Household savings and retirement

Where has all my super gone?

A report on superannuation and retirement for CPA Australia

KELLYresearch
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Contents

Foreword	**2**
Author note	**3**
Executive summary	**4**
Introduction	**6**
Data sources	7
The retirement income system	**8**
Expectations and adequacy	9
Trends	**11**
Social	11
Labour force	11
Homeownership	13
Impact of the trends on retirement	15
Savings	**16**
Household wealth	18
Superannuation	22
Debt	26
Retirement	**28**
Savings and debt before and after retirement	28
Debt, superannuation and retirement	31
Discussion	**34**
Wealth and savings	34
Expectation gap	34
Has compulsory superannuation helped people to save more?	34
Retirement outlook – post GFC	35
Superannuation and the age pension	36
Conclusion	**37**
References	**38**
Appendix A Definitions and technical notes	**39**

Foreword

This year marks the 20th anniversary of the commencement of the compulsory Superannuation Guarantee (SG) system in Australia. Also given that compulsory SG contributions are increasing from 9 to 12 per cent from 1 July 2013, it is timely to reflect on and question the effectiveness and appropriateness of Australia's compulsory superannuation system, and whether it has delivered on its policy objectives.

Traditional arguments supporting our superannuation system will highlight the benefits provided, such as increased GDP; greater access to capital for Australian companies and banks; greater investments in infrastructure and venture capital; and providing a much needed buffer against the full impact of the global financial crisis. However has our compulsory superannuation system met its primary policy objectives of boosting the retirement savings of Australians, boosting their self-reliance in retirement and reducing their reliance on the age pension?

This question is particularly pertinent in the current constrained fiscal environment where concerns are being raised about the appropriateness of the tax concessions – some $30 billion each year and growing – being provided to encourage superannuation savings and how they are targeted. Is Australia receiving an appropriate return on our collective investment in superannuation or should the government be spending our money somewhere else?

This report is the first in a series by CPA Australia examining the effectiveness of our compulsory superannuation system. In particular, it looks at the impact of superannuation on household savings and debt. It considers whether compulsory superannuation has boosted net household savings and placed individuals in a better financial position for retirement.

The short answer is that Australia's compulsory superannuation has failed to deliver on some of its core objectives. Between 2002 and 2010, superannuation balances, property and other assets have undoubtedly grown. However, a surprising appetite for personal debt has eroded both compulsory superannuation and the benefits of strong asset price inflation for those now approaching retirement.

People approaching 65 have sharply increased their debt levels. Their average mortgage balance and other property debt has more than doubled since 2002 and credit card debt is up 70 per cent.

Remarkably, people aged 50 to 54 are tracking down a similar path – with a ratio of debt to superannuation of 91%. Even those people close to pension age had a debt to superannuation ratio of 42 per cent.

Between 2002 and 2010 average superannuation balances across all age groups grew 42 per cent. Property assets grew 60 per cent and other assets rose 17 per cent. But the accumulation of assets has been accompanied by a 94 per cent increase in property debt and a 50 per cent increase in other debt.

Perhaps the most striking evidence in the research is the savings patterns of people approaching retirement. In the broad 50 to 64 age bracket, household superannuation grew by 48 per cent, property assets grew by 58 per cent and other assets by only 3 per cent. Yet property debt rose 123 per cent in that period and other debt grew 43 per cent.

Lump sum superannuation benefits are being treated as a windfall and being used to pay for the lifestyle that's been lived now instead of being put aside to provide income in retirement.

Some twenty years after the introduction of the superannuation guarantee it is clear that Australia's retirement savings policy is not delivering on its policy intent. At best, all it has achieved is to make some savings compulsory instead of voluntary, and quarantine these savings until retirement age. Overall, these enforced savings, locked up until a person retires have been largely offset by similar if not larger private borrowings.

The government is effectively funding a $30 billion per annum tax concession that will do little if anything to relieve pressure on the cost of providing the age pension to retirees and the impact on the public purse.

Policy measures must be considered to ensure superannuation savings are being invested to be used to fund a person's retirement. Measures such as lifting the preservation age may further boost superannuation savings, but based on this research it will inevitably only defer the use of accumulated superannuation to extinguish household debt.

Serious consideration must be given to limiting the amount of superannuation that can be taken as a lump sum and encouraging income streams in retirement. Given the compulsory nature of the system, it is not unreasonable to consider the use of compulsory income streams in retirement.

We need to break our love affair with lump-sum superannuation and move away from the "lump sum as a windfall" mentality if our retirement savings system is to succeed.

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Author note

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Executive summary

The Superannuation Guarantee (SG) scheme has now been in place for 20 years. When introduced, it promised to reduce dependence on the age pension and provide a higher standard of living in retirement for the ageing population. But what impact has it really had on retirement?

This report attempts to quantify the impact by asking and then answering the following questions:

Has compulsory superannuation future-proofed household savings?

- Compulsory superannuation was designed to supplement the pension, and in some cases to replace it, and to provide an income that would meet people's expectations. However, these expectations have risen and household savings have not been future-proofed.
  - It was originally envisaged that the employer contributions of 9 per cent would be matched with a 3 per cent employee co-contribution. On this basis, a person would achieve a 40 per cent replacement rate by age 65 after around 40 years of contributions. It was also predicted that low-income earners would need a higher replacement rate.
  - Higher household incomes, asset price increases and access to easy credit have led to higher retirement living standard expectations. The consensus now is that a replacement rate of 60-65 per cent of pre-retirement income should be the target.
  - Household income has doubled in the last 20 years and for people aged 55-64 who are not retired the median household income is $108,090. Based on this income, the target replacement amount should be $67,500.
  - Average household superannuation grew by 42 per cent between 2002 and 2010, non-superannuation financial assets by 17 per cent, and property by 60 per cent. However, property debt grew by 94 per cent and other debt by 50 per cent.
  - In the same period, superannuation of the 50-64 year age group grew by 48 per cent, non-superannuation financial assets by only 3 per cent, property by 58 per cent, property debt by 123 per cent and other debt by 43 per cent.

What levels of debt are people carrying into retirement?

- People approaching the age of 65 have considerably higher debt than in the past. Mortgage averages and other property loans have more than doubled since 2002 and credit card debt has increased 70 per cent.
  - In 2010 the average household aged 50 to 64 had a $75,000 mortgage, other property loans of $39,000 and owed $2300 on their credit cards.
  - Households aged 50-54 who were not retired had a debt to superannuation ratio of 91 per cent, and even those close to pension eligibility (60-64) had a ratio of 42 per cent.

Are people using retirement savings to extinguish existing debt?

- Superannuation is clearly being used to reduce debt. Retired households aged in their 60s have significantly less superannuation and less debt than those of the same age who are not retired.
  - In 2010, household debt of those aged 60-69 and not retired was $119,000, while in retired households it was $50,000. Non-superannuation financial asset levels were approximately the same, but superannuation was considerably lower for retired households ($238,000 for retired and $304,000 for non-retired).

Is there a difference in household savings and debt patterns between homeowners and non-homeowners?

- The non-retired households with the largest average superannuation balances are owner households without a mortgage ($358,000 in 2010).
  - Those with a mortgage saw their superannuation rise by only 17 per cent, while their debt rose by 57 per cent.
  - There has been a doubling of the proportion of homeowners approaching retirement age with a mortgage since 2002.
- Households that rent are generally on lower incomes and this is reflected in their lower superannuation balances. However, superannuation balances of not-retired renting households grew faster than homeowners at 86 per cent, but it is still only three-tenths of homeowner households.

- Not-retired renting households had $87,000 debt in 2010. Having a debt equivalent to three-quarters of superannuation does not bode well for enjoying an adequate living standard in retirement.

- People approaching retirement age are using the equity in the family home as a source of funds to assist their children into homeownership, to fund an overseas trip, retire early or simply to live a lifestyle their income cannot support. This is adding to the unrealistic expectations of retirement lifestyle.

Have there been other factors influencing household savings?

- The poor performance of superannuation funds in 2008 and 2009 has had a detrimental impact on some age groups. This impact is most likely to be felt by those in their 50s and 60s (in 2010).
  - The impact of the Global Financial Crisis (GFC) on the retirement savings of average Generation X's and Gen Y's is unlikely to be very significant.
- In general, people have unrealistic views of how they will fund their retirement and prefer to consume now rather than save for the future.
  - Increases in wealth through rising asset values, easy credit, and higher earnings have allowed working households to enjoy a higher standard of living than was possible in the past. This can lead to higher retirement expectations and increase the gap between retirement savings and expectations.
- Few people continue working up to retirement age. In the 60-64 age group, half of women and one-third of men are not working. These people are not only reducing their retirement savings, but missing an opportunity to have their employer contribute to their savings.
  - On average, by retiring early men miss out on $64,000, while women lose $54,000.
  - Tracking of households in the 65-69 age range showed that those who were still working went from having the lowest level of savings in 2002 to the highest level in 2010, when compared with retirees.
- Other research has found that those approaching retirement may be substituting superannuation for other forms of saving rather than making additional savings.
  - Each dollar contributed as SG is offset by an approximately 30 cent reduction in other savings.
- For most women and a large share of baby boomers, their retirement savings and the pension will not be sufficient to provide them with the target replacement rate.
  - The original superannuation adequacy estimates were based on 40 years of contributions and the SG is only 20 years old.
  - Superannuation for women at retirement is only half the level of their male counterparts.

What are the influencing factors why people are carrying debt into retirement?

- Knowledge that an amount of money will become available at retirement is making people more willing to take risk.
- In 2010, the average household aged 50 to 64 years had a $75,000 mortgage, other property loans of $39,000 and owed $2300 on their credit cards.
- Not-retired households aged 50-54 years had a debt to superannuation ratio of 91 per cent and even those close to pension eligibility had a ratio of 42 per cent.
- Those approaching retirement may be substituting superannuation for other forms of saving rather than making additional savings.

When introduced, the SG aimed to reduce dependence on the age pension and provide a higher standard of living in retirement for the ageing population. However, the policy has flaws – it was based on a pattern of labour force behaviour that has changed significantly, it does not ensure that the savings were used to supplement the pension, and it did not take into account the impact the savings would have on people's expectations.

Compulsory superannuation will provide extra money in retirement, but this money, for many people, will be used to repay debts or to assist others. It is likely that the majority of people will find their savings will not adequately fund their retirement expectations.

Introduction

This year is the 20th anniversary of the introduction of compulsory retirement savings, the Superannuation Guarantee (SG) scheme. When SG was introduced, it aimed to reduce dependence on the age pension and provide a higher standard of living in retirement for the ageing population. From one viewpoint, it has been a success with more than 90 per cent of employees now covered by superannuation. However, from another viewpoint, it has not been a success. It appears many people still believe that the age pension will provide them with an adequate living standard in retirement and regard compulsory superannuation savings as money to be spent soon after retirement. This leaves the majority of older Australians reliant on the very modest age pension. So has the SG improved our savings or has it just allowed us to take on more debt in anticipation of receiving a large superannuation pay out?

Many changes have occurred since the SG was introduced – there are more retirees, people are living longer, standard of living expectations have increased, economic prosperity has come and gone, and house prices and share markets have soared and declined. These changes have modified savings behaviour – the once fashionable habit of spending has recently been replaced by thrift – and the average Australian's view of the future has changed from optimism to pessimism (despite the Reserve Bank Governor and others encouragement to think positively). The changing savings behaviour and retirement expectations imply that the future is quite different to the one envisaged 20 years ago. Has compulsory superannuation helped or hindered retiring households in this changing environment?

This report considers the impact of compulsory superannuation on household savings and whether the scheme really provides a better standard of living in retirement. It will be followed up by a second report that will focus in more detail on the impact of the SG on net household savings and debt and whether there has been a trade-off between voluntary savings and the SG.

