Expenditure patterns in retirement

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aist
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This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. 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 paper, however, are those of the author and should not be attributed to either FaHCSIA or the Melbourne Institute.

Executive summary

Providing adequate retirement income for the healthiest, wealthiest and largest demographic to ever reach retirement in Australia is a topic of increasing interest and debate.

How should an 'adequate' income for retirement be defined across a vast group of disparate people with individual circumstances and requirements?

What is the role of the individual in providing for their own retirement, and what is the obligation of society in relation to the needs of retirees?

The increasing cost of retirement – as represented by a longer-living population with rising health care costs and a higher expected standard of living than any previous generation – has made these questions more complex than ever before.

This paper seeks to add evidence to understanding the income needs of retirees by looking at expenditure patterns amongst existing retired households in Australia. There are two major conceptual frameworks used to benchmark expectations on a standard of living in retirement. The first is the concept of 'replacement rate' which identifies a desired level of retirement income based upon a percentage of that individual's wage during their working life. There are several methodologies used to calculate the replacement rate. The second is a cost-basis benchmark that identifies the cost of a basket of goods and services that would typically be consumed by the 'average' retiree. In Australia, this benchmark has been calculated by the Association of Superannuation Funds of Australia (ASFA) and is commonly known as the ASFA standard.

In this paper, we utilise the Household Income, and Labour Dynamics in Australia (HILDA) data to examine the expenditure patterns of Australian households that have reached age 65. The HILDA data can offer insights that are not commonly available in other data sets. First, it is a survey-based, longitudinal study and so allows for like-for-like examination of expenditure patterns in the same household(s) and age cohorts over time. Second, the data gathered include areas of expenditure that are not included in other, similar surveys. Finally, the detailed nature of the data provided on household income, expenditure and wealth allows for a deeper examination of the data itself, such as comparing average versus median expenditure levels and looking at relationships between household wealth, income and expenditure by income decile as well as by geographic location.

The objective of this analysis is therefore to add to the available body of evidence on expenditure patterns amongst retirees in Australia. It does not represent a re-examination or critique of the ASFA standard, which has a different methodology and remains a useful benchmark. Nor is it an attempt to create a new benchmark. Rather, the analysis should be used to help shed further light on the range of standard of living outcomes for retired households in Australia at present. These data – along with other approaches mentioned –may help superannuation industry practitioners to better understand the needs of their members, including for the purposes of developing retirement income products. Retirement expenditure analysis may also improve the understanding of the adequacy of the Australian pension system, including use of both the aged pension and superannuation entitlements. At the individual level, understanding the likely pattern of expenditure in retirement may help improved decision-making on planning for the retirement phase.

The increasing cost of retirement has made these questions more complex than ever before.

Key findings

The HILDA data represent results of panel surveys undertaken with 9500 households across Australia, with expenditure data gathered annually since 2002. The expenditure data represent the figures as reported by households in each category in the survey. The survey is not totally comprehensive, and excludes some items such as holidays and other types of discretionary spending. However, HILDA does include housing costs, which are missing from other data sets, and add to the total picture of spending in retirement. The most recent data reported are from 2014.

There are several key findings in the examination of retired households in Australia through the HILDA data. Some confirm the consensus of findings in the current literature, while other findings challenge some commonly held views.

- **About 80 per cent of retired households in the HILDA survey report expenditure levels that, are at or below the ASFA 'modest' standard**.

  This is the level of expenditure considered to be the most basic standard of living for retirees, at $23 797 for a single household and $34 226 for a couple household aged 65-85 in 2014 who own their own home. HILDA data from the same year indicate single household expenditure of just over $18 000 per annum and couple household expenditure of $33 000 per annum, on average, in the same age range. However, median expenditure is significantly lower, at just $14 000 per annum for a single household and $27 000 for a couples household. One quarter of all retired households have an annual expenditure of less than $14 000, while 10 per cent reported their annual expenditure is over $50 000.[1]

- **The HILDA data show the majority of retirees are not saving money in retirement, with significant variation in standards of living across age cohorts**.

  When broken down by age cohort at a 5-year interval (that is, households aged 65-69, 70-75 and so on), average reported expenditure levels were only 40 to 50 per cent of reported income across all groups aged 65 and above in 2014. This appears to support the assertion from some quarters that retirees save excessively throughout their retirement and are 'under-consuming', perhaps motivated by the need for precautionary savings or by the desire to leave a bequest. However, a more finely tuned analysis by income decile shows a different picture and warns against benchmarking by averages. When categorised by income[2] decile, what we find is that the lowest-earning 40 per cent of retired households are spending at or above their current income level, and are not saving at all in retirement. The next three deciles are spending 60-70 per cent of their reported income. Only the top 30 per cent of households by income (with income of more than $70 000 per annum) report expenditure that is 50 per cent or less than their reported income.

- **Contrary to findings commonly cited in research on retirement, HILDA households do not show a decline in expenditure through the course of retirement**.

  One common finding in the retirement literature is the expectation that household expenditure will decline over the course of retirement, as retirees lose mobility and reduce their discretionary spending. However, the longitudinal analysis available in HILDA shows that retired households aged 73-76 in the 2014 survey did not report lower expenditure for their household on an inflation-adjusted basis than they did in the 2006 or 2010 surveys. Households currently in the 83-86 age range reported slightly higher expenditure than in 2006 and 2010. The composition of household spending was fairly constant in the early years of retirement, however after age 75 expenditure on food decreased slightly and expenditure on utilities increased slightly. These finding should be qualified with a reminder that as HILDA does not incorporate expenditure on leisure or aged care, it in unclear how these affect total expenditure levels through retirement.

- **Further, today's retirees are spending more than earlier cohorts at a similar age**.

  In the 2014 survey, retirees in all age brackets reported a higher level of expenditure (inflation adjusted basis) than that same age cohort reported in the 2006 survey. The biggest increase in expenditure was in the 85+ age cohort. Reported average annual expenditure in this cohort increased from $20 017 per annum in 2006 to $27 279 in 2014, or a 36 per cent increase.

[1] HILDA data do not report all categories of discretionary expenditure that are likely to be higher among higher income households, such as holidays. As such, expenditure levels in higher income households may be somewhat understated.

[2] The HILDA survey includes private income and public transfers which increase net wealth, as well as withdrawals from superannuation accounts which are offset by a decrease in the value of superannuation assets.

- **This is indeed the wealthiest retired generation ever in Australian history, with household wealth and income continuing to increase with each successive HILDA survey**.

  Households in their late 50s in 2014 held 25-40 per cent more net wealth than their same-aged peers reported in 2002 (inflation adjusted). The average net wealth of households aged 70-74 has more than doubled since 2002, from $562 000 to more than $1 million. Early stage retirees are wealthier than ever before, possibly setting higher expectations for the standard of living in retirement. At the same time, averages can hide important variations within a population. Median wealth shows similar growth over the period – 74 per cent growth in wealth for households aged 70-74 and 36 per cent for households aged 55-59 – but at a much lower level. The median wealth of a household aged 65-69 in 2014 was $685 000, compared with average household wealth of $1.24 million.

- **Self-funded or partly self-funded retirees appear to enjoy a significantly higher standard of living than those who rely on the Aged Pension**.

  The median annual expenditure for self-funded households was $30 000 in 2014, compared with $19 000 among households whose main source of income was the Age Pension. In other words, self-funded retirees reported annual expenditure that is nearly 60 per cent higher than average expenditure. Forty-four per cent of self-funded retiree households have an annual expenditure above $33 000 (the ASFA suggested modest standard),[3] compared with only 17 per cent of households who receive most of their income from the Age Pension.

- **Retirees who do not own their own homes or live alone are at greater risk of financial hardship**.

  A significant minority of retirees (approximately 15 per cent) do not own their homes and thus face additional expenses – these households spent, on average, $11 500 (40 per cent of their total annual expenditure) on rent in 2014. While some pensioners may qualify for rental assistance this is likely to be well below actual rental costs.[4] Single person households also struggle. The average single-person household aged 65-74 had expenditure 22 per cent below the ASFA 'modest' level in 2014, while expenditure by couple households was only 2 per cent below the modest level.

- **While there is significant income disparity within the HILDA population, the level of household expenditure varies more according to geographic location than it does by level of income**.

  That is to say that there is a bigger difference detected in household expenditure according to urban or rural living than there is by income decile. The biggest difference in the level expenditure was between households located in Sydney where household expenditure was $44 672 on average as against households located in regional South Australia where household expenditure was $22 017 on average in 2014. This exceeds the reported gap in expenditure between the highest-income decile of $40 671 and the lowest-income decile of $23 988, suggesting location-based cost-of-living is a major driver of expenditure levels.

This report explores all these points in detail, and is structured as follows.

Section 1 looks at the importance of identifying expenditure patterns in retirement, and canvasses existing literature and recent policy reviews and issues on this matter.

Section 2 provides some background on commonly utilised benchmarks for assessing standards of living in retirement, including the ASFA standard and replacement rates, and compares these with the HILDA data. The HILDA data and their usage are also described in this section.

Section 3 examines the HILDA data in detail, drawing out any important implications on patters of retirement expenditure amongst Australian households. Data on household income and wealth, including the accumulation of superannuation assets over time, are also described.

Section 4 draws conclusions and implications from the analysis

[3] In 2014 the ASFA modest income standard for a couple aged 65-84 was $33 784.

