



BANKWEST CURTIN ECONOMICS CENTRE

BEYOND OUR MEANS?

Household Savings and Debt in Australia

Focus on the States Report Series, No.2
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About the Centre

The Bankwest Curtin Economics Centre is an independent economic and social research organisation located within the Curtin Business School at Curtin University. The centre was established in 2012 through the generous support from Bankwest (a division of the Commonwealth Bank of Australia), with a core mission to examine the key economic and social policy issues that contribute to the sustainability of Western Australia and the wellbeing of WA households.

The Bankwest Curtin Economics Centre is the first research organisation of its kind in Western Australia, and draws great strength and credibility from its partnership with Bankwest, Curtin University and the Western Australian government.

The centre brings a unique philosophy to research on the major economic issues facing the state. By bringing together experts from the research, policy and business communities at all stages of the process – from framing and conceptualising research questions, through the conduct of research, to the communication and implementation of research findings – we ensure that our research is relevant, fit for purpose, and makes a genuine difference to the lives of Australians, both in WA and nationally.

The centre is able to capitalise on Curtin University's reputation for excellence in economic modelling, forecasting, public policy research, trade and industrial economics and spatial sciences. Centre researchers have specific expertise in economic forecasting, quantitative modelling, micro-data analysis and economic and social policy evaluation. The centre also derives great value from its close association with experts from the corporate, business, public and not-for-profit sectors.

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Foreword



The ability of both households and governments to increase savings and manage debt has been an ongoing policy issue in Australia and throughout the world. Debt can be a good thing if it encourages real asset growth beyond that of interest repayments, as long as it does not interfere with other important economic activity.

Beyond our Means is the second report in the Bankwest Curtin Economics Centre's *Focus on the States* series. It brings new evidence to a national policy issue that impacts upon individuals, households and Australian States and Territories. Patterns of household savings and debt are explored over time and the issue of government debt examined.

Australian government debt is low when compared to other OECD countries – ranked 21 out of 25. However, the trajectory of government net debt in the post-GFC period has been exponential, particularly in relation to government revenue, increasing from 15.2% to 54.4% in just over five years. This can become a burden to the Australian economy, increasing the risk of creditor downgrading and limiting the ability of governments to govern. Instead of servicing the Australian people, governments can end up spending more resources servicing debt.

Australia's state and territories have also seen a marked increase in government debt over recent years – particularly South Australia, Victoria and Queensland. All three states are now recording debt to revenue ratios in excess of 50%. Western Australia has also followed suit, with debt to revenue increasing above 50% in 2013, a period which also saw the state lose its AAA credit rating, and with the most recent forward estimates foreshadowing no return to such levels for the remainder of the decade.

On the other hand, Australian households have decreased their propensity to take on debt and have increased their savings in the post-GFC period, however, household debt still remains three times higher now than what it was twenty years ago. Australians are now more comfortable with debt and currently hold debts equal to 1.5 years of income whereas in the past they had only debt equivalent to half annual income.

Who are Australia's best savers? Unsurprisingly it is the richest 20% of households holding most of the savings wealth – more than three-quarters of all household savings. These households have an estimated wealth of around \$1.3 million in savings – 200 times the bottom 20%. This division in savings in the form of financial assets between high and low income households is stark. These households also own around 68% of superannuation and 62% of cash deposits and more than 95% of the value of trusts.

Australians are also more likely to use the equity in the family home to increase spending now, with borrowing against the equity in the family home becoming more popular and the knowledge of a future super lump sum potentially influencing current household behaviour. While this use of debt allows a household to enjoy a higher standard of living now, it may jeopardise the standard of living it can achieve in the future.

A handwritten signature in black ink, appearing to read 'Alan Duncan', written in a cursive style.

Professor Alan Duncan

Director, Bankwest Curtin Economics Centre
Curtin Business School, Curtin University

Executive summary

This second report in the Bankwest Curtin Economics Centre's *Focus on the States* series addresses the critical issue of savings and debt in Australia. Our research explores patterns of savings and debt in Australia, and the implications this may have on the financial security and wellbeing of families now and into the future.

A detailed analysis of savings and debt focuses on a series of key issues:

- What types of households are more likely to save or be in debt?
- How do debt and saving patterns change over the lifecycle and has this behaviour changed across cohorts?
- Which state and territories are more likely to save or be in debt?
- Are certain types of debt and savings platforms becoming more popular?
- To what degree is home equity being used as an ATM?
- Will current superannuation savings provide an adequate standard of living in retirement for all Australians?

The report also examines patterns of government debt at both the federal and state level and how this compares internationally and to the level of debt taken on by households over time.

The report makes use of a number of key sources, including the ABS Survey of Income and Housing, government finance statistics and the International Monetary Fund's World Economic Outlook database, to source the most recent data.

Key findings

The Big Picture

- Government net debt in Australia currently stands at \$226 billion. International comparisons show that Australia was placed 21 out of a selected 25 OECD countries both in terms of net debt as a proportion of GDP and revenue.
- Government net debt relative to revenue has seen the most rapid increase since the GFC, jumping from 15.2% to 54.4% in just over five years.
- Over the last ten years, net government debt as a proportion of total revenue has increased across all state and territories.
- South Australia, Victoria and Queensland have seen net debt relative to revenue increases outpace the rest of the state and territories in recent times, with all three states above 50%. Western Australia has had similar patterns of debt to revenue increases
- In the period after the GFC, the household saving ratio climbed to heights not seen since the 1980s, to 11.2% of income by end 2011.
- The household savings ratio currently sits at around 8.5 cents in the dollar
- Although the GFC may have motivated households to budget with more care, there is evidence that those disciplines are starting to fade.
- Australians are living with higher debt, currently equal to 1.5 years of income whereas in the past they had debt equivalent to half annual income.
- The share of debt associated with investment property loans has tripled from one-tenth to three-tenths between 1990 and 2015.

Key findings (continued)

- Total household financial assets have risen from \$767 billion to \$3,961 billion in the last two decades - an annual rate of growth of 8.8%. Around half of this growth has been driven through superannuation savings, which totalled \$2.05 trillion in March 2015.
- Household debt has been growing at an annual rate of 10.3% over the last 20 years and now stands at over \$2 trillion dollars.
- The rate of growth in household debt has slowed since the GFC to an annual average of 6.2% over the last five years.
- While all quintiles have significant proportions of their savings in superannuation and cash deposits, those with the highest savings (top 20% of households) still own around two-thirds of these assets (68% of superannuation and 62% of cash deposits). They also own almost all the value of trusts (95%), equities (86%) and business assets (93%).

Savings and debt across states and territories

Distribution of household savings and debt

- The combined territories (ACT/NT) have the highest level of average household savings (\$436,000), closely followed by WA (\$370,000)
- Debt is also highest for the ACT/NT and WA, followed by NSW. NSW, however, does not enjoy similarly high savings levels, reflecting high relative property prices.
- The high prices of Sydney real estate and associated loans means that property debt as a proportion of total household debt is highest in NSW at 92.5%.
- Households in the capital cities have more in savings (\$36,000 on average) but almost double (\$79,000 on average) the household debt of their country counterparts.
- The low financial savings in Sydney sees it being the only capital city to have less household savings than its Balance of State counterpart. Sydney-siders have an average of \$20,000 less savings than households in the rest of NSW.
- On average the Australian household in 2015 is estimated to have savings of \$340,900. The typical or median household, one with half above and half below, has household savings of around \$100,000.
- The richest 20% of households have an estimated average of \$1.3 million in savings. This is more than 200 times the average of the poorest households, which have on average \$5,900 in savings.
- Superannuation and cash deposited in financial institutions are the main forms of savings for most Australians, representing two-thirds of average household savings.
- The richest one-fifth of households have three-quarters of household savings. The second richest quintile control 15% and the remaining six-tenths of households own under 10%.

Who saves and who owes?

- The youngest households have the lowest average household savings (\$32,800) and those approaching retirement, in the 55-64 age group, have the highest average with over half a million dollars in savings (\$532,400).
- Older couple Only have the highest average levels of savings – over half a million dollars.
- Lone person households where the household head is aged less than 35 years have the lowest level of household savings - \$61,000 followed by single parent households - \$89,000.
- The low savings of single parent households is exacerbated by reasonably high levels of debt. They have an average debt level of over \$100,000 and are the only type of household with people aged 35 or more years that has more debt than savings.
- The least indebted households are lone person or couple only households aged 65 years and over. A clear objective, and a sensible one, for those entering or in retirement is to reduce household debt.
- Higher incomes are related to higher levels of savings but not perfectly. Other factors are important in determining savings level, including household type and life stage.
- Capital cities have seen their disposable income increase by an average of 39% over the last decade, while the remaining state balances have only seen an increase of 31%.
- The greatest change in real household disposable income was in Perth (up 68%) while the lowest was for those in country Victoria (up 20%).
- Hobart recorded the largest growth in savings between 2005 and 2015, with an average increase of 143%. This took Hobart from one of the capital cities with the lowest average savings of \$142,900 in 2005-06 to one of the highest, with average savings of \$347,500 in 2015.
- Student loans have grown the fastest out of all debt classes at a growth rate of 65% in the ten years to 2015. This is closely followed by other property debt (62%) and mortgages (59%).
- Real credit card debt has decreased by 2% in the ten years to 2015, while investment loans have decreased by 10% and personal loans by 24%.

Trends over time

- Savings behaviour has changed considerably in the last ten years, exceeding the growth rate of both debt and disposable income.
- Growth in savings is a result of significant growth in cash deposits, trusts and superannuation which is owned by almost all households.
- There are almost 700,000 households in Australia that have savings or financial assets valued at \$1 million or more – excluding the family home
- Millionaire households may only represent a small proportion of all households (7.6%) but they hold more than half of all savings – more than the total of all the other households combined (92.4%).
- The combined territories of ACT/ NT have the highest proportion of millionaire households.

- The number of millionaire households has increased from under 300,000 since 2005 to almost 700,000 in 2015.
- Growth in the popularity of trusts has seen the proportion of households with trusts rise from one-quarter to one-third of millionaire households since 2005, and the typical amount in trusts rise from \$160,000 to almost \$600,000.

Beyond our means? Saving for the future

- Growth in both debt and savings have outstripped the growth in income. This may be caused by the 'wealth effect', which states that as wealth increases, spending will also increase.
- While spending more as wealth increases is not a problem, the issue with the wealth effect is that households do not differentiate between actual and perceived increases in wealth.
- According to the wealth effect, perceived increases in wealth will increase spending just as real increases will.
- Australians are now more comfortable with debt, accustomed to living with debts equal to 1.5 years of income whereas in the past they had debt equivalent to only half annual income.
- The use of debt allows a household to live beyond its means by funding a lifestyle that cannot be supported by a household's current income.
- Financial deregulation and mortgage innovations in the 1980s and 1990s have spawned the development of a suite of mortgage products, which effectively turn the family home into

an ATM that home owners can draw from as and when needed without having to sell the home.

- Large increases in borrowing secured against the family home was witnessed during the 1990s and early 2000s when house prices soared on the back of a historic housing market boom.
- Mortgage indebtedness has risen among all age groups over the past two decades, particularly for those aged 45-54 years. Amongst this age group, the incidence of mortgage debt rose by over 35 percentage points between 1990 and 2011-12, followed by a 30 percentage point increase amongst those aged 35-44 and 55-64 years.
- Significant mortgage equity withdrawal (MEW) activity is taking place amongst those aged 35-54 years.
- Prior to 2007-08 the incidence of mortgage equity withdrawal rose amongst nearly all age groups. Since 2007-08 the propensity to use MEW fell amongst younger age groups, but continued for those approaching retirement.
- WA homes owners were more likely to be engaged in mortgage equity withdrawal than other states prior to the GFC.
- Turning the family home into an ATM that can be accessed during all stages of the life course creates a real risk that elderly Australian homeowners will be more reliant on government income support during their retirement years.

Introduction

The Australian Treasurer said in his 2015 Budget speech that “Every nation must live within its means, and Australia is no different” (Hockey 2015) while announcing a deficit of \$35 billion and a surplus that will not occur until 2019-20 at the earliest. Some observers have stated that this timeframe is not credible and based on unrealistic assumptions and changes to accounting practices (Gittens 2015). The Intergenerational Report clearly suggests Australia is not collectively living within its means as policies currently legislated would not see the budget in surplus at any point over the next 40 years (IGR 2015).

One of the reasons for the budget deficit is the growth in outlays due to Australia’s ageing population. This places pressure both on the expenditure and revenue sides of the balance sheet. The government has responded by reviewing health care, the Pharmaceutical Benefits Scheme, the Age Pension, aged care, and superannuation system. Similarly, State and Territory governments are struggling with the burden of escalating costs of funding hospitals and are examining ways to reduce their projected future outlays. The prospects for revenue growth as a route to a healthier debt and deficit position are limited and are currently being gained through bracket creep. Faced with this outlook, it seems clear that government expenditures will inevitably be cut and users will have to contribute more, even if most ideas for reducing costs are being met with opposition.

Cutbacks in health, aged care and pension outlays by governments mean that older Australians need to be financially more self-reliant, that is they need to have saved more during their working life to meet the extra contributions they need to make in retirement. The introduction of compulsory retirement saving through the Superannuation Guarantee in the early 1990s was the first step in ensuring Australians were more self-reliant in their later years. This has been successful, at least in terms of accumulated savings, with \$2.05 trillion now invested with superannuation funds (APRA 2015). However, whether these funds will be used to support retirement living standards is unknown.

Turning from governments to households, the Australian population has historically not been disciplined savers compared with earlier decades. They have increasingly been spending more of their earnings over their working life and unlike their grandparents are quite comfortable with high levels of debt – a trend seen throughout many OECD countries. The ratio of income to amount not spent (called the Household Savings Ratio) was in continual decline from the mid-1970s until the Global Financial Crisis (GFC). The post-GFC period has seen this pattern change somewhat, with Australian households saving more and the ratio of household debt to income stabilising.

The change in behaviour has received favourable comments from the Reserve Bank of Australia (RBA) in their annual commentaries on the financial situation of households in Australia. For example, the RBA said, *'The household sector has continued to consolidate its financial position. The household saving rate remains well above the levels recorded in the 1990s and early to mid-2000s and households have been actively shifting their portfolios towards more conservative assets such as deposits.'* (RBA 2012) and then the following year the RBA said, *'The household sector has continued to display a more prudent approach to its finances than in the period prior to the global financial crisis ... Consistent with this, housing loan arrears rates have continued to improve across most parts of the country and other indicators of household financial stress remain low'* (RBA 2013).

A major contributor to household saving rates are the compulsory superannuation contributions made under the Superannuation Guarantee. While retirement savings has improved, the likelihood of these savings being used to sustain adequate living standards in retirement remains under a cloud. The tax concessions available through superannuation make it attractive to contribute but the option of taking superannuation as a lump sum and the ability to invest in residential real estate (through a Self-Managed Superannuation Fund) mean many see it as a tax effective way to invest in housing or to gift a home deposit to a young relative. This is inconsistent with the original intention of the policy, with tax concessions received supposedly improving living standards in retirement and reducing reliance on the government.

This aspect of saving is highlighted in the most recent review of household finances by the RBA. The RBA gives households a pat on the back for the continuing low levels of financial risk. However, it warns of the risks to the financial position of households associated with greater investor housing activity and the possibility of significant housing price falls¹ (2015). In other words, households could undo the good saving behaviour they have exhibited in the last few years by using those savings to reignite their love affair with housing and ignoring the associated risks.

This report analyses the level of household savings and debt in Australia and how this has changed over time. An overall view of the national situation in relation to government debt and households savings is firstly explored, followed by a detailed analysis of household savings and debt patterns. Are Australian governments really in over their heads when it comes to debt? Which states and territories are better at balancing the budget? What type of households are more likely to save and how do these patterns change over time and across the lifecycle? The report also discusses the impact large levels of superannuation savings are having on household behaviour.

¹ The Treasury Secretary recently said Sydney's housing market is showing "unequivocal" signs of a housing bubble, as are up-market areas of Melbourne (Hutchens 2015). In addition, the RBA believe the strong house price growth in Sydney combined with more investors and low interest rates are leading to more construction which may result in oversupply and increase the risk of significant price falls. (RBA 2015).

Definitions and Scope

This report mainly focuses on *savings* rather than *saving*. The difference is that saving (without the 's') is a rate while savings (with the 's') is a stock or level at a particular time. For example, if a household has been **saving** \$100 per week for one year, they will currently have **savings** of \$5200.

In this report the term 'savings' includes accounts held with financial institutions (including offset accounts), the net value of a business, shares, debentures and bonds, trusts, superannuation funds, and loans to other persons. This definition is the same as the ABS or OECD definition of 'financial assets'. The terms *financial assets* and *savings* are used interchangeably within the report.

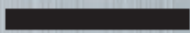
Household debts are defined as the current amount outstanding on mortgages, other property loans, investment loans, credit cards, personal and vehicle loans, and student loans.

The savings and debt values used in the report are estimates derived from the Australian Bureau of Statistics (ABS) 2011-12 Survey of Income and Housing (SIH). The ABS, 2011-12 SIH is the most current household level data available that collects information about household assets and debt. It provides data on 14,500 households and is representative of all Australian households. Survey methodology and variables are described in detail in the SIH user guide (ABS 2013).

The 2011-12 SIH data have been updated to 2015 using the latest available household projections, changes in the ASX Index, wages, changes in superannuation balances and inflation. The methodology to estimate the 2015 values is detailed in the Glossary and Technical notes at the end of this report.

Trend analyses presented in this report compare the savings and debt of households in 2015 with those ten years ago in 2005, using the ABS, 2005-06 Survey of Income and Housing (ABS 2008). The values shown for 2005 are presented in 2015 dollars. These inflation-adjusted estimates were obtained by applying the change in the CPI between 2005 and 2015 to the original values.

The big picture



Background

If incomes are growing faster than inflation, Australia should be saving more. However, in reality, people have a propensity to 'get paid, pay our commitments, and spend the balance' (Whittaker 2015), meaning as income increases, living standards through expenditure increase and very little, if any, is saved. In fact, living standards tend to rise in line with growth in wealth (for example, as the value of superannuation balances increase or the value of the family home increases) even when that wealth is not currently producing a higher income. This perceived increase in wealth can lead to people living beyond their current means by increasing their levels of debt. Unfortunately, this is true for both governments and households.