This report will consider the trends, expectations and the savings of people as they approach retirement, and attempt to answer the following questions:

- Has compulsory superannuation future-proofed household savings?
- What levels of debt are people carrying into retirement?
- Are people using retirement savings to extinguish existing debt?
- Is there a difference in household savings and debt patterns between homeowners and non-homeowners?
- Have there been other factors influencing household savings?
- What are the influencing factors causing people to carry debt into retirement?

The report begins by examining Australia's retirement income system that is designed to encourage people to save for their retirement. The report will then examine the major trends that are impacting on our retirement and present data on household wealth, superannuation, other savings, and debt of those approaching retirement.

Armed with all of this data, the focus turns to providing answers to these questions.

Data sources

The main source of data in this report is the Household, Income and Labour Dynamics in Australia (HILDA) Survey.[1] The HILDA Survey is an annual household-based study which began in 2001, and Release 10 of the HILDA data which contains waves one to 10 is currently available (Summerfield et al. 2011). HILDA is a panel study of 7682 households that were first selected in 2001 and followed over time. The survey collects information about economic wellbeing, labour market participation and family dynamics. In 2002, 2006 and 2010 additional data was collected in regards to assets, debt, personal superannuation contributions, employer contributions and superannuation account balances. This additional data is used extensively in this report.

It is a limitation of all surveys of household wealth that information is often not known or not reported. In the case of HILDA, nearly 39 per cent of wave two households had some component of household wealth missing. In wave six, it was 29 per cent and in wave 10 it was 28 per cent. Imputation was then used to estimate the missing values. Despite the use of imputation, benchmarks from the Reserve Bank of Australia (RBA) and National Accounts show that the HILDA survey performs well overall and when benchmarked against RBA National Accounts the results were very similar for real estate, superannuation (excluding unfunded superannuation), equities, other financial assets and household debt. However, HILDA did underestimate cash deposits (Bloxham and Betts 2009).

1 The HILDA Project was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) 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 FaHCSIA or the Melbourne Institute.

The retirement income system

The largest asset owned by the majority of Australian households is the family home, but this does not readily provide an income. Unfortunately, households have traditionally regarded any other form of saving, particularly retirement saving, as a low priority. As Gallagher has noted, people "prefer to consume excessively now rather than save sufficiently for the future" and then will rely on the age pension to provide them with an income in retirement (1993). This was an issue for 1980s governments, as they were facing a situation where the retired population was increasing in size and living longer.

In the 1980s, the government began to model the fiscal impact of the ageing population. These projections suggested government intervention was required to increase personal retirement savings. This view was reinforced by observations that the age pension alone (which was set at one-quarter of the average wage) was not sufficient to meet the retirement income expectations of most people. The low levels of voluntary savings and the possibility of future budgetary pressure from pension outlays led to a retirement income system being designed to encourage greater private retirement saving.

The outcome is a retirement income system that consists of a taxpayer-funded pension to provide an income safety net and private savings accounts called superannuation. Superannuation has a compulsory element and a voluntary element. The aim of the two elements is to generate greater savings for retirement and enable people to enjoy a standard of living in retirement better than what would have been achieved if solely reliant on the age pension (Gallagher 1995).

Compulsory superannuation contributions through the SG scheme are a critical element of the retirement income system. The government legislated that from 1 July 1992 employers must contribute a percentage of an employee's earnings to superannuation, with very few exceptions.[2] These funds could not be accessed until preservation age (at least 55 years old[3]) was reached and the contribution rate gradually rose over a 10-year period to 9 per cent. Recently, in recognition that this contribution rate would still not provide an adequate standard of living in retirement, the government passed legislation to further increase the minimum employer contribution rate from 9 per cent to 12 per cent from 2013–14 and 2019–20.

In addition to the compulsory element of superannuation, there is a voluntary element. This includes above-minimum employer contributions, personal before-tax contributions, personal after-tax contributions, or salary sacrificing contributions. Each of these factors attract some form of concessional taxation treatment, but are targeted by placing income bands on contributors or limits on the amounts that can be contributed. Almost every Australian Federal Budget in the last decade contains some changes to simplify or improve the targeting of superannuation concessions.

The coverage of superannuation in Australia has grown significantly as a result of the introduction of compulsory superannuation. In 2000, 91 per cent of employees aged 15-64 years had superannuation, compared with 55 per cent in 1988 (ABS 2002, 2008). Over the last decade, the coverage has been consistently above 90 per cent of all employees but is up to 95 per cent of full-time employees (ABS 2000, 2011).

Those who are self-employed are not required to make SG contributions, but they are encouraged to voluntarily save for their retirement through the availability of tax deductions for personal superannuation contributions and small business tax concessions. Currently around 73 per cent of self-employed people have some superannuation.

2 The major exceptions are employees who earn less than $450 per month, those aged 70 years and over, and those under 18 years old and employed for no more than 30 hours per week.

3 Preservation age is 55 years for those born before 1 July 1960 and increases to 60 years for those born from 1 July 1964.

Expectation and adequacy

The expenditure required in retirement to maintain an acceptable or adequate living standard varies with the composition of the household, and the expectations and needs of its members. Clearly a household with a high income can have a higher living standard than the same household on a low income, and a child-free household on a given income will have more discretion in their expenditure than a family with children on the same income. In addition, expectations will have an impact on whether a certain level of income is adequate.

During the working life of a person or household, the living standard they enjoy is generally dictated by their available income, but it is also influenced by access to borrowing and household wealth. Research has shown that as wealth rises, expenditure and living standards also rise (Tan and Voss 2000). This is the case even when the increase in wealth is due to asset appreciation, which may not produce any extra income for the household (for example, a rise in the value of the family home increases household wealth but doesn't produce income). Similarly, access to credit can allow households to consume more than their income. Debt allows households to have a living standard that is not supported by their income in the long term. In a household where expenditure exceeds income, an item that can be delayed or reduced will be impacted. Unfortunately, living beyond their means is a reality for many Australian households and it often causes saving for retirement to be delayed. In addition, for those that do save for retirement, many have reduced their voluntary saving because of the existence of the SG. Research suggests the SG contributions are offset by reductions in other forms of saving by around 30 cents in the dollar (Connolly 2007).

It is clear that a certain level of expenditure is required to maintain an adequate standard of living in retirement. The definition of adequate will vary from household to household, but at the time of the SG introduction the government believed a retirement income of around 40 per cent of pre-retirement income would be sufficient. Experts now suggest that most people will want a standard much closer to the living standard they enjoy while working. The consensus is the replacement rate should be 60-65 per cent of pre-retirement income (Senate 2002), which would provide 70-80 per cent of pre-retirement expenditure. It is also accepted by experts that the replacement rate would need to be higher for those on less than average earnings.

The government in the 1980s believed the 40 per cent replacement rate target could be achieved through a combination of the pension and personal retirement savings. The maximum rate of publicly funded age pension is just over one-quarter of average earnings.[4] The remainder of the retirement income would need to come from personal savings. At the time the compulsory SG scheme was introduced, it was envisaged that employer contributions would be matched with a 3 per cent employee co-contribution to raise total SG contributions to 12 per cent of salary (Gallagher 1995). The government estimated that a person would achieve the target on retirement at age 65 after around 40 years of contributions. In other words, the pension plus superannuation contributions (SG plus 3 per cent voluntary contributions) from 40 years of full-time employment would allow the average person to achieve an adequate standard of living in retirement. This policy had a number of shortcomings, not least of which was that a 40 per cent replacement rate was not adequate for most people.

The design of the retirement income policy does not ensure adequacy for a number of groups of Australians. Some of the factors that influence retirement incomes are the length of time in the labour force, salary level, home ownership and other private savings (Treasury 2002). These factors will detrimentally impact on a large segment of Australians. For example, the replacement of the policy's average of a 40-year full-time career with casual and part-time work, broken work patterns, and early retirement or retrenchment will mean many will not accumulate a sufficient amount. For some, the 40-year full-time career was never realistic. For those that do not own a house outright and people on low incomes, the replacement rate will need to be higher and their savings will need to be greater.

Increases in wealth through rising asset values (such as house prices), easy access to credit, and higher earnings have allowed many working households to enjoy a higher standard of living than was possible in the past.

4 The single rate of the age pension is 27.7 per cent of Male Total Average Weekly Earnings.

This is particularly true for baby boomers who are now approaching retirement. But this higher living standard comes at the cost of reduced savings. Baby boomers are enjoying a high standard of living now, but it seems they will not be able to continue living this way in retirement.

The phased introduction of SG only 20 years ago means that the scheme has not reached maturity as the large baby boomer cohort moves into retirement. This generation, which is healthier and will live longer in retirement, has great expectations of what they would like to do over this phase of their life. Research by Hamilton and Hamilton (2006) found that the baby boomer generation can be divided into two groups – high income and low income – and the retirement expectations of the two groups are quite different. The high-income group does not expect to retire as they enjoy work and will probably just "shift down a gear" or pursue an interest. The larger low-income group has quite different expectations. They are looking forward to the traditional view of retirement – leaving the labour force and having more leisure time. However, many think they will need to work up to and beyond retirement age for financial reasons. The findings of this report support this view.

The same research also found that most baby boomers do not expect to be dependent on the pension and "almost all, including lower income earners, say they intend to fund retirement with super. These are much lower than Treasury projections, suggesting that many baby boomers are in denial or have unrealistic expectations about their financial situation in retirement". At the start of compulsory superannuation, Gallagher noted that people were not saving enough to meet their expectations, and 20 years later it seems the gap between expectations and reality is still evident.

In summary, people have expectations for their living standard in retirement based on their wealth, income and expenditure during their working life. Most think that a replacement rate of 60-65 per cent of pre-retirement income is required to meet these expectations. For some, a higher rate is needed due to their low income or higher living costs. For others, including most women and a large share of baby boomers, their decreased duration of accruing superannuation will detrimentally impact on their retirement savings and the pension will not be sufficient to provide them with this replacement rate.

Trends

Before investigating the levels of savings, we need to look at a number of underlying changes that are occurring in Australia – social, labour force and homeownership. Each of these changes may impact on the level of savings required in retirement and on the contribution rate to savings at various stages of our working lives.

Social

Ageing population

During the 20 years from 1991 to 2011, the number of people aged 65 years and over increased from 1.9 million to 3.0 million. As well as growing numerically, they grew as a proportion of the population by 2.5 percentage points to 13.8 per cent. Over the same period the "working age" proportion (15 to 64 years) grew by only 0.5 percentage points. In other words, when SG started there were 5.9 people of working age (and hopefully employed and paying taxes) for each person aged 65 and over; now there are 4.8 people of working age for each retiree.

The reasons for this large increase include the first of the large baby boomer cohort turning 65 in 2011, and that people are living longer. The life expectancy of a 65-year-old male in 1992 was 15.4 years, whereas it is currently 18.9 years. The life expectancy for a 65-year-old female has increased from 19.2 years to 21.8 years (*Life Tables, Australia, 2008-10*. ABS 2011.). So Australians can now expect to live for around 20 years in retirement, three years longer than when the SG was introduced.

Almost half of older people suffer "physical or multiple and diverse" disabilities (AIHW 2008). With a population that is ageing, the number with disabilities and overall health expenditure will also increase and most of the increased health care expenditure will fall on the government. These increasing health and pension costs associated with an ageing Australian population will have long term effects on the government's capacity to fund an adequate age pension system.

Household structure

Over the last 20 years, changes have impacted on the structure of households. Women have been having children later, and the median age of women at childbirth rose from 28.7 years in 1992 to 30.8 years in 2006, where it has remained. The transition to older births has seen the peak fertility rates move from women aged 25-29 years in 1992 to women aged 30-34 years in 2000. Since then, women aged 30-34 have continued to record the highest fertility rate of all age groups. From 2003, the fertility rate for women aged 35-39 years has exceeded that of women aged 20-24 years.