[4] The Commonwealth Government provides Rent Assistance to eligible Age Pension recipients, however the maximum benefit in 2014 was $3286.

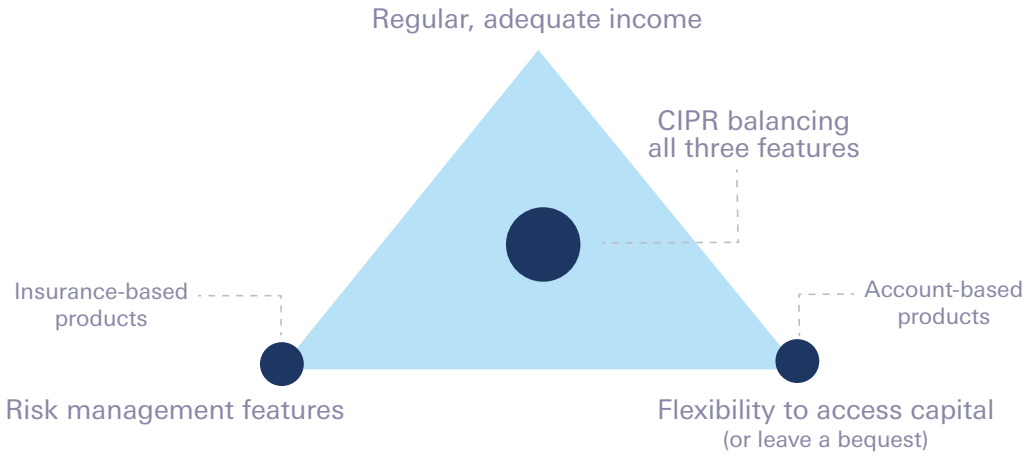
1. Why retirement expenditure patterns matter

With the 'baby boomer' generation entering retirement over the next 15 years, Australia is at a demographic tipping point. This generation is expected to enjoy longer and healthier lives than any previous retirees, however there is growing interest in the funding of their retirement. Fundamental to this discussion is the question of retirement income 'adequacy'. That is, what level of income is required to fund an acceptable standard of living in retirement? Analysis of the expenditure patterns of actual retirees will help inform this discussion and provide an additional level of understanding about the income needs of retirees, to the benefit of policy makers, financial product providers and individuals.

Financial decision making for retirement is complex, and research shows the majority of retirees do not have sufficient financial literacy to make optimal decisions on these issues. With the current age of retirement in Australia now sitting at age 65 and life expectancy at age 85, households contemplating retirement have 20 years of expenditure to cover – the same period as almost half their working lives. Government policies (notable welfare safety nets) may reduce the incentive of workers and retirees to make 'sound and well-informed decisions' if they perceive broad subsidy is available to support most of their income needs in retirement (Productivity Commission 2016, 6). To counter this, the Federal Government mandates and encourages private savings through the Superannuation Guarantee (SG) and the concessional treatment of saving in superannuation system. More recently, it has indicated that it will encourage the development of innovative retirement income products, to better manage income needs and improve the standard of living for retirees (The Australian Government 2015). The appropriate level for the SG and the extent of tax concession for superannuation depend on the anticipated expenditure needs of retirees, and an assumption about retirement income adequacy. If these levels are set too low, retirees will have insufficient savings to meet their expenditure needs in retirement and will not be able to achieve an acceptable standard of living. Alternatively, increasing the generosity of these levels reduces the sustainability of the public and private pension systems.

To improve the retirement outcomes from superannuation, the Federal Government accepted the Financial System Inquiry (FSI) recommendation that superannuation trustees pre-select a comprehensive income product for retirement (CIPR) through which its members will receive their superannuation benefits in retirement (The Australian Government 2015). Although the details of such a product are uncertain, it is expected that CIPRs would provide a regular and stable income stream, longevity risk management and flexibility (to access capital or, if desired, leave a bequest) (**Figure 1**).

Figure 1: Desired features of retirement income products



Source: Adapted from The Australian Government the Treasury 2014, 122.

Research on retirement expenditure patterns will assist trustees to anticipate the income needs of their members, enabling them to design and provide appropriate income products. For example, the expected total expenditure levels may dictate the balance between income and risk management; the pattern of expenditure through retirement may inform the need for flexibility (if expenditure levels are lumpy) or the use of deferred annuities (if expenditure increases at higher ages). Analysis

of expenditure by item may suggest a dual-tier product, with guaranteed income to cover 'essentials' (such as groceries, accommodation, transport and healthcare) and variable income to meet expenditure on 'extras' (such as leisure and recreation activities). Observed expenditure patterns may also reflect current retirement income options, and the introduction of new CIPRs could lead to a change in expenditure patterns.

A better understanding of expenditure levels in retirement would assist individuals in making financial decisions. Without understanding the cost of their retirement, individuals are unable to make informed decisions about their savings, investment and draw-down behaviour.

Analysing expenditure patterns alongside other financial and social data provides additional context for the role of superannuation in funding retirement. Cost of living (and income adequacy) varies greatly depending on the retirees' home ownership, health, marital status and location. Further, superannuation is only one source of wealth and income for most retirees. Most retirees own property and financial assets outside of superannuation which can be converted into income, and will receive at least a part Age Pension. Each of these will contribute to the retirees' income.

1.1 How we think about retirement expenditure

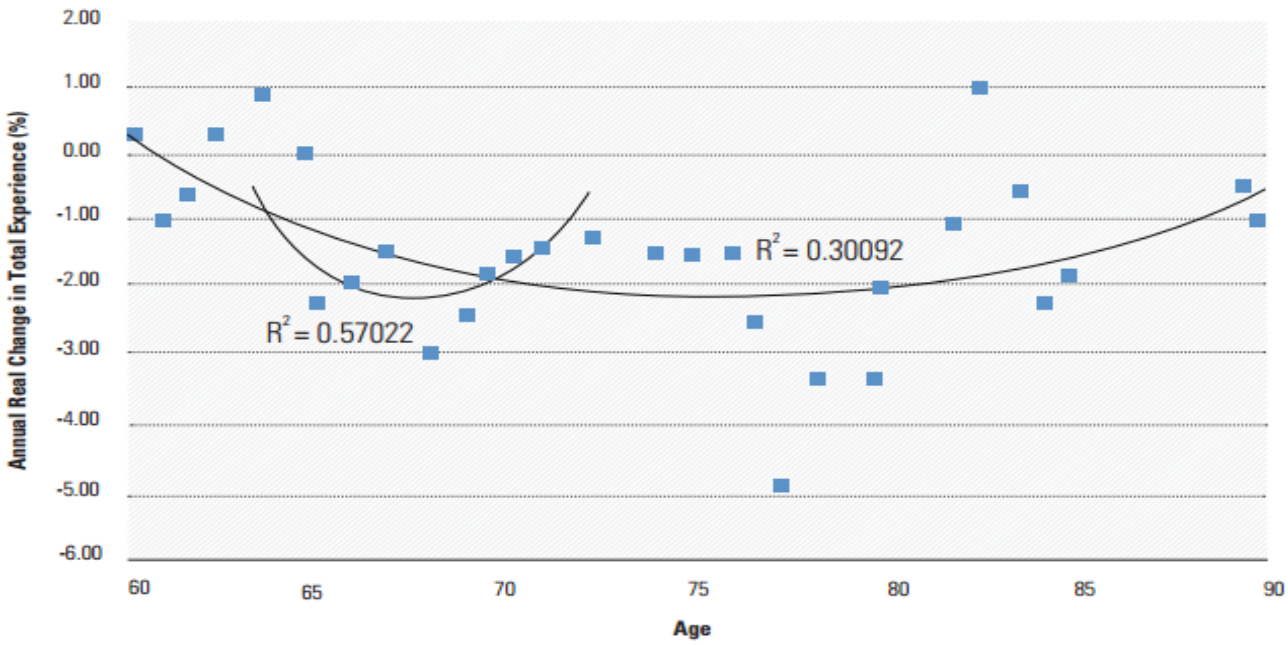
The expenditure patterns and income needs of Australian retirees are not well understood. They are likely to differ across retirees, depending on lifestyle, household structure, and non-monetary resources.

It is generally accepted that household expenditure systematically decreases at the time of retirement (the 'retirement consumption puzzle') (Hurd and Rohwedder 2008). This is attributed to a decrease in savings, and lower work-related expenditure. How expenditure levels change through retirement is less well understood.

Traditional 'reality' retirement planning is based on the assumption that expenditure levels declines incrementally though retirement. In this scenario, reductions in spending are described as 'voluntary' as they reflect changes in lifestyle (as retirees become less active) and lower discretionary spending rather than an income constraint (Fisher et al. 2005; Bernicke 2005).

More recent research has suggested that expenditure levels may be characterised by a 'retirement spending smile'. In this case, expenditure levels decrease in the early years of retirement as retirees become less active, before increasing in later years as healthcare expenses increase. **Figure 2** shows the annual real change in consumption for American retirees, with a decrease in annual spending.

Figure 2: Annual real change in consumption for retirees, United States



Source: David Blanchett 2014.

Internationally, Australian retirees appear to have relatively low expenditure and income levels. However, high rates of home ownership mean Australian retirees have relatively low housing expenses and income needs. When compared with five other countries (Canada, United Kingdom, United States of America, Italy and Finland), Yates and Bradbury find that while Australia has the highest before-housing poverty rate among those aged 65 years or over, it has one of the lowest after-housing poverty rates in this same age group (Yates and Bradbury 2010).

