{89.} Average annual income for households aged over 65 increased by \$47,000 in real terms from 1988-89 to 2015-16, while total taxes increased by \$5,400. Households aged under 35 had a lower increase in income (\$38,000), but a higher increase in total tax (\$5.800).

^{90.} In today's terms.

^{91.} Grattan analysis of ABS (2018b).

Figure 5.7: Older Australians pay far less tax than younger Australians on the same income

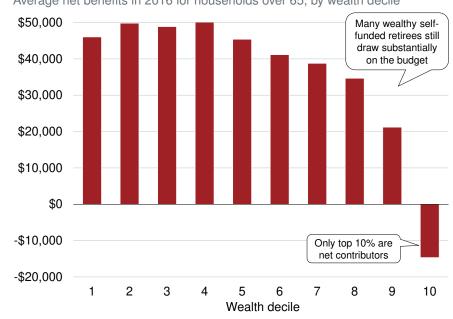
Household total tax in 2015-16



Notes: Total tax includes both direct and indirect taxes. Total income includes all sources. Figure shows a random sample of 500 households per age bracket. Households over 65 are by age of household reference person.

Source: ABS (2018b).

Figure 5.8: Even wealthy retirees draw on the budgetAverage net benefits in 2016 for households over 65, by wealth decile



Notes: Net benefits are social assistance benefits in cash plus support in kind minus income and sales taxes. Households over 65 are by age of household reference person.

Source: ABS (ibid.).

Grattan Institute 2019

5.4 Have older households paid their taxes?

One argument sometimes advanced to defend age-based tax breaks is that older Australians have 'paid their taxes'. The implication is that they paid enough tax over their working life to check out of the tax system for their final decades.

But this can only be sustained by pushing a growing tax burden onto younger Australians. Working-age households today are underwriting the standard of living of older households to a much greater extent than in the past.

When an average Baby Boomer born in the late 1940s turned 40, they were contributing \$3,200 a year to support older Australians in retirement. An average Generation Xer at 40 today is contributing \$7,300 – more than they are contributing to their own retirement through compulsory superannuation. Under current policy settings, the child of today's 40-year-old will need to contribute about \$11,700 a year by the time they turn 40 (Figure 5.9).

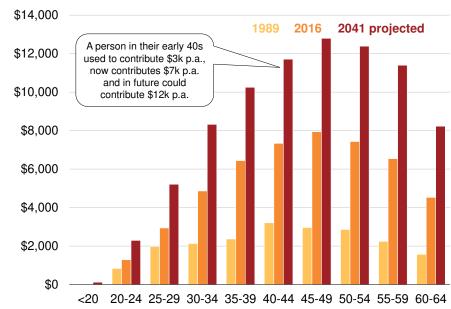
If the economy grows, it is possible to sustain a generational bargain where each cohort takes out more than they put in. But the sheer size of these transfers, combined with an ageing population, will put a growing strain on younger Australians – and the strain will be greater still on their children.

5.5 Business as usual is not an option

Budget policies have not yet caught up with these realities.

Figure 5.9: Today's 40-year-olds contribute twice as much to support older Australians than the Baby Boomers did at 40

Per person contribution by age to net benefits for all households aged 65+, 1989 vs. 2016 vs. 2041, in 2015-16 dollars



Notes: Net benefits for households 65+ include both cash and in-kind transfers minus taxes. The contribution of each age group to total net benefits for households 65+ is based on the proportion of tax paid by households in each age group. Projection factors in population growth, health cost growth (based on PC estimates) and pension cost projections (as per Intergenerational Report 2015 'currently legislated' scenario). Sources: ABS (2018b), ABS (2018f) and ABS (2018e).

^{92.} Average annual earnings in 2016 (all jobs) for people 35-44 was \$71,200, and compulsory superannuation of 9.5 per cent means a contribution of about \$6,800 each year towards their own retirement.

^{93.} This figure is calculated using the ABS 'B series' population projection. The result is similar using higher population growth assumptions: under the higher 'A series' projection, the child of today's 40-year-old would need to contribute about \$11,400 a year by the time they turn 40.

The Commonwealth budget has been in deficit for a decade. Net debt is forecast to reach a new high of 19.2 per cent of GDP in 2018-19. Treasury is forecasting a budget surplus and a fall in net debt in 2019-20,⁹⁴ although the recent downturn in economic conditions raises questions about whether this is the right time to contract the fiscal position.⁹⁵

Projections in the 2015 Intergenerational Report suggest that without policy change, spending will continue to rise as share of GDP over the next decade and beyond because of structural pressures from population ageing. The Intergenerational Report's 'business as usual' scenario had budget deficits reaching 6 per cent of GDP and net debt ballooning to around 60 per cent of GDP by 2055.96

Recent Treasury budget projections are more optimistic. The 2019-20 Budget projected surpluses every year for the next decade. The hope springs from an upbeat assessment of the future path of economic growth and the capacity for government spending restraint.

On growth, estimates of potential GDP⁹⁷ assume labour productivity growth of 1.5 per cent a year, in line with its 30-year average. But this is substantially above the average of 1.3 per cent achieved over the past decade.⁹⁸ Lower productivity growth has become the norm across the developed world. Australia's budget projections ignore the risk that lower growth is the 'new normal'.

94. Commonwealth of Australia (2019).

On spending, the projections assume no new spending initiatives for the coming decade.⁹⁹ Under this assumption, spending as a share of GDP will fall steadily over the decade, from 24.9 per cent today to 23.6 per cent by 2029-30,¹⁰⁰ during a period when the ageing of the population will increase spending pressures.¹⁰¹ This would require spending in 2029-30 to be more than \$40 billion lower (\$33 billion in today's dollars) than if spending stayed as a constant share of GDP.

This would require unprecedented spending restraint. Despite population ageing, and overall population growth, 102 real spending growth would need to average around 1.3 per cent per annum over the decade – or 1.8 per cent if the economy performs as strongly as Treasury projects. Either way, this is substantially lower than any previous government has achieved over the past 50 years. Any new spending commitments, such as responding to the growing calls for higher Newstart payments or an increase in aged care spending, would cut into projected surpluses.

One risk from optimistic projections is complacency about future budget pressures. This is already evident in the Government's decision to legislate sizeable income tax cuts in 2024-25, which it claims it will be able to deliver while also keeping the budget in surplus.¹⁰³

In the absence of enduring economic good fortune and historically abnormal spending restraint, Australia will be left with growing structural budget deficits over the next decade. The intergenerational pressures built into the budget are coming home to roost.

^{95.} Lowe (2019).

^{96.} Treasury (2015, pp. xiv-xv).

^{97. &#}x27;Potential GDP' is the level of output that an economy can produce at a constant inflation rate: OECD (2019a). In practice, Treasury estimates potential GDP based on analysis of underlying trends for population, productivity, and participation, smoothing out business cycle fluctuations: Treasury (2019b).

^{98.} Annual average increase in real GDP per hour worked between 2007-08 and 2017-18: ABS (2018g). Growth was even less between Q1 2009 and Q1 2019 (1.1 per cent): ABS (2019f).

^{99.} It is long-standing Treasury practice to project government spending based on current policies for most expenditure categories. This is to avoid second-guessing future government decisions. But it means the spending projections are baseline estimates, rather than estimates of the likely 'future state of the world'.

^{100.} Commonwealth of Australia (2019).

^{101.} PBO (2019).

^{102.} Rizvi (2019).

^{103.} Wood et al. (2019).

6 Inheritances won't close the generation gap

Wealth is growing in Australia and is becoming more concentrated in the hands of older Australians (Chapter 2). Older households tend to save more than they consume, so we can expect much of the wealth being accumulated by older Australians will be passed on through gifts or inheritances.

These intergenerational wealth transfers partly address the concerns about today's young being left behind. But most inherited money is received by people over 55, so inheritances won't help young people when they most need the money. And inheritances tend to transmit wealth to people who are already well-off. A generation more reliant on inheritances for building wealth is therefore one in which wealth is less equally shared.

6.1 Inheritances in Australia are sizeable and growing

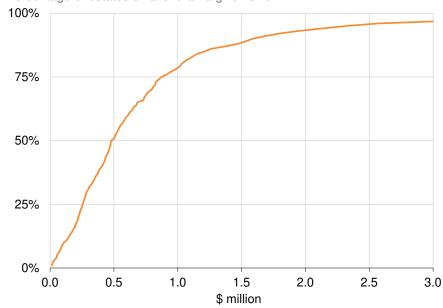
There is no national database of inheritances in Australia. But each state maintains records through their respective probate offices.

Analysis of probate data from Victoria focusing on 'final estates' – that is, estates without a surviving spouse – gives an indication of the size of current inheritances (see Appendix B for details). The size of estates in Victoria is not materially different from the national average. ¹⁰⁴

Our analysis suggests the typical (median) final estate size is \$480,000, and the mean \$773,000. ¹⁰⁵ About 21 per cent of final estates

are larger than \$1 million, and 7 per cent are larger than \$2 million

Figure 6.1: About half of final estates are bigger than \$500,000 Percentage of estates smaller than a given size



Notes: Includes only estates where no bequest was made to a spouse. This will almost always correspond to 'final estates'; that is, people without a surviving spouse.

Source: Grattan analysis of probate files, Victoria, 2016.

⁽Figure 6.1).

^{104.} Grattan analysis of the data underlying Baker (2014) concluded that the average estate size in Victoria is about 3 per cent lower than the national average, so it is likely that conclusions drawn from a Victorian analysis are indicative of nationwide trends.

^{105.} This is the total value of assets passed on by the deceased. Most final estates will have multiple beneficiaries, so individual inheritances will be smaller.

About three quarters of final estate money is received by children of the deceased. A further 11 per cent is transferred to other younger family members, such as nieces and nephews, or grandchildren. Only a very small proportion of estate money is left to people unrelated to the deceased (about 4 per cent), or to charities (about 2 per cent).

About half of the total value of final estates is in real estate. 106

The size of inheritances grew by about 2 per cent above CPI over the past 15 years. Given strong recent growth in wealth (Chapter 2) and the evidence that older households generally maintain and even increase their wealth in retirement (Box 6), the size of inheritances can be expected to grow even faster in future.