As a consequence of having children later, the proportion of people aged 55-64 living with dependent children has increased. According to HILDA data, 30 per cent were part of a couple with children in 2010 (up from 25 per cent in 2002) and sole parents were up from 5 per cent to 7.3 per cent.

Declining marriage rates and increasing divorce rates have been national trends over the last decade, which is also evident amongst those approaching retirement. The number of people aged 50-64 who were married was down by three percentage points since 2002 (to 72 per cent) and those in the same age bracket who were divorced were up two percentage points (to 11 per cent).

Labour force

There have been a number of changes in labour force participation in the 20 years of compulsory superannuation, including changes in the proportion of the population that participates in the labour force, the proportion working part-time, and the level of income earned.

Participation rates

The proportion of people aged 15 and over who are participating in the workforce has increased from 63 per cent in June 1992 to 65.3 per cent in June 2012 (*Labour Force, Australia, August 2012*. ABS 2012). This increase in the participation rate is almost entirely due to more women contributing as the participation rate for men in almost all age groups have been in a gradual decline. The overall participation rate for women rose strongly from 52 per cent to 59 per cent over the last two decades, while the proportion of men working declined from 74 per cent to 72 per cent.

The participation rates of those approaching retirement is somewhat different to the overall trends. While men aged 45-54 have followed the trend by declining slightly (-0.9 per cent) over the two decades, men in the 55-59 and 60-64 age groups have not followed the downward trend, increasing their participation rates by six and 14 percentage points respectively (Figure 1).

We would expect that labour force participation would increase for women aged 45 to 64 years as the overall female trend was upwards and the 60-64 age group is being impacted by a changing eligibility age for the age pension. The eligibility age for women has gradually increased from 60 years before July 1995 to 64.5 years currently and will be 65 years in 2014. The expected increase in the participation rate of females aged 60-64 years is clearly present in the data. In 1992 only 15 per cent of women aged 60-64 were employed, but in 2012 three times this number are employed (45 per cent). Most of the growth appears to have happened in the decade between 1999 and 2009. The participation rate for women aged 60-64 since 2009 has been relatively stable. Women in the 55-59 year age bracket have been returning to the labour force in large numbers, and their participation rate has increased by 30 per cent over the 20 years and a clear upward trend has been apparent since 2001.

Figure 1 shows that in the 45-54, 55-59 and 60-64 age groups the participation rate for males is greater than 50 per cent. However, participation rates for these older men are on a slight decline with the exception of men aged 60-64.

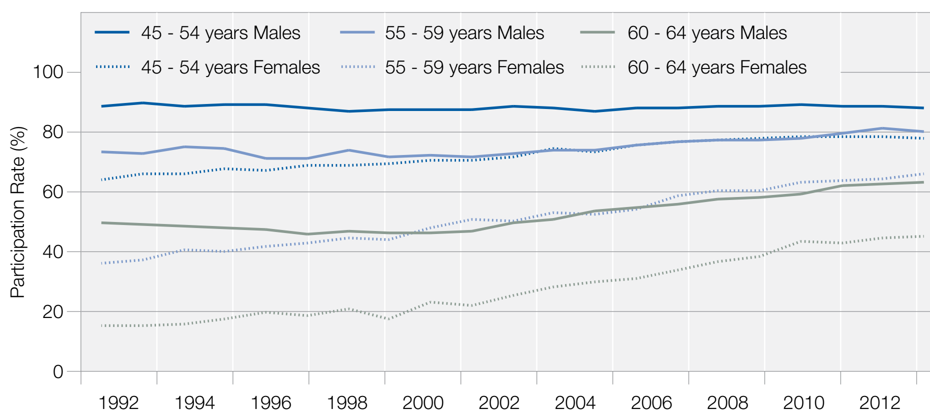
While the vast majority of employed men aged 45 to 64 years are working full-time, there has been a trend for some men to move to part-time work. This group of part-time workers has increased by more than a half from 10.4 per cent of employed males in 1992 to 16.5 per cent in 2012. The part-time picture for women is somewhat different, as women have always had a greater tendency to work part-time than men, with around four in 10 women generally working part-time. Over the last 20 years, this share of employed women has increased from 42.2 per cent to 45.8 per cent.

A final point of interest from Figure 1 is the low proportion of people who are actually working up until pension age. More than half of all women in the 60-64 age group are not participating in the labour force (55 per cent) and one-third of men in this age group are not working. While these values are lower than they were two decades ago, by taking early retirement these people are foregoing significant amounts of employer-provided superannuation.

Income

Over the last two decades, median personal income has more than doubled (up 115 per cent) from $13,950 to $30,000 per annum, according to the latest Australian Bureau of Statistics (ABS) Census of Population and Housing. Total household income has also doubled over the period to $63,960 per annum in 2011 (*Census of Population and Housing 2011*. ABS 2012). However, based on HILDA for 2010, people aged 55-64 who were employed enjoyed a somewhat higher income. The median personal income of this group that is approaching retirement was $55,000 and the median household income was $108,090.

Figure 1: Participation rates by age, May 1992 to May 2012



Source: ABS 6291.0

Homeownership

Since the 1960s, Australia has maintained a relatively steady level of homeownership (around 70 per cent). Using HILDA data, the stability of the overall level of homeownership is apparent with the proportion of households buying or owning a home moving less than one percentage point over the eight-year period to 2010 (Table 1)[5]. However, the age trends and the proportion with a mortgage are not as stable.

Different age groups are responding differently to the changing economic environment. Most age groups experienced a decline in homeownership between 2002 and 2010, however the decline varied between 0.4 and 5.8 percentage points. Households aged 55-59 were the exception as they increased their ownership level by 3.2 percentage points. Of particular interest about this age group is that the level declined between 2002 and 2006 (down 1.4 per cent), but this was reversed between 2006 and 2010 (up 4.6 per cent). The other age groups declined over the eight years but often exhibited quite different rates in the two periods. Each age group seems to have responded differently to the access to easy finance until 2006 and the financial crisis after that time.

In addition to underlying changes in homeownership levels occurring by age, the proportions of homeowners with a mortgage has been increasing since the mid-1990s. Deregulation of the financial markets from the 1980s saw banks adopt a more flexible approach to refinancing and the use of mortgages. When combined with competition between banks and non-bank lenders and rapidly rising equity in houses, households generally found it easy to acquire credit during the 1990s. This access to easy finance seems to have helped the proportion with mortgages climb from 40 per cent when compulsory superannuation began in 1992 up to 53 per cent in 2010 (Figure 2).

Table 1 Proportion of homeowner households (with or without a mortgage) by age group

Age of homeowner	2002	2006	2010	Change 2002-06	2006-10	2002-10
	%	%	%	% points	% points	% points
<30	34.7	31.7	34.3	-3.0	+2.6	-0.4
30-39	59.3	59.6	58.1	+0.3	-1.5	-1.2
40-49	74.9	72.4	72.0	-2.5	-0.4	-2.9
50-54	80.1	79.9	74.3	-0.2	-5.6	-5.8
55-59	80.6	79.2	83.8	-1.4	+4.6	+3.2
60-64	83.2	84.3	80.4	+1.1	-3.9	-2.8
65-69	82.4	84.0	81.8	+1.6	-2.2	-0.6
70+	80.7	79.3	78.8	-1.4	-0.5	-1.9
All	67.8	67.2	67.0	-0.6	-0.2	-0.8

Note: Age of the household is based on the age of "Person 1" in each household.

Source: HILDA waves 2, 6 and 10

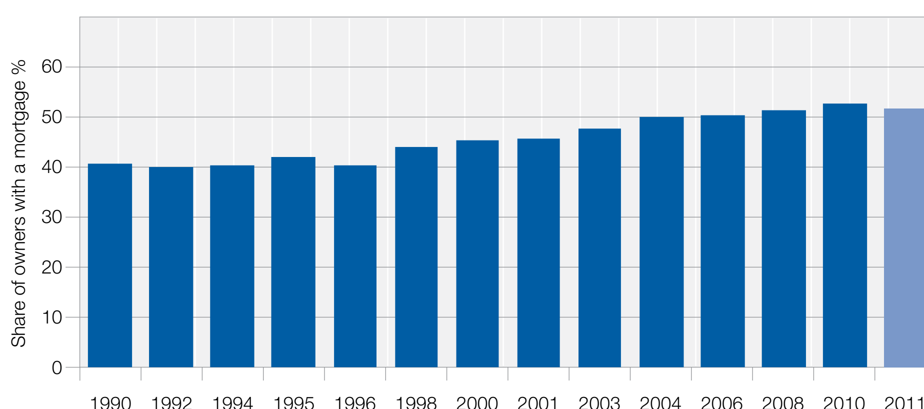
5 Overall ownership levels on HILDA are slightly lower than those estimated by ABS. However, HILDA has the same trend. ABS trends from 69.5 per cent in 2003 to 68.8 per cent in 2010 whereas HILDA shows 67.8 per cent in 2002 to 67.0 per cent in 2010.

Preliminary numbers from the 2011 Census suggest that the GFC may have halted the upward trend with the proportion dropping back slightly to 52 per cent.

The proportion of homeowner households with a mortgage increased for all ages between 2002 and 2010 according to HILDA data (Table 2). Based on this data, the proportion of homeowners with mortgages increased by six percentage points between 2002 and 2010 (from 48.4 per cent to 54.3 per cent). Within this overall trend, the age groups with the largest increases were those approaching retirement – 50-54, 55-59 and 60-64 years – which all saw increases of more than 14 per cent.

Of note is the more than doubling of the proportion of homeowners very close to retirement (60-64 years) with a mortgage. In 2002, one in six households had a mortgage approaching retirement, while just eight years later in 2010 almost one in three had a mortgage. In addition, as we shall see in the next section, the average size of the mortgage for these 60-64 year olds also increased considerably.

Figure 2: Proportion of homeowners with a mortgage, selected years



Source: ABS 4102.0, Census 2011

Table 2 Share of homeowners that have a mortgage by age group

Age of homeowner	2002	2006	2010	Change 2002-06	2006-10	2002-10
	%	%	%	% points	% points	% points
<30	77.8	76.3	82.5	-1.5	+6.2	+4.7
30-39	84.5	85.2	88.3	+0.7	+3.1	+3.8
40-49	67.6	74.9	77.4	+7.3	+2.5	+9.8
50-54	49.7	59.8	63.7	+10.1	+3.8	+14.0
55-59	33.4	40.7	48.4	+7.3	+7.8	+15.1
60-64	16.5	22.4	30.7	+6.0	+8.3	+14.3
65-69	8.9	12.3	18.0	+3.4	+5.7	+9.1
70+	3.8	5.2	6.2	+1.3	+1.0	+2.4
All	48.4	51.6	54.3	+3.3	+2.7	+6.0

Note: Age of the household is based on the age of "Person 1" in each household.

Source: HILDA waves 2, 6 and 10

Impact of the trends on retirement

The last two decades have seen a number of demographic, labour force and homeownership trends that are impacting on the ability to save for retirement. On the positive side, more women are working, a larger share of female employment is full-time, and increasing proportions of older men and women are staying in the labour force. This behaviour is helping households accumulate more superannuation. However, a prevalence for early retirement is removing opportunities to save. In addition, higher incomes are allowing living standards and retirement expectations to increase. It is doubtful most households will have enough in superannuation to meet these expectations. The greater share of households either renting or still paying off a mortgage at retirement will also have a significant impact on the gap between expectations and financial reality in retirement.