1.2 Policy developments and the need for better data

A number of recent policy developments highlight the need for better data on household income and expenditure in retirement. These policy changes reflect rising budget pressures that are creating increased focus on the equity and the cost of the superannuation system, as well as on the cost and sustainability of government entitlements for retirees. The role and ability of superannuation to efficiently provide retirement income in the retirement phase is a critical question at a time when the baby boomer generation is beginning to retire but the superannuation system is only halfway to maturity. To date, however, there has been little research into the real experiences of Australian retirees, with superannuation outcomes largely measured against budget standards and income replacement ratios.

Objectives and efficiency of the superannuation system

In October 2015, the Federal Government announced it would develop legislation enshrining the objective of superannuation. An agreed set of objectives should encourage long-term confidence in the system, enabling policy changes to be assessed for efficiency and effectiveness, and limiting ad-hoc changes. In a discussion paper released in March 2016, the Government agreed with the primary objective of superannuation recommended in the Financial System Inquiry:

> **To provide income in retirement to substitute or supplement the Age Pension.**
> **(The Australian Government 2016)**

Beyond this, Treasury sought comment on a range of subsidiary objectives and points for consideration, including superannuation's role in providing 'retirement income' and income 'adequacy'. An improved understanding of retirees' income needs – informed by real data – will inform debate on these issues and improve understanding about the role of superannuation.

Following an agreement on the objective of superannuation, the Productivity Commission (PC) will assess the efficiency and competitiveness of Australia's superannuation system (in a Review to be commenced post 1 July 2017). In an Issues Paper released in March 2016 the PC outlined a 'hierarchy' of efficiency for the superannuation system:

- economy wide efficiency (overall wellbeing)
- efficiency of retirement income system (adequacy of retirement incomes; balance between three pillars)
- efficiency of superannuation system (best outcomes for members given broader policy settings). (Productivity Commission 2016)

Currently, the adequacy of retirement income is primarily measured against the ASFA Retirement Income Standards, or as a ratio to pre-retirement income. Access to real expenditure data provides another important input into the discussion about adequate income levels. Further, analysis of expenditure patterns alongside household income and wealth provides a more holistic framework to understand the role of superannuation in delivering retirement income.

Retirement income products

In 2015 the Federal Government agreed to support the Financial System Inquiry's recommendation that superannuation trustees pre-select a default comprehensive income product for retirement (CIPR) for their members (The Australian Government the Treasury 2014). Fundamental to the design on these products will be an assumption about the level of retirement income members require (and can afford) through retirement. To design suitable products trustees will need a sound understanding of their members' income needs. This includes understanding the impact of age, location, household structure, pre-retirement income and health on expenditure.

To provide income in retirement to substitute or supplement the Age Pension.

2. Estimating and observing retirement expenditure

Surprisingly, given its importance, there has been little research into actual expenditure patterns amongst retirees in Australia. Instead, retirement planning and measures of retirement income adequacy tend to use either an income target, or an income replacement ratio.

Income targets – the ASFA Retirement Income Standard

The ASFA Retirement Standard is a bottom-up estimate of the annual budget required to fund a comfortable or modest standard of living in retirement. The Standard was created in 2004 based on interviews with retirees and outlines their expected weekly expenditure on housing, utilities, food, communication, household goods and services, clothing, transport, health, and leisure. Since its inception the Standard has been enhanced to reflect changes in retirees' lifestyle expectations and spending pattern and is revised quarterly in line with inflation. In 2015 the Standard was expanded to cover two periods of retirement, reflecting increasing life expectancy. The Standard estimates the level of income needed by both single and couple households, assuming retirees own their homes, have no debt, and are in relatively good health. **Table 1** outlines the annual income targets in 2014 for younger retirees up to age 85 and older retirees.

Table 1: ASFA Income Standard for younger and older retirees, 2014 ($)

	MODEST SINGLE	COMFORTABLE SINGLE	MODEST COUPLE	COMFORTABLE COUPLE
65-84	23,489	42,579	33,784	58,326
85+	22,670	37,875	33,740	53,123

Notes: 2014 ASFA figures are reported for consistency.
Source: ASFA 2014b.

The ASFA Retirement Income Standards are the most widely used estimate for retirement income adequacy in Australia. Despite this, they are not universally accepted. Some common criticisms are that the higher 'comfortable' income standard[5] is overly generous, even when compared to income levels among the working-age population (Daley, Coates, and Wood 2015). Income standards are also criticised for not being flexible enough to reflect the differing expectations and needs of diverse retirees.

Income replacement ratios

Internationally, retirement income adequacy is often expressed as a ratio of pre-retirement income. Replacement ratios are a top-down estimate of the annual income required to achieve a standard of living in retirement equivalent of that achieved while in employment. They have the benefit of acknowledging that a desirable level of retirement income is likely to vary depending previous experience. The actual method of calculating income replacement ratios and the ratio which denotes 'adequacy' vary. For example, whether income is measured pre-tax, after taxes and transfers, or only disposable income is included, and whether the final year of employment, or an average across all years of employment, is used for comparison. The OECD suggests the target replacement rate for a median income earner should be 70 per cent of final earnings (OECD 2009). The World Bank suggests a target annual replacement rate for middle income earners should be:

- 78 per cent of net average lifetime wage
- 60 per cent of gross average lifetime wage
- 53 per cent of net final year wage
- 42 per cent of gross final year wage. (The World Bank 1994)

These suggested replacement rate are unlikely to be as useful for low or high income earners. However, they do provide an important link between a household's standard of living prior to retirement, and the expected standard of living in retirement. The variability in household wages across Australia is significant.

[5] The Commonwealth Government provides Rent Assistance to eligible Age Pension recipients, however the maximum benefit in 2014 was $3286.

3. Examining expenditure patterns in retirement

The analysis undertaken in this paper utilises expenditure data from the HILDA Survey Wave 14. This survey was conducted in 2014 and published in 2015. Data are reported at the household level, after being adjusted using the provided cross-sectional weights. It is assumed that households with a first responding person aged 65 and are 'retiree households', although actual retirement age varies (Appendices 1 and 5 have more details of the HILDA survey and sample). All figures reported are in 2014 dollars.

Table 2 shows the income, expenditure and wealth items measured by HILDA.

Table 2: HILDA income, expenditure and wealth variables, 2014

INCOME	EXPENDITURE	WEALTH
Private Income • Wages and salary • Business income • Investment income • Regular private pensions • Regular private transfers • Irregular income **Public transfers** • Government pensions • Government parenting payments • Government allowances • Family payments • Bonus payments • Other non-income support payments • Other government benefits • Other regular public income • Foreign pensions	**Household expenditure** • Groceries • Alcohol • Cigarettes and tobacco • Public transport and taxis • Meals eaten out • Motor vehicle fuel • Men's clothing and footwear • Women's clothing and footwear • Children's clothing and footwear • Telephone rent and calls, internet charges • Private health insurance • Other insurance • Fees paid to health practitioners • Medicines, prescriptions and pharmaceuticals • Electricity, gas bills and other heating fuel • Repairs, renovation and maintenance to home • Motor vehicle repairs and maintenance • Education fees **Housing** • Rental payments • Mortgage repayments	**Assets** • Bank accounts • Superannuation • Cash investments • Equity investments • Trust funds • Life insurance • Home asset • Other property assets • Business assets • Collectibles • Vehicles • Credit cards **Liabilities** • HECS debt • Personal debt • Business debt • Home debt • Other property debt

Notes: Income and expenditure is measured annually; wealth is measured every four years (2002, 2006, 2010 and 2014). A number of expenditure items were discontinued after 2010: new vehicles, used vehicles, computers and related devices, audio visual equipment, white goods, furniture, holidays and travel costs.

'Irregular income' includes superannuation lump sums, as well as inheritances, redundancies, irregular payments from parents, and lump sum workers compensation pay-outs.

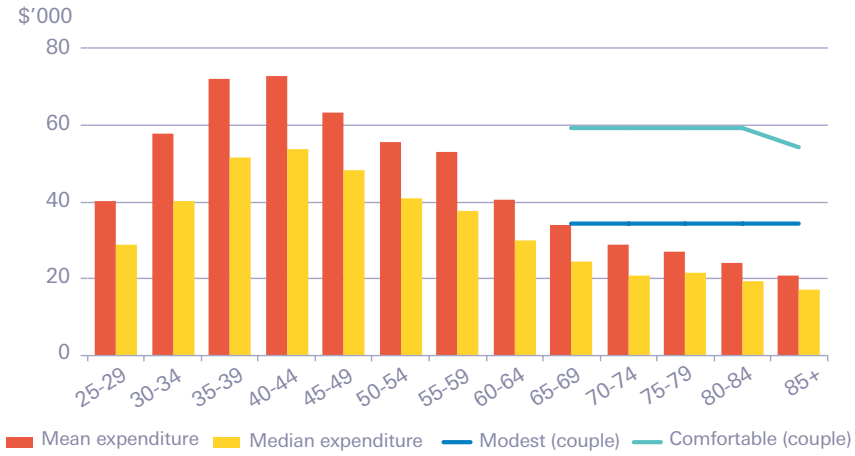
Source: Department of Social Services 2015.