Governments

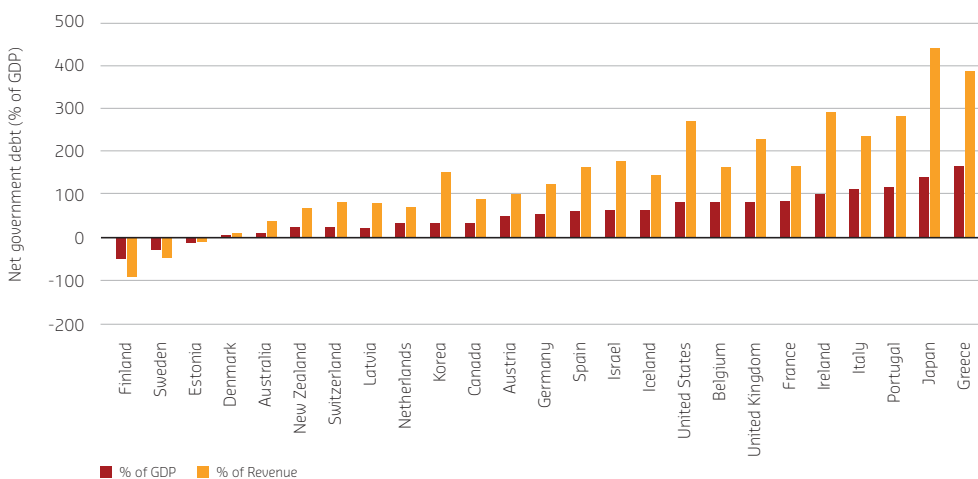
Government debt has been the subject of an ongoing rhetoric among policy makers, the public and the media. Government debt is often perceived to be a result of reckless government spending and an ongoing inability to balance the annual budget. Increases in government debt are often a common result of economic downturns, where revenue recedes and expenditure is increased to inject new life into the economy. While economic debates are ongoing about the advantages and disadvantages of government intervention in this way there is a general consensus that if government expenditure occurs as investment it would have much longer lasting impacts on economic growth (Reinhart, C & Rogoff, K., 2010).

Government net debt in Australia currently stands at \$226 billion

The Rudd government's Treasurer Wayne Swan embarked upon such a strategy at the time of the GFC by introducing a stimulus package at the outset. This policy has been heralded as the main reason Australia did not slip into full recession, recording only one quarter of negative growth and leading to Swan being nominated as world Treasurer of the year in 2011 by *Euromoney*. Others have argued this wasn't so much a consequence of astute fiscal management, but rather the strong financial position inherited from the previous government (Alexander 2013). Indeed, continued government surpluses in excess of expectations bolstered by the mining boom over the decade leading up to the GFC meant that the Rudd government was in a better position to act, but they also took the initiative.

Despite the potential positive effects of moderate government debt on economic recovery, economic theory suggests that large amounts of government debt can pose a significant threat to a nation's wellbeing. Large amounts of central government debt can create inflationary pressures and also has the potential to crowd out private investment. An obvious problem with government debt is that servicing debt can mean a reduction in other government activity. McKibbin (2011) argues that if debt as a proportion of GDP increases at a rate that exceeds the interest rate and budgets continue to be in deficit a debt explosion is inevitable. Government net debt in Australia currently stands at \$226 billion according to the most recent budget papers². However, a comparison to national growth and the ability to service this debt through revenue is required to make anything of this figure. Recent international comparisons (Figure 1) show that Australia was placed 21 out of a selected 25 OECD countries both in terms of net debt as a proportion of GDP and revenue.

Figure 1 Net government debt as a proportion of GDP and total revenue: selected OECD countries, 2013



Source: International Monetary Fund World Economic Outlook database.

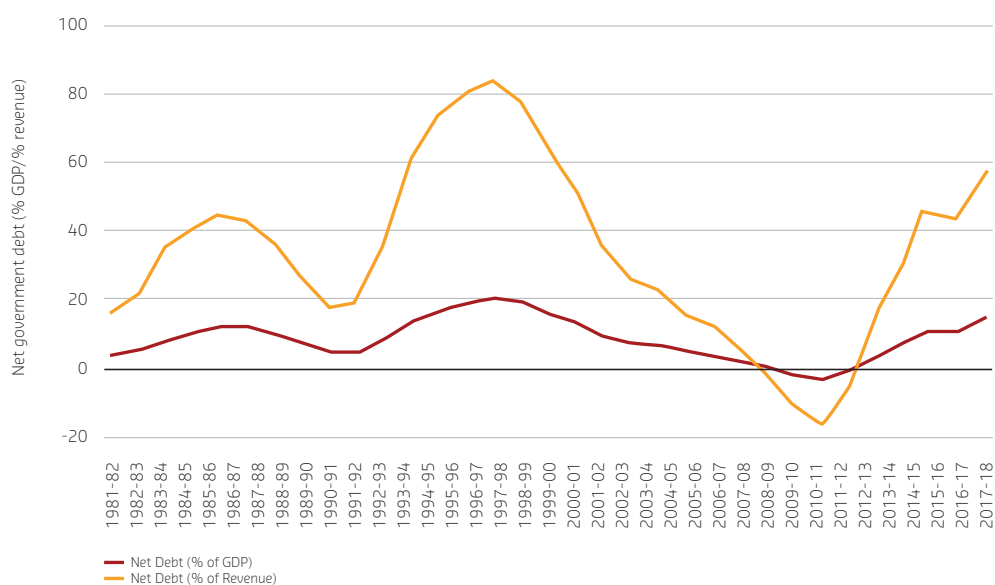
² Federal Budget 2015, Budget Paper 1: Budget Strategy and Outlook.

Governments (continued)

Government net debt as a proportion of revenue has seen the most rapid increase since the GFC, jumping from 15.2% to 54.4% in just over five years.

However, net debt has been rising at a considerable pace since the GFC, particularly with respect to government revenue (Figure 2). Net general government debt as a proportion of GDP currently sits at around 12.5% and has been climbing rapidly since reaching a low of -3.8% in 2007-08. Government net debt as a proportion of revenue has seen the most rapid increase since the GFC, jumping from 15.2% to 54.4% in just over five years. While both measures remain below those seen in the early to mid-nineties as the “recession we had to have” took hold of the economy, there is a concern that serviceability of government debt is unsustainable particularly if the current trajectory continues.

Figure 2 Net debt as a proportion of GDP and government revenue, Australia 1981-82 to 2013-14

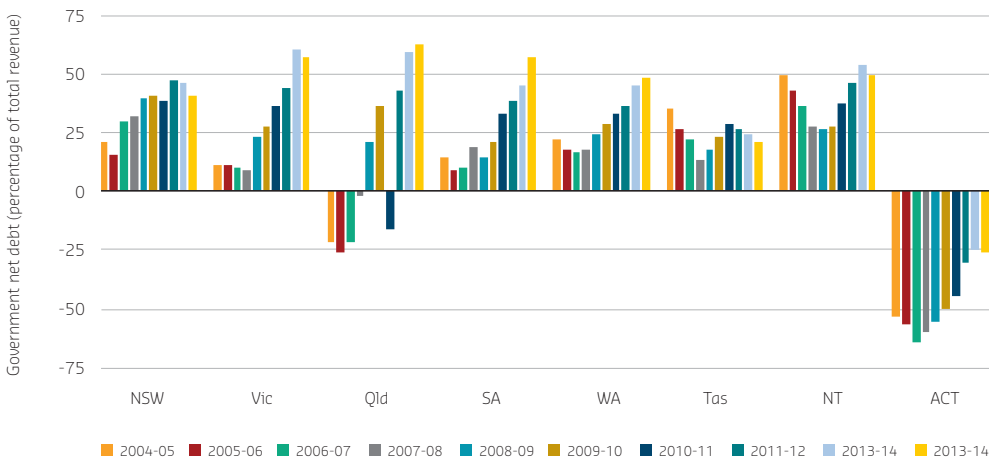


Source: 2014-15 Budget papers.

The ratio of government net debt to revenue is often used as an indicator for international creditor ratings. A general rule of thumb is that debt to revenue ratios above 50% erode confidence in an economy and heighten the risk of a downgrade. At a national level, Australia has managed to maintain its AAA credit rating despite debt to revenue ratios recently exceeding 50%. However, Goldman Sachs has warned that Australia’s gold star rating is at risk (Scutt 2015).

The country’s top performer – Western Australia – has experienced such a fall, with its AAA rating downgraded to AA+ in September 2013, a period that also saw the state’s debt to revenue ratio exceed 50% (Figure 3). Over the last ten years, net government debt as a proportion of total revenue has increased across all states and territories, following a similar path to that of the Commonwealth. Some states have increased at a faster rate than others, particularly post-GFC. South Australia, Victoria and Queensland have seen net debt increases outpace the rest of the states and territories in recent times, with all three states well above the 50% marker. Western Australia has had similar patterns of debt to revenue increases. Small decreases in net debt proportionate to revenue have been observed in NSW over the past three periods, keeping NSW below the 50% threshold.

Figure 3 Government net debt as a proportion of total revenue, Australian states and territories, 2004-05 – 2013-14

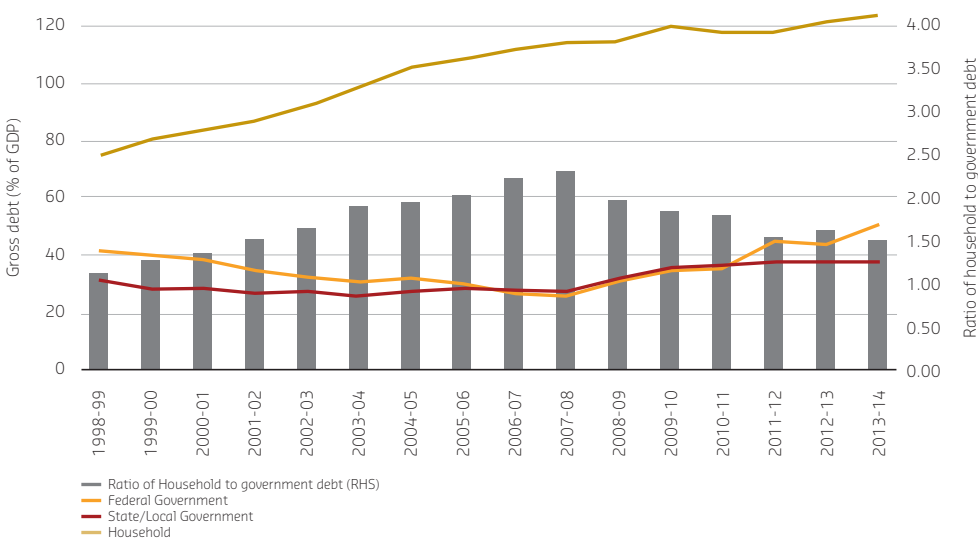


Over the last ten years, net government debt as a proportion of total revenue has increased across all state and territories.

Note: Government net debt is defined here as the total of general government and public non-financial corporations net debt. Total revenue is the sum of GFS general government and GFS public non-financial corporations revenues.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates from ABS Cat No.5512.0 – Government Finance Statistics, Australia 2013-14 and state and federal Budget papers.

Comparing government and household debt we observe that proportionately households have consistently taken on more debt than state or federal governments (Figure 4). Until 2003-04 gross household debt was growing at rates of between 3% and 6% of GDP. Relatively, state/local gross government debt as a proportion of GDP was falling. The situation changed dramatically between 2007-08 and 2008-09 when the GFC hit, where the propensity of governments to take on more debt increased. The rate of gross household debt also slowed after this period, decreasing between 2009-10 and 2011-12.

Figure 4 Household and government gross debt as a percentage of GDP, 1998-99 – 2013-14

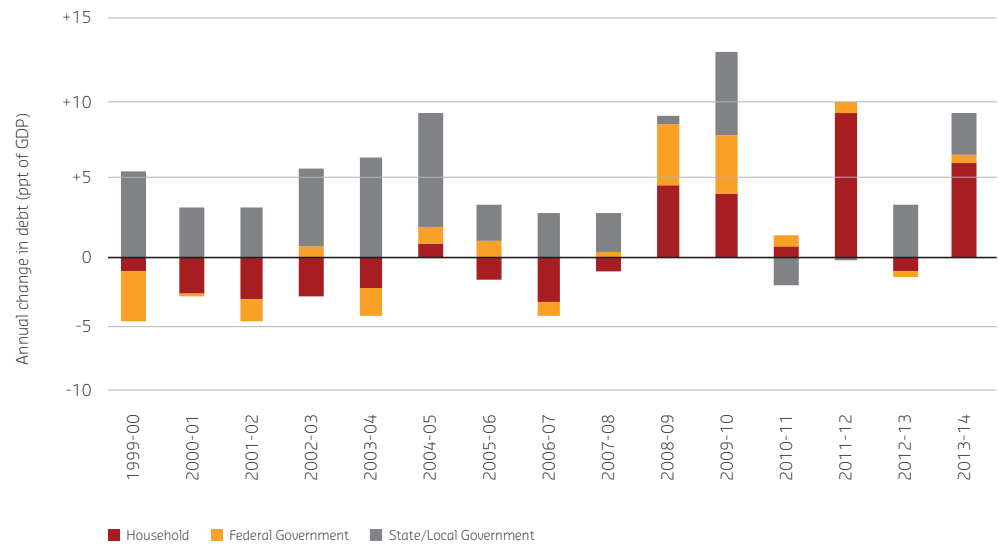


Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates from ABS Cat No.5512.0 – Government Finance Statistics, Australia 2013-14 and state and federal Budget papers.

Governments (continued)

The annual percentage point change in gross debt is shown in Figure 5 and emulates the pattern shown in Figure 4. Growth in household sector debt was rising at a faster rate prior to the GFC, since the GFC this has tapered off and federal government debt has been rising rapidly.

Figure 5 Annual change in household and government debt, 1998-99 - 2013-14



Note: Government net debt is defined here as the total of general government and public non-financial corporations net debt.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates from ABS Cat No.5512.0 - Government Finance Statistics, Australia 2013-14 and state and federal Budget papers.

Households

Household saving is defined as the difference between the disposable income of the household and what they spend on goods and services. Disposable income is calculated by deducting income tax and the Medicare levy from gross income.

This is the definition used by the ABS in calculating the Household Saving Ratio (HSR). An important aspect of the HSR definition is that household saving does not include capital gains and losses as these are not considered to be part of a household's disposable income³. The exclusion of capital gains means that rising house prices do not directly influence the level of household saving. However, indirectly the "wealth effect" from rising house prices may influence expenditure. The wealth effect is discussed later in the report.

Household saving

The proportion of income saved on average by Australian households declined steadily from over 12% in 1985 to zero in 2002 (Figure 6) and by December 2002 the ratio of savings to income had fallen to -0.7%. This means, on average, Australian households were spending all of their income, in fact, they were spending 100.7 cents for every dollar that came into the house.

Research suggests that the downward trend was driven by a number of factors, including an increased availability of credit, falling real interest rates, more stable economic outcomes, rising house prices, rising household income and higher income expectations. This confidence influenced household behaviour and resulted in consumption growing faster than income and the saving ratio falling (Finlay and Price 2014).

In the period after the GFC, the saving ratio climbed to heights not seen since the 1980s – to 11.2 cents in the dollar by late 2011. Finlay and Price (2014) attributed this to a shift in attitudes to debt for certain types of households. In particular, they found that those with less secure incomes and/or those vulnerable to housing price shocks, higher educated households, younger families with debt and older households with significant savings had changed their behaviour and saved more. They suggest that from 2003 onwards, households with higher levels of education downgraded their future income prospects and increased their savings.

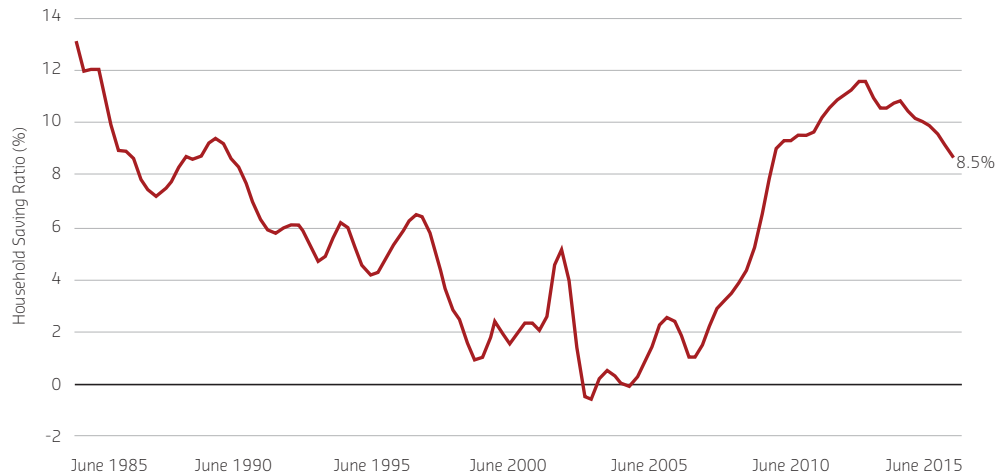
Similarly, low income households and those with large exposures to property debt felt more at risk and were therefore more inclined to save. Finally, wealthy households and those servicing high debt levels may have changed their attitude to debt after the GFC and committed to rebuild their savings. It seems the GFC reminded people of the importance of saving for a 'rainy day'.

³ While the HSR provides an indication of household saving, it does have some limitations. Firstly, the rate at which households save cannot be directly measured and has to be estimated as the residual of two large items in the National Accounts – aggregate disposable income and household spending. Secondly, due to data limitations, the household sector in the National Accounts is broader than just households. The sector also include unincorporated enterprises and non-profit institutions.

Households (continued)

Australian households are now saving 8.5 cents of every dollar of income.

Figure 6 Household Savings Ratio, June 1985 to December 2014



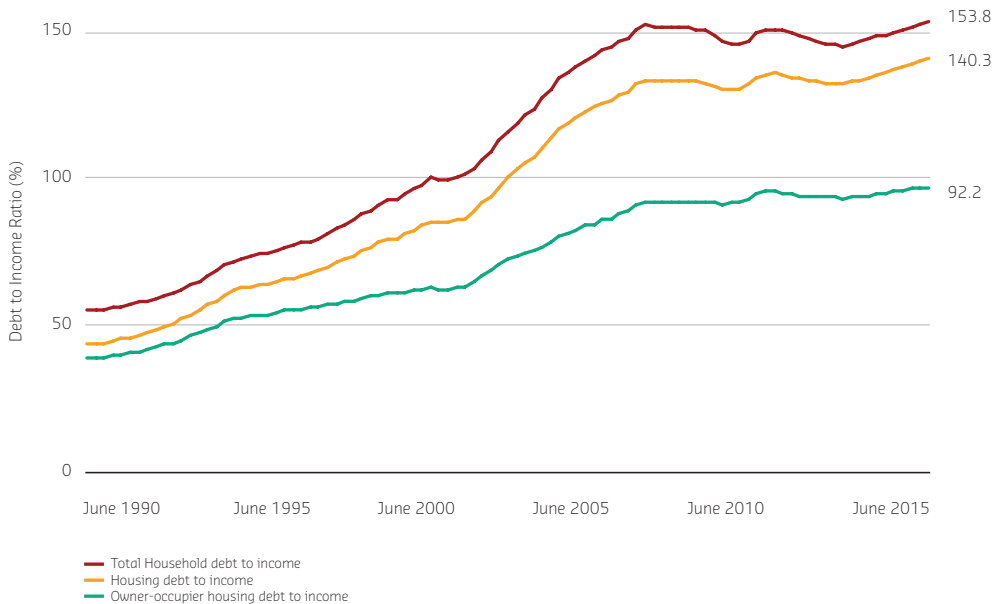
Source: ABS Cat No. 5206.0 - Australian National Accounts: National Income, Expenditure and Product, Table 1 - Household Savings Ratio (Trend).