Savings

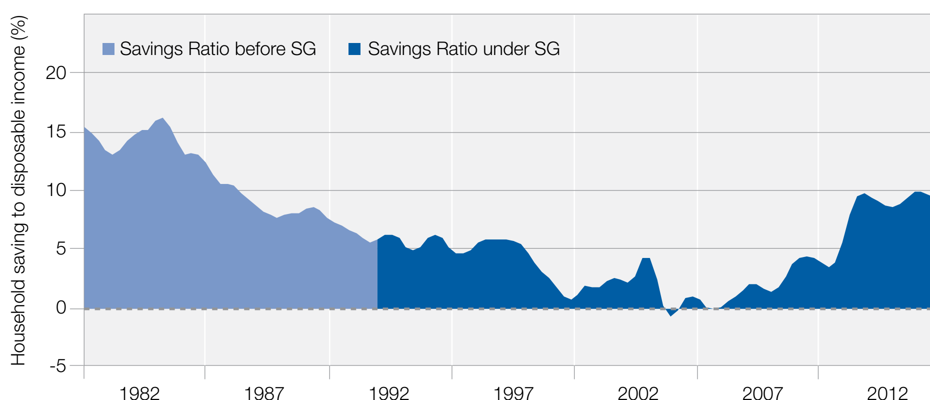
Household savings are calculated by ABS as current disposable income minus current consumption (including consumer durable goods like cars and televisions). Of note is that the definition does not include unrealised capital gains (such as increasing house prices). Using this definition the "household saving ratio" is expressed as household savings as a percentage of disposable income. It is this ratio that is often quoted in the media and is shown in Figure 3.

During the first decade of compulsory superannuation, the savings ratio continued a downward trend from 6 per cent in 1992. Despite disposable incomes rising in real terms during the 1990s, savings were declining and in 2002 the ratio of savings to income had fallen to -0.7 per cent. This means, on average, Australian households were spending 100.7 cents for every after-tax dollar that came into the house.

From this low point, there has been a turnaround in the "spend everything and more" mindset. It seems household behaviour is changing in two ways – (a) households are reducing borrowing, and (b) households are moving away from riskier forms of investment such as shares, into low risk, low return assets like term deposits (Freestone et al. 2011). The reduction in borrowing means that expenditure is reduced. This can be seen in the upward trend since 2002 and the average Australian household is now consistently not spending their entire income but rather retaining around 10 per cent of it (Figure 3). The second identified trend – away from risk – should result in some of this retained income being invested in term deposits or being contributed to superannuation. Superannuation is an attractive option as it is perceived as being more tax friendly and lower risk than many other investment options.

This report is interested in analysing how people and households save for their retirement. This means we will primarily focus on people who are under retirement age (the paper assumes this is 65 years) and will define saving in similar terms to ABS household savings. We will focus on financial assets that can be used to fund retirement and not consider growth in the value and equity of the family home. The reason for this is that only a very small proportion of people are willing to sell their home to provide a better standard of living in retirement. Downsizing is often suggested as a way of releasing funds for retirement, but there is little evidence of it occurring. While some people may sell and purchase a smaller home on retirement, rarely does their net financial asset position change as an outcome of the move. In addition, the means testing of the age pension, which exempts the family home, discourages people from converting their home into an assessable financial asset.

Figure 3: Household savings ratio, 1982-2012



Source: ABS 5206.0

Saving will be categorised into various assets and debt and the changes in these values will be used to measure savings. The following categories will be used:

- Assets
  - Financial assets
    - Superannuation
    - Other (for example, bank accounts, share portfolio, trust funds)
  - Property assets
    - Own home
    - Other property
- Debt
  - Property debt
    - Mortgage
    - Other property loans
  - Other debt (credit card, personal loans and other loans)

An additional category of “household wealth” is also used. This category includes all of the above and adds business equity, vehicles, collectibles and home contents. More comprehensive definitions of these terms are provided in Appendix A.

To estimate net household savings for retirement, we will sum financial assets, both superannuation and non-superannuation, and subtract any outstanding debt. Clearly, this definition assumes that all debt will be paid off, including mortgages, before the remaining savings are used to fund retirement living costs and this may not be true. In the case where a household chooses not to pay off all of their debt then they will have more financial assets, but they will also have to service the outstanding debt. As the borrowing costs are usually higher than returns on financial assets, the outcomes for those with debt in retirement would not be as high as those presented in the remainder of the paper. For example, if a person had a $100,000 outstanding mortgage (at 7 per cent interest) and more than $100,000 in a term deposit (earning 6 per cent interest), then they would generally be better off to extinguish the mortgage than to maintain it. However, as we shall see, this is often not happening.

Household wealth

All Australian households

Average household wealth (value of all household assets less debt) is estimated to have increased from $493,000 to $681,000 between 2002 and 2010 after adjusting for inflation, an increase of almost 40 per cent. The data shows that all of the increases occurred in the four years up to 2006 and in the second period (2006-2010), the period in which the GFC occurred, there was negative growth (growth was 0.6 percentage points below inflation, Table 3).

While overall household wealth grew by 38 per cent between 2002 and 2010, non-superannuation financial assets (such as bank accounts and shares) grew at less than half this rate and property debt grew at 2.5 times this rate. Over the eight years, households added to their wealth by increasing their non-superannuation assets by 17 per cent in real terms and their superannuation by 42 per cent. However, while these financial assets were increasing, household debt levels were increasing at substantially higher rates – property mortgages almost doubled (up 94 per cent) and other debt increased by 50 per cent in real terms. Of considerable concern is the strong growth of debt in the period 2006-2010, when asset growth was quite subdued.

In 2010, the average Australian household had more debt ($151,000) than superannuation ($142,000) and their total household debt was equal to two-thirds of their total financial assets (65 per cent). This ratio of debt to financial assets had increased from 46 per cent in 2002.

Table 3 Average household wealth and selected assets and debt in 2002, 2006 and 2010 (2010 dollars)

	Assets				Debt		
	Financial						
	Non-super	Super	Total	Property	Property	Other	Household wealth
2002 ($'000s)	78	100	178	312	62	20	493
2006 ($'000s)	98	130	228	486	97	27	685
2010 ($'000s)	92	142	234	500	121	30	681
Change 02-06 (%)	+25.9	+30.0	+28.2	+55.8	+56.5	+35.8	+38.9
Change 06-10 (%)	-6.8	+9.5	+2.5	+2.9	+24.2	+10.3	-0.6
Change 02-10 (%)	+17.4	+42.4	+31.4	+60.3	+94.4	+49.8	+38.0

Note: 2002 and 2006 values have been inflated by the change in the CPI to give "real" 2010 values. Household wealth includes other items such as the value of vehicles, collectibles and equity in a business that are not shown in the table.

Source: HILDA

Households aged 50 to 64 years

The discussion above refers to all Australian households and provides a background against which we can benchmark the changes for those approaching retirement. Wealth usually increases with age over the working life and generally households approaching age 65 would have higher net worth than the average. Table 4 shows that, as expected, the average household wealth of those in the 50-64 age group is over one million dollars in 2010 ($1.035m) and considerably above the average of $681,000 for households of all ages. The table also shows that household wealth grew at approximately the same rate as the general population (+34.7 per cent for 50-64 households and +38 per cent for all households).

The changes by asset and debt type of the 50 to 64 age group are generally in line with the overall averages with two notable exceptions – non-superannuation financial assets and property debt. There was effectively almost no change (less than 4 per cent) in the level of financial assets held outside of superannuation by this age group between 2002 and 2010 after inflation was taken into account. In comparison, the overall average for all age groups had increased by 17 per cent. One reason for poor performance of households aged 50-64 is the large negative growth in non-superannuation financial assets between 2006 and 2010.

The value of cash deposits and share portfolios owned by 50-64 year old households fell by four times more than the average in dollar terms (-$24,000) and more than twice the average in percentage terms (-15 per cent) over the four years. It's likely that this age group experienced a greater rate of loss due to higher exposure to the share market.

Between 2002 and 2010, overall property debt for all households increased by 94 per cent to an average of $121,000. Property debt of those aged 50 to 64 years is slightly lower than average at $114,000, but had increased by 123 per cent over the period. As property values had only increased for both groups by approximately 60 per cent, the property debt increases were due to higher borrowing against the properties rather than adding value to the properties. The servicing of this significant debt in retirement will surely impact on the cost of living in retirement.

A breakdown of the values of assets and debt of the three age groups in 2002, 2006 and 2010 is presented in Figure 4 on the next page. An interesting feature is the closeness of the average household wealth of those aged 55-59 years ($1.13 million) and those aged 60-64 years ($1.15 million). It could be expected those in the latter age group would be trying to rapidly grow their wealth by increasing their financial assets and reducing their debt

Table 4 Average household wealth and selected assets and debt of households aged 50 to 64 years in 2002, 2006 and 2010 (2010 dollars)

Household head aged 50-64 years	Assets				Debt		
	Financial						
	Non-super	Super	Total	Property	Property	Other	Household wealth
2002 ($'000s)	126	176	301	421	51	24	769
2006 ($'000s)	154	246	400	632	91	31	1,024
2010 ($'000s)	130	260	391	667	114	34	1,035
Change 02-06 (%)	+22.2	+40.2	+32.7	+49.9	+79.4	+31.4	+33.2
Change 06-10 (%)	-15.1	+5.8	-2.2	+5.6	+24.5	+8.8	+1.1
Change 02-10 (%)	+3.8	+48.3	+29.7	+58.3	+123.4	+43.0	+34.7

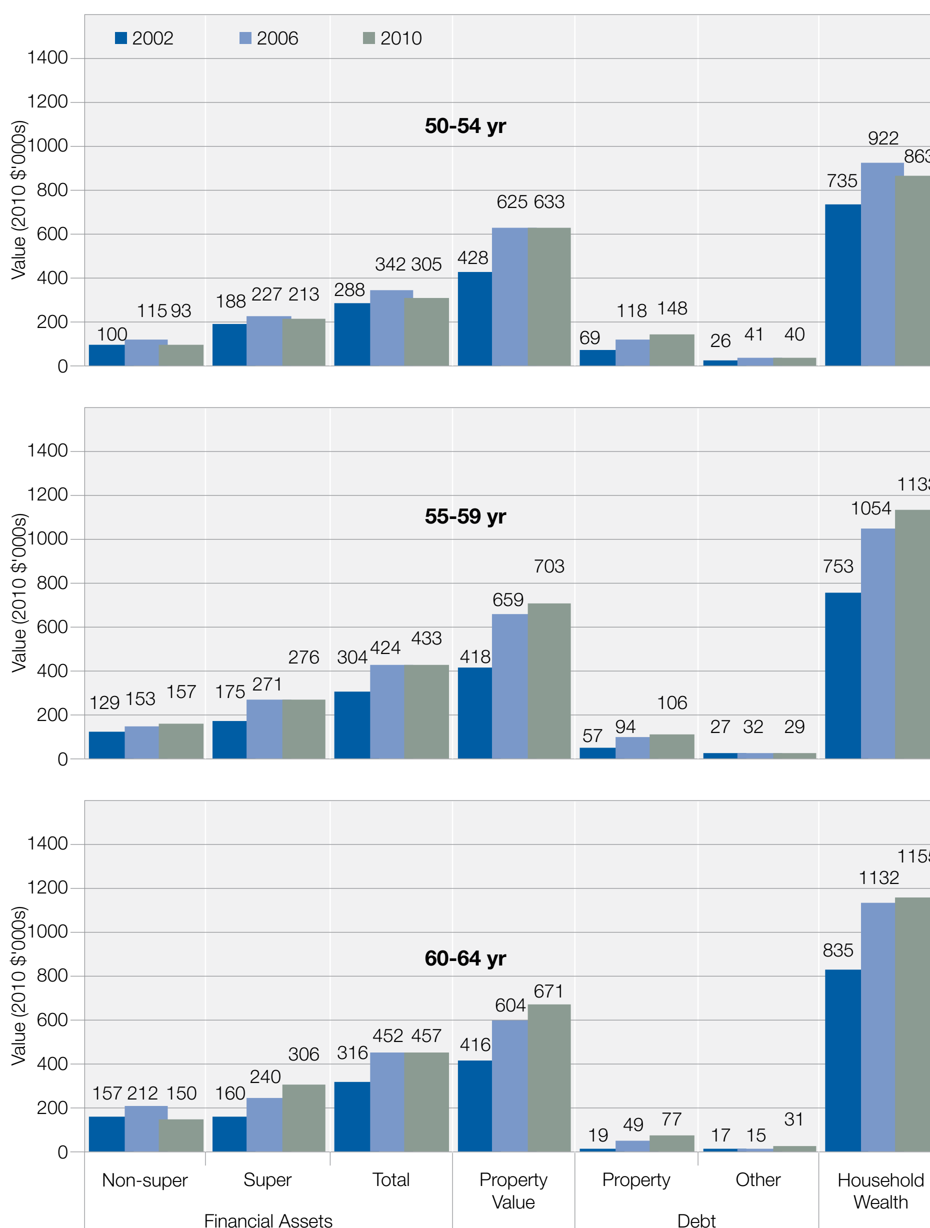
Note: 2002 and 2006 values have been inflated by the change in the CPI to give "real" 2010 values. Household wealth includes other items such as the value of vehicles, collectibles and equity in a business that are not shown in the table.