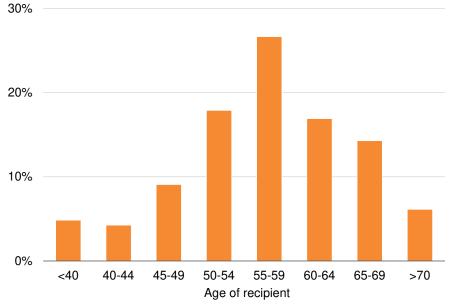
6.2 Most inheritances come later in life

Inherited wealth will boost the living standards of today's younger households in the future. But inheritances usually don't arrive at the stage of life when people need the money most – when they are saving for a first home deposit or raising a young family.

The most common age to receive an inheritance from parents is 55-59. More than one quarter of estate wealth is transferred to people in this age bracket. More than 80 per cent is inherited by people 50 and over (Figure 6.2).

As life expectancy continues to increase, we would expect today's young people to inherit even later in life. This means that inheritances

Figure 6.2: Inheritance money largely flows to people over 50 Proportion of inheritance money



Notes: In probate data, the age of the recipient is only identifiable for children of the deceased, which represents three quarters of final estate money. Includes only estates where no bequest was made to a spouse. This will almost always correspond to 'final estates'; that is, people without a surviving spouse.

Source: Grattan analysis of probate files, Victoria, 2016.

^{106.} It's likely some additional wealth was held in real estate shortly before death; for example, before a property was sold to fund an aged care bond.

^{107.} Grattan estimates from Household, Income and Labour Dynamics in Australia (HILDA) survey: Melbourne Institute (2018). Differences between the HILDA inheritance data and the probate collections are outlined in Appendix B.

^{108.} Bequests to grandchildren and other family members of younger generations are typically smaller.

are increasingly likely to supplement people's retirement savings rather than help young people into the housing market.

6.3 Inheritances tend to go to the already wealthy

Wealthier people are more likely to receive an inheritance ¹⁰⁹ and when they do, it is likely to be larger. The mean inheritance for someone in the wealthiest 20 per cent is more than three times as big as the mean for someone in the poorest 20 per cent (Figure 6.3).

This is not just because people tend to be older and therefore richer when they inherit. The same trends are evident in the size of inheritances within age groups (Figure 6.4). The wealthiest 20 per cent of individuals of a given age receive 38 per cent of inheritance money, the poorest 20 per cent receive only 8 per cent.

If inheritances primarily transfer capital to wealthy people, they will not address concerns about intergenerational inequality for much of the population. Those most likely to be in need – the young and poor – are far less likely to benefit from these transfers.

On current trends, much of accumulated wealth in the hands of Baby Boomers will be handed down to the wealthiest Generation Xers, significantly exacerbating wealth inequality, and inequality of opportunity. Inheritances reinforce the advantages of having rich parents, such as better schooling, connections, and a greater ability to take risks because of a parental safety net.¹¹⁰

And if inheritances rather than lifetime earnings are the dominant route to wealth, there is less incentive for talented Australians to get ahead

Box 6: Many older households are net savers in retirement

Most retirees do not draw down on their savings. Indeed, many are net savers through much of their retirement.

Grattan analysis of ABS wealth data for households over 60 found that that non-housing financial wealth increased for all retiree age cohorts over an 11-year period, which included the GFC.^a

Other studies have similar findings. The Productivity Commission found that people aged 75-79 had a higher net worth on average than people aged 50-54. International studies also find that retired households spend far less than their life expectancy would suggest. C

And it is not just the well-off who are preserving their assets. Australian Government data shows that less than half of all pensioners draw down on their assets, and more than 40 per cent are net savers.^d Another recent study found that at death the median pensioner still had 90 per cent of their wealth as first observed.^e

This is consistent with our analysis of probate records, which found that people over 70 leave significantly larger estates than people under 70.

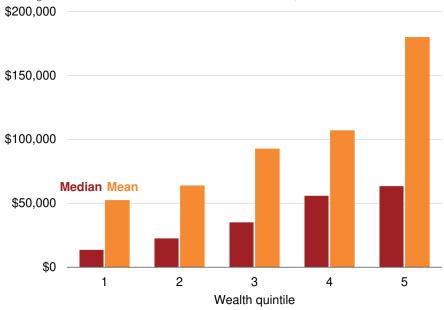
- a. Daley et al. (2018a).
- b. PC (2015).
- c. Love et al. (2009); and Banks et al. (1998).
- d. Morrison (2015). About 45 per cent of pensioners were net savers in the first five years of receiving the Age Pension, while 43 per cent drew down their savings. In the final five years of receiving the pension, 43 per cent of pensioners were still net savers, while just a third drew down their savings.
- e. Asher et al. (2017) find that age pensioners preserve financial and residential wealth and leave substantial bequests.

^{109.} The probability that someone in the wealthiest 20 per cent receives an inheritance in a given year (2 per cent) is more than double that for someone in the poorest 20 per cent: Grattan analysis of Melbourne Institute (2018).

^{110.} Bowles and Gintis (2002); and Fagereng et al. (2015).

Figure 6.3: Wealthier people tend to get much larger inheritances

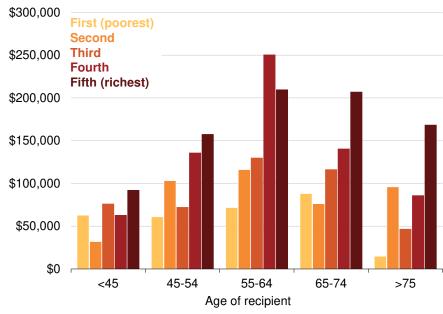
Average size of inheritance where one was received, in 2017-18 dollars



Notes: Data on inheritances by wealth of recipient is not available from the probate records, so we use data from HILDA on self-reported inheritances. We observe significantly lower average inheritances in HILDA than in the probate data, for reasons set out in Appendix B. Wealth captured only in 2002, 2006, 2010, and 2014 surveys. Wealth quintile based on most recently-captured wealth information for an individual. Individuals are allotted to a wealth quintile across all respondents.

Source: Melbourne Institute (2018).

Figure 6.4: Wealthy people of all ages tend to get larger inheritances Average size of inheritance where one was received, by wealth quintile, in 2017-18 dollars



Notes: Data on inheritances by wealth of recipient is not available from the probate records, so we use data from HILDA on self-reported inheritances. We observe significantly lower average inheritances in HILDA than in the probate data, for reasons set out in Appendix B. Wealth captured only in 2002, 2006, 2010, and 2014 surveys. Wealth quintile based on most recently-captured wealth information for an individual prior to the inheritance. Individuals are allotted to a wealth quintile within their 5-year age band.

Source: Melbourne Institute (ibid.).

through individual endeavour – what Thomas Piketty described as the 'Jane Austen world'. 111

6.4 Gifts to younger generations tend to be small

Bequests are not the only way wealth is transferred across generations. Parents might help their children by contributing to a house deposit or helping them with other purchases.¹¹²

People under 45 are more likely to report receiving a gift from parents than an inheritance in a given year. But gifts tend to be small – less than \$1,000 a year on average (Figure 6.5). For the 16 years from 2002 to 2017, fewer than 3 per cent of people under 50 reported receiving gifts totalling more than \$50,000.¹¹³

Substantially more money is transferred from older generations via inheritances than gifts (Figure 6.5). So gifts are unlikely to have much impact on closing the generation gaps outlined in this report.¹¹⁴

Figure 6.5: Young people are more likely to receive gifts, but the

Average amounts received in a given year, in 2017-18 dollars

amounts tend to be small

\$4,000

\$3.000

Note: Averages include people who did not receive a gift or inheritance in that year. Source: Melbourne Institute (2018).

25-29 30-34 35-39 40-44 45-49 50-54 55-59 Age of recipient

^{\$2,000}Gifts from parents
Inheritances

\$1,000

^{111.} Piketty (2014, p. 241).

^{112.} The 'Bank of Mum and Dad' has played a much greater role in the past decade for people lucky enough to have this financial support, but fewer first homebuyers have been accessing this support in recent months: North (2019).

^{113.} Includes only people surveyed across all 16 surveys from 2002 to 2017, under 50 at 2017.

^{114.} Of course, monetary gifts are not the only form of generosity from older generations to younger generations. Many older Australians offer substantial in-kind assistance to their adult children, for example with childcare: Betts (2014).

7 What governments should do

Today's young are not making the same economic progress as previous generations. Wealth and income growth have stalled, home ownership rates are down and budget pressures loom.

There are no easy fixes, but policy changes could help restore the fair go. Past government decisions have contributed to the problems. The choices governments make today could help restore generation-ongeneration progress.

Policies to boost economic growth benefit all Australians but particularly the young. Loosening restrictive planning laws would help younger Australians buy a home. And winding back some of the overly generous tax concessions for 'comfortably off' older Australians would ease the emerging budget pressures from an ageing population.

Older Australians are now wealthier than ever before, so given inheritances are likely to grow, governments should consider taxing intergenerational wealth transfers to fund income tax cuts. At a minimum, taxpayers should stop subsidising inheritances through superannuation tax concessions and exclusions from the Age Pension assets test.

7.1 Boost economic growth

Strong economic growth in the past has enabled each generation to do better than the generation before it. But economic growth has slowed in Australia and around the developed world in recent years.

Boosting long-term economic growth benefits everyone. It increases individuals' material living standards and enables societies to invest in the non-material assets that improve people's lives. Growth particularly benefits young people, because their employment and wages are more sensitive to the economic cycle (Chapter 3).

Labour productivity is the most important determinant of future growth. A lot of the factors that affect productivity – including technological innovation and adaptation – are largely beyond the direct control of government. But government does have some levers to improve productivity over the long run.

Grattan's Commonwealth and State Orange Books include a range of recommendations for governments looking to improve the performance of the economy.¹¹⁶ Some of the biggest are summarised below.

Increase the efficiency of taxation

Australia's tax system is a patchwork that includes some highly inefficient taxes. Improving the tax mix would reduce the overall drag of taxes on economic growth.

The biggest tax reform to boost productivity would be for state governments to abolish stamp duties and replace them with broad-based property taxes.