However, the climb in the saving ratio is showing signs of a reversal since the near 30-year high of 11.2 cents in the dollar by 2011. Household savings rates are again trending downwards (Figure 6), with Australian households now saving 8.5 cents of every dollar of income on latest figures for March 2015. The tough times associated with the GFC may have motivated households to budget with more care, but are those disciplines starting to fade?

Household debt

Higher house prices, easier access to consumer credit, the ability to borrow against housing equity, deregulation of the financial markets in the 1980s and a less cautious attitude to current expenditure were major contributors to the low saving or overspending trend evident in the early 2000s. This trend resulted in Australian households taking on considerable debt, with debt levels increasing until recently.

The trend in the total household debt ratio (Figure 7) has been strongly upwards for most of the last two decades. It has tripled from less than half of annual disposable income in 1990 (47%) to over 150% in 2006. Over the last decade, the ratio has been relatively stable at around 150%. The plateau is a good sign that the upward debt trajectory has abated, even though the ratio remains at the highest level for 25 years. It is clear that Australian households have become accustomed to living with higher levels of debt, equal to 1.5 years of income on average now compared with half annual income in 1990 and one year of income at the start of the millennium.

Figure 7 Household Debt to Income Ratio, June 1990 to December 2014

Source: ABS Cat No. 5206.0 – Reserve Bank of Australia, Table E2 Household Finances – Selected Ratios.

Not surprisingly, housing debt to income is closely aligned to overall household debt, given that this debt class generally constitutes the highest proportion of households' commitments. The ratio currently stands at 140% and has been driven by an increase in debt associated with property investment. The share of debt associated with investment property loans has tripled from one-tenth to three-tenths of total household debt over the last 25 years. This growth in the share of debt associated with investment properties is particularly evident in the pre-GFC period from 2000 to 2007. Owner-occupied debt (mortgages) as a ratio to disposable income have also been increasing over the past 25 years, though at a slower rate, and has also plateaued since the early 2000s.

Households (continued)

The mirroring growth of debt and superannuation may be one reason that households are more comfortable with debt – they know a retirement lump sum will be available to pay their debts at some point in the future.

Household saving and debt trends

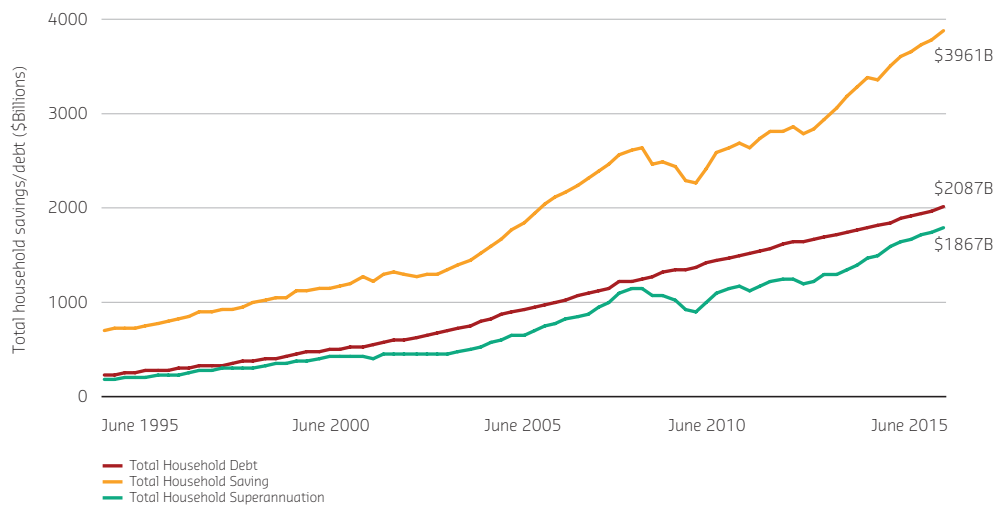
Over the last 20 years total household financial assets or savings have risen from \$767 billion to \$3,961 billion (Figure 8), equivalent to an annual rate of growth of 8.8%. Around half of these household savings are held in superannuation funds which totalled \$2.05 trillion in March 2015.

The rate of growth of household debt has broadly kept pace with the increase in superannuation savings over the last two decades. Total household debt has grown at an annual rate of 10.3% over the last 20 years and is now over \$2 trillion dollars.

Growth in debt has slowed over the last 10 years, with both household financial assets and debt growing at 8% per year. In the five years since the GFC, the rate of increase in household debt has reduced even further to 6.2% per annum.

The mirroring growth of debt and superannuation may be one reason that households are more comfortable with debt – they know a retirement lump sum will be available to pay their debts at some point in the future.

Figure 8 Total household savings (including superannuation) and debt, June 1995 to December 2014



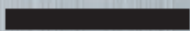
Source: Reserve Bank of Australia Table E1: Household and Business Balance Sheets.

Summary

Since the introduction of compulsory superannuation contributions, household savings have been growing at 8.8% over the last two decades. However, household debt has also been growing at around the same rate. An increase in borrowing for investment properties is evident, but the use of credit to maintain a lifestyle not supported by income seems to be adding to the level of debt. On average, households now have debt equivalent to 150% of their annual disposable income.

Patterns

of household savings and debt



Patterns of household savings and debt

Households save for a variety of reasons. Economic research has suggested four principal motives for saving: to provide for retirement and bequests; to purchase a home or finance a large expenditure; for precautionary reasons; and to smooth living standards over time (Callen and Thimann 1997). A recent Australian survey found that while saving for retirement or the unexpected were common reasons, they were certainly not the most common. The more common reason given for saving was to finance a major expenditure, but interestingly not a house purchase but rather for travel. Saving for retirement, precautionary reasons ('a rainy day') and to repay debts also rated among the more popular reasons (Melbourne Institute 2011).

Along with the varying motives for saving, there are also a range of savings instruments. These include bank accounts, offset accounts, other deposits with financial institutions, share portfolios, superannuation account balances, and investing in a business. Of course, the family home is the largest single asset owned by the vast majority of Australians. However, the focus for this section of the report is on financial savings instruments, which is why we distinguish from the value of primary residences and other property investments in the analysis that follows.

Some households have no savings at all. Most will have at least a bank account balance and a superannuation account with some retirement savings, and some households have millions of dollars in savings. There are huge variations in patterns of savings in Australia, and it is important to learn more about the distribution and drivers of savings behaviours. The same is true for household debt – some have no debts whatever, many have a mortgage as their only significant financial commitment, and a few households are millions in debt.

The motives, instruments and ability to save lead to considerable differences in savings and debt outcomes of Australian households. As money is put aside and compounds over the working life, it could be expected the savings will grow with age. Is this correct? Does higher income produce higher savings? Does a couple only household save more than single parent household? Has the improved Household Saving Ratio over the recent years reflected in greater levels of savings? Who are the best savers and who has the most debt – those on high incomes or those on very low incomes? All of these aspects of household savings and debt will be discussed in the following sections.

Distribution by quintile

The average Australian household in 2015 is estimated to have savings of \$340,900. The typical or median household, one that sits in the middle of the distribution of households when ranked according to savings, has household savings of around \$100,000⁴. However, there are 9.1 million households in Australia and almost certainly no two of them have saved the same amount or have the same levels of debt. Aggregate or average figures obscure important variations in financial circumstances, which is why this section explores the distribution of savings and debt for different household groups according to the value of their financial assets.

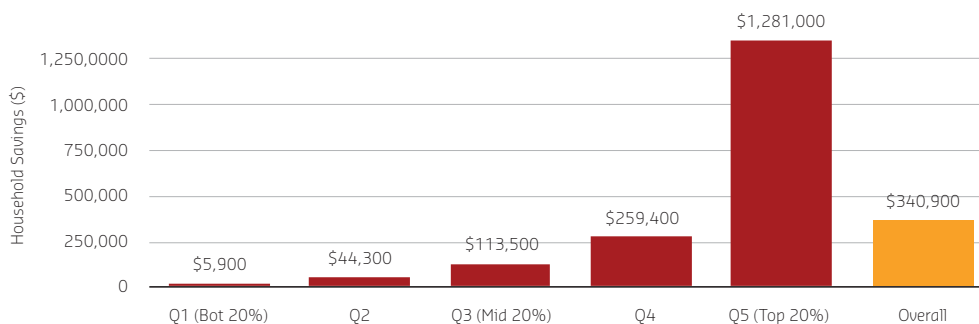
The average Australian household in 2015 is estimated to have savings of \$340,900.

Household savings

To provide a comparison of the different levels of savings, data on Australian households have been ranked into five groups (*quintiles*) according to the value of their total savings. The 20% of Australian households with the least savings are designated as Quintile 1 (Q1), the next 20% as Quintile 2 (Q2), and so on. Q5 are the 20% of households with the highest level of savings. Five distinct groups allows the bottom, middle and top to be easily compared, with each quintile representing around 1.8 million households (Figure 9).

The average value of household savings is \$340,900, but savings within successive quintiles range from an average of under \$6,000 for the fifth of households with the least savings to an average of almost \$1.3 million for the richest quintile (Figure 9).

Figure 9 Average household savings by savings quintile, Australia, 2015 (mean \$'000s)



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The most prominent feature of household savings by quintile is the difference between the richest one-fifth and the rest. The richest 20% of households (Q5) have an estimated average of \$1.281 million in savings. This is five times more than the average of their nearest neighbour (Q4 \$259,400) and more than 200 times the average of the poorest households (Q1 \$5,900). They also have more than 10 times the average savings of a household in the middle (Q3 \$113,500).

⁴ The reason that the average is higher than the typical household is that the average is biased towards those with very high levels of savings (see Appendix B – Impact of means and medians for a discussion of the medians and means).

Table 1 Household savings by savings quintile, Australia, 2015

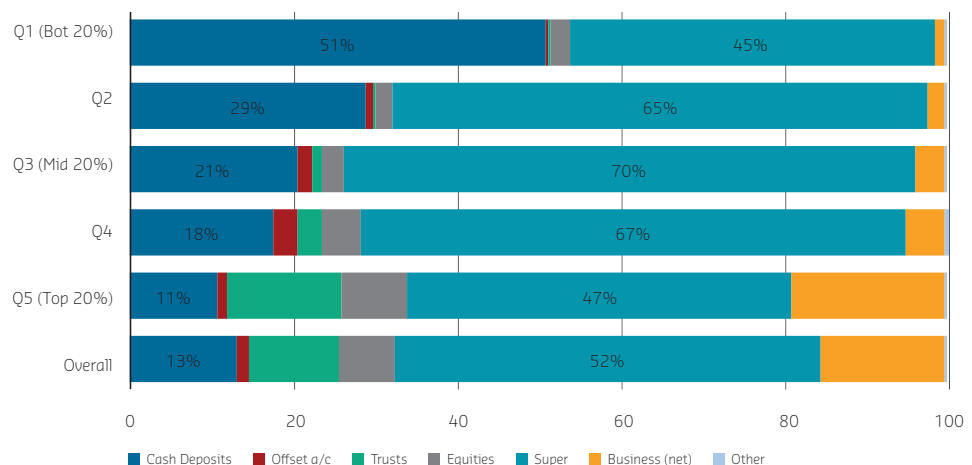
	Cash Deposits	Offset account	Trusts	Equities	Super	Business (net)	Other	H'hold Savings
	\$	\$	\$	\$	\$	\$	\$	\$
Q1 (lowest 20%)	3,000	0	0	100	2,600	100	0	5,900
Q2	12,700	400	200	900	28,900	1,000	100	44,300
Q3 (middle 20%)	23,300	2,200	1,100	3,100	79,400	4,000	300	113,500
Q4	45,500	7,500	7,700	12,200	173,200	12,100	1,300	259,400
Q5 (top 20%)	137,600	17,300	178,700	102,000	600,800	240,000	4,600	1,281,000
Australia overall	44,400	5,500	37,600	23,700	177,000	51,500	1,300	340,900

Note: Cash deposits includes money held by financial institutions and debentures. Other includes loans to people outside the household and the value of other financial instruments. Values have been rounded and may not add to total value.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table 1 shows the average value of savings by different financial instruments among households in each five savings quintiles. Superannuation and cash deposited in financial institutions are the main forms of savings for most Australians. In overall terms, these two asset types represent two-thirds of average household savings (Figure 10). For those with minimal savings, like those in Q1, their savings are roughly divided between these two forms of financial asset with half in cash deposits (\$3,000 or 51%) and most of the remainder in superannuation (\$2,600 or 45%). These two financial assets total 96% of their average savings for those with the lowest savings. For households with savings in the middle (Q3), these two asset types still account for over 90% of their savings. However, the share of savings in superannuation for households in the middle (Q3) is higher than for the poorer Q1 and with an average household superannuation balance of \$79,400 is 70% of their savings and cash deposits represent only one-fifth (21%) of their total household savings.

Figure 10 Asset allocation of household savings by quintile, Australia, 2015 (% of savings portfolio)



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

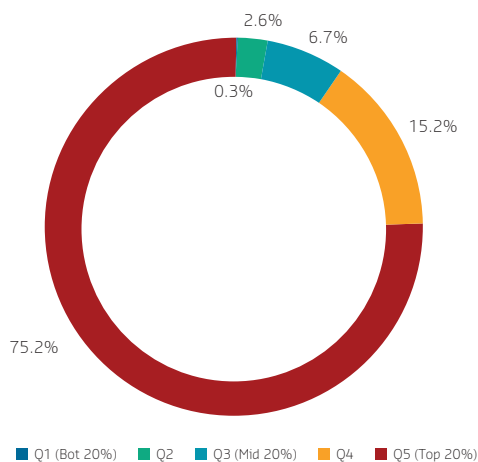
Households with the highest levels of savings (Q5) typically spread their savings over a greater range of financial assets. However the low tax rates associated with superannuation still ensure that it represents almost half (47%) of their savings portfolio. And while those in Q5 have more in cash deposits than any other quintile – an average of \$137,600 – this represents the smallest proportion of savings at 11%.

The high level of savings of those in Q5 (\$1.3m) allows them to diversify into other financial assets and have significant amounts in trusts (Q5 average \$178,700), equities (\$102,000) and net business assets (\$240,000). Each of these averages is many times the balances of those in lower quintiles.

The differing averages suggested a very unequal distribution of savings. An analysis of the proportion of total household savings owned by each quintile confirms the bias towards the rich. The richest one-fifth of households have three-quarters of household savings (Figure 11). The second richest quintile control 15% and the remaining six-tenths of households own under 10%. This concentration of savings in the hands of the rich is much greater than the inequality of income (Q5 receive 31% of total disposable income) or net wealth (Q5 own 56% of total household net wealth).

The richest one-fifth of households have three-quarters of household savings.

Figure 11 Proportion of total household savings by quintile, Australia, 2015 (%)



Source: BANKWEST CURTIN ECONOMICS CENTRE | See Table A-xx.

While all quintiles hold significant proportions of their savings in superannuation and cash deposits, those with the highest savings (Q5) still own around two-thirds of these assets (68% of superannuation and 62% of cash deposits). They also own almost all the value of trusts (95%), equities (86%) and business assets (93%).

Household debt

Easier access to credit and the ability to draw on the equity in the family home over the last few decades has allowed Australian households to support financial outlays and lifestyle purchases that would not be possible on household income alone. Many households have taken advantage of access to credit to smooth incomes and expenditures over the course of their lives.

Having significant amounts of savings allows a household even easier access to credit because they can take on debt using an asset as security (with the obvious exception of superannuation). It is perhaps not surprising then that those with the highest average debt are also those with the highest savings. Households in the highest savings quintile (Q5) have an average of \$226,500 in debt, those in the middle (Q3) have \$173,700 and those at the bottom (Q1) have an average of 35,900 (Table 2). Clearly this is more evenly distributed than savings. Mortgages, on average, are the largest financial commitment across all quintiles. The size of the average mortgage is relatively evenly distributed between the top four quintiles with each between \$70,000 and \$120,000, although the range of mortgage values around those averages is very broad. In the bottom quintile, there are a much smaller proportion of households with mortgages and the average value of \$23,500 reflects this.

Table 2 Household debt by savings quintile and type of debt, Australia, 2015 (mean \$)

Savings Quintile	H'hold Disp Income \$pa	Mortgage \$	Other Prop Loans \$	Student Loans \$	Credit Cards \$	Invest. Loans \$	Personal & Car Loans \$	Total H'hold Debt \$
Q1 (lowest 20%)	42,600	23,500	6,700	2,000	1,300	200	2,100	35,900
Q2	70,300	73,700	18,800	3,400	2,200	1,300	4,000	103,400
Q3 (middle 20%)	87,200	120,000	41,800	2,700	2,900	1,700	4,600	173,700
Q4	103,700	115,700	74,000	3,100	2,800	3,900	4,400	203,900
Q5 (top 20%)	136,700	89,500	111,400	1,700	2,800	17,700	3,400	226,500
Australia overall	88,100	84,500	50,500	2,600	2,400	4,900	3,700	148,700

Note: Values have been rounded and may not add to total value.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Those with high savings are usually aware of when it is smart to borrow and when it is not. Households in the richest 20% tend to borrow money for investments purposes (when it is tax deductible) and use their savings to pay off their high interest, non-tax deductible personal debts such as credit cards. This is reflected in the data where average credit card debt, personal loans and car loans are generally lower than other quintiles. Other property loans average \$111,400 for the highest fifth of households, some \$35,000 more than the next highest quintile, with average investment loans more than four times the next highest quintile (\$17,700) compared to \$3,900.

Summary

There are 9.1 million households in Australia with average savings of \$340,900 and debts of \$148,700. There is significant inequality in the distribution of these financial assets. The top 20% of savers average almost \$1.3 million and have three-quarters of total value of savings while the poorest 20% average only \$5,900 (and 0.3% of the total savings). Debt is spread more evenly across the savings distribution. Households with higher savings generally having more debt, a product of greater accessibility and means to repay these liabilities.

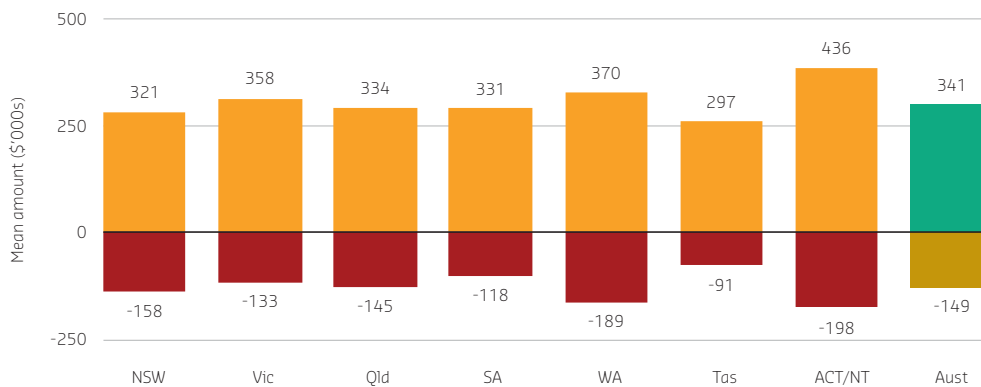
Distribution by State and Territory

Household savings

There are a number of reasons for household savings to vary by State/Territory. Household wealth includes the value of the family home and housing markets vary considerably between States. The value of other household assets are less sensitive to the location of households as other savings instruments and financial assets outside of the family home tend to be less dependent upon location. However, differences in industry concentrations, local labour markets and remuneration opportunities between States and Territories provide households with different capacities to build their savings. Household wealth balances by State/Territory and Capital City/Balance of State were discussed in the first BCEC *Focus on WA* report on 'Sharing the Boom' (Cassells et al. 2014a).