Source: HILDA

as they approach retirement. However, the data shows only a $22,000 increase between these age groups. The difference between the younger age groups (50-54 and 55-59) of $270,000 is more in line with expectation.

It appears that while households in the 60-64 age group in 2010 do have almost double the superannuation than those of the same age in 2002 (+92 per cent), they also have slightly less non-superannuation financial assets (-4 per cent) and a lot more property debt (+294 per cent). These households on the brink of retirement in 2010 have close to three times more property debt and 86 per cent more debt in other forms than their 2002 counterparts.

Figure 4: Assets and debt of households aged 50-54, 55-59 and 60-64 years (2010 dollars)



Note: 2002 values used to estimate the change were inflated by the change in the CPI to give "real" 2010 values.
Source: HILDA

Since 2006, the different age groups have had quite different outcomes by type of asset. Non-superannuation financial assets have declined in real terms for the 50-54 and 60-64 age groups and superannuation grew for those nearest to 65 years, while it declined or was stable for the other two age groups. The end result of this movement was that total financial assets for those aged 50-54 did not change over the eight years, while it increased for those in the two older age groups. All age groups saw property values increase in real terms in the first four years, but only those aged 60-64 saw a significant increase post-2006.

On the debt side, average outstanding loans associated with property do decline with age, but for all age groups they continued to increase over the eight-year period. A very strange outcome was the doubling of other debt for households aged 60-64 years, albeit from a very low base ($15,300 in 2006 to $30,700 in 2010).

The assets and debt of households aged 50 to 64 also provide some worrying savings and debt information. In 2010 the average household aged 50-54 in 2010 had $188,000 in debt and this represented 89 per cent of their superannuation. This was up from 50 per cent in 2002. Similarly, debt for those aged 55-59 years was half (49 per cent) of their superannuation balance in 2010 and one-third (35 per cent) for those aged 60-64 years. Each of these three age groups had increased the ratio of debt to superannuation over the eight-year period.

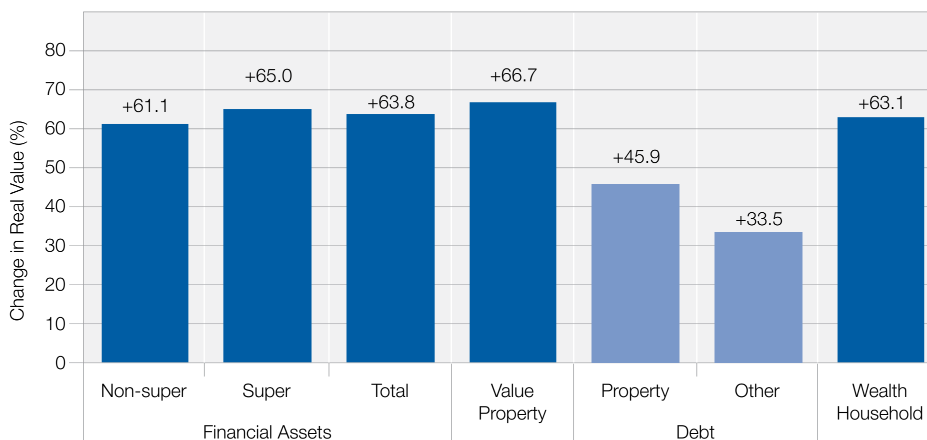
Tracking households aged 50 to 64 years

The analysis shows that households approaching age 65 have more household financial assets but also more debt in 2010 than they did in 2002. What it does not tell us is whether households are increasing their debt approaching that age or whether the younger generations are just taking on more debt. In other words, is the higher debt a consequence of a more frugal older generation being replaced by the baby boomers who in 2010 are approaching age 65 and have lived comfortably with debt for many years?

Using HILDA we can track a birth cohort (people born in the same range of years) between the years 2002 and 2010 and analyse how their financial situation has changed. With traditional “cross-sectional” techniques, we are taking a snapshot of different households but with this “longitudinal” approach the same households are continually observed. The longitudinal findings are shown in Figure 5.

Household wealth of these households that were aged 50-64 in 2010 (that is, Person 1 in the household was born between 1946 and 1960) increased by 63 per cent between 2002 and 2010. Growth in wealth came from similar contributions from both financial (up 64 per cent) and property (up 67 per cent) assets. The disappointing feature of Figure 5 is the growth in average debt of these households as they crept closer to age 65 years.

Figure 5: Changes in the real value of assets and debt between 2002 and 2010 of households aged 50-64 years in 2010



Source: HILDA

Combining this longitudinal data with the cross-sectional data from the previous section highlights that not only do the baby boomers have more debt on average than previous generations at this age, but that they were increasing their individual debt as they approached retirement. At this stage of their life, it might have been expected that they would be trying to reduce their debt, but it seems the average household increased their property debt by almost half (45.9 per cent) and other debt by one-third over the eight-year period.

In terms of saving for retirement, these households saved (total financial assets less total debt) an average of $84,000 over the eight years.

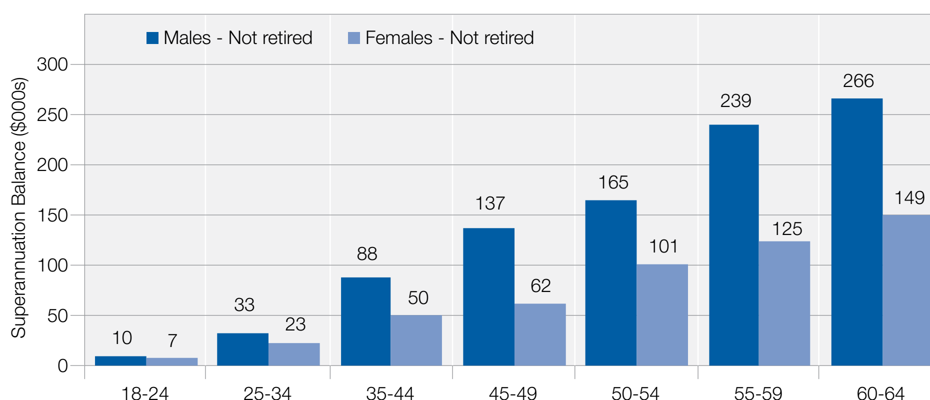
Superannuation

The most common method of saving for retirement is through the accumulation of superannuation during a person's working life. The household wealth section found that superannuation of households aged 50 to 64 years in 2010 had 65 per cent growth over the previous eight years to an average balance of $260,000. This is an average value for a household and includes both single person and couple households, and households where there are either none, one or two people employed. To provide a more detailed analysis of this savings vehicle, we will look at individuals rather than households.

Early retirement

Figure 6 shows the average personal superannuation balance of those not retired and aged under 65 years in 2010 by age group and gender. There is a direct relationship between superannuation balance and number of years worked. Men who do not retire early have an average superannuation balance of $266,000 by the time they are aged 60-64 years, while women who had not retired in this age group have an average superannuation balance of $149,000.

Figure 6: Average superannuation balance of those not retired and under 65 years by gender, 2010



Source: HILDA

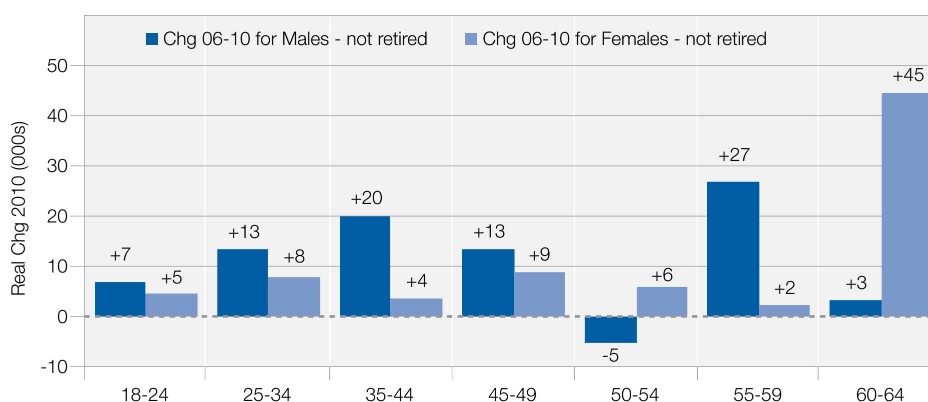
The lower balance for women reflects their interrupted careers and their lower earnings (and related employer contributions). The different employment paths for men and women is apparent in the small change in the average balances for women aged 35-44 and those aged 45-49 years, while their male counterparts of the same age experience a significant increase. The different outcomes reflect that a large proportion of women between these ages are not earning and receiving SG contributions while they are raising a family, while men in this age group are predominately working full time.

Despite the mixed returns from superannuation funds over the period 2006 to 2010 (the nominal performance of superannuation funds for 2007 to 2010 were +15.7 per cent, -6.4 per cent, -12.9 per cent, and +9.8 per cent [6]), superannuation balances increased for almost all ages and grew by large amounts for some older workers (Figure 7).

Both men who were aged 55-59 and women who were aged 60-64 and not retired in 2010 saw their superannuation balances grow by more than $25,000 in real terms between 2006 and 2010. The balance for men increased on average by $27,000, probably through a combination of compulsory and voluntary contributions and investment returns from the funds. Women aged 60-64 were rewarded for staying in the labour force with an average growth of $45,000 in their super balances over the four-year period.

There are a number of possible explanations for the increasing growth in superannuation balances as people get older. An obvious one is that as retirement draws closer, the urgency of desiring a sizable superannuation payout encourages people to increase voluntary contributions. A second reason is that discretionary funds generally become more available as the costs associated with raising a family decrease, this allows salary sacrificing and other voluntary contributions to be enacted. Another factor is that government policy on superannuation has generally allowed higher concessional contributions to superannuation from age 50 onwards. Also contributing to the reason for increased super balances in line with maturation, which may explain the very high levels of contribution by men aged 55-59, was in 2007 the unique opportunity to invest large amounts (up to $1 million) into superannuation was offered by the government.