Other reforms that would improve the efficiency of taxation and increase people's incentives to work and invest include: making the tax treatment of savings more consistent; and broadening the GST base and/or increasing the GST rate, and using the proceeds to reduce income tax and boost welfare payments.¹¹⁷

^{115.} The other determinants – terms of trade and participation rates – are projected to move from adding to growth rates to dragging on growth rates over the next decade: Commonwealth of Australia (2019, Budget Paper 1).

^{116.} Daley et al. (2019a); Daley et al. (2018c); and Daley et al. (2012).

^{117.} See Daley et al. (2019a, pp. 32-36) and Daley et al. (2018c, Chapter 9) for specific policy recommendations.

The business tax regime should also be improved. Moving from a profit-based tax to a (destination-based) cash-flow tax would boost incentives for investment. A more incremental reform would be to lower effective company tax rates by introducing investment allowances or accelerated depreciation on new investment.

Improve labour force participation and productivity

Increasing the share of the working-age population that is in work is one of the biggest 'bang for buck' economic levers governments have. 120 Australia can improve the workforce participation of women and older Australians. 121

Increasing the age at which people can access the Age Pension – with appropriate carve-outs for people with poor health – would substantially boost older-age workforce participation. It would ease the structural budget pressures caused by population ageing (Chapter 5). And the economy would benefit from having experienced people stay longer in the workforce.

Increasing childcare rebates would reduce the income 'traps' facing second earners (mainly women) when they increase the number of days a week they work.¹²²

Better education also boosts workforce participation, productivity, and living standards over the medium-to-long term. Grattan's Orange

Books detail a range of policies governments could adopt to improve education. 123

Make strategic investments in infrastructure

Investments in public infrastructure can boost productivity and economic growth. But this doesn't mean that all infrastructure spending is of benefit to future generations.

Poor project selection can reduce or eliminate the economic payoff from infrastructure spending. If governments use debt to fund projects with high costs and few benefits, future generations can be left with the bill. The Commonwealth Government has put more than \$50 billion of infrastructure projects 'off budget' in the past decade, including the NBN, Inland Rail, Western Sydney Airport, and Snowy Hydro 2.0. Most of these are unlikely to generate the implied commercial returns, leaving future taxpayers on the hook for this spending.¹²⁴

Reducing the impact of politics on project selection, and requiring published independent assessment of all proposed projects, would increase the likelihood that projects will ultimately benefit future generations. ¹²⁵

7.2 Improve housing affordability

One of the biggest contributors to the disparities in wealth accumulation between generations has been two decades of house prices growing faster than incomes. Young people – particularly poorer young people – now struggle to get into the housing market (Chapter 2).

^{118.} Auerbach (2017). For an Australian discussion see Potter (2018) and Hamilton (2019).

^{119.} Daley et al. (2019a, p. 35).

^{120.} Daley et al. (2012).

^{121.} Daley et al. (2019a, pp. 36-37) includes more detail about these policy recommendations.

^{122.} Daley et al. (2019b).

^{123.} See Daley et al. (2019a, Chapters 8 and 9) and Daley et al. (2018c, Chapter 6) for specific policy recommendations.

^{124.} Terrill and Wood (2018).

^{125.} Terrill et al. (2016a); and Terrill et al. (2016b).

Owning a home remains a core aspiration for most Australians. Home ownership supports financial and emotional security, a sense of belonging, ¹²⁶ and the stability to take risks and innovate. ¹²⁷

The biggest lever governments have to improve housing affordability is to boost supply. Building an extra 50,000 homes a year for a decade would leave Australian house prices 5-to-20 per cent lower than they would have been otherwise. 129

These homes should not all be on city fringes. State governments should change planning rules to allow more homes in the inner and middle rings of our capital cities. Increasing density would produce economic dividends by enabling more people to live closer to the higher-productivity city centres.¹³⁰

The Commonwealth Government could help improve housing affordability by reducing demand. Reducing the capital gains tax discount to 25 per cent and winding back negative gearing would improve housing affordability a little. And winding back these tax concessions would also improve the budget bottom line while making the housing market more stable.¹³¹

7.3 Wind back age-based tax breaks

A wealthy country such as Australia *should* offer excellent health and aged care services and a pension that affords a decent standard of living for its older citizens.

It is much harder to afford these benefits though when most people leave the tax system by age 65 regardless of their means. Many well-off retirees still draw substantially on government benefits – in fact only the wealthiest 10 per cent of households over 65 are net contributors to the budget on average. 132

Tax breaks based on age rather than capacity to pay are hard to justify. As Sonia Arakkal neatly puts it, 'old age is no longer a proxy for the worthy poor'. 133

To make budgets more sustainable and better align taxation policy with people's capacity to pay, governments should:

- 1. Tax all superannuation earnings in retirement at 15 per cent. This would align the tax treatment of super earnings of retirees with people of working age. Taxing long-term savings at a much lower rate than other income is justified, but the magnitude of the current concessions (zero for most super earnings in retirement) goes way beyond the purpose of superannuation to supplement or replace the Age Pension.¹³⁴ A 15 per cent tax on all super earnings would improve budget balances by about \$2 billion a year today, and much more in future.¹³⁵
- 2. Wind back the Seniors and Pensioners Tax Offset (SAPTO) and reduce the Medicare levy threshold for senior Australians. SAPTO and the higher Medicare levy threshold for seniors means older Australians pay less tax than younger Australians on the same income. One benefit of SAPTO is it keeps full-rate pensioners out of the tax net. SAPTO should be wound back to the point at which

^{126.} Sheppard et al. (2017).

Much small business borrowing is backed by security over property: Daley et al. (2018b, p. 72).

^{128.} Several government, academic and private sector studies point to restrictive zoning as an important factor in Australia's high and rising housing prices: see Daley et al. (lbid., pp. 57,112).

^{129.} Ibid. (p. 3).

^{130.} Ibid.

^{131.} Daley et al. (2016a).

^{132.} Grattan analysis of ABS (2018b).

^{133.} Sonia Arakkal is a co-founder of Think Forward, a lobby group for young Australians. She made the comment at a Grattan Institute / State Library Victoria event: Policy Pitch (2019).

^{134.} See Daley et al. (2015).

^{135.} Daley et al. (2018a, p. 99).

it just offsets tax for full-rate pensioners. Making this change, along with bringing down the Medicare levy threshold to the same level would boost the budget bottom line by about \$700 million a year. 136

 Reduce private health insurance rebate rates for seniors to the same level as applies for working-age Australians. This would raise about \$250 million a year.¹³⁷

7.4 Consider whether intergenerational transfers should be taxed, or at least not subsidised

Australia's national wealth has grown from \$2.8 trillion in 1990 to \$10.3 trillion in 2018, despite the GFC. 138

Much of this wealth is held by older Australians, particularly those who owned a property before the house price boom. Transfers of wealth across generations through inheritances or large gifts will reduce the wealth gap on average, but the wealth will be less equally shared (Chapter 6).

Young people without well-off parents are the losers from policies that favour a growing income tax burden over taxation of wealth transfers.

7.4.1 An intergenerational transfer tax (IGTT)?

Australians currently pay taxes on the income they earn from working, but money received via a bequest is tax free. If used to reduce income taxes, a relatively low intergenerational transfer tax (IGTT) – levied on sizeable gifts and inheritances – would yield some economic payoff as well as boosting disposable income for most young people.

136. See Daley et al. (2016b) for more detailed discussion of this proposed change.

Taxes on intergenerational transfers drag on the economy less than most other taxes including income tax. This is because an IGTT has less impact on behaviour, particularly decisions to work. 139

Indeed, an IGTT might even increase workforce participation. A recent German study showed that people expecting to receive a large inheritance work less, even before they receive the inheritance.¹⁴⁰

The Henry Review of Australia's tax system noted that 'a bequest tax levied at a low flat rate, and designed to affect only large bequests, could be an efficient and equitable component of Australia's future tax system'. Australia is one of only seven OECD countries that do not levy any inheritance, estate, or gift taxes. 142

An IGTT/income tax swap could also boost disposable income for young people. For example, if all inheritances above \$500,000 were taxed at 20 per cent, and the revenue was used to fund income tax cuts, most people under 50 would be ahead financially.¹⁴³

Yet taxes on inheritances are deeply unpopular.¹⁴⁴ Estate taxes were abolished in Australia in the late 1970s and no government has touched them since.¹⁴⁵

There is a strong economic case for levying some form of tax on unearned income. Identifying the right model and bringing the Australian people along will be no easy task though.

^{137.} Ibid.

^{138.} Figures reported in 2018 dollars: ABS (2019a).

^{139.} Henry et al. (2009a, pp. 137-140); OECD (2018, pp. 70-71); and Asprey (1975, p. 440).

^{140.} Kindermann et al. (2018).

^{141.} Henry et al. (2009a, pp. 137-140).

^{142.} OECD (2019b). Based on 2016.

^{143.} Grattan calculations based on Roach (2019).

^{144.} Emslie and Wood (2019).

^{145.} Wood (2018).

7.4.2 Wind back taxpayer subsidies of inheritances

Even if an IGTT proves a bridge too far for policy makers, it is hard to justify taxpayer subsidies that *increase* the size of inheritances.

Broaden super death benefits tax

Superannuation is concessionally taxed to encourage people to save for their retirement and take the pressure off the Age Pension system. But given that many older Australians do not draw down on their capital (Chapter 6), tax concessions also boost the size of bequests.

Super death benefits taxes are intended to claw back superannuation tax breaks when the money is passed on to non-dependents, so that the government is not subsidising inheritances. But they are only partly achieving this aim.¹⁴⁶

Current super death benefits taxes are too low. A higher tax on super bequests paid to non-dependents would better capture the value of the super tax-breaks accumulated by the deceased over their life.¹⁴⁷

Government should also lower the annual cap on post-tax contributions, or replace it with a lifetime cap. This would limit re-contribution strategies, 148 which provide a loophole whereby people can reduce the tax paid on inherited super.

Don't force people to over-save

Compulsory superannuation contributions are currently legislated to rise from 9.5 per cent to 12 per cent of wages between 2021 and

146. Daley et al. (2018a, p. 20).

2025. This will reduce wages, ¹⁴⁹ which will particularly hurt younger Australians, who rely more heavily on wage income (Chapter 3).