Figure 12 shows that there are significant differences in household savings between the States and Territories. The combined Territories category of *Australian Capital Territory/Northern Territory* boasts the highest levels of savings with an average of \$436,200. This is \$95,000 more than the overall average and \$66,000 more than Western Australia, the State with the second highest level of household savings – which has an average of \$370,200. These findings likely reflect much higher average incomes in these States and Territories when compared to other areas across Australia.

Figure 12 Household savings and debt by State/Territory, 2015 (mean \$'000s)



Note: Values at the top of each column are average household savings; inside the bottom of each column are average household debt for that State. The ACT/NT values are the weighted averages.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing.

Western Australia is followed by Victoria (\$357,500); Queensland (\$334,000); and South Australia (\$330,500). It is likely that the high cost and popularity of real estate is impacting on other savings in New South Wales with a lower average of \$320,800.

Table 3 Household savings by State and type of asset, 2015 (mean \$s)

	Cash Deposits	Offset account	Trusts	Equities	Super	Business (net)	Other	H'hold Savings
	\$	\$	\$	\$	\$	\$	\$	\$
New South Wales	47,200	7,500	15,600	24,200	174,200	50,800	1,300	320,800
Victoria	44,000	4,900	48,500	25,200	181,500	52,300	1,000	357,500
Queensland	40,300	4,400	49,600	16,500	169,900	51,700	1,700	334,000
South Australia	38,100	3,900	37,900	27,100	169,100	53,000	1,400	330,500
Western Australia	51,900	4,700	54,900	28,500	174,700	54,500	1,000	370,200
Tasmania	36,700	2,200	22,300	15,700	175,200	42,200	2,300	296,700
A.C.T. and N.T.	40,800	6,400	46,300	37,400	266,000	39,100	300	436,200
Australia	44,400	5,500	37,600	23,700	177,000	51,500	1,300	340,900

Note: Not all household wealth columns are shown and assets will not add to total value.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table 3 shows the average superannuation balances for each State/Territory are in range from just under \$170,000 to mid \$170,000s for each jurisdiction with the exception of the value for ACT/NT. The higher average value for these territories (\$266,000) reflects the traditionally high proportion of government employees in the Territories and the generous superannuation contributions available in the past. The high proportion of government employment in the Territories also assigns it a value of the *net business* assets that is only three-quarters (\$39,100) of the average.

Household debt

Along with the highest household savings, Western Australia and ACT/NT also have the highest levels of debt (Table 4). As the only two areas where household disposable incomes average over \$100,000, higher incomes not only allow greater savings but also access to more debt.

Table 4 Household debt by State/Territory and type of asset, 2015 (mean \$)

	H'hold Disp Income	Mortgage	Other Prop Loans	Student Loans	Credit Cards	Invest. Loans	Personal & Car Loans	Total H'hold Debt
	\$pa	\$	\$	\$	\$	\$	\$	\$
New South Wales	91,900	95,900	50,300	2,400	2,600	2,900	4,000	158,000
Victoria	82,400	77,200	42,500	3,200	2,300	4,000	3,400	132,600
Queensland	84,800	78,400	51,400	2,300	2,400	6,100	4,200	144,800
South Australia	77,400	67,600	37,300	2,700	1,900	5,700	2,400	117,700
Western Australia	103,400	96,600	74,300	2,100	2,600	10,100	3,800	189,400
Tasmania	68,100	49,500	28,000	2,100	1,800	6,000	3,200	90,500
A.C.T. and N.T.	108,400	94,500	87,500	3,300	2,600	5,500	4,300	197,700
Australia	88,100	84,500	50,500	2,600	2,400	4,900	3,700	148,700

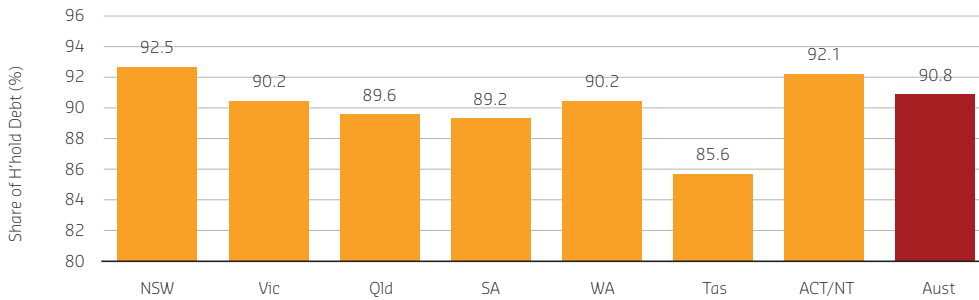
Note: Not all household wealth columns are shown and assets will not add to total value. The A.C.T. and N.T. values are the weighted averages.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The average debt in the ACT/NT is almost \$200,000 which is one-third higher than the overall average of \$148,700. While lower incomes are reflected in Tasmania having the lowest household savings (\$296,700), they also have the lowest average household debt at \$90,500. The reason for this, appears to be having mortgages and other property loans that are only a little over half the overall Australian average, they also have lower than average credit card debts and personal & car loans (Table 4).

Tasmanian households have the lowest ratio of property debt to overall debt, due to the lower house values, mortgages and other property loans in the State. Nevertheless, property debt does still represent 86% of their overall household debt.

Figure 13 Property debt as a share of all household debt by State, 2015 (%)



Note: The ACT/NT values are the weighted averages.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing.

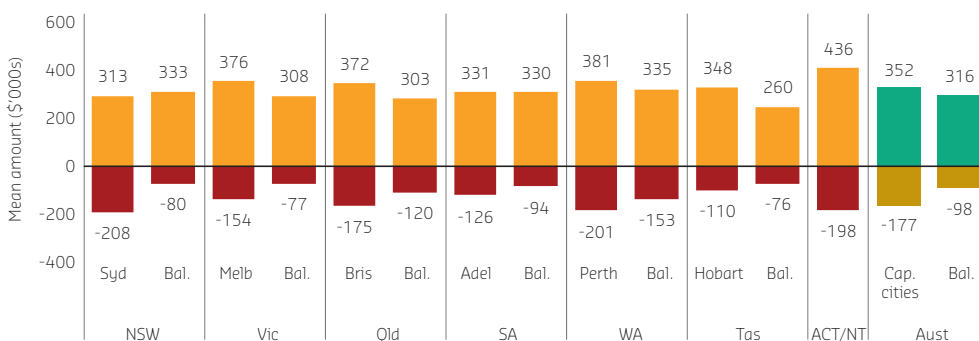
Those households in the capital cities have more in savings (\$36,000 on average) but almost double (\$79,000 on average) the household debt of their country counterparts.

The high prices of Sydney real estate and the associated loans means that property debt as a proportion of total household debt is highest in NSW at 92.5% (Figure 13). High real estate costs see the next highest proportion of debt in property being ACT/NT and Western Australia (at 92.1% and 90.2% respectively).

Capital City versus Balance of State

The differing levels of household savings and debt between the States are even more pronounced when the Capital City and the Balance of State averages are considered (Figure 14). Those households in the capital cities have more in savings (\$36,000 on average) but almost double (\$79,000 on average) the household debt of their country counterparts.

Figure 14 Household savings and debt by Capital City and Balance of State, 2015 (mean \$'000s)

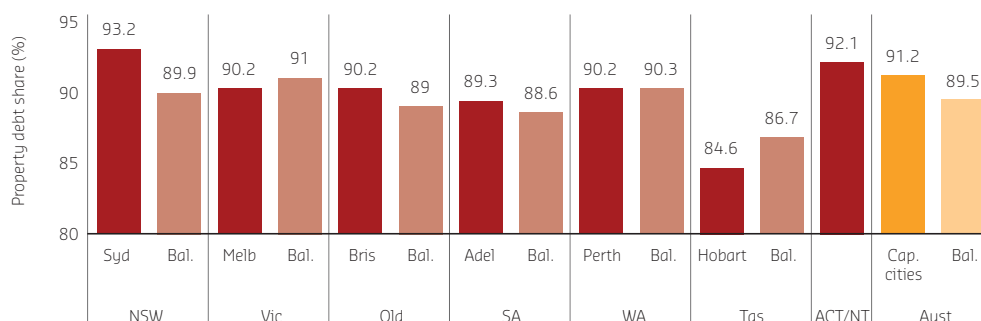


Note: Values at the top of each column are average household savings; at the bottom of each column are average household debt for that capital city or balance of state. The ACT/NT value is the weighted averages and is not included in City/Bal estimates.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing.

The differences between the Capital City and Balance of State are most obvious in NSW. Sydney's preference for property rather than financial assets is evident with Sydney households having the lowest level of savings (\$313,000) for a capital city and the highest average level of household debt in Australia. The low financial savings in Sydney sees it being the only capital city to have less household savings than its balance of state counterpart. Sydney-siders have an average of \$20,000 less savings than households in the rest of NSW.

Figure 15 Property debt as a share of debt by Capital City and Balance of State, 2015 (mean \$'000s)



Note: Values are the property debt as a proportion to total household debt. The ACT/NT value is the weighted average and is not included in City/Bal estimates.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing.

The fondness for real estate and the high prices in Sydney are also evident with 93%, on average, of Sydney household debt associated with property (Figure 15). This is the highest for Australia but only slightly higher than the capital city average, with most areas across Australia having the majority of their debt associated with property. Tasmania, including the capital of Hobart and the balance have much lower proportions of overall debt tied up in property.

Summary

The combined Territories of Australian Capital Territory and Northern Territory boasts the highest levels of household savings (\$436,200) and the highest level of debt (197,700). Excluding the Territories, Western Australia is the State with the highest average savings (\$370,200 per household) and the highest level of debt (\$189,400). Residents of capital cities have considerably more debt than those living in the Balance of the State but the capital city dwellers also have more savings than their country counterparts (with the exception of Sydney). Sydney-siders appear to be disadvantaged relative to other State capitals by high property prices, which restrict their ability to access other savings devices, despite the relatively high incomes they enjoy.

Distribution by age

It takes time to build up savings. As discussed earlier, overall households are currently saving around 9% of their disposable income. It can be expected then that, in general, savings will increase over time or with age.

Household savings and debt

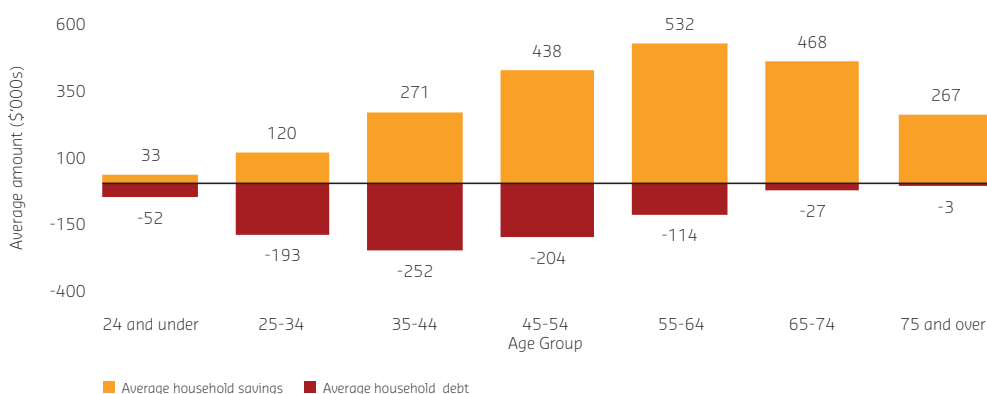
We turn to an analysis of the distribution of savings and debt by the age of the household reference person (see *Glossary and Technical* notes for definition). Multiple family households, extended family households, and group households have been excluded from the following analysis as their characteristics and circumstances are varied and differ markedly from single-family households.

Average household savings do increase with age during the working life, as expected, and begin to decline after the traditional retirement age of 65 years is reached (Figure 16). The youngest households have the lowest average household savings (\$32,800) and those approaching retirement in the 55-64 age group have the highest average with over half a million dollars in savings (\$532,400).

An unexpected finding is the manner in which the growth in savings slows before retirement age. The level of savings increase by over \$150,000 between the 25-34 and 35-44 age groups and between the 35-44 and 45-54 age groups. However, the 55-64 age group have only \$94,600 more than the age group younger than them. This is unexpected because this age group is approaching retirement and their expenditure on the children are generally reduced. The gradually increasing contribution rate at the introduction of the Superannuation Guarantee (SG) is another explanation. The contribution rate was 3% in July 1992 when the SG began and gradually climbed to 9% by 2002. These lower rates of compulsory contribution may have impacted the savings of those aged 55-64 years.

The youngest households have the lowest average household savings (\$32,800) and those approaching retirement in the 55-64 age group have the highest average with over half a million dollars in savings (\$532,400).

Figure 16 Household savings and debt by age group, Australia, 2015 (mean \$)



Note: Age Group refers to age (in years) of the household reference person. Multi-family, Extended-family and Group households were excluded from the household savings by age analysis.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Closer examination of the savings of those approaching retirement age shows that superannuation is growing rapidly while business and trust assets are being reduced (Table 5). The average superannuation balance grows by \$100,000 between the 45-54 age group and the 55-64 age group while the average for business assets decreases in value by almost \$17,000 and the value of trusts decreases by \$8,200. It appears that households are transiting to retirement by reducing exposure to businesses and trusts and transferring more into superannuation.

Table 5 Household savings by age group and type of asset, Australia, 2015 (\$)

	Cash Deposits	Offset account	Trusts	Equities	Super	Business (net)	Other	H'hold Savings
24 and under	8,400	400	4,900	300	16,300	1,000	1,500	32,800
25-34	12,800	6,000	15,200	5,000	58,400	22,600	300	120,200
35-44	22,000	13,900	39,100	20,700	123,900	50,200	900	270,600
45-54	41,200	5,800	49,600	26,700	228,400	85,500	500	437,800
55-64	59,400	4,400	41,400	27,100	329,200	68,700	2,100	532,400
65-74	72,500	2,200	39,600	33,700	272,800	45,100	2,400	468,400
75 and over	80,000	300	43,500	58,300	69,200	14,200	1,700	267,200

Note: Not all household wealth columns are shown and assets will not add to total value.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The movement of savings into superannuation is rational but does not fully explain the reduced growth in savings for that age group. One possible explanation for the reduced growth in savings is that this age group is more concentrated on reducing debt. This is supported by average household debt reducing by \$90,000 between the 45-54 and 55-64 age groups. Two-thirds of this \$90,000 reduction in debt is due to lower mortgage balances (down \$62,000 on average), smaller reductions are made in all categories (see Table A-3). The large reduction in mortgages and the smaller reductions in other types of debt results in other property loans increasing from 40% in the 45-54 age group to half (51%) of the total household debt for the 55-64 age group, while mortgages fall from half (51%) to 38% of the total debt.

Summary

Household savings increase with age during the working life, culminating with those approaching retirement in the 55-64 age group having over half a million dollars in savings. However, surprisingly, the amount saved in the decade approaching retirement was less than amount saved in the previous decade. Closer examination of the behaviour those approaching retirement shows two clear movements. Firstly, they are transferring financial assets out of businesses and trusts and into superannuation. Secondly, they are reducing debt by reducing their mortgage. The second highest level of savings belongs to those aged 65 to 74 years.

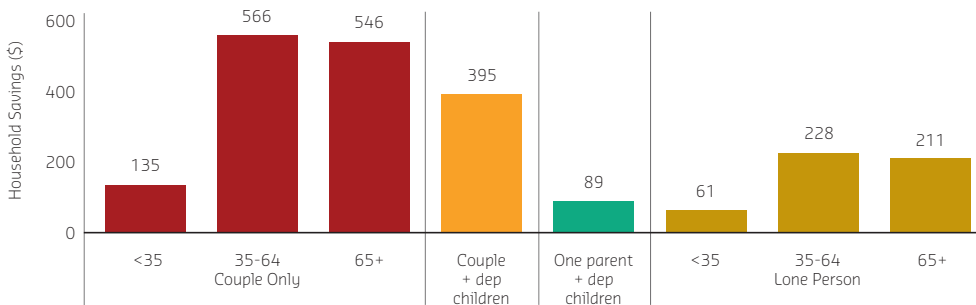
Distribution by type of household

The previous sections have highlighted that savings and debt levels of households vary by location and age. The savings and debt of a household will also be impacted by composition of the family within the household. The lifecycle of a household may begin and end with one person living alone but the number of adults and children usually varies during the period in-between. In the following section the different financial assets and debts of households over the lifecycle are considered. To differentiate the various stages of the lifecycle the composition of family within the household is used, supplemented by age group where appropriate. Once again multiple family households, extended family households, and group households have been excluded from this analysis.

Household savings

In general, dual incomes provide couple households with more discretionary income than households which have only one income. It is not surprising then that couple only households in the two older age groups (35-64 and 65+) have the highest average levels of savings – over half a million dollars (Figure 17). The averages of these two couple only households is 40% higher than the next highest household type which is again a couple household but this time with dependent children. The time it takes to build up savings is evident with both lone person and couple only households aged under 35 years having around one-quarter of the savings of their respective two older age groups. Couple only households aged under 35 have an average of \$135,000 in savings, while older couple only households have around \$550,000 and lone person households aged under 35 have an average of \$61,000 while their older counterparts average around \$220,000.

Figure 17 Household savings by household type and age group, 2015 (mean \$'000s)



Note: The age groups are the age of the household reference person. Multi-family, Extended-family and Group households were excluded from the analysis.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The lowest average savings accrue to lone person household aged under 35 years (Table 6). As expected, with only one person in the household, an average age of only 28 years (and its implied lifestyle) and having to pay all expenses associated with running a household, discretionary income available for saving is scarce and hence savings for this group are modest. The limited time in the labour force is also evident in their superannuation balances (average \$27,800) which is \$20,000 less than the next lowest superannuation average, single parent households, who have \$47,800 and can be expected to have been out of the labour force for extended periods raising their children.