Figure 7: Average real change in superannuation balance between 2006 and 2010 of those not retired and under 65 years in 2010



Source: HILDA

6 These nominal returns are for the median of "Balanced" superannuation funds (SuperRatings 2012).

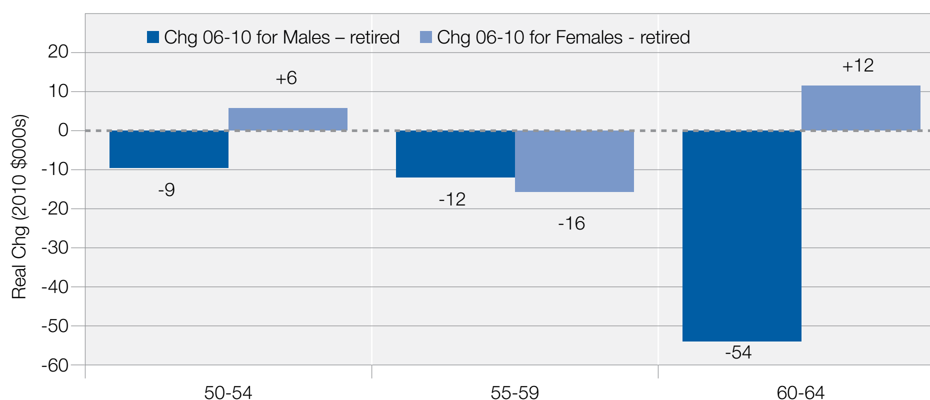
For those who retire early or are retrenched, the opportunity to grow their retirement savings is often missed. Over the period 2006 to 2010, men who retired in their 60s but before age 65 saw their superannuation balance reduce by $8000, which effectively means they will enter retirement with an average $64,000 less than their colleagues who did not retire because they saw their superannuation grow by $56,000 over the same period (Figure 8).

The average woman who was retired in the 60-64 age group did see her superannuation grow between 2006 and 2010, but only by $12,000. While the retiree may be happy with this, it is around $54,000 less than her non-retired friends. Given the generally lower superannuation balances of women, their longer life expectancy and higher probability of living alone in retirement, the reduction in the superannuation balance does not bode well for future financial security.

Self-employed

People who are self-employed are not required to make SG contributions, but the government does provide tax deductions for contributions to superannuation to encourage voluntary saving for their retirement. Currently around 73 per cent of the self-employed have some superannuation as compared with 90 per cent of employees. Table 5 compares the financial circumstances of not-retired employees and self-employed people aged 50-64 years. It also shows their share of household assets and debt by dividing the total household value by the number of adults in the household. Self-employed people in this age bracket have an average of $114,000 in personal super, which is somewhat lower than their employed counterparts who have $178,000. Their share of household superannuation is also lower.

Figure 8: Average real change in superannuation balance between 2006 and 2010 of those retired and under 65 years in 2010



Source: HILDA

Table 5 Value of assets and debt by self-employed/employee aged 50-64 and not retired, 2010

	Employee	Self Employed	Difference (Employee – SE)
	$'000s	$'000s	$'000s
Gross income (personal)	64	49	+16
Gross income (share of HH)	50	42	+8
Super (personal)	178	114	+64
Super (share of HH)	126	86	+40
Fin assets (non-super) (share of HH)	42	73	-31
Total fin assets (share of HH)	168	159	+9
Total debt (share of HH)	66	99	-34
Net business (share of HH)	9	105	-96
Total financial assets less debt (share of HH)	103	60	+43

Note: Share of "HH" is the value for the person's household divided by the number of adults in the household.

Source: HILDA wave 10

A tax effective strategy for the self-employed is to draw a low income from the business while building equity. This can be particularly tax effective if the equity in the business is rolled over into a superannuation fund at the end of the working life. The data in Table 5 shows that the self-employed do have $16,000 less personal income than employees, but they have considerably more value in business assets than employees ($96,000 more).

A comparison of savings (total financial assets less debt) of the employee against the self-employed suggests that the employee is $43,000 better off. However, if we assume that the self-employed did rollover the equity in their businesses, that is to convert the business equity to superannuation, then we would have to add $96,000 to the savings of the self-employed and the "best saver" award would be given to them. The big question is whether a self-employed person will allow their business to be sold, when they may have spent a lifetime developing it.

In summary, compulsory employer contributions, voluntary personal contributions and investment returns on superannuation as a form of saving are steadily increasing. However, there are still issues – superannuation for women at retirement is only half the level of their male counterparts, and the popular trend to retire early is having a detrimental impact on the level of savings people take into retirement.

Debt

In the previous section, we showed that average household wealth of Australian households rose by 39 per cent above inflation between 2002 and 2006. The average then declined by 0.6 per cent between 2006 and 2010. The trend for total household financial assets (superannuation and non-superannuation) was shown to be similar, with a 28 per cent increase followed by a very modest 2.5 per cent rise. However, the trends for debt are somewhat different. For all types of household debt the trend is for strong growth in both periods. The largest increases in debt are property related, with home mortgages increasing by more than 80 per cent over the eight-year period from $47,400 to $85,700, and other property loans increasing by 135 per cent over the eight years to $34,800. While both of these types of debt were more subdued in the second half of the period, both still rose by 24 per cent. Debt from HELP, credit card and car and personal loans grew faster than inflation and all exceeded the growth in financial assets and household wealth (Table 6).

Table 6 Average household debt by type, selected years (2010 dollars)

	Household wealth	Total financial assets	Mortgage	Other property loans	HELP	Credit card	Car & personal loans
2002 ($'000s)	494.6	178.3	47.4	14.8	1.7	1.3	9.2
2006 ($'000s)	687.0	228.5	69.3	28.1	2.1	1.6	14.3
2010 ($'000s)	680.9	233.6	85.7	34.8	2.7	1.8	15.7
Change 02-06 (%)	+38.9	+28.2	+46.1	+90.1	+19.7	+24.7	+56.2
Change 06-10 (%)	-0.9	+2.2	+23.7	+23.7	+32.6	+12.4	+9.7
Change 02-10 (%)	+37.7	+31.0	+80.7	+135.2	+58.7	+40.2	+71.3

Note: 2002 and 2006 values have been inflated by the change in the CPI to give "real" 2010 values.

Source: HILDA

This suggests that the overall picture for Australian households is that debt is increasing. While it is not growing as fast as it did before the GFC, it is still growing in real terms. Growth of debt in the period 2006-2010 when asset growth was quite subdued is a concern.

The debt levels of households approaching 65 years mirror the overall Australian upward trend. However, there are some differences – average mortgages and other property loans have more than doubled since 2002 and credit card debt has increased 70 per cent.

In 2010, the average household aged 50 to 64 years had a $75,000 mortgage, other property loans of $39,000 and owed $2300 on their credit cards (Table 7). These values are respectively 130 per cent, 103 per cent and 70 per cent higher in real terms than they were for households of that age in 2002.

Table 7 Average household debt by type of households aged 50-64 years (2010 dollars)

	Household wealth	Total financial assets	Mortgage	Other property loans	HELP	Credit card	Car & personal loans
2010							
50-54 years ($'000s)	870	308	96	54	3.5	2.4	25.2
55-59 years ($'000s)	1,140	435	77	30	2.7	1.6	17.7
60-64 years ($'000s)	1,165	459	47	32	1.7	2.7	7.2
All ages 50-64 years	1,043	393	75	39	2.7	2.3	17.6
Change 2002-2010							
50-54 years (%)	+15.9	+5.2	+98.2	+140.4	+45.5	+78.3	+100.5
55-59 years (%)	+48.7	+40.9	+132.4	+18.4	+77.7	-3.9	+29.2
60-64 years (%)	+38.7	+44.4	+317.8	+256.9	+134.2	+225.0	+21.6
All ages 50-64 years	+33.6	+28.8	+130.1	+103.1	+66.1	+70.2	+58.7

Note: 2002 values used to estimate the change were inflated by the change in the CPI to give "real" 2010 values.

Source: HILDA

Retirement

Expectations of what a person will do in retirement and the reality of what they can actually afford to do may be quite different. To provide more detail to this transition, this section offers an analysis of the financial situation of households before and after retirement. We begin by considering the situation of households aged 60 to 69 years.

Savings and debt before and after retirement

Over the last 20 years, the government has introduced a range of initiatives to encourage people to stay in the labour force. These include increasing the superannuation preservation age, changing the taxation treatment of superannuation withdrawals (they are now tax free after age 60), introduction of a transition-to-retirement scheme, increasing the pension age for women, and programming a future gradual increase in the eligibility age for both men and women. It seems that these policies that are designed to encourage people to stay in the labour force are succeeding. In 2002, based on HILDA, 69 per cent of household heads aged in their 60s were retired. By 2010 the proportion of households in their 60s that were retired had dropped to 54 per cent (Table 8). One major change that was occurring over this period was that the eligibility age for women for the age pension rose from 62 to 64.

The impact of the greater time in employment (and the greater duration receiving compulsory superannuation) can be seen in a comparison of the financial position of those in their 60s that are retired with those that are not retired. Over the period 2002 to 2010 the wealth of a retired household increased from three-fifths to four-fifths of those that were not retired. The post-retirement total household income has also increased from half to 60 per cent of those not retired (Table 8). The SG and the government changes in policy appear to have improved the financial situation of those in retirement.

Table 8 Average household values by retirement status of households aged 60-69 years (2010 dollars)

	Not retired		Retired		Retired /not retired	
	2002	**2010**	**2002**	**2010**	**2002**	**2010**
Share of households (%)	31.0	46.3	69.0	53.7	%	%
Total household income ($000s)	78	99	41	60	52.7	60.6
Net wealth ($000s)	1066	1256	645	987	60.5	78.6
Fin assets (non-super) ($000s)	151	137	151	164	100.1	119.7
Superannuation ($000s)	183	304	120	238	65.6	78.3
Property values ($000s)	594	733	323	598	54.4	81.5
Property loans ($000s)	29	80	10	47	34.6	59.2
Other debt ($000s)	24	39	3	3	13.2	8.5
Total household debt ($000s)	53	119	13	50	24.9	42.5

Note: 2002 values were inflated by the change in the CPI to give “real” 2010 values.

Source: HILDA

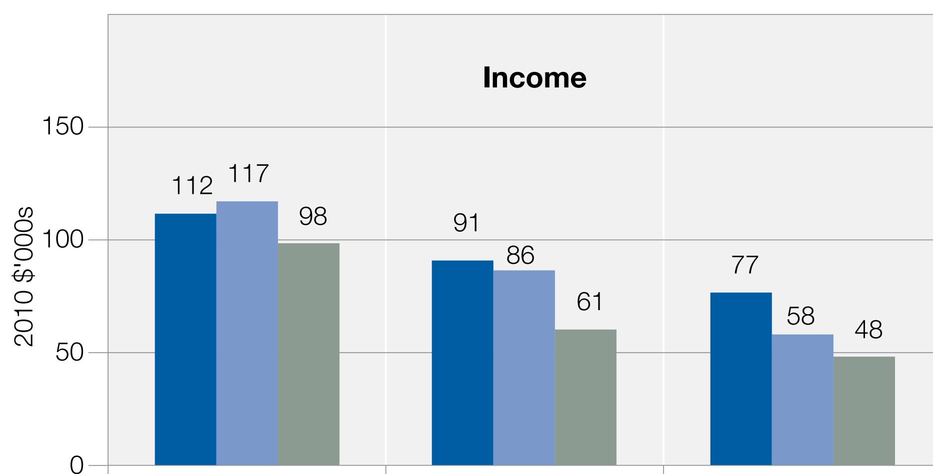
However, while real household wealth and income have increased between 2002 and 2010, greater levels of debt may result in living standards not changing. It appears that 60-69 year old households both retired and not retired are following the overall trend towards carrying more debt. In 2010, total household debt of those not retired was $119,000 and $50,000 for retired households. For the latter it was a significant increase on the $13,000 debt the same group had in 2002. As there is little discretion in whether this debt is serviced and repayments cannot be delayed, the interest payments on this debt come before any improvement in living standards.