3.1 Expenditure levels are (on average) low

The total annual expenditure levels of Australian retiree households reported in the HILDA data appear low compared with the broader population and with published income 'standards'. Figure 3 presents the average household expenditure for different age groups in 2014. For these households, total expenditure declines above the age of 45. The reported expenditure levels of retired households are well below the level suggested as the ASFA 'comfortable' standard of living in retirement.

Across all age groups, median expenditure levels are lower than average expenditure. For households in the early years of retirement (age 65-70) median expenditure is approximately $21 000, compared with an average household expenditure of $34 000. The variation in household expenditure is explored in the following discussion.

Figure 3: Average and median household expenditure by age, 2014 ($'000)



Notes: 'Modest' and 'comfortable' expenditure levels are taken from the ASFA retirement standard for a couple household who own their own home and are in good health.

Source: ACFS analysis of Department of Social Services 2015.

These figures are not adjusted for household size, so it is likely that the higher levels of expenditure seen in households aged 35-45 partially represents their larger average household size. Households aged 65 and above are far more likely to be either single person households or couples with no dependent children.

Total expenditure levels are well below those suggested as providing a 'comfortable' retirement according to the ASFA standard. Some of this difference is likely accounted for by differences in the expenditure items included (ASFA includes expenditure on travel and household goods and services not measured in the HILDA survey). However it appears that even after the inclusion of those items many households' expenditure would still fall short of the comfortable level. **Table 3** shows the expenditure items captured in the HILDA survey and ASFA standard. While the two measures cover many of the same items, there are some major differences. The ASFA Standard includes expenditure on household goods and services and on leisure. Many of these items were measured in the original HILDA survey, but were removed after Wave 10 (conducted in 2010).[6] Alternatively, the HILDA survey includes rent and mortgage payments; these are not captured by the ASFA Standard which assumes retirees are home owners with no debt. Neither includes the cost of residential aged care.

Together, the budget standards developed by ASFA (in consultation with retirees), and HILDA findings provide quite a rich picture of expenditure needs and experience in retirement.

[6] Expenditure on new and used vehicles, electronics, whitegoods, furniture and vacation were lasted recorded in 2010. In 2014 dollars, the average expenditure on these items in 2010 was $5773 (median expenditure was $1457) (Department of Social Services 2015)

Table 3: Expenditure items – HILDA and ASFA, 2014

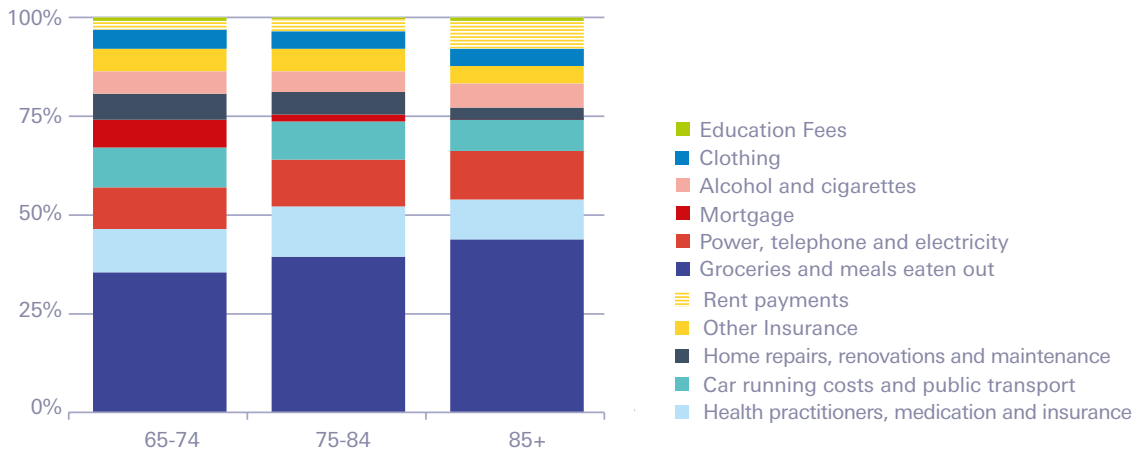
HILDA	ASFA
Food	
• Groceries • Meals eaten out	• Groceries and fresh food • Lunches and dinner out
Alcohol and cigarette	
• Alcohol • Cigarettes and other tobacco products	• Alcohol consumed in home (or equivalent spent) • Gifts and/or alcohol or tobacco
Utilities	
• Electricity Bills, Gas Bills and Other Heating Fuel • Telephone Rent and Calls/ Internet Charges	• Electricity and gas • Home phone, mobile, broadband
Home maintenance	
• Other insurance • Home Repairs, Renovations and Maintenance	• Building and contents insurance • Home improvements • Repairs and maintenance • Rates
Transport	
• Public transport and taxis • Motor vehicle repairs and maintenance • Motor vehicle fuel	• Public transport • Car transport and running costs
Healthcare	
• Fees paid to health practitioners • Medicines, prescriptions and pharmaceuticals • Private health insurance	• Co-payments and out of pocket • Chemist • Health insurance • Cost of major medical procedures
Education	
• Education Fees paid to Schools, Universities and Other Education Providers	• N/A
Clothing	
• Men's Clothing/ Footwear • Women's Clothing/ Footwear • Children's Clothing/ Footwear	• Clothing and footwear
Household goods and services	
• N/A	• Household cleaning and other supplies • Cosmetic and personal care items • Barber or hairdressing • Music and CDs • Newspaper and magazines • Computer, printing and software • Household appliances • Pest control, alarm services • Home and community care contribution • Domestic cleaning services
Housing	
• Rent • Mortgage payments • Second mortgage payments	• N/A
Leisure	
• N/A	• Membership clubs • TV, DVDs, digital cameras • Cinema, plays, sport and day trips • Domestic vacations • Sundry items

Notes: A number of expenditure items were removed from the HILDA survey after 2010: new vehicles, used vehicles, computers and related devices, audio visual equipment, white goods, furniture, holidays and travel costs.

Source: Department of Social Services 2015; ASFA 2014a.

Figure 4 shows the breakdown of expenditure by item for households aged 65 and above, on average. For these households, the largest expenditure items are food and meals, utilities, healthcare and transport. Younger retirees also have significant expenditure on mortgage repayments and home repairs, which are much lower in older households. Alternatively, older retirees have (on average) a higher expenditure on rent than younger 'retiree' households.

Figure 4: Average household expenditure by item, 2014 (%)



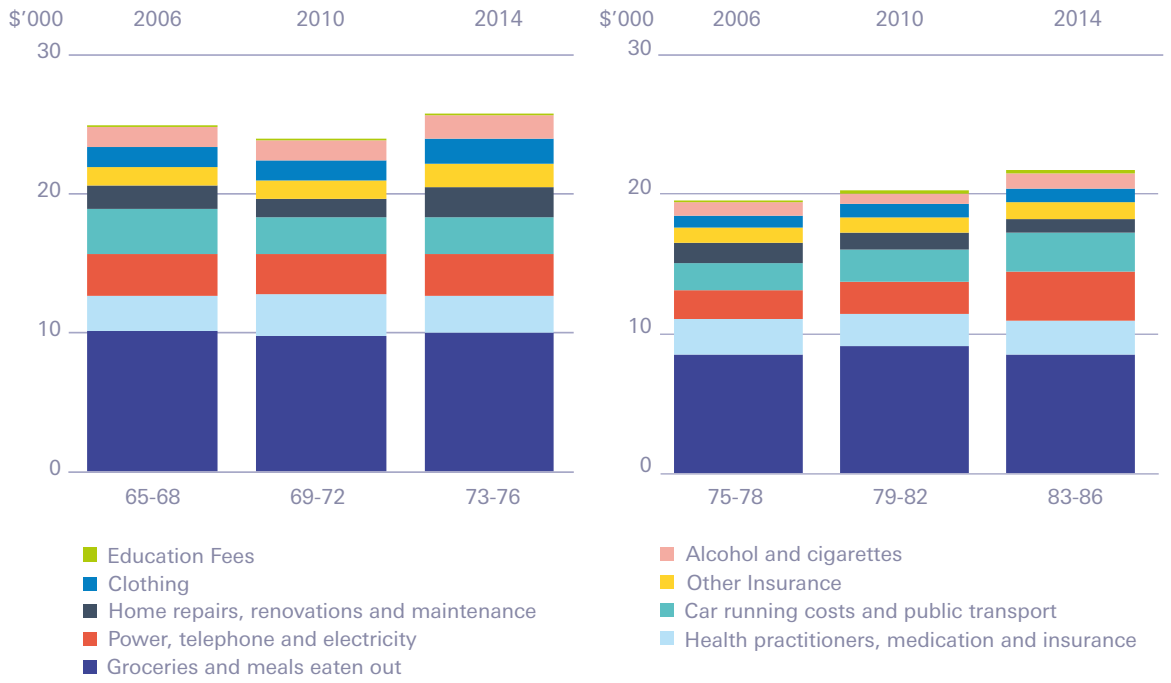
Notes: Households shown are homeowner couples with no dependents.

Source: ACFS analysis of Department of Social Services 2015.