Table 6 Household savings by household type and age and type of asset, 2015 (mean \$)

		Cash Deposits	Offset account	Trusts	Equities	Super	Business (net)	Other	Savings
Couple Only	34 and under	18,100	6,900	15,500	9,300	64,700	20,200	200	134,800
	35-64	60,300	8,500	39,400	30,500	340,900	84,600	2,100	566,400
	65 and over	94,000	2,600	52,300	59,800	279,200	55,800	2,600	546,300
Couple with dep. children		32,500	11,200	53,500	24,900	192,600	80,000	500	395,200
One Parent with dep. children		10,400	3,100	16,100	2,900	47,800	8,300	100	88,800
Lone person	34 and under	9,600	1,800	15,400	1,400	27,800	4,100	1,100	61,200
	35-64	28,400	3,400	18,000	14,900	135,500	26,100	1,400	227,700
	65 and over	59,500	100	31,800	31,500	79,800	7,000	1,600	211,300

Note: The age groups are the age (in years) of the household reference person. Multi-family, Extended-family and Group households were excluded from the analysis.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

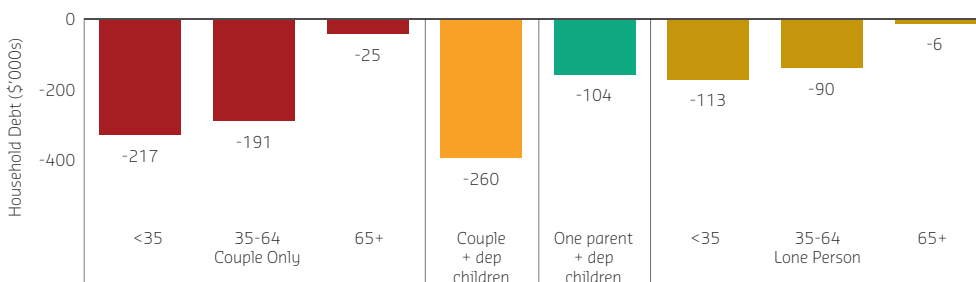
Superannuation is a very significant financial asset for couple only households aged 35 years and over. Sixty per cent of the savings of couple only households aged 35-64 are in superannuation (\$340,900). The high proportion in superannuation reflects the compulsory employer contributions, the difficulty in accessing superannuation funds before preservation age; and, the taxation advantages of superannuation as a savings vehicle. The proportion of savings in superannuation drops to half for couple only households aged 65 and over. While it is still a considerable asset (on average \$279,200), with restrictions on withdrawals now removed we see a greater proportion of savings being held as equities and cash deposits. As savings are now being used to maintain living standards, it appears funds have been moved to asset types where they can be more easily accessed.

Single parents have the second lowest savings at \$88,800. Despite having an average age 13 years older than the lone young person (41 and 28 years respectively), they have only \$28,000 more in savings. Once again over half (54%) of the average single parent household savings are locked away in superannuation and hence only a small proportion of the savings is available to meet unforeseen expenses.

Household debt

The low savings of single parent households is exacerbated by reasonably high levels of debt. They have an average debt level of over \$100,000 and are the only type of household with people aged 35 or more years that has more debt than savings (Figure 18).

Figure 18 Household debt by household type and age group, 2015 (mean \$'000s)



Note: The age groups are the age of the household reference person. Multi-family, Extended-family and Group households were excluded from the analysis.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The highest levels of debt are associated with working age couple households. Couple only households under the age of 65 years have average debts of more than \$190,000 and couples with dependent children households are the most indebted of all types and ages with an average total household debt of \$260,000. Around two-thirds of household debt for young couples and couples with children is their mortgage while couple only households aged 35 years and over have a lower proportion in mortgages but almost half of their debt (45%) is associated with other property debt.

The least indebted households are lone person or couple only households aged 65 years and over. A clear objective, and a sensible one, for those entering or in retirement is to reduce household debt. Couples aged 65 and over have an average of \$25,000 in debt and single person households have an average of \$6,000. The average amounts owed are greatly reduced for all types of debt to achieve these low targets but mortgages in particular have been reduced as a proportion of overall debt.

Summary

In general, couple households have significantly higher savings than a single adult household. The ability to share some costs allows them to have more than double the savings of a single adult household. Around 60% of savings are in superannuation for almost all household types of working age. Only one parent with dependent children households have a lower proportion in superannuation and that is still half of their savings (49%).

Along with the very low levels of savings, single parent households are also burdened with the highest average level of debt. The low superannuation and high mortgage debt (half of their total debt) can be attributed to divorce where the house (mortgage) and children generally go together.

Distribution by income

In this section we consider the relationship between the disposable income of households and their levels of savings.

Household savings

Ranking households by income suggests that there is a clear link between income and savings. Using the methodology that was used to rank each household into a savings quintile, all household have been ranked and assigned a quintile based on household disposable income (that is, after tax and the Medicare Levy are deducted). Analysis of these income quintiles shows that a clear correlation exists – as incomes rises, household savings also rises (Table 7). However, it is not a linear relationship. For each dollar that income increases, savings will not increase by a fixed amount. What is clear is that, generally, those that have higher income have greater savings.

Table 7 Average household savings by income quintile and type of savings, 2015

	Disp Income \$pa	Cash Deposit \$	Offset account \$	Trusts \$	Equities \$	Super \$	Business (net) \$	H'hold Savings \$
IQ1 (lowest inc 20%)	22,300	29,800	800	17,900	7,200	49,500	20,700	126,700
IQ2	46,200	41,400	1,600	12,700	11,500	102,800	24,100	194,700
IQ3 (middle inc 20%)	73,200	36,900	2,100	18,700	17,800	150,400	39,200	266,100
IQ4	107,500	41,400	5,800	33,900	17,700	203,400	40,400	344,000
IQ5 (top inc 20%)	191,200	72,700	17,000	104,500	64,200	378,900	132,900	772,600
Australia overall	88,100	44,400	5,500	37,600	23,700	177,000	51,500	340,900

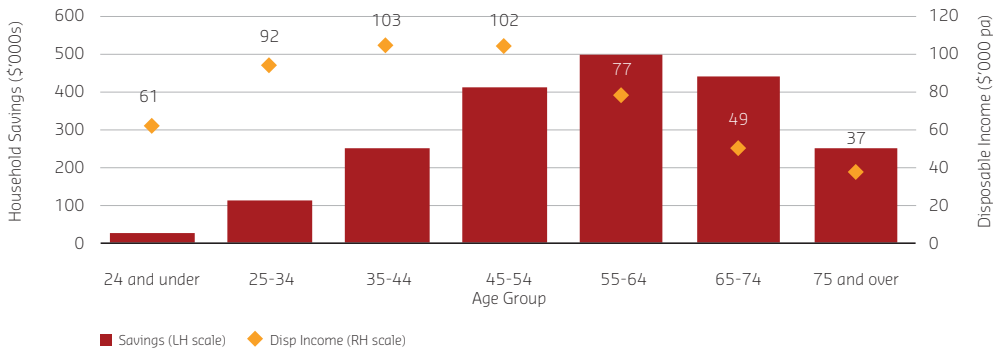
Note: *Cash deposits* includes money held by financial institutions and debentures. *Other financial assets* is not shown but included in the total. Values have been rounded and may not add to total value.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The reason for this loose correlation is the influence of other factors on saving such as age and family type. A couple household will have more discretionary income than a single person and be able to save at a faster rate. The presence of young children in a household will likely reduce the level of savings. A young household head implies that the household has not been earning income for many years and this will influence savings. In a previous section it was shown that younger households average savings levels are lower than older working age people.

Figure 19 shows the relationship between age, income and savings. Average income and savings increase together in the 24 and under, 25-34 and 35-44 age groups. From age 65 onwards, both income and savings decline in unison. However, in the years approaching retirement income levels start reducing while savings are still climbing. Households in these age groups appear to enter a 'transition to retirement' phase where possibly a 'better life/work balance' is being achieved by working less hours (as less income is required) or income is being salary sacrificed into superannuation to build up retirement savings.

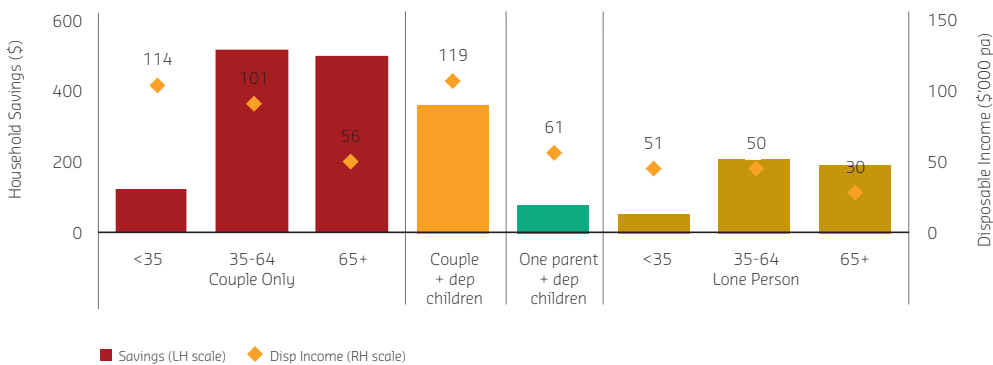
Figure 19 Household savings and disposable income by age group, 2015



Note: The values refer the average disposable income for the age group. Multi-family, Extended-family and Group households were excluded from the analysis.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

As expected, working-age couple households have disposable incomes that are double the income of one working-age adult households (Figure 20). The advantage of more discretionary income provides couple households with a clear advantage in building up their savings. For example, an under 35 couple only household has an average disposable income of \$114,000 p.a. which is more than double that of a lone person household aged under 35 years (\$51,000 p.a.) They also have more than double the average household savings (\$135,000 and \$61,000) respectively.

Figure 20 Household savings and disposable income by household type and age, 2015



Note: The values refer the average disposable income for the household type and age group. Multi-family, Extended-family and Group households were excluded from the analysis.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

In Table 8 the distribution of savings by income are presented by showing the proportion of each income quintile that are in each savings quintile. The income quintiles are shown as rows and the columns are savings quintiles. The values shown are the proportion of households in that savings and income quintile. For example, of the one-fifth of households with the highest incomes (IQ5), 1.5% are in the bottom 20% of household savings (SQ1), 8.5% are in SQ2, and so on up to 42.0% are in the highest savings quintile (SQ5).

Table 8 Distribution by disposable income and household savings by quintiles, Australia, 2015

		Savings Quintile				
		SQ1 (Bot 20%)	SQ2	SQ3 (Mid 20%)	SQ4	SQ5 (Top 20%)
		%	%	%	%	%
Disposable Income Quintiles	IQ1 (lowest inc 20%)	49.0	20.4	13.2	10.0	7.4
	IQ2	28.6	24.4	18.1	16.1	12.8
	IQ3	15.9	26.4	22.5	19.0	16.3
	IQ4	5.0	20.4	28.1	25.0	21.5
	IQ5 (highest inc 20%)	1.5	8.5	18.3	29.9	42.0

Note: An example of reading this chart from column Q1 - 49% of those in the lowest income quintile are also in the lowest savings quintile but 1.5% of those with the lowest savings are in the highest income quintile. Another example - Row 1: 20.4% of those in lowest income quintile are in the 2nd lowest savings quintile and 10% are in the 2nd highest savings quintile.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

If there was a perfect correlation between income and savings then 100% of households would be in the darkened cells in Table 8 with all of those in the highest income quintile also being in the highest savings quintile and the same for the other quintiles. The data shows that this is not the case with just 42% of the highest income being also in the highest savings quintile. The previous figures indicate the reasons for this with age and household type having a major influence on savings.

Household debt

It is extremely difficult to gain access to credit if household income is low. It is also harder to budget for loan repayments if disposable income is low and fully committed to paying other everyday expenditure. This relationship is reflected in the correlation between income and household debt - as income rises so does average debt (Table 9).

Table 9 Household debt by income quintile and type of debt, 2015

Savings Quintile	H'hold Disp Income	Mortgage	Other Prop Loans	Student Loans	Credit Cards	Invest. Loans	Personal & Car Loans	Total H'hold Debt
	\$pa	\$	\$	\$	\$	\$	\$	\$
Q1 (lowest inc 20%)	22,300	19,400	12,000	700	1,200	1,300	900	35,400
Q2	46,200	34,700	20,400	1,700	1,400	1,100	1,900	61,300
Q3 (middle inc 20%)	73,200	75,100	33,800	2,900	2,300	2,500	3,600	120,200
Q4	107,500	119,900	59,600	3,100	3,100	3,800	5,300	194,800
Q5 (top inc 20%)	191,200	173,300	126,800	4,500	4,000	16,000	6,900	331,500
Australia overall	88,100	84,500	50,500	2,600	2,400	4,900	3,700	148,700

Note: To be supplied

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

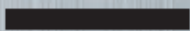
The high average income of those in the top income quintile (\$191,200 p.a.) allows these households to borrow significant amounts, especially secured loans such as for mortgages and other property loans. The average mortgage of those in IQ5 is \$173,300 and other property loan is \$126,800. This is 70% more property debt than the next highest income quintile. The highest income quintile owe half of all other property loans and four-tenths of all mortgages (41%).

Summary

Income and savings are clearly related - the higher the income the higher the savings. However, a number of other factors, discussed in earlier sections also influence the level of savings. As expected, a clear relationship between income and debt is also observed, with higher income levels allowing greater access to credit.

Savings

and debt: trends over time



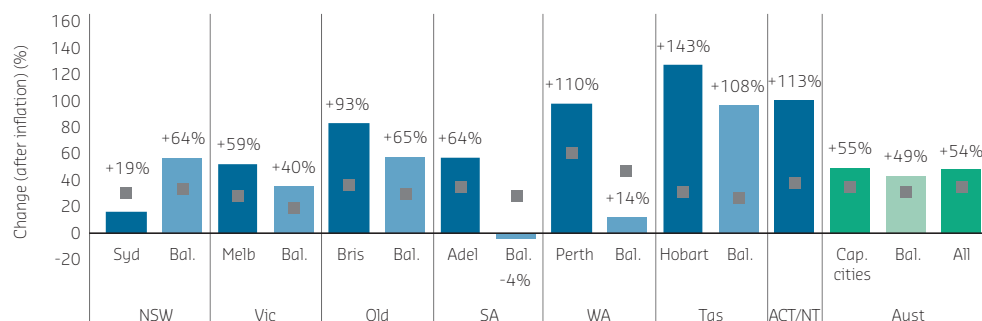
Savings and debt: trends over time

Savings have exceeded the growth in debt and that savings have grown faster than disposable income.

This section looks at changes in household savings and debt over time. It compares the savings and debts of households as recorded on the 2005-06 Survey of Income and Housing and those for 2015 estimated from the 2011-12 Survey of Income and Housing. The 2005 income, savings and debt values have been adjusted for inflation and are presented in 2015 dollars or 'real' values. This adjustment was done by applying the change in CPI between the average for 2005-06 and March 2015 to produce 2015 values (ABS 2015c).

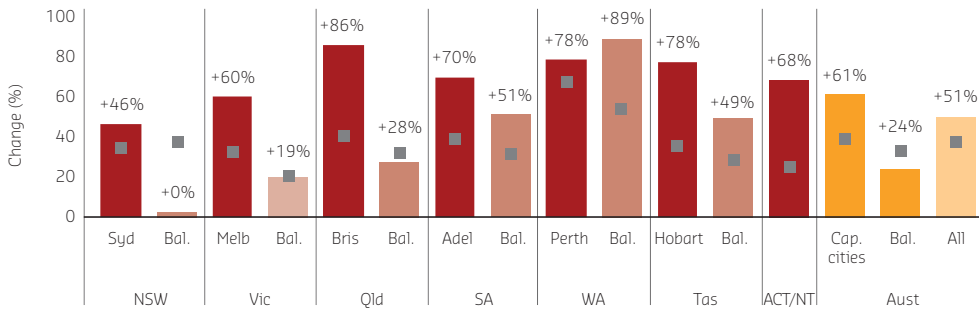
Overall, household disposable income has risen by 38% in real terms over the last decade. This growth in income has been outstripped by both savings and debt. Household savings have grown by 54% and debt has increased by half (51%) over the same period. It is commendable that savings have exceeded the growth in debt and that savings have grown faster than disposable income. The changes in savings behaviour identified at a national level since the GFC, when the downward savings trend was reversed and household savings ratio increased to around 9% of income, are reflected in the individual household data being analysed here. However, once again, the individual data does show that there are considerable differences in the real growth rates of incomes, savings and debt between the various capital cities and regional areas (Figure 21).

Figure 21 Change in real income and savings by Capital City/Rest of State, 2005 to 2015



Note: The squares represent the change in real (after inflation) household disposable income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors estimates (Table A-5).

Capital cities have seen their disposable income increase by an average of 39% over the last decade, while the remaining state balances have only seen an increase of 31% (Figure 22). However, there are significant differences between the changes. The greatest change in real household disposable income was in Perth (up 78%) while the lowest was for those in country Victoria (up 19%).

Figure 22 Change in real income and debt by Capital City/Rest of State, 2005-06 to 2015

Note: The squares represent the change in real (after inflation) household disposable income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors estimates (Table A-5).

Hobart recorded the largest growth in savings with an increase of 143% (Figure 21). This took Hobart from one of the capital cities with the lowest average savings of \$142,900 in 2005 to one of the highest with average savings of \$347,500 in 2015. Hobart also saw household debt grow by 78% over the period (Figure 22). This increase in debt is well above the capital city and national averages (61% and 51% respectively).

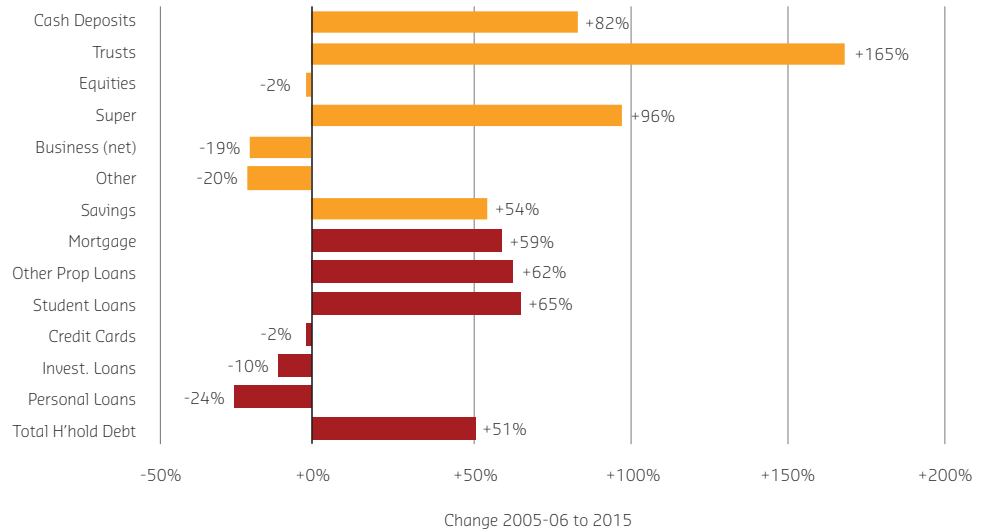
Households with the least growth in average savings are those in country South Australia, they are the only location to see their savings decline in value in real terms – down 4%. This is despite their disposable income increasing by one-third (32%). Easy access to credit seems to be the trouble with an increase of 51% in household debt double the non-capital city average of 24%.

The growth in savings is a result of very significant growth in cash deposits, trusts and superannuation which is owned by almost all households. The 6 to 7% of households that hold trusts have enjoyed stellar growth with this asset (up 165%). The median balance more than doubled for those with trusts from \$44,800 in 2005 to \$119,500 in 2015. Part of the growth in these financial assets is due to preference being given to traditional types of assets over more risky forms. The assets losing out in these transfers would appear to be equities, businesses and other financial assets. This movement agrees with the observation of the Reserve Bank that *'households have been actively shifting their portfolios towards more conservative assets such as deposits.'* (RBA 2012).