A previous Grattan report showed that increasing compulsory super as planned would effectively compel most people to save for a higher living standard in retirement than they enjoy during their working lives. ¹⁵⁰ It would make the typical younger worker up to \$30,000 poorer over their lifetimes, while doing little to boost the retirement incomes of many lowand middle-income Australians. ¹⁵¹

Higher compulsory super contributions will also exacerbate the budgetary costs of an ageing population (Chapter 5). Lifting compulsory super to 12 per cent would cost the federal budget \$2-2.5 billion a year today. Treasury projections have shown that the tax breaks from 12 per cent compulsory super would dwarf any budget savings from lower Age Pension spending as far out as 2060. 153

The Commonwealth Government should keep the Superannuation Guarantee at 9.5 per cent, rather than increasing it to 12 per cent, to avoid making younger Australians worse off over their lifetime.

^{147.} Super death benefits paid to dependants would remain tax-free.

^{148.} Under re-contribution strategies, superannuation can be withdrawn tax-free and then contributed back to the same account as a 'post-tax contribution', up to the annual post-tax contributions cap. Funds re-contributed in this way are inherited tax-free: Daley et al. (2015, pp. 54-56).

^{149.} Past increases in compulsory super contributions appear to have been passed through to workers in the form of lower wages: Coates (2019b).

^{150.} Daley et al. (2018a, p. 87).

^{151.} Coates and Emslie (2019).

^{152.} Daley et al. (2018a, pp. 92-93).

^{153.} Treasury (2013, Figure 2.1) estimated that the revenue foregone from superannuation tax breaks would exceed the budgetary savings from lower Age Pension spending by 0.4 per cent of GDP a year. Recent changes to curb super tax breaks and tighten the Age Pension assets test will reduce the annual budgetary cost of support for retirement incomes by around 0.1 per cent of GDP: Daley et al. (2018a, p. 93). The Henry Review also concluded higher compulsory super would cost the budget in the long term when it recommended against raising compulsory super beyond 9 per cent: Henry et al. (2009b).

Include the family home in the Age Pension assets test

The family home gets special treatment in the Age Pension means test. The actual value of the home is not counted in the assets test, but home-owners have a lower asset limit than non-home-owners before they begin losing their Age Pension entitlements.¹⁵⁴ This means many Age Pension payments are made to households that have substantial property assets. Half of the government's spending on Age Pensions goes to people with more than \$500,000 in assets.¹⁵⁵ These people have enjoyed substantial support from taxpayers over many years, yet will pass on a significant amount of their wealth to their heirs.

The Government should change the Age Pension assets test to include the value of the family home above some threshold, such as \$500,000. It should also allow other assets up to the same threshold so that non-homeowners are not disadvantaged.

Seniors who have little income but live in a high-value property should be allowed to borrow income up to the rate of the Age Pension against the security of their home, via the Pension Loans Scheme. This will give them financial capacity to stay in their home if they choose to.

The threshold ensures that homeowners will still have substantial equity to pass on to their beneficiaries. But it does ask people with high levels of wealth that would otherwise be passed on to heirs to use some of this wealth to support themselves in retirement.

154. This approach in effect includes the first \$210,500 of the home in the assets test irrespective of its actual value. Fixed asset test limits apply to home-owners and non-home-owners, see Department of Human Services (2019a).

7.5 Summing up

Economic, demographic, and policy changes have created a 'perfect storm' of challenges for today's young. These challenges could stretch the generational bargain to breaking point.

But a breaking of the bargain is not inevitable. Just as policy changes have contributed to pressures on young people, they can help redress them.

None of the policies we suggest are politically easy (reform rarely is). An ageing population means an ageing voter base.¹⁵⁷ But that doesn't mean older voters won't support a fair go for younger Australians.

Many older Australians care about the economic future of younger Australians and future generations. Even at the 2019 federal election, where Labor planned to reduce franking credit refunds (mainly affecting non-pensioner retirees), electorates with the highest franking credit refunds swung towards Labor on average.

The political challenge is therefore to explain to people of all ages that policy change is necessary so their children and grandchildren can enjoy the fruits of Australia's prosperity.

^{155.} Daley et al. (2019a, pp. 69-70).

^{156.} Daley et al. (2018b) and Daley et al. (2018a). Changes to the Pension Loans Scheme commencing 1 July 2019 are a step in the right direction, and may result in more retirees drawing down on the value of their home: Department of Human Services (2019b).

^{157.} Wood and Percival (2019).

^{158. &#}x27;Australians aspire to an economy that sustains or enhances living standards into the future': ABS (2013).

^{159.} Evershed (2019); and Chivers (2019).

Appendix A: The changing face of Australian households

This report draws on ABS survey data of households' wealth, income, and expenditure over time. Households of course take various forms: from a single adult to many families living together. Households of course take various forms:

We use equivalisation methods, where appropriate, to standardise for households of different sizes. But we do not 'equivalise' for all changes in household composition over time – for example, a household of two adults is treated the same under equivalisation methods whether those two adults are a couple or individuals in a share house.

This appendix looks at how households have changed over time, and what implications this might have for our findings. Table A.1 defines the household classification we have used throughout this appendix.

A.1 There are not many households headed by someone aged 15-24

Throughout this report, age refers to the age of head of the household, or what the ABS calls the household reference person. That is usually the owner of the house, the bread-winner, or the oldest person. 162

Table A.1: Classification of family composition within households

Category	Definition
Single	Single adult, no dependent children (with or without non-dependent children)
DINKS	One couple, no dependent children (with or without non-dependent children)
Young family	One couple with one or more dependent children (with or without non-dependent children)
Single parent	Single adult with one or more dependent children (with or without non-dependent children)
Share house	Two or more independent adults who identify as living in a 'group household'
Multi-family	More than one family sharing a home, with or without children
Other	Any other arrangement

Source: Grattan analysis of ABS SIH and HES 'family composition' categories.

^{160.} The Survey of Income and Housing (SIH) and the Household Expenditure Survey (HES).

^{161.} The ABS defines a household as 'one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling': ABS (2016).

^{162.} The ABS applies the following selection criteria (in order) to determine the household reference person: (1) the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure; (2) one of the partners in a registered or de facto marriage, with dependent children; (3) one of the partners in a registered or de facto marriage, without dependent children; (4) a lone parent with dependent children; (5) the person with the highest income; (6) the eldest person: ABS (ibid.).

Only 9 per cent of people aged 15-24 are the head of their household, compared to 40 per cent of people aged 25-34 and about 50-to-60 per cent of older people.

It is unusual for someone aged 15-24 to be the head of their household because typically people of this age still live with their parents or an older relative. The experiences of 15-24 year-old *households* are therefore only a small subset of the experiences of all 15-24 year-old *people*.

This report compares how households of a given age fare today compared to households of the same age in the past. It is important to know, therefore, whether survey data has become more or less representative of households of a given age over time.

Figure A.1 shows that the proportion of young and old people who are head of their household has declined over time, although not dramatically so.

For young people, this probably reflects a trend towards moving out of home later. For older people, this reflects the fact that older households are now less likely than in the past to be single-person households and more likely to be couples (Appendix A.4).

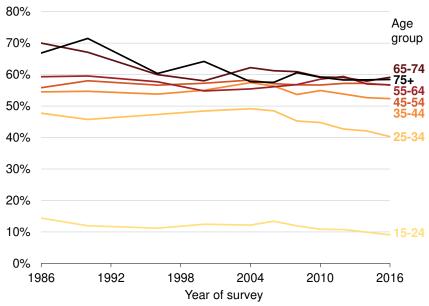
A.2 How young households have changed

Younger households in 2016 were less likely to have children than younger households in the mid-1990s (Figure A.2 and Figure A.3).

In 2016, households headed by someone aged 15-24 were typically single-person or couple-only households, whereas in 1995 households of this age were most likely to be share houses.

Young families are still the most common arrangement for households aged 25-34, but they are a declining share, with couple-only households on the rise.

Figure A.1: Few people aged 15-24 are the head of their household Proportion of population by age that are head of their household



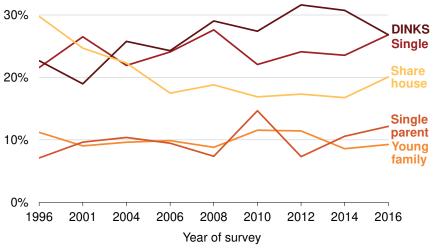
Notes: 'Head of household' refers to the ABS's household reference person, who is usually the owner of the house, the bread-winner, or the oldest person. HES data shows similar trends.

Sources: ABS (2018a) and ABS (2018f).

Figure A.2: Share housing has become less common over the past two decades for households aged 15-24

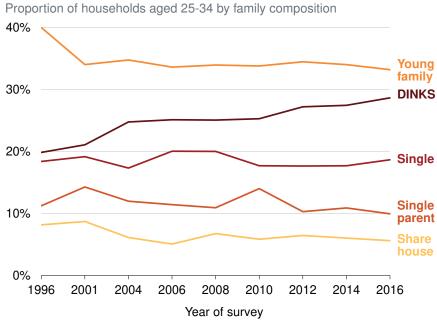
Proportion of households aged 15-24 by family composition





Notes: 'Other' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). DINKS = 'Dual-Income-No-Kids'. Only dependent children are counted towards the 'young family' and 'single parent' categories. Age refers to the age of the household reference person. HES data shows similar trends. Sources: ABS (2018a).

Figure A.3: More households aged 25-34 are delaying a family



Notes: 'Other' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). DINKS = 'Dual-Income-No-Kids'. Only dependent children are counted towards the 'young family' and 'single parent' categories. Age refers to the age of the household reference person. HES data shows similar trends. Sources: ABS (ibid.).

A.3 How middle-aged households have changed

Household composition has remained fairly steady over time for 35-44 year-olds, with young families dominating the mix (Figure A.4). But there have been substantial shifts for households aged 45-64 over the past two decades (Figure A.5 and Figure A.6).

For households aged 45-54, the share of young families has increased while the share of Dual-Income-No-Kids ('DINKS') has fallen. This probably reflects people having children later. Most households aged 55-64, are couple households, but the share of single households has been rising.