3.2 Expenditure does not decrease through retirement

Another expenditure pattern often identified in existing literature suggests that expenditure levels decline over the course of retirement. The HILDA data provide a different view on this question. **Figure 3** showed older households had lower expenditure than younger households in 2014. However, expenditure data from the last decade suggest that, for a given household, annual expenditure does not decrease materially through retirement. **Figure 5** shows the average annual expenditure for the same households as they progressed through retirement. The first panel shows reported spending for households that were aged 65-68 in 2006, and then their levels of expenditure in 2010 (aged 69-72) and in 2014 (aged 73-76). The right hand panel shows the average annual expenditure for households that were aged 75-78 in 2006, 79-82 in 2010, and 83-86 in 2014.

Figure 5: Average household expenditure in 2006, 2010 and 2014 (2014 dollars)



Notes: Households shown are homeowner couple households with no dependents.

Source: ACFS analysis of Department of Social Services 2015.

For both sets of households total expenditure levels appear fairly constant across the eight year period. If anything, there is a minor increase in expenditure as households age that appears somewhat aligned with the 'smile' theory (section 1.1).

The largest expenditure item, groceries and meals eaten out, is quite constant through retirement. Similarly, expenditure on healthcare (including private health insurance, fees paid to health practitioners, and medicines, prescriptions and pharmaceuticals) appears constant through retirement. It is well established that the cost of health service increases (on average) with age (Productivity Commission 2014, 127). These results suggest that these increasing healthcare costs are borne primarily by the government through entitlements, not individuals. It is an open question as to whether this will be sustainable given Australia's ageing demographic, rising health care costs and lengthening life expectancy.

The HILDA survey does not record expenditure on aged care, but this might be expected to increase (on average) with age. Analysis of the 2011-12 Census revealed that 14 per cent of people aged 65 and above needed assistance with core activities and 6 per cent lived in an age care home or hostel. Among the population aged 85 over half (53 per cent) required assistance and one quarter lived in and age care facility (CEPAR 2014). As the population ages these figures are projected to increase – among those aged 65, half of men and two-thirds of women are expected to require formal care in their remaining lifetime.

The survey also does not measure expenditure on leisure activities such as holidays and entertainment. These activities are more likely to be undertaken by younger retirees with higher mobility and this, we might expect leisure expenditure to decrease with age. Research from the Unites States suggests leisure expenditure in retirement peaks between the ages of 65-74 at approximately 13 per cent of household expenditure. This drops to 8 per cent for households aged 75 and above (Butrica 2005).

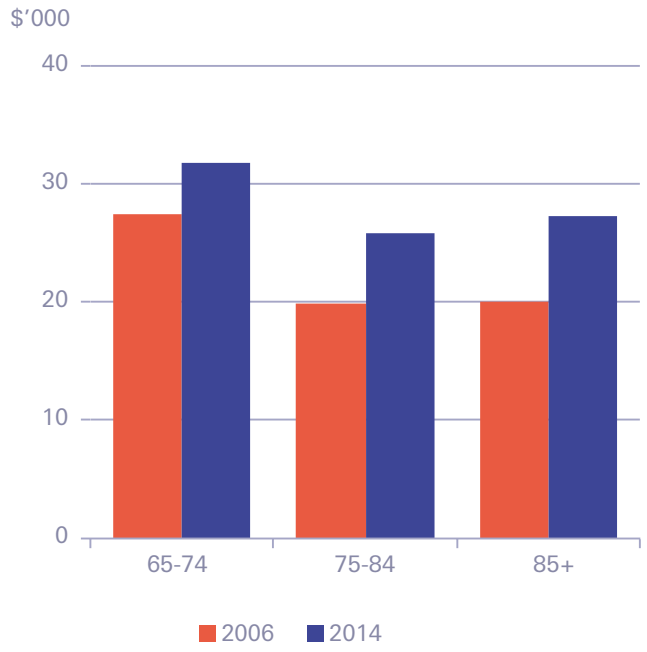
Expenditure on utilities (electricity bills, gas bills and other heating fuel, and telephone rent and calls/ internet charges) appear to increase with age, which may reflect retirees spending a greater amount of time in the home. For older households (**Figure 5** right-hand panel), transport costs increase with age, possibly reflecting a decrease in mobility. By the age of 80, over 70 per cent of total household expenditure falls into four categories: food, health care, transport and utilities.

Housing costs, alternatively, decrease through retirement. By age 75 most mortgage debt is extinguished, reducing average repayments (section 3.9).

3.3 Today's retirees spend more than those in previous cohorts

Not only does spending not appear to decline through retirement according to the HILDA data, but today's retirees are spending more than ever before. **Figure 6** compares the average 2006 total household expenditure against expenditure in 2014, by age cohort. In each age group, retirees spent more in 2014 than their same-age peers did in 2006. For younger retirees, the increase is 16 per cent. For older retirees the difference is even more marked – households aged 85 in 2014 had a 36 per cent higher expenditure (on average) than comparable households in 2006.

Figure 6: Average household expenditure by age, 2006 and 2014 (2014 dollars)



Notes: Only expenditure items included in both the Wave 6 and Wave 14 survey are included.

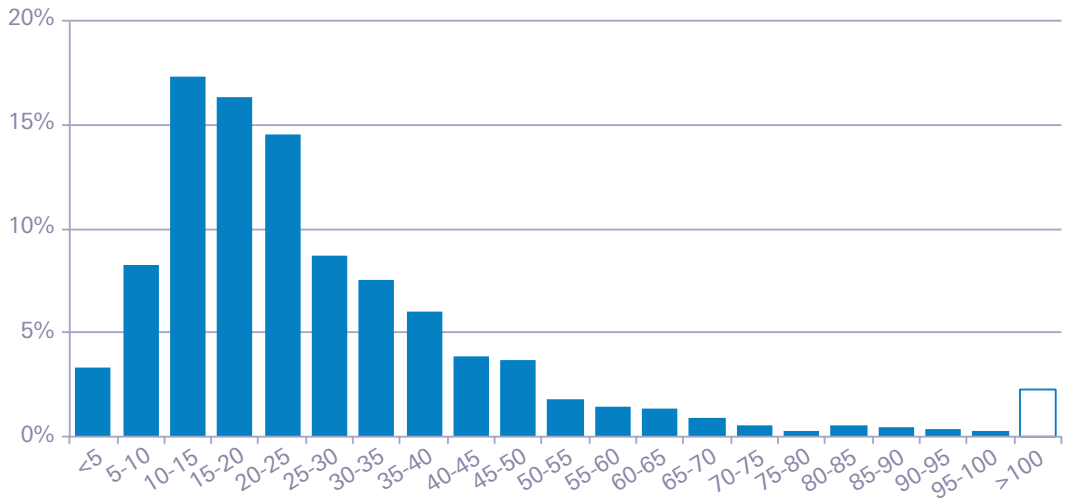
Source: ACFS analysis of Department of Social Services 2015.

The increase in expenditure mirrors substantial growth in the wealth of retirees between the two periods (section 3.11).

3.4 There is a large variation in household expenditure

As discussed in section 3.1, there is a wide variety of experiences and standards of living during the working life of Australian households, and retirement expenditure is equally varied. **Figure 7** shows the distribution of annual household expenditure for households aged 65 and above in 2014. The peak of the distribution sits with an annual expenditure level of $5000 to $30 000 per household per annum, representing about 65 per cent of the population. Less than 7 per cent of retired households are living at the ASFA 'comfortable' standard[7]; it is a long but very thin tail of households that report spending more than $50 000 per year.

Figure 7: Distribution of annual average household expenditure, 2014 ($'000)



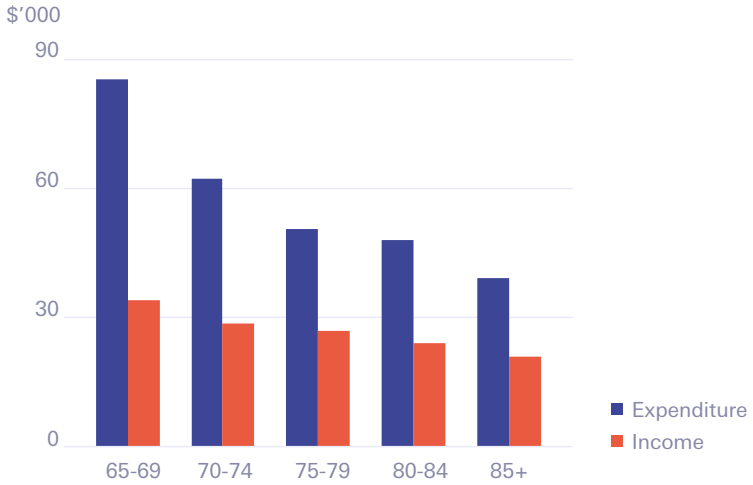
Source: ACFS analysis of Department of Social Services 2015.

The median annual household expenditure is approximately $22 000, with one quarter of all households having an annual expenditure of less than $14 000 and 10 per cent of household have expenditure of over $50 000.

3.5 Are most retired households saving money?

Analysis of ABS data has led a number of authors to conclude that retired households in Australia are living well below their means, based upon a high income-to-expenditure ratio. At first blush, HILDA data also suggest this is the case. **Figure 8** shows average household income and expenditure levels by age in the HILDA data. In all age cohorts, retirees' annual income is well above their expenditure, particularly in the earlier stages of retirement when reported expenditure is less than half of reported income. While some of the difference is undoubtedly accounted for by expenditure on items not captured in the HILDA survey, it appears retirees may also be saving a proportion of their income each year.