Households with the least growth in average savings are those in country South Australia, they are the only location to see their savings decline in value in real terms – down 4%.

Real credit card debt has decreased by 2% in the ten years to 2015, while investment loans have decreased by 10% and personal loans by 24%.

Figure 23 Change in real savings and debt classes, 2005 to 2015



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors estimates (Table A-7).

Australians generally consider real estate to be a conservative asset. In recent years, they have rediscovered their love of housing and investment properties which has resulted in mortgages and other property loans growing faster than other forms of debt and faster than average household savings (Figure 23). Mortgages grew by 59% and other property loans by 62% over the last decade. When taken as a whole, the proportion of households with investment properties only grew by one-percentage point over that time. However, this Australia-wide figure does not capture the changes in popularity that are occurring for investment properties in some states.

Student loans also grew faster than average due to larger loans, a product of an increase in the cost of tertiary education and also the greater propensity for households to hold student loans. While the borrowing restraint commended by the Reserve Bank is evident in real declines in credit card debt and personal & car loans. Real credit card debt has decreased by 2% in the ten years to 2015, while investment loans have decreased by 10% and personal loans by 24%.

The negative growth in equities and the reduction in investment loans is in-line with a movement to a more conservative portfolio and the strong growth in property loans suggests that for Australians the preferred vehicle for savings is now the property market rather than the stock market.

Age group trends

The difference between the average income, savings and debt by age in 2005 and 2015 allows comparison of the financial situation of different cohorts at the same age a decade apart (Table 10).

Table 10 Change in real income, savings and debt 2005 to 2015

Age	2005 to 2015	H'hold Disp Income	Savings	Debt
35-44	Change (2015 \$)	+25,200	+95,300	+91,500
	Change %	+37%	+54%	+57%
45-54	Change (2015 \$)	+18,000	+115,800	+53,600
	Change %	+24%	+36%	+36%
55-64	Change (2015 \$)	+11,600	+166,500	+44,500
	Change %	+20%	+46%	+64%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

For those aged 35-44 years, household incomes are \$25,200 higher or 37% in real terms (i.e. in 2015 dollars) in 2015 when compared with 2005. This reflects an increase in human capital for younger cohorts (they are better educated) and their ability to command greater incomes. However, over the same period their savings and debt have increased at a higher rate than their income, with debt rising slightly more than savings (57% and 54% respectively). The type of debt has also changed over the period with decreases in the average for credit card debt and personal loans while the averages for mortgages and other property loans have increased (see Table A-9). However, while the average mortgage amounts increased for this age group, the proportion of households aged 35-44 years with a mortgage or investment property loan did not change over the period.

Income of those in the middle age group (45-54 years) has not grown by the same proportion as fast as those ten years younger. Their disposable household income is 24% higher than for households of that age a decade before. Both the average household savings and debt of those aged 45-54 in 2015 is 36% higher than ten years earlier in real terms. Superannuation and cash deposits were the preferred financial assets (both up by 69% or more, Table A-9). A similar movement into property loans was evident for this age group as the 35-44 age group.

Those aged 55-64 approaching retirement only receive 20% more in real disposable income than a decade previously while a 46% increase in household savings and a 64% increase in debt was realised. The low increase in income for the older age group is likely to reflect the stage of life, where people are transitioning to retirement. The greater growth in debt than savings is an unexpected result and suggests that there may be an increased propensity to enter into debt in anticipation of the superannuation lump sum which has been increasingly used to pay down debt upon retirement. Superannuation balances grew by 83% but other property loans grew by 88% and mortgages grew by 70%.

THE TOP,

the bottom and the unexpected

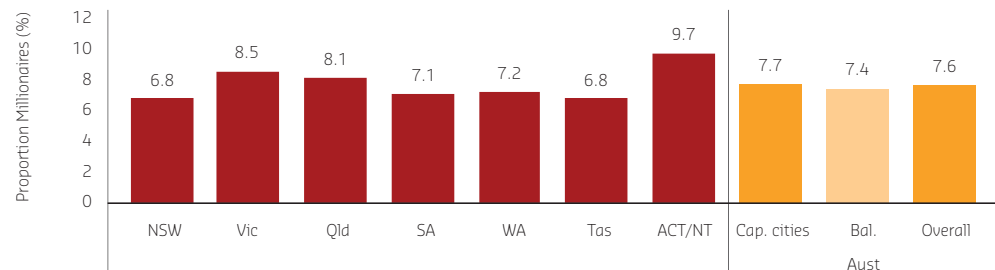


Millionaire households

This section examines in more detail those households at the very top and the very bottom of the savings spectrum.

There are almost 700,000 households in Australia that have savings or financial assets valued at \$1 million or more – excluding the family home⁵. The State/Territory with the highest proportion of millionaire households is the combined Territories of the ACT and NT (9.7%). This value reflects the correlation between income and savings for working age households noted earlier. The higher incomes in the Territories allows for greater saving and as discussed earlier is also boosted by the historically higher superannuation contribution rates of the public service. The lowest proportion of millionaire households are in Tasmania and New South Wales. Tasmania is not a surprise as working age incomes are historically lower in the apple isle and this generally leads to lower savings. The fact that NSW has the equal lowest proportion of millionaire households is a little more surprising. Incomes in NSW are one of the highest (behind ACT/NT and WA) and hence the proportion of millionaires would be expected to be higher. Remembering that real estate is excluded from our definition of savings, housing is the most probable reason for their low millionaire proportion, the rich in NSW have a larger proportion of their wealth in property than residents of other states.

Figure 24 Proportion of millionaire households by State, 2015 (%)



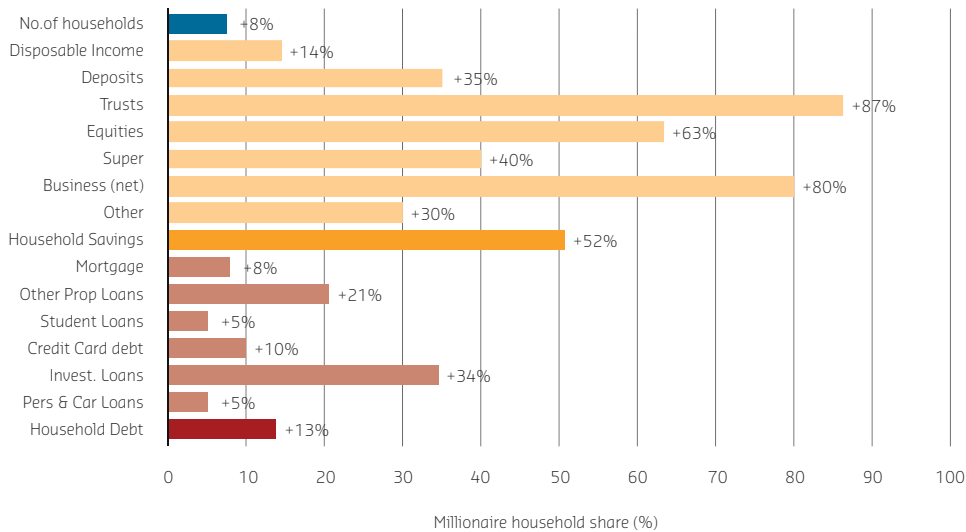
Note: The ACT/NT values are the weighted averages.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing.

The households that are millionaires may only represent a small proportion of all households but they do hold more than half of all savings. Growth in the popularity of trusts, particularly as a business structure, saw the proportion of households with trusts rise from one-quarter to one-third of millionaire households since 2005 and the typical amount in trusts rise from \$160,000 to almost \$600,000 (Table A-8). In 2015, 87% of the value of trusts are owned by millionaire households. Similarly, four-fifths of the value of businesses and almost two-thirds of all equities (63%) are also owned by millionaire households (Figure 25). However, the proportion of millionaires owning equities did fall over the period from seven-in-ten to six-in-ten while the proportion of non-millionaires owning shares was around one-quarter.

The proportion of debt held by millionaires is greater than their proportion of the population at 13%. However, the two types in which they have the large shares could be considered 'good' debt – debt obtained to purchase assets that provide income and/or growth in value over time. The high proportions of millionaire holdings of *Other Property Loans* and *Investment Loans* reflects this 'good' debt.

⁵ There are an estimated 694,800 with financial assets, or savings as they are referred to in this report, valued at \$1,000,000 or more in 2015. Due to the high housing values many parts of Australia, if housing is added to savings (called 'household wealth') then one-quarter of Australia's 9.1 households are millionaires.

Figure 25 Share of financial assets and debt owned by millionaire households, 2015 (% of total)

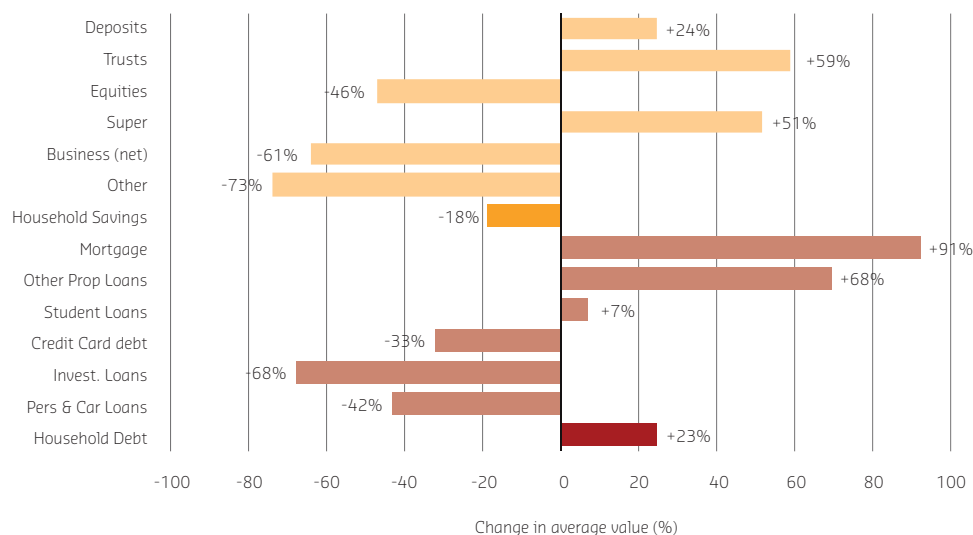
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Millionaire trends

The number of millionaire households has increased from under 300,000 since 2005 to almost 700,000 in 2015 (Figure 25). Over that time, the average disposable income of millionaires has increased from \$137,600 to \$150,600 in real terms (up 9%). Over the same period the disposable income of non-millionaire households has increased by more than one-third (up 35%). In terms of changes in level of savings, the average non-millionaire household has also shone, increasing their savings by 45% in real terms while millionaire households watched their average savings per household decrease in real terms (Figure 26). In contrast to the lower increases in savings, the average household debt of millionaires has increased by almost one-quarter (up 23%) over the period was less than the increase in debt of non-millionaire households (up 48%).

There are almost 700,000 households in Australia that have savings or financial assets valued at \$1 million or more.

Figure 26 Change in the real value of financial assets and debt owned by millionaire households, 2005 to 2015



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The trend data suggests that the financial assets of millionaires have been reducing their exposure to businesses, equities and other financial assets and transferring into trusts, superannuation and, to a lesser extent, cash deposits. While this may have some taxation advantages and reduce financial risk, it appears that the net effect since 2005 has been to reduce the average millionaire household's savings by 18% in real terms.

The large growth in debt associated with mortgages and other property loans, suggests that millionaire households are following the overall trend out of financial assets and into property assets. The large increase in the proportion of millionaire households with mortgages is clear evidence of a preference for housing over the last decade. Those with mortgages have risen from one-in-six to one-in-four (17% to 24%) and those with other property loans also increased by one percentage point (to 22%).

The typical millionaire households are more likely to be couple households (70%). Almost all are homeowners either owning their home outright (60%) or with a mortgage (32%). One-third of these millionaire couples are headed by a person approaching retirement (55-64 years), one-quarter are slightly younger (45-54) and almost one-in-five have just passed retirement age (19% aged 65-74). Over half of all millionaire households live in NSW and Victoria. NSW has 29% of the total and Victoria has 28%. The split between Capital City/Balance of State is the same for millionaire households as it is for the non-millionaires (62% city). Almost six-tenths own equities and over one-third have trusts. Almost a half (48%) of millionaire households have other properties.

Low economic resource households

In the 2013 HILDA Survey, people were asked about their current financial situation. Most answered that they were at least reasonably comfortable (70%). However, one-quarter said they were just getting by; and the final 3% said they were poor or very poor. One-third of the half a million people in the poorer categories (poor or very poor) had not been able to pay their mortgage or rent on time (35%), had pawned something (34%), had been unable to heat their home (31%), and/or went without meals (35%). Almost two-thirds (62%) of the poor and very poor also reported that they would not be about to raise \$3000 in an emergency. Only a small fraction (7%) of the majority of Australians who are reasonably comfortable or better, in comparison, could not raise the emergency funds.

Typically, people in this situation are members of households that have both low incomes and little or no savings for emergencies or other purposes. This group of low economic resource households, were discussed in detail in the BCEC *Falling through the Cracks* report (Cassells *et al.* 2014b) and are briefly focused on in the following paragraphs.

There are 937,100 households that are in the bottom 20% for both disposable income and savings that is, they have relatively low savings and financial assets to access. Interestingly, this constitutes 10% of the household population and yet only 3% described themselves as poor or very poor.

The typical low economic resource households are more likely to be females (58%), aged 55 or over (62%) and living in alone (68%). Low economic resource households represent the greatest share in Tasmania (15%) but one-third of low economic resource households are in NSW and one-quarter in Victoria. Over half are in capital cities and half are renting.

Typically over half of women living alone aged over 55 years are widowed and another one-quarter are divorced.⁶ This situation presents new financial challenges for many women. For those finding themselves with low economic resources, almost all have bank accounts but with a low median balance of \$700 in cash deposits. Their only other asset is superannuation, typically worth \$4,400. While the average savings of this group is \$4,200, four per cent have nil savings and half have less than \$1,800.

Two-thirds of the low economic resource households have no debts, but the one-third that do hold a median of \$8,700 and an average of \$50,400. Ten per cent have a mortgage (median \$67,000); seven per cent have personal & car loans worth an average of \$15,400; and almost one-quarter (22%) have credit card debts. The median credit card debt is \$1,600 but the average is \$4,900.

The ratio of average debt to disposable income for low economic resource households has deteriorated over the last decade. In 2005 average household debt represented 0.6 years of income. In 2015 it represents 1.1 years of disposable income. If the debt consists of credit card debt and personal loans with an average interest rate of, say, 20%, then 21% of the \$16,900 per annum household budget will be required to just to service the debt. Clearly, with such a small household budget, spending on other essentials like food, electricity, heating and clothing will have to be foregone. For many in such circumstances, managing debt is a constant struggle. For some, the possibility to pay down accumulated debts is simply out of the question. This situation makes this group vulnerable to a continual cycle of payday lenders.

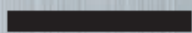
⁶ Based on HILDA data for 2013, for women living alone aged 55 and over, 5% are separated, 26% are divorced, 57% are widowed and 10% have never married.

When the unexpected happens

A number of previous sections have highlighted the greater levels of savings possible by a couple household over a single person or single parent household. In general, this greater level of savings relates to the higher earning capacity of a couple and the reduced cost of living available through sharing some household expenses. However, an unexpected event such as marriage breakdown or death of one of the couple can have both a significant emotional and financial impact (see Kelly and Vu 2010; and Kelly *et al.* 2012). Making financial decisions, developing a savings plan, or developing strategies to reduce debt are all difficult when done with a trusted partner, but they are even more difficult when done alone and possibly with far less income coming into the house.

Beyond

our Means? Saving for the Future



Impact of greater savings and greater debt

The use of debt risks a household living beyond its means by funding a lifestyle that cannot be supported by a household's current income.

A recent report noted that the growth in superannuation has been matched by an equal amount of household debt (Kelly 2013). The research suggests that households have effectively offset the superannuation saved with increased levels of debt.

One reason for the growth in debt as well as savings is the 'wealth' effect. The wealth effect is a theory that states that as wealth increases, spending will also increase. Research on Australian households has shown that higher wealth significantly increases consumption and therefore reduces saving (Tan and Voss 2000; Dvornak and Kohler 2003; Yates and Whelan 2009; Windsor, Jääskelä and Finlay 2013). While spending more as wealth increases is not a problem, the issue with the wealth effect is that households do not differentiate between actual and perceived increases in wealth. For example, if a person aged 35 sells some shares at a large profit, they have more wealth because their wealth has actually increased. However, if the same person receives a superannuation statement showing a large increase in the balance, they also feel wealthier despite it only being a perceived increase in wealth – it could reduce again before it can be realised. According to the wealth effect, perceived increases in wealth will increase spending just as real increases will. To pay for the increased spending with perceived increases of wealth, more debt needs to be taken on.

The growth of superannuation balances along with booming house prices have led to many households perceiving that they have more wealth. At the same time, ABS data shows that household expenditure has been running at double the rate of inflation for the past decade and well ahead of earnings.⁷ Following the theory of the wealth effect, households have been taking on more debt to cover this expenditure, knowing their wealth is increasing.

The RBA Governor has noted that assets (mainly residential housing prices) have appreciated at very high rates since the mid-1990s and household debt has been growing (Stevens 2012). He also noted that since 2007 growth in household debt had slowed but income growth has also slowed resulting in debt plateauing around 150% for the last decade. Easy access to consumer credit, the ability to borrow against the equity in your home, and the deregulation of the financial markets in the 1980s are major contributors to the low saving or overspending trend evident in the early 2000s. This trend has resulted in Australian households having considerable debt and the level of debt has been increasing until recently. In Figure 7 (on page 13) the ratios of owner-occupied housing debt, all housing debt and total household debt to disposable income are shown.

The trend for the total household debt ratio has been strongly upwards for most of the last two decades. It has tripled from less than half of annualised disposable income in 1990 (47%) to over 150% in 2006. Over the last decade, the ratio has been relatively stable at around 150%. The plateau is a good sign albeit at a very high level. It is clear that Australians are now willing (or at least accustomed) to bear a higher level of debt. The average household currently lives with debts equal to 1.5 years of income. This compares with average debt equivalent to half of household annual income in 1990 and three quarters of annual income at the start of the millennium.

⁷ Household expenditure has grown at 5.6% pa, the CPI at 2.7% pa and earnings (AWOTE) at 4.5% pa over the past decade.