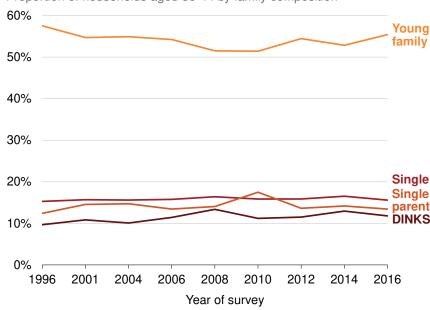
A.4 How older households have changed

Household composition has remained steady over time for 65-74 yearolds (Figure A.7). But households over 75 have changed. While they're still typically single-person households, the share of singles has been in decline since the mid-1990s, and the share of couples is on the rise (Figure A.8). This may reflect more people living longer and healthier lives in their own homes.

A.5 These compositional changes are unlikely to affect our findings

Differences in household composition over time are already largely accounted for through equivalisation methods. The ABS household equivalisation method, used in this report, applies a weighting for each adult and child in a household, so it accounts for changes in family size over time and the differences between single and couple households (see footnote 36 on page 19).

Figure A.4: Households aged 35-44 are typically young families
Proportion of households aged 35-44 by family composition

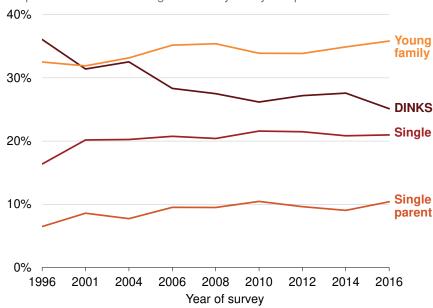


Notes: 'Other', 'share house' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). DINKS = 'Dual-Income-No-Kids'. Only dependent children are counted towards the 'young family' and 'single parent' categories. Age refers to the age of the household reference person. HES data shows similar trends.

Sources: ABS (2018a).

Figure A.5: More households aged 45-54 have young kids

Proportion of households aged 45-54 by family composition

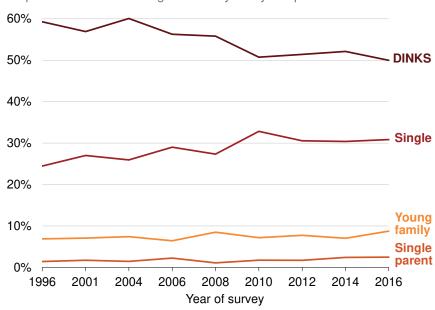


Notes: 'Other', 'share house' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). DINKS = 'Dual-Income-No-Kids'. Only dependent children are counted towards the 'young family' and 'single parent' categories. Age refers to the age of the household reference person. HES data shows similar trends.

Sources: ABS (2018a).

Figure A.6: More households aged 55-64 are single and fewer are couples

Proportion of households aged 55-64 by family composition

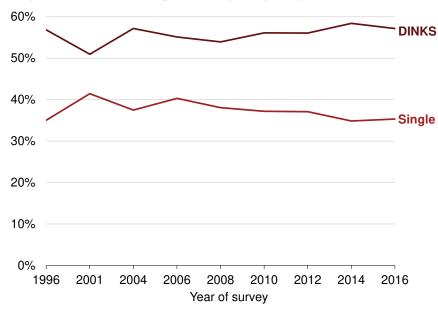


Notes: 'Other', 'share house' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). DINKS = 'Dual-Income-No-Kids'. Only dependent children are counted towards the 'young family' and 'single parent' categories. Age refers to the age of the household reference person. HES data shows similar trends.

Sources: ABS (ibid.).

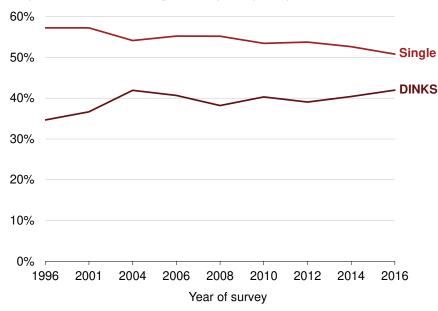
Figure A.7: The composition of households aged 65-74 has been steady over time

Proportion of households aged 65-74 by family composition



Notes: 'Other', 'young family', 'single parent', 'share house' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). Age refers to the age of the household reference person. HES data shows similar trends. Sources: ABS (2018a).

Figure A.8: Fewer households aged 75+ are singlesProportion of households aged 75+ by family composition



Notes: 'Other', 'young family', 'single parent', 'share house' and 'multi-family' categories are not shown (together they represent less than 10 per cent of households). Age refers to the age of the household reference person. HES data shows similar trends. Sources: ABS (ibid.).

But household equivalisation does not distinguish between families and share houses with the same number of adults. This could have two types of impacts (but is likely to affect only 15-24 year-olds, where group housing is common).

First, equivalising income for adults in a share house assumes they pool the same resources as a couple or family would – potentially more than they actually do. This could result in the income of a share house being overstated.

Given that group housing was more common in the past, equivalised income for households aged 15-24 may be *over*-stated in the past, relative to today. But this does not affect the key findings. Our report finds that the incomes of young people have stagnated or gone backwards since the GFC, and group housing levels have been steady or below 2016 levels over that period.

Second, change in the proportion of share houses compared to other types of households might indicate underlying differences in the population of people we compare over time. For example, if living in a share house was an indicator of lower income and the proportion of share housing has declined over time, then this might suggest today's sample of households would have higher incomes, all else being equal. If this were the case, then our findings of low income growth over time for households aged 15-24 would be conservative.

Appendix B: Inheritance data analysis

B.1 Probate data

When someone dies in Australia, assets they personally own form part of their estate. This will not include assets they jointly own (for example, with a spouse), superannuation balances, or family trusts.¹⁶³

Assets in the estate are usually transferred to others according to the deceased's will. The transfer of part of the estate to an individual is referred to as an inheritance. In order for the assets of a deceased estate to be distributed, the executor of the estate needs to file an application to the Probate Office of the Supreme Court of the state or territory in which the person died.¹⁶⁴

Once processed, probate files are publicly available at the Public Records Office in each state and territory. The documents generally contained within a probate file are shown in Table B.1.

To assess the size and distribution of inheritances, we analysed a sample of 534 probate files from Victoria in 2016. Our sample included randomly-selected boxes of probate files. Each box contains all probate files processed within a certain time, so our sample is a random cross-section of probate files in Victoria.

Table B.1: Our analysis used information from different documents within the probate file

Document	Information we collected
Motion for the grant of probate	Name of deceased Date of birth Date of death
Death certificate	Age of children of the deceased
Inventory of assets and liabilities	Total estate Division into real estate, personal estate, and liabilities Description and value of individual items
Last will and testament	Distribution of estate to individuals, and their relationship to the deceased

Not all asset transfers occurring at death are captured as part of probate:

- Money held within a superannuation fund does not generally form part of a will, and is distributed separately.¹⁶⁵ The trustee will pay out the amount of the account balance and any additional death benefits to the beneficiary of the superannuation fund, which may not be an inheritor of the estate.¹⁶⁶
- Family trusts can be transferred to the remaining trustees upon the death of one trustee, without forming part of an estate.

In general, estates of less than about \$10,000 will not require probate.¹⁶⁷ In practice, this will include many deaths where the

^{163.} Assets can be jointly owned as 'joint tenants', meaning that when one owner dies, the remaining owners continue to own the property; or as 'tenants in common', where two or more individuals own a specific percentage of an asset, and the percentage an individual owns is theirs to leave in a will: ATO (2019b). Properties jointly owned by a married or de facto couple are most commonly owned as joint tenants.

^{164.} Baker (2014, p. 9).

^{165.} Department of Justice NSW (2019).

^{166.} Andreyev Lawyers (2016).

^{167.} Baker (2014, p. 10).

deceased had access to assets exceeding \$10,000, but the bulk of these assets are jointly owned, or in family trusts. In Victoria, about half of all deaths result in a probate application. 168

Thus, although probate does not capture all wealth that is transferred at the point of death, it does capture a significant portion.

Probate files separate assets into real estate, personal estate, and liabilities. 'Real estate' is often a family home, but can also include investment properties. 'Personal estate' can include bank accounts, shares, an aged care bond, cars and other chattels. 'Liabilities' can include a mortgage, a credit card, and small bills such as council rates.

B.1.1 Excluded estates

Estates were excluded from our dataset where it was not possible to determine a close approximation of the distribution of assets. In practice, this applied to a small number of intestate estates (where a person dies without making a will).

For some intestate estates, the distribution of assets is reasonably clear from the documents included in the probate file. That is, the deceased had either a spouse but no children (in which case, the full estate passes to the spouse), or children but no spouse (in which case, the estate is shared equally between the children). Such estates were included in our dataset.

In the event that an intestate deceased had both a spouse and at least one child, the distribution of assets is more complicated. There were only eight such estates in our sample, and they were excluded from our dataset, leaving a total of 526 files for analysis.

B.1.2 Allocation of liabilities to real estate / personal estate

The 'inventory of assets and liabilities' separates assets into real estate, personal estate, and liabilities. To allocate amounts to recipients, we first apportioned liabilities to either real estate or personal estate, and calculated a 'net' amount in each asset category.

If the liability was a mortgage, it was subtracted from the value of real estate.

Other liabilities were subtracted from the value of personal estate. If such liabilities exceeded the value of personal estate, they were subtracted first from the value of personal estate, then from the value of real estate. This method was applied even for home-owner-related expenses, such as council rates.

This methodology reflects likely practice, whereby we would expect the trustee to pay small debts out of available cash, before considering whether to sell real estate.

B.1.3 Allocation of real estate / personal estate to beneficiaries

In many wills, specified dollar amounts rather than specified items were bequeathed to individuals. We allocated such amounts first from personal estate, and then any remaining amounts from real estate.

A will also specifies the distribution of the remaining amount after specified bequests, known as the 'residual estate'. Where the residual estate was split proportionally between multiple recipients, both real estate value and personal estate value were allocated by the same proportions.

B.1.4 Approximations

Any funeral expenses or legal expenses were ignored in calculating the estate and the distribution. The will normally stipulates that these are

^{168.} Ibid. (p. 29).