Figure 8: Average household income and expenditure by age, 2014 ($'000)



Source: ACFS analysis of Department of Social Services 2015.

[7] The ASFA comfortable retirement standard for couple households aged 65-84 ($58 326) in 2014 ASFA 2014a.

However, relying on averages across the retire population can be misleading. This group is diverse, and the extremely high wealth of a small group of retirees skews average wealth, income and expenditure figures. **Table 4** contrasts the annual average and median income and expenditure of retirees. For example, the average annual income for households aged 65-69 in 2014 was approximately $85 000, compared with a median annual income of $50 000 for the same group.

The median figures for income and expenditure suggest a far lower propensity to save amongst retired households than is suggested by the average rates across the cohorts. Neither the median nor the average level of expenditure approaches the ASFA comfortable standards, and in most cases is below the ASFA modest standard as well. The 'savings' that are being generated by a 'median' household – $8000 to $15 000 per annum for households over the age of 70 – are significant shares of household income, but not significant sums in their own right.

Table 4: Annual household income and expenditure, 2014 ($)

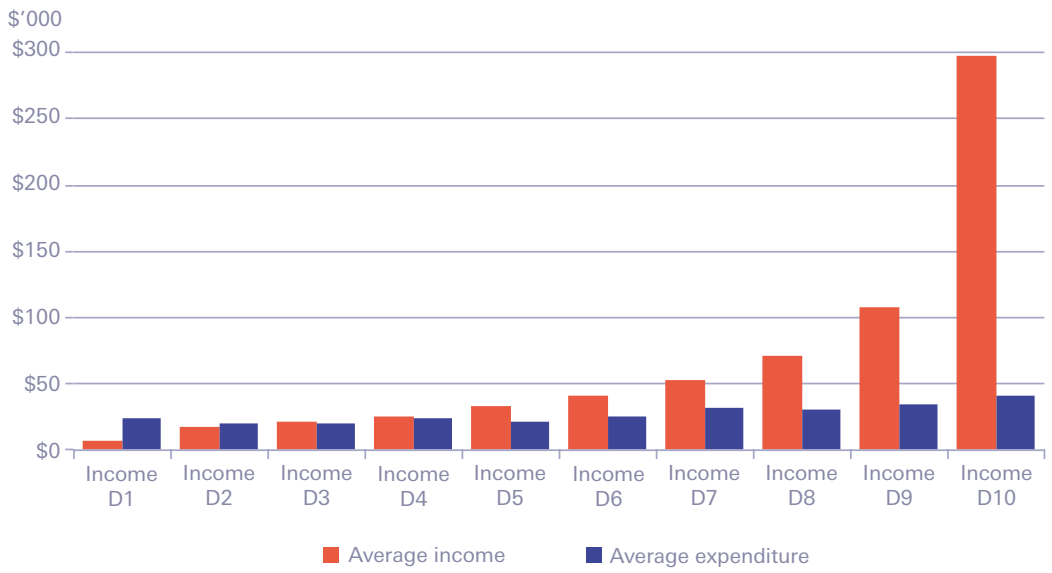
	AVERAGE INCOME	AVERAGE EXPENDITURE	MEDIAN INCOME	MEDIAN EXPENDITURE
65-69	85,386	33,944	49,692	24,640
70-74	62,351	28,733	35,898	20,864
75-79	50,499	27,044	35,892	21,416
80-84	48,037	24,153	31,360	19,224
85+	39,059	20,785	25,558	17,010

Source: ACFS analysis of Department of Social Services 2015.

The disparity between the average and median income reported of these aged cohorts is significant, particularly for the retired cohort ages 65-75 where average income is more than 70 per cent above the median income.

For further examination, the retiree population was decomposed into income deciles, with the expenditure level for those households then shown across the different levels of income (**Figure 9**). For the lowest two income deciles – 20 per cent of the retiree households – reported expenditure was higher than income. For the next 20 per cent, expenditure was at the level of income. Only at the 50th percentile did income begin to rise above expenditure. Even then, the magnitude does not become significant, particularly considering some of the HILDA expenditure category omissions. It is in the top 30 per cent of households where income significantly exceeds expenditure to the point where annual income is more than twice expenditure. The HILDA survey does not provide details about how households spending above their means are funding this expenditure – whether from drawing down savings, liquidating assets or borrowing funds.

Figure 9: Average household expenditure by income decile, 2014 ($'000)



Source: ACFS analysis of Department of Social Services 2015)

Notes: Households aged 65 and above

Overall the HILDA data suggest that at least 70 per cent of Australian retired households in 2014 were not spending significantly less than they earned. It also suggests that although some households do show a propensity to save, savings that are generated do not appear to be significant sums. It is only in the wealthiest, highest-income households where significant savings appear to be ongoing through the retirement phase.

For households in the highest income deciles it is unclear why expenditure levels remain relatively low. One possible explanation is that the HILDA survey does not collect details about expenditure on non-essential items such as travel and leisure (including entertainment and electronics) which are disproportionately consumed by higher wealth households. Alternatively, it appears there may be scope for more charitable giving and intergenerational transfers from the retired wealthy. There is certainly scope for further research into the expenditure and savings behaviour of wealthy retirees.

3.6 Location is strongly related to household expenditure variation

As shown in **Figure 9**, the level of household income has some influence on household expenditure. However, household location appears to have a much greater impact, with household expenditure levels showing greater variation by location than by income decile. This suggests that variation in the cost of living – as associated with urban versus rural locations – is a strong indicator of expenditure levels. **Figure 10** shows average annual household expenditure by location.

Figure 10: Average household expenditure by location, 2014 ($'000)

Notes: Households aged 65 and older.

Source: ACFS analysis of Department of Social Services 2015.

The relationship between the variation in the cost of living by location and the level of household expenditure is an important finding of this study. It suggests that location could be a critical piece of demographic information in the determination of a household's required level of income for retirement, as this seems to be the variable responsible for the greatest variation in household expenditure across the HILDA sample. If so, geographic location becomes an important consideration when estimating what income is required to achieve an adequate standard of living in retirement for any particular household or groups of households.

> ...location could be a critical piece of demographic information in the determination of a household's required level of income for retirement

3.7 Single-person households are less likely to meet expenditure 'targets' than couples

Table 5 shows the average annual household expenditure for single and dual person households and the corresponding ASFA retirement income standards. The shortfall between the average actual expenditure and ASFA modest income level is far greater for single person households than for couples. For example, the average single person household aged 65-74 falls short of the modest expenditure target by 22 per cent. The dual person household has expenditure only 2 per cent lower than the modest standard. This supports the argument that single person households are most at risk of economic hardship in retirement.

Table 5: Average household expenditure and income standards, by household type, 2014 ($)

AGE	LONE PERSON			COUPLE		
	ACTUAL EXPENDITURE	MODEST LIFESTYLE	COMFORTABLE LIFESTYLE	ACTUAL EXPENDITURE	MODEST LIFESTYLE	COMFORTABLE LIFESTYLE
65-74	18,397	23,489	42,579	33,202	33,784	58,326
75-84	18,077	23,489	42,579	30,937	33,784	58,326
85+	15,974	22,670	37,875	31,754	33,740	53,123

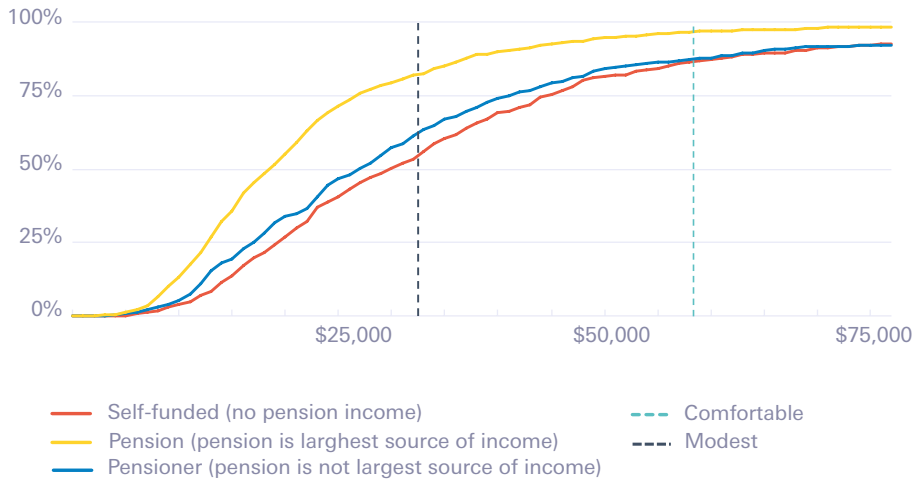
Notes: 'Modest' and 'comfortable' expenditure levels are taken from the ASFA Retirement Income Standards.

Source: ACFS analysis of Department of Social Services 2015; ASFA 2014a.