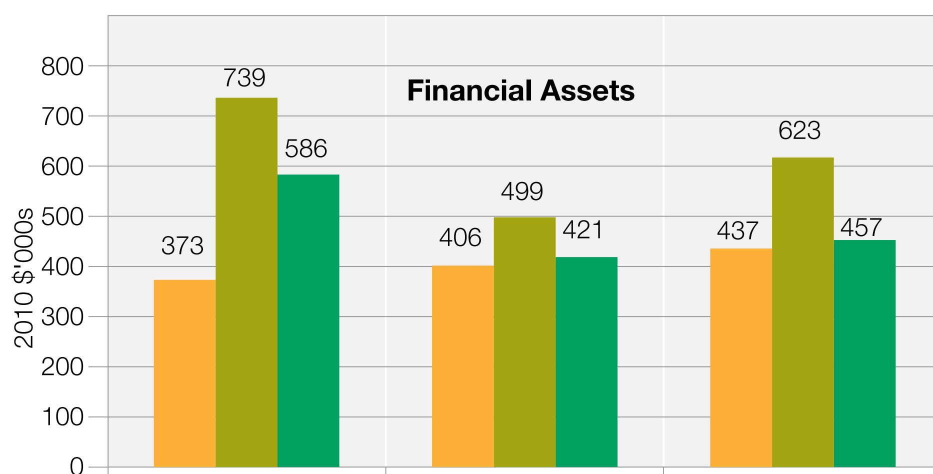
As the growth in retiree wealth is due to higher property values, which do not generate any income, and the increased debt includes debt on which high rates of interest are charged, such as car loans, personal loans and credit cards, the improvement in living standards suggested by the greater wealth may well be an illusion.

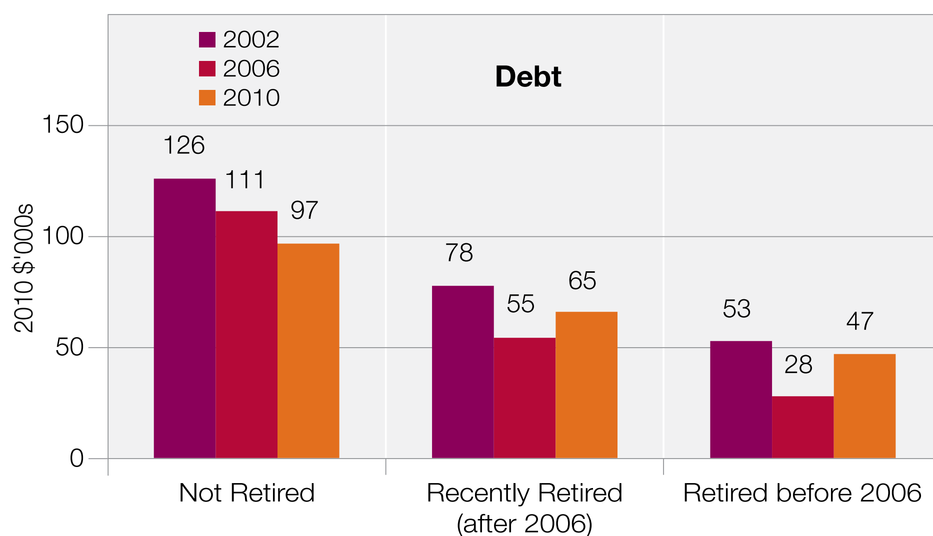
Not retiring at 65

Research by Hamilton and Hamilton (2006) found that many baby boomers believe they will have to continue to be employed past the traditional retirement age of 65 if they are to have adequate income in retirement. This research provides further evidence that remaining in the labour force may help to ensure an adequate retirement income. But is this what people are doing? In the following section, we will look at the behaviour of a group of households that have just reached retirement
age – the household heads were aged 65-69 years in 2010 and were not retired in 2002. Using HILDA data we are able to consider the income, financial assets and debts in these households in 2002, 2006 and 2010 and their retirement status. The overall 60-65 age group was divided into those who have still not retired in 2010, those who recently retired (between 2006 and 2010), and those that retired between 2002 and 2006.

Figure 9: Income, financial assets and debt of households aged 65 to 69 years (2010 dollars)







Notes: Income means "Total Household Income"; *Financial Assets* means "Total Household Financial Assets"; and, *Debt* means "Total Household Debt". Only households where the head was not retired in 2002 and aged between 65 and 69 in 2010 are shown. "Retired" and "Not retired" are self-assessed answers from HILDA in 2002, 2006 and 2010. The *head* refers to Person 1 in each household. 2002 and 2006 values were inflated by the change in the CPI to give "real" 2010 values.
Source: HILDA

Households where the head was still not retired but aged 65 to 69 years had the highest average income, highest average financial assets but also the highest level of debt (Figure 9). While the 2010 annual income of the not retired household was slightly less than it was in 2002 in real terms, at $98,000, it was still twice the income of those who had retired before 2006 and well above those that had recently retired ($61,000). The modest change in income of this group (down 12 per cent) was considerably less than the 33 per cent decline experienced by recent retirees over the period, or the 38 per cent decline experienced by those that had retired earlier than 2006.

All three groups saw their financial assets appreciate between 2002 and 2006 and then fall, in real terms, between 2006 and 2010. However, continued employment enabled those who had still not retired to increase their financial assets from being the lowest in 2002 to the highest in 2010. In addition to seeing the largest financial asset growth over the period, the employed group was able to significantly reduce their household debt over the period. Somewhat surprisingly, both of the groups that were retired in 2010 saw their debt levels increase between 2006 and 2010.

Table 9 shows that by continuing in employment, the not-retired group has gone from a position where they had the lowest level of savings (financial assets minus debt) in 2002 to the highest level in 2010. The savings of this group has doubled from $246,000 to $489,000, while both the other groups that have retired before traditional retirement age have seen little change in the real level of their savings over the eight-year period.

Debt, superannuation and retirement

There is anecdotal evidence that people approaching retirement are using debt (usually through equity in their home) to support their children, to travel, to renovate, to purchase items they could otherwise not afford, or to support a standard of living not sustainable by their current income. The numbers already presented in this report support this premise with both property loans and other forms of debt increasing. These “soon to be retired” people are comfortable with this extra debt as they have savings in the form of superannuation and may simply be bringing forward expenditure that will be repaid after retirement.

Repaying loans on retirement is logical as borrowing costs are usually higher than the returns that can be obtained. This means that for most retirees they are better off using their savings to reduce their debt rather than continuing to service their loans and investing their savings.

Homeowners

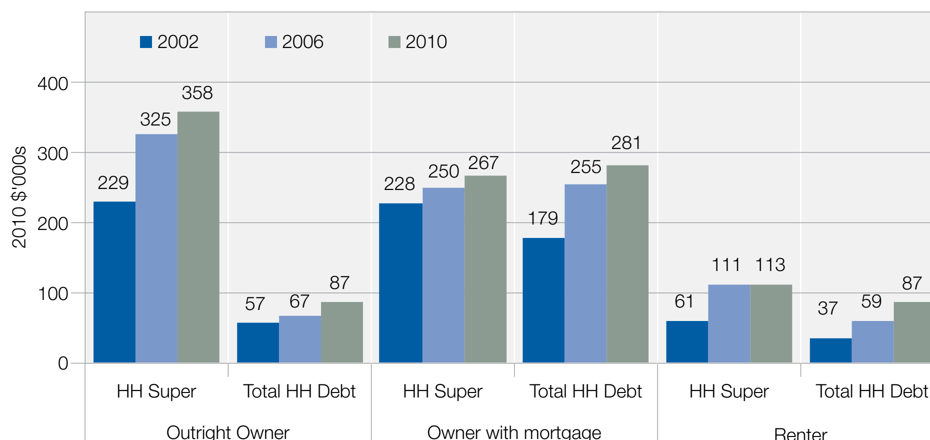
Based on survey information from the 2002, 2006 and 2010 HILDA surveys, it is clear that the superannuation balances of homeowner households have, on average, grown considerably. However the GFC has clearly had an impact, with balances rising only modestly in the latter period. Figure 10 shows the superannuation balances for households aged 50 to 64 years and not retired by tenure type.

The not-retired households with the largest average superannuation balances are outright owner households. They had an average balance of $358,000 in 2010 and household debt of $87,000. For outright owners, superannuation and debt rose over the period by similar percentages (56 per cent and 52 per cent respectively). The same cannot be said of not-retired households with a mortgage – their superannuation rose by only 17 per cent while their debt rose by 57 per cent. In 2002 the total household debt of these households represented 78 per cent of their superannuation balance. By 2010 this ratio had risen to 106 per cent. This means for these households to be debt free in retirement they will need to use the equivalent of all of their superannuation and more to pay out their loans.

Another disturbing feature of Figure 10 is the situation of renters. Households that rent rather than own their homes are generally on lower incomes and this is reflected in their lower superannuation balances when compared with homeowners. While superannuation balances of not-retired renting households grew faster than homeowners at 86 per cent, it is still only three-tenths of homeowner households.

Another concerning feature for renters is the level and growth in debt. Not-retired renting households had $87,000 of debt in 2010. Given that their cost of living in retirement will be considerably higher than that of homeowners, having a debt equivalent to three-quarters of superannuation does not bode well for enjoying an adequate living standard in retirement.

Figure 10: Mean superannuation balances of not-retired homeowner households aged 50-64 years



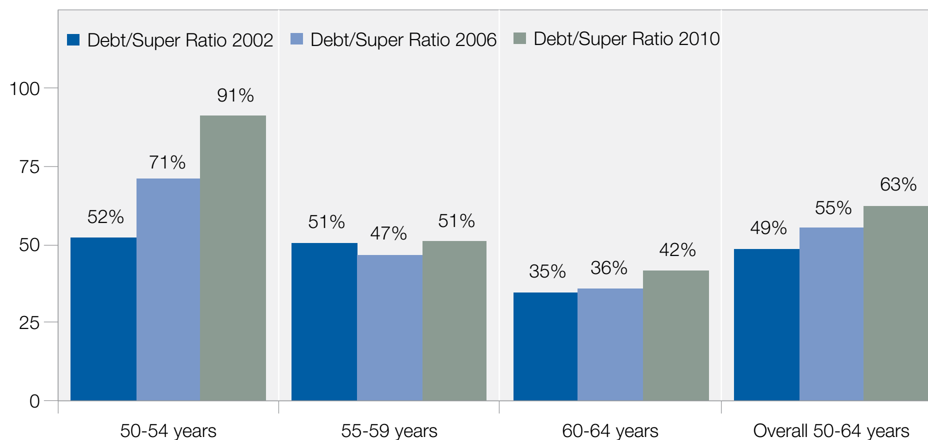
Note: The age and retirement status of the household is based on the age and labour force status of Person 1 in each household.
Source: HILDA

Debt

We have already seen that while superannuation has been growing, so has debt, and for homeowners the levels of debt can exceed their accumulated superannuation. Figure 11 shows a broader picture – the ratio of debt to superannuation for not-retired households aged 50-64 years. The youngest age group has the highest ratio for each of the three years (52, 71 and 91 per cent respectively) and it has increased dramatically. The debt-to-superannuation ratio for 55-59 year old households remains constant at 41 per cent over the period, while the ratio for 60-64 year olds has increased from 35 per cent to 42 per cent.

Analysis by type of debt shows that home mortgages and rental property debt are the major areas in which debt is increasing.