^{169.} Victorian Law Reform Commission (2019).

paid first, before the residual estate is distributed. Without knowing the amount of such expenses, we have assumed they are immaterial.

Many wills specify the distribution of particular chattels, for example items of jewellery or furniture. We allocated dollar amounts for such items to a beneficiary only if the value of the item was listed in the inventory of assets. If the item was not listed individually in the inventory (or, as in most cases, chattels were not listed at all), no dollar amount was allocated.

B.1.5 Other assumptions

We assumed that the distribution of assets occurred as per a reasonable understanding of the terms of the will. Probate files contain no confirmation that this actually happened, or whether the terms of the will were disputed.

Many wills leave money in trust for children, to be conferred on them when they reach a specified age (often 25). We assumed children eventually attain the relevant age and inherit, and so we allocated money accordingly, in the same way as if they were to receive it immediately.

Some wills specify a dollar amount to be split between any grand-children, or a dollar amount to be given to each grandchild. Many wills specify the grandchildren by name, some do not. Where the will does not name grandchildren, we generally assumed there to be one surviving grandchild. This is likely to be inaccurate, but, given the relatively small amounts typically allocated to grandchildren in this manner, immaterial.

Some wills specify that an asset is to be kept in trust for the use of a particular person during their lifetime, then passed to a specified ultimate beneficiary. This most often applies to a house (often for the use of the current resident, perhaps a spouse), but sometimes applies to a specified amount or specified portion of the residual estate (in this case, money is to be held in trust with the income only for a particular person's use). Where assets were treated this way in a will, we allocated the full amount to the *ultimate* recipient. A more accurate estimate of value would involve calculating the expected net present value of the cash flows each recipient would receive, but this would involve additional assumptions, additional complexity, and additional uncertainty. Our simpler methodology is unlikely to result in materially different findings.

B.2 HILDA data

Data on inheritances by wealth of recipient is not available from the probate records, so we use data from the Household, Income and Labour Dynamics in Australia (HILDA) survey. HILDA contains information regarding self-reported inheritances received, and thus enables us to observe the prior wealth levels of people receiving inheritances.

We observe significantly lower average inheritances in HILDA data than in probate data. In HILDA data, the mean inheritance received in a given year (in 2016 dollars) is \$107,000, and the mean inheritance received by a survey respondent across the full period they are tracked by the survey is \$139,000. By comparison, the average inheritance received by individual recipients in probate data is \$227,000.

Part of the difference may be due to inheritances from small estates, which do not require probate (Appendix B.1). Inheritances of this type may be captured in HILDA, but will not appear in probate data, and will invariably be smaller than average, bringing the observed HILDA average down.

But the exclusion of some small inheritances from probate data cannot fully explain the differences observed between the two datasets. HILDA data includes very few large inheritances (for example, over \$1 million)

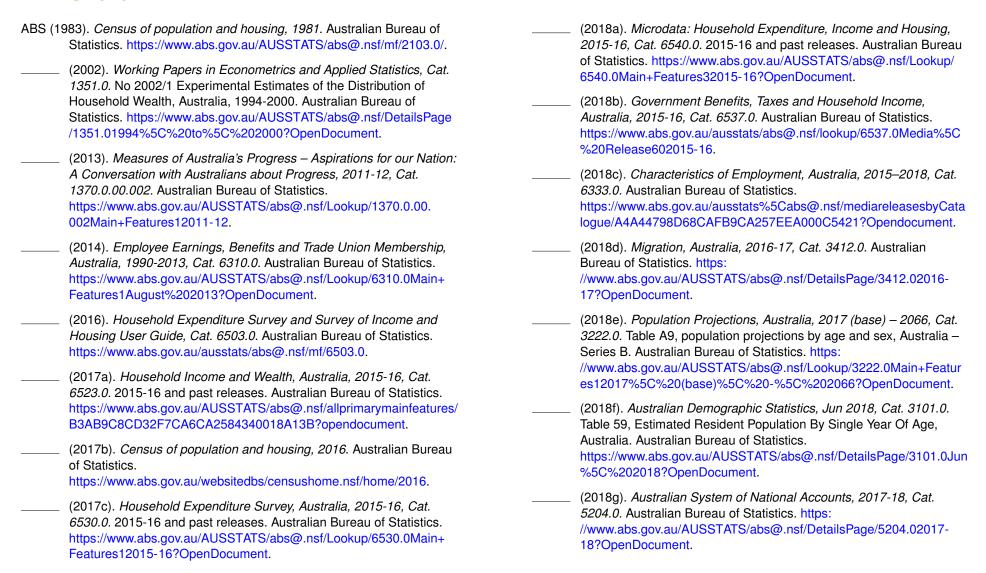
compared to probate data, indicating that HILDA is systematically missing or under-reporting large inheritances. This could be because:

- Inheritance information in HILDA is self-reported, so may be less
 accurate than the amounts calculated in probate documents.
 Inheritance information in HILDA is captured via the question:
 'How much did you receive from inheritances / bequests during the
 last financial year?'. It is unclear whether respondents will interpret
 this as including real estate and other non-cash assets, or whether
 they will accurately estimate the value of such assets.
- HILDA does not capture individuals who were living in aged care at its commencement in 2001, though it does capture people in its original sample who have since moved into aged care. It is likely that many spouses receiving inheritances are living in aged care when they receive an inheritance. Thus, the HILDA sample may be underweight in spouses receiving inheritances. Our analysis of probate files found that inheritances received by spouses are larger on average, since a surviving spouse typically receives the bulk of the total estate.

Data shortcomings may lead to an understatement of overall average amounts. But it is unlikely that biases in self-reporting will affect survey years differently, meaning trends we observe over time are unlikely to be distorted.

While it is possible that understatement of inheritances would be greater for wealthier individuals, this is unlikely to materially change the conclusions we have drawn regarding inheritance patterns for wealthier individuals.

Bibliography



- ABS (2019a). Australian National Accounts: Finance and Wealth, Cat. 5232.0. March 2019, Table 35. Australian Bureau of Statistics. https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5232.0Main+ Features1Mar%5C%202019?OpenDocument. (2019b). Residential Property Price Indexes: Eight Capital Cities, Mar 2019. Cat. 6416.0. Australian Bureau of Statistics. https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6416.0Mar %5C%202019?OpenDocument. (2019c). Average Weekly Earnings, Australia, Nov 2018, 6302.0. Australian Bureau of Statistics. https://www.abs.gov.au/ausstats/ab s@.nsf/mf/6302.0?opendocument&ref=HPKI. (2019d). Participation, Job Search and Mobility, Australia, Feb 2019. Cat. 6226.0. Australian Bureau of Statistics. https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/6226.0Mai n%20Features4Feb%202019. (2019e). Labour Force, Australia, May 2019, Cat. 6202.0. Australian Bureau of Statistics. https://www.abs.gov.au/ausstats/abs%5C%40.nsf/mf/6202.0. (2019f). Australian National Accounts: National Income, Expenditure and Product, March 2019, Cat. 5206.0. Seasonally adjusted. Australian Bureau of Statistics. https://www.abs.gov.au/ausstats/abs@.nsf/mf/5206.0.
- ACARA (2018). Year 12 certification rates. Australian Curriculum Assessment and Reporting Authority. https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia-data-portal/year-12-certification-rates/#dataset.
- Andreyev Lawyers (2016). *It's official. Super isn't part of your estate.* https://andreyev.com.au/2016/10/19/superannuation-not-asset-of-estate/.
- APRA (2018). Annual Fund-level Superannuation Statistics back series.
 Australian Prudential Regulation Authority.
 https://www.apra.gov.au/publications/annual-fund-level-superannuation-statistics.

- Asher et al. (2017). Asher, A., Meyricke, R., Thorp, S. and Wu, S. "Age pensioner decumulation: Responses to incentives, uncertainty and family need". *Australian Journal of Management* 42.4, pp. 583–607.
- Asprey, K. W. (1975). *Taxation Review Committee: Full Report*.

 Commonwealth Taxation Review Committee.

 http://adc.library.usyd.edu.au/view?docld=law/xml-main-texts/p00087.

 xml;chunk.id=0;toc.id=LEVI;database=;collection=;brand=ozfed.
- ATO (2019a). *Taxation Statistics 2016-17*. Individuals Table 3. Australian Taxation Office. https://data.gov.au/data/dataset/taxation-statistics-2016-17/resource/81c8666c-9947-468e-820a-902ee6d85fdd.
- (2019b). Joint tenants. Australian Taxation Office. https://www.ato.gov.au/General/Capital-gains-tax/Deceased-estates-and-inheritances/Inherited-dwellings/Joint-tenants/.
- Auerbach, A. (2017). *Demystifying the Destination-Based Cash-Flow Tax*. Working paper 23881. National Bureau of Economic Research. https://www.nber.org/papers/w23881.pdf.
- Australian Government (2019a). *Common benefit rates*. Guides to social benefit law. http://guides.dss.gov.au/guide-social-security-law/5/1/8/20.
 - (2019b). Single Unemployment & Sickness Benefit November 1984 to Present Date.
 - http://guides.dss.gov.au/guide-social-security-law/5/2/1/20#NoteN.
- Baker, C. (2014). Encouraging Charitable Bequests by Australians. Swinburne Business School: Asia-Pacific Centre for Social Investment & Philanthropy. https:

 //www.swinburne.edu.au/media/swinburneeduau/research/research
 - //www.swinburne.edu.au/media/swinburneeduau/research/research-centres/csis/documents/Encouraging-Charitable-Gifts-by-Australians-Baker.pdf.
- Banks et al. (1998). Banks, J., Blundell, R. and Tanner, S. "Is there a retirement-savings puzzle?" *American Economic Review* 88.4, pp. 769–788. https://www.jstor.org/stable/117005.

- Betts, K. (2014). The ageing of the Australian population: triumph or disaster?