3.8 Self-funded retirees and pensioners have different expenditure profiles

As expected, retirement expenditure patterns differ noticeably between self-funded and pensioner households. In 2015 approximately 40 per cent of retirees received the maximum-rate Age Pension, and a further 30 per cent received a part-rate pension. As the Age Pension is mean tested[8], pension status is a reasonable proxy for household wealth. **Figure 11** shows the distribution of household expenditure by pension status. For households whose main source of income was the Age Pension (shown in yellow), the bottom 25 per cent had an annual expenditure of less than $13 000, and the top 25 per cent had an annual expenditure above $27 000. In comparison, among self-funded retirees (shown in red) the bottom 25 per cent had an annual expenditure off less than $20 000, and the top 25 per cent had an annual expenditure of above $45 000. The median annual expenditure for self-funded households was $30 000 in 2014, compared with $19 000 among households whose main source of income was the Age Pension. In other words, self-funded retirees reported annual expenditure that is nearly 60 per cent higher than average expenditure by pension-only retiree households.

Figure 11: Cumulative distribution of house hold expenditure by pension status, 2014



Notes: 'Self-funded' households received no government pensions; 'pensioners' largest source of income was the Age Pension; 'part-pensioners' received the Age Pension, although it was not their largest source of income.

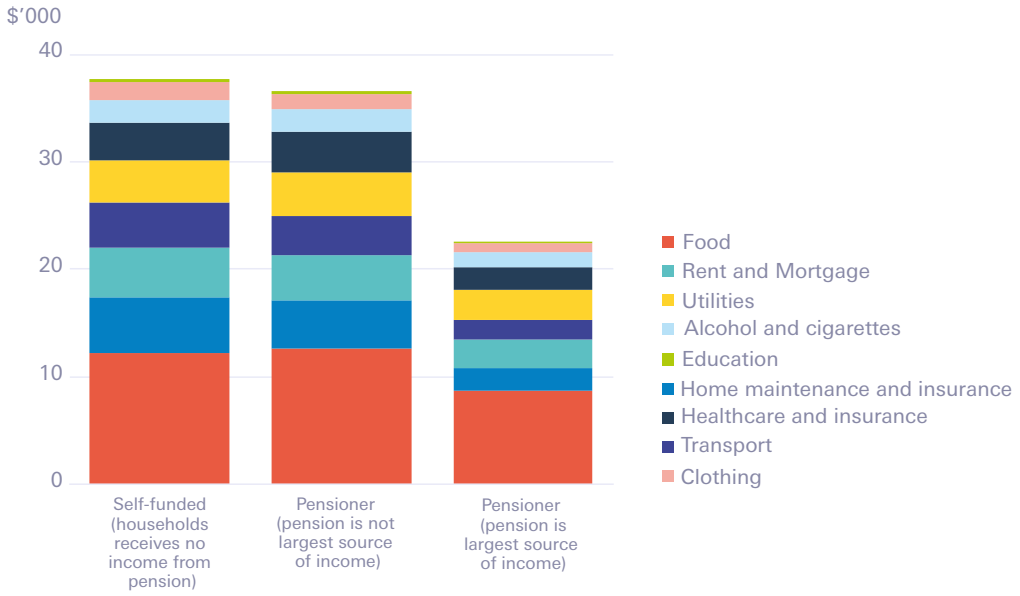
The 'modest' and 'comfortable' expenditure levels shown are based on couple households aged 65-84.

Source: ACFS analysis based on Department of Social Services 2015.

[8] Although some assets (including the family home) are exempt from the means test.

Figure 11 also shows self-funded retirees are more likely to attain the ASFA expenditure standards. Forty-four per cent of self-funded retirees households have an annual expenditure above $33 000 (the ASFA suggested modest standard),[9] compared with only 17 per cent of households who receive most of their income from the Age Pension.

Figure 12: Average annual households expenditure by pension status, 2014 ($'000)

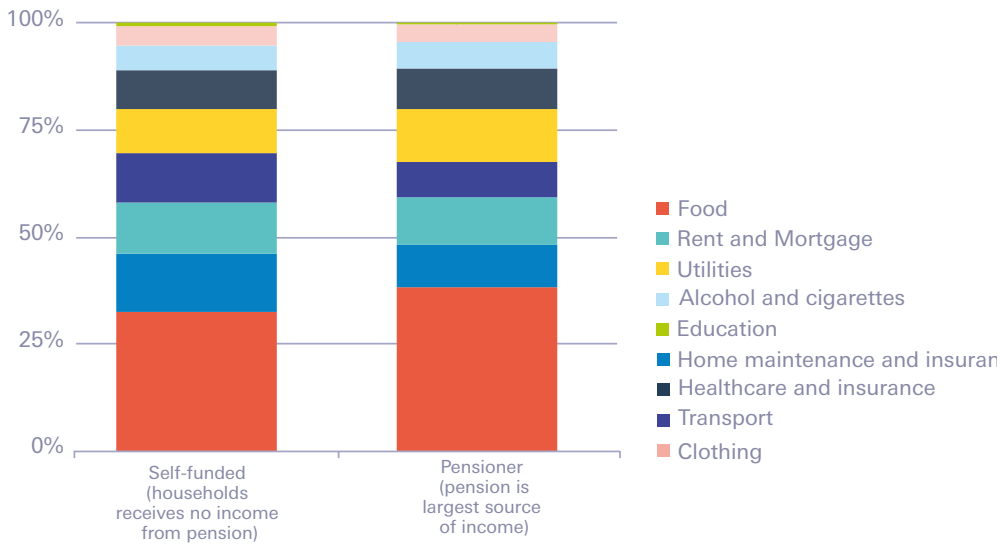


Notes: 'Self-funded' households received no government pensions; 'pensioners' largest source of income was the Age Pension; 'part-pensioners' received the Age Pension, although it was not their largest source of income.

Source: ACFS analysis based on Department of Social Services 2015.

While the self-funded retiree households generally have higher expenditure levels (which may reflect higher income and wealth but may also arise from financial behaviour), there is variation across expenditure items. **Figure 13** shows the average breakdown of expenditure by item for pensioners and self-funded retirees by item.

Figure 13: Average expenditure by item, self-funded retirees and pensioners, 2014 (%)



Source: ACFS analysis based on Department of Social Services 2015.

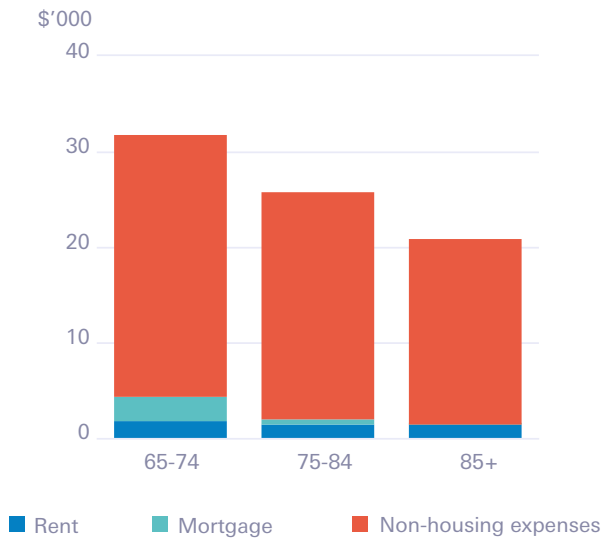
Food and utilities were a greater proportion of expenditure for pensioner households compared with self-funded retirees. Alternatively, healthcare, home maintenance and insurance were a smaller proportion of expenditure for pensioner households compared with self-funded retirees.

9 In 2014 the ASFA modest income standard for a couple aged 65-84 was $33 784 (ASFA 2014a).

3.9 Non-homeowners have significant additional expenditure needs

In aggregate, housing costs (rent and mortgage repayments) do not appear to be a significant area of expenditure for retiree households (**Figure 14**).

Figure 14: Average annual household mortgage and rental payments by age, 2014 ($'000)



Source: ACFS analysis of Department of Social Services 2015.

In reality, this reflects a drop in the number of households with mortgages at higher ages. While a number of households entering retirement in 2014 were still making mortgage repayments (12 per cent), far fewer older households were still making mortgage repayments in the later stages of retirement (only 1 per cent for households aged 85 and above). This may reflect households using their superannuation savings to extinguish debt as they move into retirement. Alternatively, the proportion of households renting was quite constant across age bands (**Table 6**).

Table 6: Proportion of households making rental or mortgage payments by age, 2014 (%)

	65-74	75-84	85+	ALL RETIREES
Renters	15	15	14	15
Mortgagees	12	3	1	8

Source: ACFS analysis of Department of Social Services 2015.

For households who do not own their home, housing costs are significant. The average rental cost in 2014 was $11 500, which represented almost 40 per cent of the annual expenditure ($30 000) for this group. Retirees who qualify for the Age Pension and do not own their own homes may be eligible to receive Rent Assistance from the Commonwealth Government, however this is unlikely to fully cover their housing costs. In 2014 the maximum annual Rent Assistance benefit was $3286, well short of average rental expenditure ($11 500). The proportion of retirees who rent their homes consistently sits at around 15 per cent of the population across all age cohorts.

3.10 Financial wellbeing isn't closely linked to expenditure

In addition to reporting income, expenditure and wealth data, HILDA also asks respondents to rate their level of financial satisfaction. **Figure 15** indicates the level of financial satisfaction recorded in each age cohort. What is observed is that satisfaction is lowest for households in their 40s, and then consistently increases with age from 50 years onward. Thus, although households show varying patterns of income and expenditure, there is not clear evidence here that households themselves are dissatisfied with their financial affairs.

Figure 15: Average financial satisfaction (left axis) and household expenditure (right axis) by age, 2014

Notes: Financial satisfaction was self-rated with a score between 0 and 10, with 10 representing complete satisfaction.
Source: ACFS analysis of Department of Social Services 2015.