Figure 11: Ratio of household debt to superannuation of not-retired households aged 50 to 64 years by age, selected years



Note: "Homeowner" includes those with or without a mortgage. The age of the household is based on the age of Person 1 in each household.
Source: HILDA

Discussion

Wealth and savings

The wealth of Australian households increased by 38 per cent in real terms between 2002 and 2010 and the growth in wealth of those households aged 50 to 64 years was slightly less at 35 per cent. It could have been expected that this age group would outperform the overall average as they are motivated by their close proximity to retirement. So what went wrong? The answer it seems is an old one – "individuals discount the future too heavily, and prefer to consume excessively now rather than save sufficiently for the future" (Gallagher 1993). As their wealth increased, their consumption or living standard also increased, but the wealth increase stemmed from real estate assets that did not provide extra income.

Access to the equity in the property overcame a cash flow problem, and the knowledge that retirement was imminent and access to superannuation would soon become available relieved stress. It seems that as people are approaching retirement they are using the equity in the family home as a source of funds to assist their children into homeownership, to take an overseas trip, retire early or simply to enjoy a lifestyle their income cannot support. This behaviour will have a long-term impact on their retirement living standards. The expectations have increased, and either the cost of living has increased (due to needing to make interest payments on the debt) or the money available to supplement the age pension is reduced.

Another impact of the knowledge that an amount of money will become available at retirement is that people may be more willing to take risk. For example, Person A who has no superannuation will probably be less willing to risk the money they do have, than Person B who has a considerable superannuation balance they know can be accessed shortly. Some of the increased debt of those aged 50 to 64 years appears to fall into this category.

Expectation gap

In the trend section of the report, it was stated that median household income was $63,960. However, people aged 55-64 who are still employed are living in households where the median income is approaching double this value ($108,090 in 2010). It could be assumed this is allowing them to live a very comfortable lifestyle.

In general, when estimating the income required to provide an adequate living standard in retirement the overall median household income is assumed and a replacement rate of 60-65 per cent rate is used to give an annual income of approximately $40,000 as the target retirement income. However, this is incorrect as the calculation should be based on the pre-retirement income of the household. As shown above this is $108,090, and using the same replacement rate gives a target retirement income of approximately $67,500. For most households with limited to average savings this is unobtainable, but it is probably close to the living standard a working person aged 55-64 will expect. Managing the gap between expectation and reality will be an ongoing issue.

Has compulsory superannuation helped people to save more?

In the 1980s, the government recognised that traditional tax incentives were not persuading people to save enough for their retirement. This is one of the reasons compulsory superannuation was introduced. However, it was estimated at the time that compulsory superannuation would be offset by people by around 30-50 cents in the dollar in other savings, in other words they would save 30-50 cents less in other forms for each dollar contributed through the SG scheme.

Because there are so many factors that influence savings, it is not possible to isolate the impact of SG. However, Connelly has attempted to do this and he found that the outset was around 30 cents in the dollar. Another method to estimate the impact is to compare the savings of the self-employed with employees of the same age. As the self-employed are under no compulsion to contribute to superannuation, they can (to some extent) be used to estimate how people would have saved if compulsory superannuation did not exist.

Unfortunately, looking at the self-employed for comparison gives an inconclusive result. When considering the traditional definition of savings (total financial assets less debt) then employed workers had more savings, but the self-employed had also accumulated equity in their businesses and often this can be converted into retirement savings. If the business was sold and therefore converted to savings, then the self-employed person was the better saver.

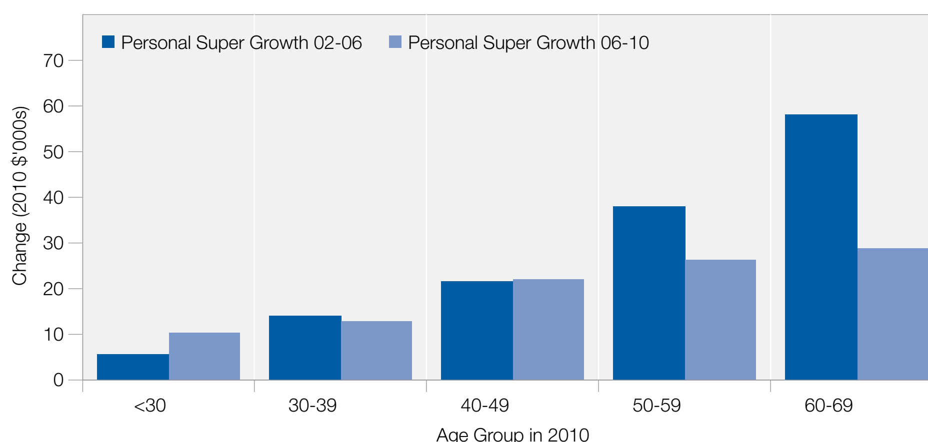
Another insight can be gained from looking at the behaviour of those approaching retirement compared with the general population. The non-superannuation financial assets of the general population grew by 17 per cent between 2002 and 2010, and their superannuation grew by 42 per cent. Overall, their financial assets grew in value in real terms by 30 per cent. The overall growth rate for households aged 50-64 years was the same at 30 per cent. However, their non-superannuation financial assets grew by only one-quarter the rate of overall households, and their superannuation grew at 48 per cent. It could therefore be argued that substitution rather than additional saving is occurring here.

Retirement outlook – post GFC

It is well known that the GFC impacted adversely on superannuation funds. The returns for 2008 and 2009 were particularly poor (-6.4 per cent and -12.9 per cent respectively). This bad news and the related media coverage has resulted in a number of people questioning the value of superannuation and the government initiated the *Cooper Review* to "examine and analyse the governance, efficiency, structure and operation of Australia's superannuation system" (2010). The response to the poor returns from superannuation funds has been to highlight that superannuation is a long-term investment and some poor years are to be expected. This observation is accurate, but what has not been explained is that the timing will have a different impact on each generation.

Figure 12 uses the individual tracking abilities of HILDA to show the changes in superannuation balances of different generations of Australians between 2002 and 2010. The average changes shown are for people who were not retired in 2002, 2006 and 2010. For each generation or age group, the average superannuation balance grew in real terms in each four-year period. However, the increasing balances are a combination of superannuation contributions and investment returns and it appears that the poor investment returns in the second period have impacted on some age groups significantly more than others.

Figure 12: Real growth in individual superannuation balances of those not retired in 2002, 2006 and 2010 by age group



Note: The values shown are the average change in personal superannuation balance of individuals who were not retired in 2002, 2006 and 2010. The age groups refer to the person's age in 2010. 2002 and 2006 values were inflated by the change in the CPI to give real 2010 values.
Source: HILDA

The combination of contributions and returns making up the growth means that those with large superannuation balances will see the weakest growth. This differential impact has meant that those with high balances will be most adversely impacted, and they are generally the closest to retirement. Figure 12 shows that those in their 20s, 30s and 40s in 2010 saw almost the same growth in the value of their superannuation before and during the GFC. This is because their superannuation balances were low in comparison with their investment returns, in other words most of the increase was due to contributions and their poor returns had little impact. For those in their 50s and 60s, the outcome is reversed. The average superannuation balance is higher so a higher proportion of the growth comes from investment returns and is reflected in the poorer growth between 2006 and 2010.

So what is the retirement outlook for different generations? For those in their 50s and 60s in 2010, investment returns were a significant driver of superannuation growth due to their superannuation balances. The GFC has adversely impacted on this generation when they have little time to recover. For Generations X and Y (those in the 20s, 30s and 40s in 2010), the impact on their retirement will not be as significant as investment performance is not yet a major driver of growth.

Superannuation and the age pension

The government's 1992 vision was that 9 per cent employer contributions matched with 3 per cent employee co-contributions would provide an income of around 40 per cent of pre-retirement salary on retirement at age 65 after around 40 years of contributory service. There are a number of shortcomings with this vision. Firstly, the proportion of employees making voluntary contributions of 3 per cent of salary is not widespread. Secondly, to achieve the 40 per cent of pre-retirement salary assumes 40 years of full-time employment. This assumption has never been true for the vast majority of women and is also unlikely to be true for most men in the current labour force environment. The replacement rate was developed when the average household had only one earner. Today, many households approaching retirement have two earners working full-time and their pre-retirement income is considerable. Finally, the 40 per cent replacement rate is now considered too low, as the consensus is that 60-65 per cent of pre-retirement salary should have been the target. For all of these reasons, there was always going to be a significant gap between the expectations that SG would provide a standard of living above that afforded by the pension alone and reality.

The age pension alone provides a maximum income of approximately one-quarter of a man's average earnings for a single household and 1.5 times that amount for a coupled household. Clearly this is considerably below the target of 60-65 per cent of pre-retirement income for most households. Despite this, people prefer to consume now rather than save for the future. Some believe that they can live adequately on the pension and do not need to save and are subsequently surprised when they find it difficult.

Conclusion

This year is the 20th anniversary of compulsory superannuation. When SG was introduced its aims were to reduce dependence on the age pension and provide a higher standard of living in retirement for the ageing population. At that time, it was thought retirees could live on 40 per cent of the husband's pre-retirement income. Now, it is widely acknowledged that this is unrealistic, and the consensus is that 60-65 per cent of the pre-retirement household income should be the retirement income target. In 2010 that was $67,500 per year.

Many changes have occurred since the SG was introduced – there are a lot more retirees, people are living longer, living standard expectations have increased, economic prosperity has come and gone, and house prices and share markets have soared and declined. These changes have had a profound impact. Women, on average, accumulate $149,000 in superannuation by age 60-64 if they do not retire early and men $266,000. The higher living standards being enjoyed during the working life along with receiving an annual superannuation statement have caused our expectations for living standards in retirement to rise. It seems unlikely that most people will have a retirement income to match these expectations.

The increase in property prices has provided many with the opportunity to increase their debt and use it to assist others or sometimes to live a life beyond their means. This debt will impact on their circumstances in retirement – namely they may still have a mortgage to pay off. This will even further reduce the chance of them having enough savings to meet their expectations and increase the likelihood of them relying on the age pension for their retirement income.

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Appendix A Definitions and technical notes

Wealth-related terms

HOUSEHOLD WEALTH is the net worth of the household calculated as the sum of property assets, financial assets, collectibles, businesses and vehicles less household total debt.

HOUSEHOLD TOTAL DEBT is the sum of property debt, business debt, credit card debt, HELP debt, and car and personal loans.

HOUSEHOLD TOTAL ASSETS is the sum of financial assets and property assets.

FINANCIAL ASSETS is the sum of superannuation and financial assets (non-superannuation).

PROPERTY ASSETS is the sum of the current home value and other current property values.

FINANCIAL ASSETS (NON-SUPERANNUATION) includes the value of bank accounts (individual, joint bank and children's accounts), redeemable insurance policies, financial investments (shares, managed funds, and property trusts) and cash investments (bonds, debentures, certificates of deposit, and mortgage backed securities).

CAR AND PERSONAL LOANS includes debt in the form of car loans, hire purchase agreements, investment loans, personal loans from a bank or financial institution, loans from other lenders, loans from friends/relatives and overdue personal bills.

HILDA

The Household, Income and Labour Dynamics in Australia (HILDA) Survey is a nationally representative panel study of Australian households that commenced in 2001. The study is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) and is managed by the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne.

The HILDA Survey provides data on the lives of Australian residents over time. It annually collects information on a wide range of aspects of life in Australia, including household and family relationships, employment, education, income, expenditure, health and wellbeing, attitudes and values on a variety of subjects, and various life events and experiences. Information is also collected at less frequent intervals on household wealth, fertility-related behaviour and plans, relationships with non-resident family members and non-resident partners, health care utilisation, eating habits and retirement.

The important distinguishing feature of the HILDA Survey is that the same households and individuals are interviewed every year, allowing us to see how their lives are changing over time. This longitudinal data provides a picture of the life-course a person takes. The HILDA Survey is therefore quite different to the cross-sectional household surveys regularly conducted by the Australian Bureau of Statistics.

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