 Monash Centre for Population and Urban Research.

 https://www.researchgate.net/publication/295519852_The_ageing_o
 f_the_Australian_population_triumph_or_disaster.
- Bishop, J. and Cassidy, N. (2017). "Insights into Low Wage Growth in Australia". *Reserve Bank of Australia Bulletin*. March Quarter, 2017, pp. 13–20. https://www.rba.gov.au/publications/bulletin/2017/mar/pdf/bu-0317-2-insights-into-low-wage-growth-in-australia.pdf.
- Borland, J. (2015). "The Australian Labour Market: The More Things Change". *The Australian Economic Review* 48 (3), pp. 225–242. https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-8462.12125.
- (2017). Part-time work in Australia: A second look. Labour market snapshot 38. https://drive.google.com/file/d/0B_H1wGTm98W3MTY 3d05HbjZUWkk/view.
- Bowles, S. and Gintis, H. (2002). "The Inheritance of Inequality". *Journal of Economic Perspectives* 16.3. https://pubs.aeaweb.org/doi/pdfplus/10.1257/089533002760278686.
- Brotherhood of St Laurence (2018). *Part-time purgatory: Young and unemployed in Australia*. http://library.bsl.org.au/jspui/bitstream/1/11030/1/BSL_Part-time_purgatory_young_and_unemployed_Dec2018.pdf.
- Burke et al. (2014). Burke, T., Stone, W. and Ralston, L. *Generational change* in home purchase opportunity in Australia. AHURI Final Report No 232.
- Chivers, C. (2019). "Election 2019: the result wasn't the only surprise". *Grattan Blog.* https://blog.grattan.edu.au/2019/06/election-2019-the-result-wasnt-the-only-surprise/.
- Coates, B. (2019a). Where is home for marginalised consumers? Grattan Institute. https://grattan.edu.au/presentations/where-is-home-for-marginalised-consumers-2/.

- (2019b). "Do superannuation increases come out of workers' wages?" Grattan Blog. https://blog.grattan.edu.au/2019/04/do-superannuation-increases-come-out-of-workers-wages/.
- Coates, B. and Emslie, O. (2019). "Super shock: more compulsory super would make Middle Australia poorer, not richer". *The Conversation*. https://theconversation.com/super-shock-more-compulsory-super-would-make-middle-australia-poorer-not-richer-120002.
- Collard, D. (2000). "Generational transfers and the generational bargain". Journal of International Development 12 (4), pp. 453–462. https://onlinelibrary.wiley.com/doi/abs/10.1002/1099-1328%28200005%2912%3A4%3C453%3A%3AAID-JID683%3E3.0.CO%3B2-W.
- Commonwealth of Australia (2019). *Budget 2019-20*. April. https://www.budget.gov.au/2019-20/content/documents.htm.
- CoreLogic (2019). *Monthly Housing & Economic Chart Pack, July 2019*. https://www.corelogic.com.au/reports/chart-pack.
- COTA (2018). State of the (older) nation, 2018. Council on the Ageing. https://www.cota.org.au/wp-content/uploads/2018/12/COTA-State-of-the-Older-Nation-Report-2018-FINAL-Online.pdf.
- Cowan, S. (2016). *The myths of the generational bargain*. Centre for Independent Studies. https://www.cis.org.au/app/uploads/2016/03/rr10.pdf.
- CSIRO (2019). Australian National Outlook 2019. Commonwealth Scientific and Industrial Research Organisation. https://www.csiro.au/en/Showcase/ANO.
- CSIRO and BOM (2018). State of the Climate 2018. Commonwealth Scientific, Industrial Research Organisation and Bureau of Meteorology. http://www.bom.gov.au/state-of-the-climate/State-of-the-Climate-2018.pdf.

- Daley, J. (2019). *Immigration and wage growth*. Discussant paper, Low Wage Growth, RBA Conference 2019. Grattan Institute. https://grattan.edu.au/news/most-new-migrants-to-australia-are-low-skill-and-they-may-be-slowing-wage-growth-for-unskilled-labour/.
- Daley et al. (2012). Daley, J., McGannon, C. and Ginnivan, L. *Game-changers: Economic reform priorities for Australia*. Grattan Institute. http://grattan.edu.au/publications/reports/post/game-changers-economic-reform-priorities-for-australia/.
- Daley et al. (2014). Daley, J., Wood, D., Weidmann, B. and Harrison, C. *The wealth of generations*. Grattan Institute. http://grattan.edu.au/report/the-wealth-of-generations/.
- Daley et al. (2015). Daley, J., Coates, B., Wood, D. and Parsonage, H. *Super tax targeting*. Report No. 2015-11. Grattan Institute. https://grattan.edu.au/report/super-tax-targeting/.
- Daley et al. (2016a). Daley, J., Wood, D. and Parsonage, H. *Hot property:* negative gearing and capital gains tax. Report No. 2016-8. Grattan Institute. https://grattan.edu.au/report/hot-property/.
- Daley, J. and Coates, B. (2016). "Why every generation feels entitled". *The Conversation*. https://theconversation.com/why-every-generation-feels-entitled-70405.
- Daley et al. (2016b). Daley, J., Coates, B., Young, W. and Parsonage, H. *Age of entitlement: age-based tax breaks*. Report No. 2016-14. Grattan Institute. https://grattan.edu.au/report/age-of-entitlement/.
- Daley et al. (2018a). Daley, J., Coates, B., Wiltshire, T., Emslie, O., Nolan, J. and Chen, T. *Money in retirement: More than enough*. Grattan Institute. https://grattan.edu.au/report/money-in-retirement/.
- Daley et al. (2018b). Daley, J., Coates, B. and Wiltshire, T. *Housing affordability: re-imagining the Australian dream*. https://grattan.edu.au/report/housing-affordability-re-imagining-the-australian-dream/.

- Daley et al. (2018c). Daley, J., Duckett, S., Goss, P., Terrill, M., Wood, D., Wood, T. and Coates, B. *State Orange Book 2018*. Report No. 2018-16. Grattan Institute. https://grattan.edu.au/report/state-orange-book-2018/.
- Daley et al. (2019a). Daley, J., Duckett, S., Goss, P., Norton, A., Terrill, M., Wood, D., Wood, T. and Coates, B. *Commonwealth Orange Book 2019*. Report No. 2019-03. Grattan Institute. https://grattan.edu.au/report/commonwealth-orange-book-2019/.
- Daley et al. (2019b). Daley, J., Coates, B. and Chivers, C. "Why Labor's childcare policy is the biggest economic news of the election campaign". *The Conversation*. https://theconversation.com/why-labors-childcare-policy-is-the-biggest-economic-news-of-the-election-campaign-116441.
- Department of Human Services (2019a). *Assets test limits*. Accessed at 30 July 2019. https: //www.humanservices.gov.au/individuals/services/centrelink/age-pension/how-much-you-can-get/assets-test/assets#assetstestlimits.
- (2019b). Changes to the Pension Loans Scheme from 1 July 2019.
 15 April 2019.
 https://www.humanservices.gov.au/individuals/news/changes-pension-loans-scheme-from-1-july-2019.
- Department of Justice NSW (2019). *Superannuation*. https://www.lawaccess.nsw.gov.au/Pages/representing/after_someon e dies/assets and debts/superannuation/superannuation.aspx.
- Dhillon, Z. and Cassidy, N. (2018). *Labour Market Outcomes for Younger People*. Reserve Bank of Australia. https://www.rba.gov.au/publications/bulletin/2018/jun/labour-market-outcomes-for-younger-people.html.
- Duke, B. V. (2016). When I Was Your Age: Millennials and the Generational Wage Gap. Center for American Progress. https://www.americanprogress.org/issues/economy/reports/2016/03/03/131627/when-i-was-your-age/.

- Dyer, G. and Keane, B. (2019). "Has anyone got the capacity to solve poor wages growth?" *Crikey*. https://www.crikey.com.au/2019/06/19/reserve-bank-slow-wages-growth/.
- Ellis, L. (2019). *Watching the Invisibles*. The 2019 Freebairn Lecture in Public Policy. Reserve Bank of Australia. https://rba.gov.au/speeches/2019/sp-ag-2019-06-12-2.html.
- Emslie, O. and Wood, D. (2019). "Death and taxes". *Inside Story*. https://insidestory.org.au/death-and-taxes/.
- Eslake, S. (2014). Why is Australian housing so expensive.
- Evershed, N. (2019). "The eight charts that help explain why the Coalition won the 2019 Australian election". *The Guardian*. https://www.theguardian.com/news/datablog/2019/may/22/the-eight-charts-that-help-explain-why-the-coalition-won-the-2019-australian-election.
- Fagereng et al. (2015). Fagereng, A., Mogstad, M. and Rønning, M. *Why do wealthy parents have wealthy children?* Statistics Norway. https://www.sole-jole.org/16116.pdf.
- Fox, R. and Tulip, P. (2014). *Is Housing Overvalued?* Research discussion paper. Reserve Bank of Australia. http://www.rba.gov.au/publications/rdp/2014/pdf/rdp2014-06.pdf.
- Garnaut, R. (2011). The Garnaut Review 2011: Australia in the Global Response to Climate Change. http: //www.garnautreview.org.au/update-2011/garnaut-review-2011.html.
- Guvenen et al. (2015). Guvenen, F., Karahan, F., Ozkan, S. and Song, J. What Do Data on Millions of U.S. Workers Reveal about Life-Cycle Earnings Risk? Staff Report no. 710. Federal Reserve Bank of New York. https://www.apra.gov.au/publications/annual-fund-level-superannuation-statistics.
- Hamilton, S. (2019). "Company tax reform could be ScoMo's GST". *Australian Financial Review*. https://www.afr.com/news/policy/tax/company-tax-reform-could-be-scomo-s-gst-20190526-p51r7u.