Expectations

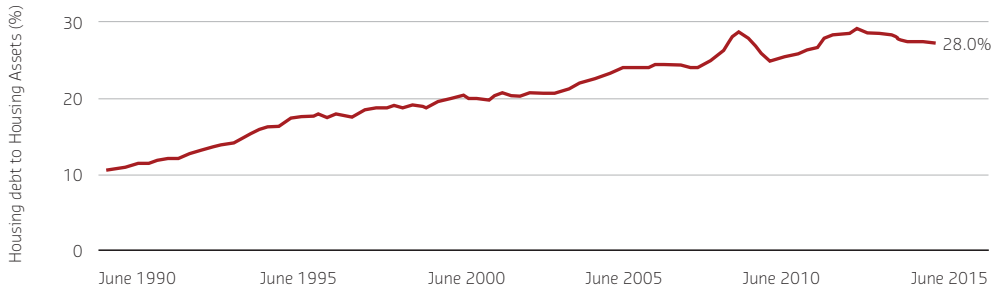
The use of debt runs the risk of a household living beyond its means by funding a lifestyle that cannot be supported by that household's current income. The high ratio of debt to income discussed in this report allows many working households to enjoy a higher standard of living than was possible in the past. But this also raises expectations of retirement living standards and if retirement savings are used to repay the debt incurred while working, where are the funds to provide this elevated retirement living standard coming from? The baby boomers are enjoying a high standard of living now and their expectations have risen but unfortunately this just means the retirement expectation-reality gap has increased.

The house as an ATM

Housing assets constitute the major share of Australians' wealth portfolios.

There is evidence of a propensity towards converting housing wealth into income for consumption. Indeed, large increases in borrowing secured against the family home was witnessed during the 1990s and early 2000s when house prices soared on the back of a historic housing market boom. Figure 27 shows the growth in housing debt as a proportion of the value of the housing asset. The percentage is has almost tripled over the 25 year period. Long-run trends on mortgage indebtedness from the ABS's Income and Housing surveys are displayed in Figure 28. Importantly, it shows that with the exception of home owners aged 65 years and over, mortgage indebtedness rose significantly amongst all other age groups between 1990 and 2007-08 and continued to rise, albeit at a slower rate, during the post-2008 GFC years. This rise is particularly noticeable amongst those aged 45-54 years. Amongst this age group, the incidence of mortgage debt rose by over 35 percentage points between 1990 and 2011-12, followed by a 30 percentage point increase amongst those aged 35-44 and 55-64 years.

Figure 27 Ratio of housing debt to housing assets, June 1990 to December 2014



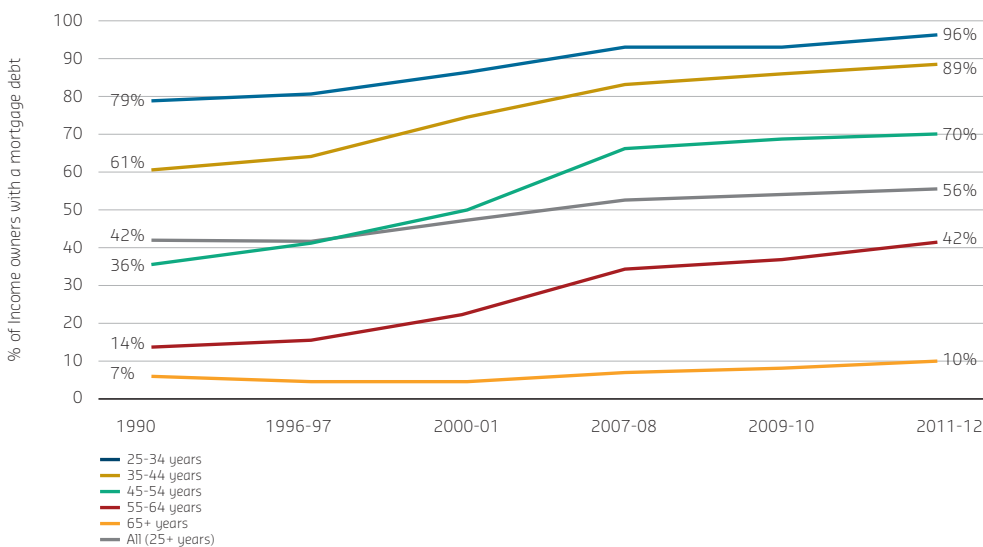
Source: ABS Cat No. 5206.0 – Reserve Bank of Australia, Table E2 Household Finances – Selected Ratios.

Growth in housing debt as a proportion of the value of the housing asset has tripled over the last 25 years.

The long-run trends drawn from the ABS Surveys of Income and Housing are further confirmed by more recent estimates on the incidence of MEW from the nationally representative panel HILDA Survey, reported in Table 11 below. The table confirms that significant MEW activity is taking place amongst those aged 45-54 and 35-44 years. In general, younger age groups are more likely to engage in MEW than older age groups.

There are at least three other noteworthy observations that can be made from the table. Firstly, in general homeowners in capital cities appear to be more predisposed to using MEW than their non-metropolitan counterparts. The second interesting trend relates to changes in the propensity to use MEW between the pre- and post-GFC years. Prior to 2007-08, the incidence of MEW rose amongst all age groups (with the exception of young home owners aged under 35 years in capital cities). Interestingly, after 2007-08, the propensity to use MEW fell amongst younger age groups. It would appear that in the wake of the GFC, the enthusiasm of young homeowners for MEW

Figure 28 Ratio of housing debt to housing assets, June 1990 to December 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

either waned, or they found themselves increasingly subject to binding borrowing constraints that prevented further engagement in MEW transactions after the credit crunch. On the other hand, older age groups approaching retirement, and in particular those living in capital cities, continued to use MEW more frequently after the GFC. It might be that older homeowners, who typically have more savings than younger homeowners, faced fewer binding borrowing constraints. Another reason could be that older homeowners were forced to tap into their housing wealth more frequently to meet financial emergencies in the wake of the GFC (Ong *et al.* 2013). However, further research is required to unlock the precise reasons behind these age disparities in MEW behaviour.

Table 11 Incidence of mortgage equity withdrawal by Capital City/Balance of State and age band, 2001 to 2010

Year	Section of State	25-34 years	35-44 years	45-54 years	55-64 years	65+ years	25+ years
		%	%	%	%	%	%
2001-02	Capital city	30	27	20	9	2	18
	Balance of state	27	29	19	7	2	16
2007-08	Capital city	30	31	26	15	3	20
	Balance of state	38	34	21	13	5	20
2009-10	Capital city	29	31	29	21	5	23
	Balance of state	22	25	21	12	4	15
		% points	% points	% points	% points	% points	% points
Chg 2001-02 to 2007-08	Capital city	0	+4	+6	+5	+1	+3
	Balance of state	+11	+5	+3	+6	+3	+4
Chg 2007-08 to 2009-10	Capital city	-1	+4	+9	+12	+2	+5
	Balance of state	-5	-4	+3	+4	+2	-1

Note: Estimates exclude Tasmania and the Territories due to data unreliability.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on the HILDA Survey.

Table 12 compares the frequency of MEW amongst homeowners across the five most populous states in Australia.⁸ Clearly, WA home owners were the most active MEW users during the early and mid-2000s, as the state rode the crest of a property market bonanza fuelled by an accelerated mining boom. During 2001-02, roughly one in five (19%) of home owners in WA engaged in MEW. By 2007-08, this incidence of MEW had climbed to 28%. Most other states experienced a slower rate of increase in MEW activity in the pre-GFC years, and the incidence of MEW remained more or less static in NSW. However, it would also appear that WA home owners' MEW behaviour is more sensitive to financial market shocks than their counterparts in other states. In the early post-GFC years, WA home owners' propensity to use MEW dipped by five percentage points, halving the growth in MEW activity that had taken place in the seven years leading up to the GFC.

Prior to the GFC, WA homes owners were more likely to be engaged in mortgage equity withdrawal than other states.

Prior to the GFC, WA homes owners were more likely to be engaged in mortgage equity withdrawal than other states.

Table 12 Incidence of mortgage equity withdrawal by state, 2001 to 2010

Year	NSW	Vic	Qld	SA	WA
	%	%	%	%	%
2001-02	17	17	17	15	19
2007-08	16	20	23	21	28
2009-10	17	22	19	22	22
	% points	% points	% points	% points	% points
Change from 2001-02 to 2007-08	-1	+3	+6	+6	+9
Change from 2007-08 to 2009-10	+1	+2	-4	+2	-5

Note: The estimates exclude home owners aged under 25 years.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on the HILDA Survey.

Overall, MEW represents an increasingly common financial strategy to turn the family home into an ATM to fund spending needs. MEW can bring about significant financial benefits to homeowners, especially in later stages of the life course when earning capacity declines. However, turning the family home into an ATM through MEW does involve enduring higher levels of mortgage indebtedness than would otherwise be the case in the absence of MEW. The fact that increasing shares of homeowners are using MEW during middle and pre-retirement years raises some important questions for the efficacy of housing assets as a source of financial security during their retirement years.

Firstly, the traditional policy assumption has been that homeowners would have paid off their mortgage debt by the time they retire. Hence, most government policy is based on the assumption that people in retirement may have low incomes but they are outright homeowners and have negligible housing costs, and can therefore get by on smaller Age Pensions. This assumption is likely to be undermined if growing numbers of homeowners are approaching retirement with mortgage debt burdens as a result of the use of MEW during their working lives.

Secondly, homeowners with mortgage debt in retirement will have less housing equity to draw from post-retirement. Hence, the emerging MEW trends may undermine recent asset based welfare policy recommendations by the Productivity Commission (2011) and others that encourage homeowners to rely on personal housing assets to fund their aged care needs in retirement.

⁸ Tasmania, NT and ACT are excluded from this analysis as their small sample sizes in the HILDA survey makes the estimates unreliable.

Mortgage equity withdrawal represents an increasingly common financial strategy to turn the family home into an ATM to fund spending needs.

Thirdly, a critical financial decision occurs when individuals reach their superannuation preservation age. If an increasing share of homeowners are entering retirement with outstanding mortgage debt burdens, this begs the question of whether older homeowners will resort to drawing down on their superannuation savings to pay off the mortgage debt once they pass preservation age. Indeed, Ong *et al.* (2013) found that reductions in superannuation balances at preservation age are correlated with falls in mortgage debt secured against the family home. While this cannot be taken to imply superannuation drawdowns are in fact being channelled toward mortgage debt repayment, Kelly (2013) offers a complementary angle which gives some credence to concerns that households are willing to use their superannuation savings to offset growing levels of debt. As discussed in the previous section, the growth in superannuation balances over the last two decades has been matched by an equivalent increase in household debt. Hence, the knowledge that one can access a superannuation 'nest egg' in retirement appears to have made households more comfortable with taking on debt in an era of sustained house price increases.

Turning the family home into an ATM that can be accessed during all stages of the life course may therefore create a real risk that growing numbers of elderly Australian homeowners will be increasingly reliant on government income support during their retirement years. This pattern, if it continues, will likely intensify pressure on the retirement income system in coming years.

The divide

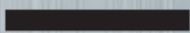
One way to measure the uneven distribution or inequality of a resource is to use the Gini coefficient. The Gini coefficient is a standard measure of inequality and it ranges from zero to one. If the Gini coefficient equals 1.0 then one household has all the income, savings or debt, while a value of 0.0 indicates that every household has the same amount. Personal income inequality was measured using the Gini coefficient in a previous BCEC report and found to be 0.32 in Western Australia and 0.33 for Australia overall in 2011-12 (Cassells *et al.* 2014a p.14).

In this report households are being analysed and it could be expected that income will be more uneven as some households will have two high incomes while others will have none. Based on the estimated 2015 incomes derived from the 2011-12 ABS Survey of Income and Housing, the Gini coefficient for household disposable income in 2015 is 0.39. There is slightly more inequality in income at the household level than at the personal level as expected. Since 2005 when the Gini coefficient was 0.38, inequality of household incomes have increased slightly.

There is much greater inequality in the distribution of savings and debt than there is in income. With three-quarters of households savings are owned by the richest 20% (page 14) it comes as no surprise that the Gini coefficient for savings is 0.72. However, the extreme concentration of savings has narrowed slightly from 0.78 over the last decade. So, for at least this period of time, inequality has improved as the rich did not get richer while the poor stayed near zero.

The distribution of household debt is more concentrated than the distribution of savings. The Gini coefficient of the household debt for 2015 is 0.76 is almost unchanged since 2005. Saving inequality may have decreased over that time but the distribution of debt is extremely concentrated and has not change over the last decade.

The future



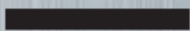
The future

The inequality in the distribution of household saving appears to be at its worst for older Australians. While those aged 65-74 years have the second highest average level of savings and 20% of millionaire households are in aged over 65, older Australians are also where a large proportion of Australia's poorest household can be found. As noted earlier in the report, the typical member of the lowest economic resource households was an older female living alone. It is this diversity that makes pension policy so difficult. However, if the governments is to reduce outlays then older Australians who can afford it need to be financially more self-reliant. The improved targeting of the Age Pension, proposed in the 2015 Budget, is the first step in this direction. In times when the society is ageing and the government budget is in a long term deficient, outlays must be reduced and giving benefits to millionaire household does not make sense.

The second issue for the government to address must be the growing levels of debt that people take into retirement. Using the equity in their home as an ATM is becoming easier and, for most households, provides a flexible option to manage household finances over the life cycle. The comfort in so doing is reinforced for those with a large superannuation lump sum coming in the future. However, there are risks that such flexibilities may reduce the level of financial security or independence for some. A number of reviews have suggested that superannuation should only be available for use in its primary purpose – providing an income in retirement – and there is a case to review how the lump sum policy is impacting on levels of retirement savings.

Discussion

and Conclusion



Discussion and conclusion

The level of savings and debt a household experiences can impact greatly on their current and future standard of living. Adequate savings can provide for a rainy day, enable a household to put a deposit on their first family home and supply an adequate income stream in retirement. On the other side of the scales, debt offers a way for households to make purchases that would otherwise be impossible and to achieve a higher current standard of living. But balance is the key. Debt that is invested into an asset that will also grow in real value and is able to be serviced without placing too much financial pressure on a household is generally considered to be good debt.

Are Australian households living beyond their means, taking on too much debt and not saving enough for the future? It is clear that the propensity to take on debt has increased for both households and governments alike. Of the estimated 9.1 million households in Australia, they currently have average savings in the form of financial assets of \$340,900 and debts of \$148,700. This is an increase in savings of 54% in real terms since 2005. However, household debt has risen at a similar rate – by 51% in the same period. Many households are able to access and service this debt, with higher debts associated with higher incomes. However, there is a gulf between those at the top of the distribution and those at the bottom.

The inequality in the distributions of household savings and debt are considerably worse than the much talked about inequality in incomes. The average household disposable income of the top 20% of savers is less than four times those in the lowest savings quintile. However, their savings at an average of almost \$1.3 million is 200 times the bottom 20%. This top quintile may receive one-third of all income but they own three-quarters of the total value of savings in the form of financial assets.

The trifecta of debts, low (or no) savings and low incomes presents many low economic resource families with an unenviable challenge to maintain an acceptable quality of life for themselves and their children on a day-to-day basis.

Since the Global Financial Crisis, the household savings rate have risen, with households exhibiting discipline in their expenditure at a time when the economic outlook was uncertain. In an economic downturn income can decline quickly while reigning in spending can be more difficult, for both households and governments. Debts can quickly get out of hand and become unmanageable in this situation. While households have reigned in their spending and the propensity to take on debt, governments have not been able to do the same over recent years. This has seen government debt to revenue increase substantially at both the Federal and State level. While still low by international standards, Australia's debt to revenue has increased exponentially from 15.2% to 54.4% in just over five years. This could become a burden to the Australian economy, increasing the risk of creditor downgrading and limiting the ability of governments to govern. Instead of servicing the Australian people, governments can end up spending valuable resources on servicing debt.

Australia's states and territories have also seen a marked increase in government debt over recent years – particularly South Australia, Victoria and Queensland. All three states are now recording debt to revenue ratios in excess of 50%. Western Australia has also followed suit, with debt to revenue increasing above 50% in 2013, a period which also saw the state lose its AAA credit rating.

On the other hand, Australian households have decreased their propensity to take on debt and have increased their savings in the post-GFC period, however, household debt still remains three times higher now than what it was twenty years ago. Australians are now more comfortable with debt and currently hold debts equal to 1.5 years of income whereas in the past they had only debt equivalent to half annual income.

Our parents and grandparents typically adopted a cautious attitude to financial security and retirement planning. They were also accustomed to more rigid financial instruments through which to secure home assets, accumulate savings and plan for retirement. Fast forward to the current generation of households and we can see that financial products, both savings, credit and debt, have arguably become more complex and more flexible. It is natural for financial instruments to adapt to consumers' changing demands and needs, and for many, such flexibility is hugely beneficial in securing higher current and future living standards. However, notwithstanding these benefits, there is also risk with complexity and it is important to promote good financial decisions and encourage a longer term outlook.

Mortgage equity withdrawal has become a popular tool to derive a higher current standard of living by using the family home as collateral. This can be a valuable option for many households who value flexibility in the management of resources over their lifetimes. More households are now taking advantage of such schemes to smooth consumption or relieve short-term financial pressures. But there is a risk. Average mortgage debt as a proportion of property values has almost tripled over the last 25 years, rising from 10% to 28% since 1990. If superannuation savings earmarked for retirement are instead diverted to pay down mortgage balances when people approach the end of their working lives, then future financial security may be affected and a greater reliance will be placed on support from the state.

Superannuation is designed to provide financial security in retirement, and there is a strong case for the government to review the use of the superannuation lump sum balances for paying down mortgage debt and the impact of such behaviour on retirement savings. The implementation of proposed changes to the Age Pension should also be considered, since without a coordinated policy framework the financial 'burden' of an ageing population is unlikely to go away.

So are we living beyond our means? With household debt to income ratios three times higher now than a quarter of a century ago, household debt up by over 50% in real terms over the last decade and the debt of those approaching retirement (55-64 year olds) up 64% in real terms, it would seem on the face of it to be true. However, the reality is more nuanced. Household savings are growing faster than income and 8.5 cents in every dollar is being saved, there is now \$2 trillion tucked away in superannuation and riskier investments are making way for more a more conservative approach. This is far better than we were 10 years ago, but with a note of caution that savings are again on the decline.

We have become accustomed to living with higher debt, but the situation is only sustainable with a certain stream of income. The use of debt, supported by reliable income streams, can service significant expenditures and lifestyle choices beyond that which would be possible on income and savings alone. However, this clearly isn't the case for everyone. The sudden deterioration in financial security when the unexpected happens – the loss of a job, illness, or a relationship breakdown – can precipitate not only a decline in wellbeing, but not uncommonly an adverse impact on physical or mental health. For such households there is an imperative to maintain adequate income support and access to good financial planning, protection and counselling to prevent a chronic deterioration in their situation and outlook.

Glossary and technical notes

ABS data sources

This report uses data from the ABS 2005-06 and 2011-12 Survey of Income and Housing (SIH). The SIH is a household survey which collects information on sources of income, amounts received, housing characteristics, household characteristics and personal characteristics. In 2005-06 and 2011-12, information on household assets and debt were also collected. The survey scope covers residents of private dwellings in both urban and rural areas of Australia.

All incomes, asset values and debts in the 2005-06 SIH have been inflated to 2015 values using the change in the CPI. The estimate is based on the overall CPI change between the average for 2005-06 and March 2015 (ABS 2015c).

The uprating of data in the 2011-12 SIH to 2015 used a variety of benchmarks to produce the most accurate estimates possible. Household population growth was estimated on a capital city and balance of state basis for each state using ABS household projections (ABS 2015b). For the ACT/NT category a weighted average of household population growth was used. Disposable income was inflated on a state basis using the estimated changes in per capita disposable income (ABS 2014). Offset accounts were inflated using the change in the 'aggregate mortgage buffer' (RBA 2015). Property values in capital cities were inflated using the change in the Residential Property Price Index for that city (ABS 2015d) while non-capital city property values were inflated using the change in the CPI. Other financial assets and debts were inflated using RBA aggregate data adjusted for changes in the household population.⁹

Debt

Credit card debt. The amount owing on the respondent's latest credit card account statement (including any government, interest or financial institution charges), irrespective of whether it was paid off by the due date. Includes amounts owing on specialised retail shopping cards as well as general credit cards such as Visa, Mastercard and store credit cards but excludes debit cards.

An Investment Loan is a loan taken out for the purpose of financing investment, excluding loans for business purposes and rental property.

Dependent children

Dependent children include all children aged under 15 years, and people aged 15-24 years who are full-time students, have a parent in the household and do not have a partner or child of their own in the household.

⁹ RBA Statistical Tables E1 *Household And Business Balance Sheets*.

Household saving ratio

The ratio of household net saving to household net disposable income is called the household saving ratio. Household net saving is calculated by deducting household final consumption expenditure and consumption of fixed capital from household disposable income.

Income

Income consists of all receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

Income includes wages, salaries & other forms of employment income, profit/loss from own unincorporated business, investment income, government pensions & allowances, and private transfers (e.g. superannuation, workers' compensation, income from annuities, or child support).

Disposable Income is gross income less income tax, the Medicare levy and the Medicare levy surcharge.

Financial assets

A financial asset is defined as an asset whose value arises not from physical existence (as would a building, piece of land, or capital equipment) but from a contractual relationship. This includes accounts held with financial institutions (including offset accounts), ownership of an incorporated business, shares, debentures and bonds, trusts, superannuation funds, and loans to other persons.

Deposits are the sum of the value of accounts with financial institutions (banks, credit unions, building societies, etc.), debentures and bonds. In the 2015 tables a second value of Offset account is presented. This is the value of funds held in offset accounts. It is only available for 2015 as it was not collected separately before the 2011-12 SIH from which the 2015 values are derived. Offset accounts were not explicitly collected in the 2005-06 SIH but may have been included in the value reported under Deposits. For this reason, when comparing 2005-06 and 2015 data, the 2015 offset amounts have been added to the Deposits value.

A trust includes any type of managed fund which involves the pooling of investors' money in order for a trustee or professional manager to administer that fund. Examples include listed and unlisted public unit trusts, cash management trusts, property trusts and family trusts used only for investment purposes. Trusts includes both public and private trusts.

Business (net) refers to the value of a business (unincorporated or incorporated) net of any liabilities.

Other refers to loans to persons outside of the household and other financial instruments.

Hilda survey

This report uses unit record data from the 2013 Household, Income and Labour Dynamics in Australia (HILDA) Survey (called HILDA wave 13). The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this report, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.

Summerfield *et al.* (2014) is the latest version of the HILDA User Guide and provides an overview and details of the survey.

Household

A person living alone or a group of related or unrelated people who usually live in the same private dwelling.

Household savings

In this report, household savings refers to the financial assets owned by any member of the household and includes deposits, offset account, trusts, equities, superannuation and businesses (net).

Low economic resources

Households with low economic resources have restricted expenditure and consumption options because they are in the lowest quintile (i.e. 20%) of both disposable household income and household savings.

Quintiles

Quintiles are groupings that result from ranking all households in ascending order according to the relevant characteristic (i.e. disposable income or savings) and then dividing the household population into five equal groups, each comprising 20% of the total household population.

Reference person

The reference person for each household is the person aged 15 years or over who (in order of selection): has the highest tenure type (owner, buyer, renter, other); is one of the partners in a registered or de facto marriage; is a lone parent with dependent children; is the person with the highest income; or is the eldest person.

Appendix A – Detailed tables

Table A-1 Share of household savings by quintile and type, 2015 (share of total %)

	Cash Deposits	Offset account	Trusts	Equities	Super	Business (net)	Other	H'hold Savings
	%	%	%	%	%	%	%	%
Q1 (lowest 20%)	1.3	0.1	0.0	0.1	0.3	0.0	0.5	0.3
Q2	5.7	1.5	0.1	0.8	3.3	0.4	1.6	2.6
Q3 (middle 20%)	10.5	8.1	0.6	2.6	9.0	1.6	5.2	6.7
Q4	20.5	27.3	4.1	10.3	19.6	4.7	20.8	15.2
Q5 (top 20%)	62.0	63.1	95.2	86.2	67.9	93.3	71.9	75.2
Australia overall	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-2 Ratio of income to savings and debt by Capital City/Balance of State, 2015

		H'hold Disposable Income	H'hold Savings	H'hold Debt	Savings / Disp Inc	Debt / Disp Inc
		\$pa	\$	\$	ratio	ratio
NSW	Sydney	102,700	312,800	207,900	3.0	2.0
	Balance of NSW	75,100	333,200	79,600	4.4	1.1
	All NSW	91,900	320,800	158,000	3.5	1.7
Vic	Melbourne	88,800	376,400	153,900	4.2	1.7
	Balance of Vic	65,500	307,800	76,600	4.7	1.2
	All Victoria	82,400	357,500	132,600	4.3	1.6
Qld	Brisbane	91,300	372,100	175,300	4.1	1.9
	Balance of Qld	79,600	303,200	120,200	3.8	1.5
	All Queensland	84,800	334,000	144,800	3.9	1.7
SA	Adelaide	81,300	330,500	126,100	4.1	1.6
	Balance of SA	66,600	330,400	94,300	5.0	1.4
	All South Australia	77,400	330,500	117,700	4.3	1.5
WA	Perth	106,300	381,300	201,000	3.6	1.9
	Balance of WA	94,300	335,100	152,600	3.6	1.6
	All Western Australia	103,400	370,200	189,400	3.6	1.8
Tas	Hobart	76,800	347,500	110,000	4.5	1.4
	Balance of Tas	61,800	259,500	76,200	4.2	1.2
	All Tasmania	68,100	296,700	90,500	4.4	1.3
ACT/NT		108,400	436,200	197,700	4.0	1.8
Australia		88,100	340,900	148,700	4.0	1.8

Note: Estimates have been rounded and may not add correctly.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-3 Household debt by age group and type of debt, Australia, 2015 (mean \$)

Age Group	H'hold Disposable Income	Mortgage	Other Prop Loans	Student Loans	Credit Cards	Invest. Loans	Personal & Car Loans	Total H'hold Debt
	\$pa	\$	\$	\$	\$	\$	\$	\$
24 and under	61,200	36,800	1,600	6,200	1,000	500	5,600	51,700
25-34	92,000	138,400	39,700	4,500	2,200	2,600	5,200	192,600
35-44	102,900	163,300	71,400	1,600	3,000	8,000	5,100	252,400
45-54	102,300	104,800	80,500	2,200	3,700	9,000	3,900	204,000
55-64	77,100	42,800	58,400	1,500	2,200	7,300	1,400	113,600
65-74	49,300	10,200	11,700	100	1,200	2,200	1,100	26,500
75 and over	36,900	1,500	500	0	400	200	700	3,300

Note: Age Group refers to age (in years) of the household reference person. Multi-family, Extended-family and Group households were excluded from the household savings by age analysis.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-4 Household debt by household type and age and type of asset, 2015 (mean \$)

	H'hold Disp Income	Other							Total H'hold Debt
		Mortgage	Prop Loans	Student Loans	Credit Cards	Invest. Loans	Personal & Car Loans		
Couple Only 34 and under	114,400	147,500	49,800	7,300	2,400	2,700	7,400	217,200	
35-64	100,600	87,300	87,100	700	2,900	8,900	3,700	190,600	
65 and over	56,100	10,100	11,200	0	1,200	1,500	1,100	25,000	
Couple with dep. children	32,500	118,700	161,300	77,800	3,000	3,700	9,700	4,800	
One Parent with dep. children	10,400	60,800	54,200	40,700	2,600	1,900	900	3,600	
Lone person 34 and under	50,700	82,400	20,100	4,400	1,200	2,300	2,400	112,800	
35-64	49,800	52,400	29,500	300	1,800	3,900	1,900	89,900	
65 and over	29,900	2,400	1,800	100	400	900	500	6,100	

Note: The age groups are the age (in years) of the household reference person. Multi-family, Extended-family and Group households were excluded from the analysis.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-5 Change in income, savings and debt by age group, 2005-06 to 2015 (2015 dollars)

	2005-06			2015			Change		
	Disp Inc	Savings	H'hold Debt	Disp Inc	Savings	H'hold Debt	Disp Inc	Savings	H'hold Debt
	\$pa	\$	\$	\$pa	\$	\$			
Q1 (lowest 20%)	29,400	2,600	27,000	37,600	5,900	35,900	+28%	+124%	+33%
Q2	46,000	21,100	72,300	66,900	44,300	103,400	+46%	+110%	+43%
Q3 (middle 20%)	59,800	55,800	111,200	81,800	113,500	173,700	+37%	+103%	+56%
Q4	68,800	134,500	128,500	96,300	259,400	203,900	+40%	+93%	+59%
Q5 (top 20%)	92,000	890,300	155,100	125,200	1,281,000	226,500	+36%	+44%	+46%
Australia overall	59,200	220,900	98,800	81,600	340,900	148,700	+38%	+54%	+51%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-6 Change in household savings and debt by Capital City/Balance of State, 2005-06 to 2015 (2015 dollars)

	2005-06			2015			Change			
	Disp Inc	Savings	H'hold Debt	Disp Inc	Savings	H'hold Debt	Disp Inc	Savings	H'hold Debt	
	\$pa	\$	\$	\$pa	\$	\$				
NSW	Sydney	68,800	262,200	142,500	92,900	312,800	207,900	+35%	+19%	+46%
	Balance of NSW	51,100	203,400	79,500	70,300	333,200	79,600	+38%	+64%	+0%
	All NSW	61,900	239,400	118,100	84,100	320,800	158,000	+36%	+34%	+34%
Vic	Melbourne	61,800	236,100	96,100	81,700	376,400	153,900	+32%	+59%	+60%
	Balance of Vic	50,900	220,000	64,100	60,800	307,800	76,600	+20%	+40%	+19%
	All Victoria	58,600	231,300	86,700	76,000	357,500	132,600	+30%	+55%	+53%
Qld	Brisbane	61,200	193,100	94,000	86,000	372,100	175,300	+40%	+93%	+86%
	Balance of Qld	55,300	184,000	94,100	73,700	303,200	120,200	+33%	+65%	+28%
	All Queensland	58,100	188,300	94,100	79,200	334,000	144,800	+36%	+77%	+54%
SA	Adelaide	55,200	201,900	74,000	76,200	330,500	126,100	+38%	+64%	+70%
	Balance of SA	47,800	345,000	62,300	63,100	330,400	94,300	+32%	-4%	+51%
	All SA	53,200	240,400	70,900	72,700	330,500	117,700	+37%	+37%	+66%
WA	Perth	59,500	181,600	112,700	100,100	381,300	201,000	+68%	+110%	+78%
	Balance of WA	56,400	293,900	80,700	86,900	335,100	152,600	+54%	+14%	+89%
	All WA	58,700	209,000	104,900	96,900	370,200	189,400	+65%	+77%	+81%
Tas	Hobart	53,300	142,900	62,000	72,000	347,500	110,000	+35%	+143%	+78%
	Balance of Tas	45,100	124,700	51,200	57,600	259,500	76,200	+28%	+108%	+49%
	All Tasmania	48,500	132,200	55,600	63,700	296,700	90,500	+31%	+124%	+63%
ACT/NT		72,200	204,900	117,400	103,100	436,200	197,700	+43%	+113%	+68%
Australia	Capital cities	62,900	226,500	110,200	87,700	351,800	177,200	+39%	+55%	+61%
NSW	Balance of Aust	52,200	212,600	78,400	69,900	316,400	97,500	+34%	+49%	+24%
	Overall	59,200	220,900	98,800	81,600	340,900	148,700	+38%	+54%	+51%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-7 Real mean savings and debt of Australian households, 2005 to 2015 (2015 dollars)

	2005 (2015 \$)	2015	Change (\$)	Change (%)
Cash Deposits	27376	49901	22525	+82%
Trusts	14148	37555	23407	+165%
Equities	24159	23680	-479	-2%
Super	90107	177040	86933	+96%
Business (net)	63574	51455	-12119	-19%
Other	1587	1274	-313	-20%
Household Savings	220913	340905	119992	+54%
Mortgage	53243	84489	31246	+59%
Other Prop Loans	31134	50546	19412	+62%
Student Loans	1570	2587	1017	+65%
Credit Cards	2456	2410	-46	-2%
Invest. Loans	5510	4945	-565	-10%
Personal Loans	4883	3713	-1170	-24%
Total Household Debt	98795	148691	49896	+51%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-8 Real mean savings and debt of millionaire households, 2005 to 2015 (2015 dollars)

	2005 (2015 \$)	2015	Change (\$)	Change (%)
Disposable Income	137,600	150,600	+13,000	+9%
Deposits	183,900	227,200	+43,300	+24%
Trusts	269,200	427,300	+158,100	+59%
Equities	361,100	196,700	-164,400	-46%
Super	621,900	938,100	+316,200	+51%
Business (net)	1,383,800	540,200	-843,600	-61%
Other	18,800	5,000	-13,800	-73%
Household Savings	2,838,300	2,334,500	-503,800	-18%
Mortgage	46,800	89,500	+42,700	+91%
Other Prop Loans	83,100	139,900	+56,800	+68%
Stud Loans	1,500	1,600	+100	+7%
CC debt	4,600	3,100	-1,500	-33%
Invest Loans	69,700	22,200	-47,500	-68%
Personal & Car loans	3,800	2,200	-1,600	-42%
Total Household Debt	209,500	258,600	+49,100	+23%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Table A-9 Real mean savings and debt of millionaire households, 2005 to 2015 (2015 dollars)

Age	2005 to 2015	Deposits	Equities	Super	Bus (net)	H'hold Savings	Mortg	OP Loans	CC Debt	Inv Loans	Pers & Car Loans	Total H'hold Debt
35-44	Chg	20,400	1,100	53,700	-2,800	95,300	69,600	25,500	-200	-1,400	-2,600	91,500
	Chg%	131%	6%	76%	-5%	54%	74%	56%	-6%	-15%	-34%	57%
45-54	Chg	20,900	400	93,200	-40,100	115,800	36,000	22,200	0	-3,600	-1,700	53,600
	Chg%	80%	2%	69%	-32%	36%	52%	38%	0%	-29%	-30%	36%
55-64	Chg	23,700	-3,500	149,100	-16,900	166,500	17,600	27,400	-200	1,900	-2,300	44,500
	Chg%	59%	-11%	83%	-20%	46%	70%	88%	-8%	35%	-63%	64%

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

Appendix B – Impact of means and medians

The tables presented in this report generally contain the overall mean value for a certain type of financial asset or household debt. For example, the overall average value of equities is estimated at \$23,700. This value for equities was estimated by summing the value of equities owned by households and dividing by the total number of households. This is called the mean and is the most common way of presenting a summary statistic. But this is just one way of describing the value of shares owned. Another way is using the median or middle value – half are larger and half are smaller than this value. However, the median is only useful if the majority of households own this asset or debt. For equities, only one-quarter (25.5%) of households own shares and this produces a median value of zero. If, however, we were only talking about the value of shares belonging to households that own shares then we could use the median.

Table B-1 Ownership, medians and means of selected financial assets and debt by savings quintile, 2015

		Q1	Q2	Q3	Q4	Q5	Overall
Trusts	Ownership (%)	0.2	1.5	2.9	8.3	22.5	7.1
	Owner Median (\$)	8,800	8,700	29,900	59,700	266,000	119,500
	Owner Mean (\$)	6,500	16,000	39,600	92,100	793,600	530,200
	Overall Mean (\$)	0	200	1,100	7,700	178,700	37,600
Equities	Ownership (%)	3.9	11.2	21.9	37.4	52.9	25.5
	Owner Median (\$)	2,600	3,900	6,300	9,100	45,600	11,700
	Owner Mean (\$)	3,500	8,400	14,100	32,600	192,700	93,000
	Overall Mean (\$)	100	900	3,100	12,200	102,000	23,700
Super	Ownership (%)	38.3	82.0	91.0	93.3	93.9	79.7
	Owner Median (\$)	5,900	33,800	88,300	179,200	466,500	95,400
	Owner Mean (\$)	6,900	35,300	87,200	185,600	639,700	222,100
	Overall Mean (\$)	2,600	28,900	79,400	173,200	600,800	177,000
Household Savings	Ownership (%)	97.3	100.0	100.0	100.0	100.0	99.5
	Owner Median (\$)	3,900	43,000	111,700	246,400	811,300	112,500
	Owner Mean (\$)	6,000	44,300	113,500	259,400	1,281,000	342,800
	Overall Mean (\$)	5,900	44,300	113,500	259,400	1,281,000	340,900
Mortgage	Ownership (%)	13.9	31.8	46.2	44.1	31.1	33.4
	Owner Median (\$)	148,300	223,100	237,500	215,100	217,900	218,200
	Owner Mean (\$)	168,700	232,000	259,900	262,200	287,800	252,800
	Overall Mean (\$)	23,500	73,700	120,000	115,700	89,500	84,500
Other Prop Loans	Ownership (%)	2.3	5.7	12.0	17.9	21.3	11.8
	Owner Median (\$)	243,600	296,200	282,300	334,400	377,300	328,400
	Owner Mean (\$)	288,700	331,100	349,000	412,400	524,200	427,100
	Overall Mean (\$)	6,700	18,800	41,800	74,000	111,400	50,500
Credit Card debt	Ownership (%)	11.2	17.3	15.9	15.4	10.6	14.1
	Owner Median (\$)	1,700	2,400	2,600	2,600	2,600	2,600
	Owner Mean (\$)	4,300	4,600	4,800	4,500	4,400	4,500
	Overall Mean (\$)	1,300	2,200	2,900	2,800	2,800	2,400
Personal & Car loans	Ownership (%)	0.3	1.0	1.0	3.8	8.3	2.9
	Owner Median (\$)	10,600	12,800	14,400	16,400	19,200	14,400
	Owner Mean (\$)	15,400	16,800	19,800	24,200	33,500	20,800
	Overall Mean (\$)	2,100	4,000	4,600	4,400	3,400	3,700
Household Debt	Ownership (%)	49.2	71.6	81.2	80.6	79.0	72.3
	Owner Median (\$)	16,000	47,100	147,100	151,400	85,400	77,000
	Owner Mean (\$)	72,900	144,400	213,800	253,000	286,600	205,500
	Overall Mean (\$)	35,900	103,400	173,700	203,900	226,500	148,700

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' estimates based on ABS Survey of Income and Housing data.

The median, for owners of equities is estimated at \$11,700 which means half of all households that own shares have a portfolio worth \$11,700 or less. However, the conditional or owners' mean is \$93,000 which suggests that a small proportion of portfolio are valued at considerably more than the median value.

The table above provides an example of the distribution of selected asset and debt by ownership of the asset, conditional median and mean and the overall mean by savings quintiles.

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