- Henry et al. (2009a). Henry, K., Harmer, J., Piggott, J., Ridout, H. and Smith, G. *Australia's future tax system*. Report to the Treasurer, December 2009. http://www.taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm.
- Henry et al. (2009b) ______ . Australia's Future Tax System The Retirement Income System: Report on Strategic Issues. Report to the Treasurer, May 2009. http://www.taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm.
- Hughes, D. (2019). "Generational gulf widens as interest rates fall". *Australian Financial Review*. https://www.afr.com/business/banking-and-finance/generational-gulf-widens-as-interest-rates-fall-20190614-p51xtv.
- Hüttl et al. (2015). Hüttl, P., Wilson, K. and Wolff, G. *The growing intergenerational divide in Europe*. Issue 2015/17. Bruegel Policy Contribution. https://bruegel.org/2015/11/the-growing-intergenerational-divide-in-europe/.
- Intergenerational Commission (2018). *A new generational contract: The final report of the Intergenerational Commission*. Resolution Foundation. https://www.resolutionfoundation.org/app/uploads/2018/05/A-New-Generational-Contract-Full-PDF.pdf.
- International Youth Foundation (2017). *Global Youth Wellbeing Index*. https://www.youthindex.org/sites/default/files/2017YouthWellbeingIndex.pdf.
- Jordan, A. (2001). *Jobs in a new labour market: changes in type and distribution*. Policy research paper no. 15. Department of Family and Community Services. https://www.dss.gov.au/sites/default/files/documents/05_2012/prp_no_15.pdf.
- Kalba, G. and Meekes, J. (2019). The Characteristics of Individuals Experiencing Low Wage Growth and Consequences of Low Wage Growth. Reserve Bank of Australia. https://www.rba.gov.au/publications/confs/2019/pdf/guyonne-kalb.pdf.

- Kindermann et al. (2018). Kindermann, F., Mayr, L. and Sachs, D. *Inheritance Taxation and Wealth Effects on the Labor Supply of Heirs*. Working paper 25081. National Bureau of Economic Research. https://www.nber.org/papers/w25081.
- Kohler, M. (2018). *The Long View on Australian Equities*. Speech given at 31st Australasian Finance and Banking Conference, Sydney 13 December 2018. Reserve Bank of Australia. https://www.rba.gov.au/speeches/2018/sp-so-2018-12-13.html.
- Koukoulas, S. (2019). "Millennials should stop moaning. They've got more degrees and low rates". *The Guardian*. https://www.theguardian.com/commentisfree/2016/apr/04/millennials-should-stop-moaning-theyve-got-more-degrees-and-low-rates.
- Kurz et al. (2018). Kurz, C., Li, G. and Vine, D. J. *Are Millennials Different?*Finance and Economics Discussion Series 2018-080. Washington:
 Board of Governors of the Federal Reserve System.
 https://doi.org/10.17016/FEDS.2018.080.
- Love et al. (2009). Love, D. A., Palumbo, M. G. and Smith, P. A. "The trajectory of wealth in retirement". *Journal of Public Economics* 93.1-2, pp. 191–208.
- Lowe, P. (2019). *The Economic Outlook and Monetary Policy*. Address to the Economic Society of Australia. Reserve Bank of Australia. https://www.rba.gov.au/speeches/2019/sp-gov-2019-05-21.html.
- McDonald, P. (2017). "International migration and employment growth in Australia, 2011–2016". *Australian Population Studies* 1 (1), pp. 3–12. http:
 //www.australianpopulationstudies.org/index.php/aps/article/view/8.
- ME Bank (2019). *Household financial comfort report: Fifteenth survey*. https://www.mebank.com.au/getmedia/899ccb18-7fe5-4868-b51b-b64ad2b467cf/216317 HFCR-Jan-2019 V11-WEB.pdf.
- Melbourne Institute (2018). *HILDA Survey*. 2002 to 2017 releases. http://www.melbourneinstitute.com/hilda/.

- Minifie et al. (2017). Minifie, J., Chisholm, C. and Percival, L. *Stagnation nation? Australian investment in a low growth world*. Grattan Institute. https://grattan.edu.au/report/stagnation-nation/.
- Morrison, S. (2015). Fairer access to a more sustainable pension. https://formerministers.dss.gov.au/15866/fairer-access-to-a-more-sustainable-pension/.
- Morrissey et al. (2015). Morrissey, I., Mulders-Jones, S. and Petrellis, N. *We stand as one: Children, young people and climate change*. Plan International. https://www.plan.org.au/-/media/plan/documents/resources/we-stand-as-one--children-young-people-and-climate-change.pdf.
- Nielson, L. and Harris, B. (2010). *Chronology of superannuation and retirement income in Australia*. Parliament of Australia. https://www.aph.gov.au/About_Parliament/Parliamentary_Department s/Parliamentary_Library/pubs/BN/0910/ChronSuperannuation.
- North, M. (2019). "The Bank Of Mum and Dad Goes Boom!" *Digital Finance Analytics Blog*. http://digitalfinanceanalytics.com/blog/tag/bank-of-mum-and-dad/.
- Norton, A. (2018). *Demand driven facts and figures*. Grattan Institute. https://grattan.edu.au/wp-content/uploads/2018/01/demand_driven_facts figures SLNSW 13Feb.pdf.
- Norton et al. (2018a). Norton, A., Cherastidtham, I. and Mackey, W. *Mapping Australian higher education 2018*. Grattan Institute. https://grattan.edu.au/report/mapping-australian-higher-education-2018/.
- Norton et al. (2018b) ______ . Dropping out: the benefits and costs of trying university. Grattan Institute. https://grattan.edu.au/report/dropping-out/.
- OECD (2017). OECD.Stat: Labour Force Status by sex and age. Organisation for Economic Cooperation and Development. https://stats.oecd.org/Index.aspx?DataSetCode=LFS_SEXAGE_I_R.



- Saunders, T. and Tulip, P. (2019). *A Model of the Australian Housing Market*. Reserve Bank of Australia. https://www.rba.gov.au/publications/rdp/2019/2019-01.html.
- Sen, A. K. (1994). "Well-being, capability and public policy". *Giornale degli Economisti e Annali di Economia Nuova Serie* 53 (7/9), pp. 333–347. https://www.jstor.org/stable/23247762.
- Sheppard et al. (2017). Sheppard, J., Gray, M. and Phillips, B. *Attitudes to housing affordability: pressures, problems and solutions*. 24th ANUPoll. Australian National University. http://politicsir.cass.anu.edu.au/research/publications/attitudes-housing-affordability.
- Sternberg, J. C. (2019). *The Theft of a Decade: How the Baby Boomers Stole the Millennials Economic Future*. Public Affairs. https://www.publicaffairsbooks.com/titles/joseph-c-sternberg/the-theft-of-a-decade/9781541742383/.
- Stevenson, B. and Wolfers, J. (2008). *Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox*. Working Paper 14282. National Bureau of Economic Research. https://www.nber.org/papers/w14282.pdf.
- _____ (2013). Subjective Well-Being and Income: Is There Any Evidence of Satiation? Brookings. https://www.brookings.edu/research/subjective-well%e2%80%90being-and-income-is-there-any-evidence-of-satiation/.
- Terrill et al. (2016a). Terrill, M., Emslie, O. and Coates, B. *Roads to riches:* Better transport investment. Melbourne: Grattan Institute. https://grattan.edu.au/report/roads-to-riches/.
- Terrill et al. (2016b). Terrill, M., Danks, L., Coates, B., Emslie, O., Parsonage, H. and Button, J. *Cost overruns in transport infrastructure*. Report No. 2016-13. Grattan Institute. https://grattan.edu.au/report/cost-overruns-in-transport-infrastructure/.
- Terrill, M. and Wood, D. (2018). "The infrastructure budget trap". *John Menadue Pearls and Irritations*. https://johnmenadue.com/marionterrill-and-danielle-wood-the-infrastructure-budget-trap/.

- Treasury (2012). Treasury's Wellbeing Framework.

 https://treasury.gov.au/publication/economic-roundup-issue-3-2012-2/economic-roundup-issue-3-2012/treasurys-wellbeing-framework.

 (2013). A super charter: fewer changes, better outcomes.

 Commonwealth Treasury. https:
 //treasury.gov.au/sites/default/files/2019-03/super_charter_report.pdf.

 (2015). 2015 Intergenerational Report: Australia in 2055.

 Commonwealth Treasury.
 https://treasury.gov.au/publication/2015-intergenerational-report/.

 (2019a). Analysis of wage growth, November 2017. Commonwealth Treasury. https://treasury.gov.au/publication/p2017-t237966.

 (2019b). Pre-election Economic and Fiscal Outlook 2019.

 Commonwealth Treasury.
 https://treasury.gov.au/publication/2019-pefo.
- Victorian Law Reform Commission (2019). *Intestacy*. https://www.lawreform.vic.gov.au/content/5-intestacy-0.
- Watson, I. (2018). *Life Course Research Using Sequence Analysis: Insights into the Youth Labour Market*. Social Policy Research Centre. http://www.ianwatson.com.au/pubs/watson_sequence_analysis_youth labour_market_13mar2018.pdf.
- Weiss, E. B. (1992). "In Fairness To Future Generations and Sustainable Development". *American University International Law Review* 8 (1), pp. 19–26. https://pdfs.semanticscholar.org/4966/8f9c7a5a198fb7cfa 2bb6e6b3597c41b834d.pdf.
- Wilkins, R. (2016). The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 14. https://melbourneinstitute.unimelb.edu.au/__data/assets/pdf_file/0007/2155507/hilda-statreport-2016.pdf.
- Wood, D. (2018). "Taxing inheritances might be unpopular, but it's fair". *Sydney Morning Herald*. https://www.smh.com.au/national/taxing-inheritances-might-be-unpopular-but-it-s-fair-20181219-p50n5b.html.

- Wood et al. (2018). Wood, D., Daley, J. and Chivers, C. *A crisis of trust: The rise of protest politics in Australia*. Report No. 2018-05. Grattan Institute. https://grattan.edu.au/report/a-crisis-of-trust/.
- Wood et al. (2019). Wood, D., Griffiths, K. and Cowgill, M. *Budget blues: why the Stage 3 income tax cuts should wait.* Working Paper No. 2019-04. Grattan Institute. https://grattan.edu.au/report/budget-blues-why-the-stage-3-income-tax-cuts-should-wait/.
- Wood, D. and Percival, L. (2019). "More grey tsunami than youthquake". *The Conversation*. https://theconversation.com/more-grey-tsunami-than-youthquake-despite-record-youth-enrolments-australias-voter-base-is-ageing-115842.
- Yates, J. (2011). "Housing in Australia in the 2000s: On the Agenda Too Late?" The Australian Economy in the 2000s: Proceedings of a Conference Held in Sydney on 15–16 August 2011, pp. 261–296. http://www.rba.gov.au/publications/confs/2011/pdf/yates.pdf.

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