3.11 Current retirees are wealthier than previous generations

HILDA data show that today's retirees are not only spending more than previous generations – they are wealthier, too. **Figure 16** compares household wealth as reported in the HILDA data in 2014 with the wealth reported in 2002, adjusted for inflation and broken down by asset class. The assets classes include the owner-occupied home, superannuation, other property and other assets. Leverage is taken into account, with household net worth also described.

There are a number of interesting trends to note in these data. First is that household wealth clearly peaks in the 60-64 age cohort. There appears to be a preference for deleveraging in retirement, with gearing declining rapidly in the early 60s age cohort and falling to minimal levels thereafter. The early 60s cohort also has the highest share of assets in superannuation, with super representing about 30 per cent of household assets. For households in their late 50s and in their late 60s, super is about 28 per cent of household wealth. Across all retired households, assets held outside of super remain significant, representing at least 20 per cent of household wealth even for households over age 85. These include physical assets such as vehicles and collectibles, as well a business assets for the self-employed and financial savings and investments. Across all age groups, the owner occupied home remains the biggest store of wealth, and rises as a proportion of wealth over the course of retirement as other assets are liquidated for income.

> Current retirees are wealthier than previous generations

Figure 16: Average household wealth by age, 2002 (left bars) and 2014 (right bars) (2014 dollars)

Source: ACFS analysis of Department of Social Services 2015.

The longitudinal analysis of household wealth also throws up some interesting observations. The first is that while households approaching retirement in 2014 have experienced a significant expansion in wealth compared to their peers in 2002, these gains have been much smaller amongst younger households. Households aged 25-29 in 2014 had lower net wealth households aged 25-29 in 2002. At the same time, since 2002 households that were aged 25-29 in 2002 have seen their wealth grow, on average from $220 000 in 2002 to $610 000 in 2014.[10]

While households currently aged in their 40s are wealthier than comparable households in 2002, superannuation wealth among these age groups has not grown nearly as quickly as it has for retired households over the 12 year period. This may be due to portfolio size effects and contribution size effects, as people who were in their 30s 12 years ago would have had a lower wealth starting point, on average, and lower incomes; the rate of growth in their super balances may yet pick up in the coming decade. Alternatively, households currently in their 60s and 70s may have been able to grow their superannuation assets faster when generous concessions were temporarily available in the 2007 period, a treatment that is no longer available to younger households and that would have been immaterial for most of them at the time.

Focusing on the wealth of retired households in 2014 versus 2002, we can observe that there has been significant growth in household wealth in the cohort currently in their 70s. Their household wealth is nearly double that of their peers in 2002. In this cohort, superannuation has been the fastest growth storage of wealth between the two periods, rising by more than threefold for households in the 70-74 age range in 2014 compared with households in 2002 – from an average of $54 000 per household in 2002 to $251 000 in 2014, and by twofold in the 75-80 age range from $44 000 to $156 000. This rate of growth for households in their 70s is likely due to concessional contributions, given the declining rate of labour participation for this age cohort. Households that are currently in their 60s have also seen superannuation as the fastest growing asset within their portfolio.

[10] The average net worth for households aged 35-39 in 2014 was $610 466 (ACFS analysis based on DSS 2015).

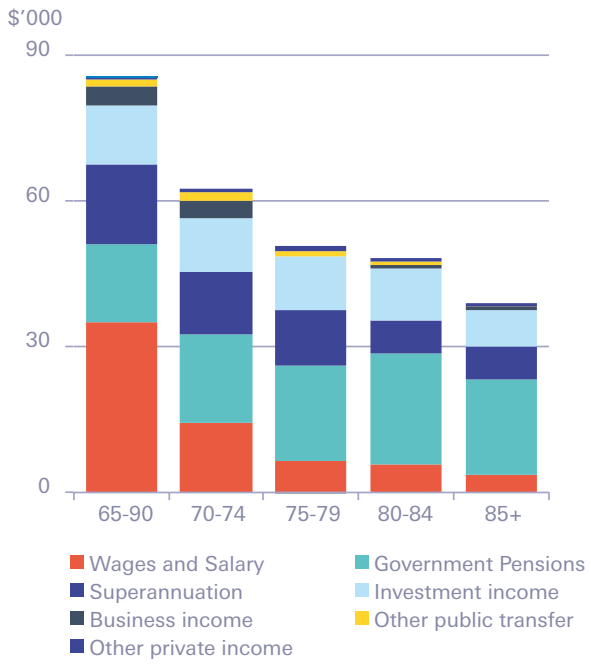
A final observation is about the importance of the owner occupied home in a retiree's portfolio. As discussed previously, housing costs for retirees who do not own their own home are significant, and comprise 40 per cent of total household expenditure for renters. The vast majority of retirees do own their own homes, and the owner-occupied home remains an important store of wealth. At the same time, the share of total wealth contributed by the home has declined somewhat as superannuation has increased. In the 2002 survey, the owner-occupied home represented 50 per cent or more of net household wealth for households aged 70 and above. For households in their 70s in 2014, the owner-occupied home represented around 45 per cent of net wealth, and was less than 40 per cent of net wealth for households in their 60s.

3.12 Retirement income comes from a number of sources

With retired households growing wealthier, this section now considers the translation of that wealth into income. Retirement is funded from various sources, as shown in Figure 17 below. Wages and salaries remain an important source of income for younger 'retirees', suggesting retirement may be being deferred. Older retirees receive relatively more income from investments (rent, interest and dividends) which may be a result of their employment and savings before the introduction of the Superannuation Guarantee. For retirees of all ages, as of 2014 the Age Pension is an important source of retirement income; as noted previously, 70 per cent of the current retired population received the Age Pension in part or in full.

It is important to distinguish between superannuation and other sources of 'income'. Income from superannuation represents a 'running down' of a financial asset, while income from other sources will likely increase net wealth. Measures of household income should be considered alongside household wealth.

Figure 17: Average household income by source, 2014 ($'000)



Note: Superannuation lump sum withdrawals are capture in 'other private income'.

Source: ACFS analysis based on Department of Social Services 2015

In Section 3.8, we noted that retirees whose major source of income is the Age Pension have (on average) much lower levels of expenditure and standard of living than those who are able to fund their retirement through private savings or earnings. The continued maturation of the superannuation system should, over time, allow the reliance on the Age Pension to decline and increase the share of the retired population that is self-funding their retirement, either in part or in whole. The extent to which the superannuation system evolves toward, is a supplement to, or replacement of, the Age Pension will depend on policy decisions about contribution rates and means testing arrangements.

4. Conclusions

4.1 Implications for superannuation trustees

With the Federal Government accepting the FSI's recommendation to introduce Comprehensive Income Products for Retirement, and proposing changes to the *Superannuation Industry (Supervision) Regulations 1994* designed to encourage innovation in retirement income product design, it seems likely that more trustees will begin offering income products to their members. While income products will share some features (a regular and stable income stream, longevity risk management and flexibility to access capital), trustees may offer products tailored to their funds' members. The HILDA data can inform this design.

The majority of retired households in Australia exhibit modest expenditure levels

The vast majority of retired-age households in Australia are reporting a level of expenditure that aligns with a modest standard of living as established by other benchmarks. The average level of household expenditure by age cohort – whether single or couple – is at or below the ASFA modest standard of living across all retired households. The median reported level of expenditure is considerably below the average.

This finding may be somewhat understating total household expenditure amongst higher income households due to the exclusion of some discretionary items in the HILDA study. Nonetheless, these items appear unlikely to significantly alter the conclusions of this analysis.

Expenditure does not appear to decline through retirement

A key finding from the HILDA data is that expenditure does not appear to decline through retirement (or exhibit the 'retirement spending smile'). Instead, income looks relatively constant throughout retirement. This is fundamental to the design of income products, suggesting they should aim to deliver a stable (inflation adjusted) income for the length of retirement.

This finding may be refined from access to data on aged cared and leisure, however barring a large deposit payment to enter a residential facility, it might be expected that (means tested) aged care fees would be offset by a decrease in discretionary spending.

There is a wide range of expenditure levels and cost of living

There is a wide range of expenditure levels among retirees, reflecting the heterogeneity of retirees. The more information trustees can gather about their members, the better their ability to protect their expenditure patterns and income needs. This study confirmed previous research indicating that age, marital status and homeowner status are three critical pieces of information in relation to anticipated levels of required expenditure. In addition, this study has shown how significantly expenditure levels vary by locations, reflecting differences in cost of living. Locational data – including for some superannuation funds with concentrations of members in a specific demographic location – may be extremely useful in future product design.

The majority of retired-age households are not saving in retirement

High-level analysis comparing average income and expenditure rates across the retired population in Australia has led some to suggest that Australian households are saving in retirement. The more granular level of HILDA data allows income and expenditure data to be analysed by income decile. Considered this way, it becomes apparent that only the top 30 per cent of income-earning households remain net savers in retirement.

Superannuation is growing in importance for retirees

The HILDA data show superannuation is just one component of retirement income. Commentary suggesting superannuation balances should, alone, be sufficient to generate a 'comfortable' lifestyle ignores the retirees' complete portfolios at the present time. As the household wealth analysis shows, many of today's retired households also have significant savings outside superannuation in property, financial, and business assets. For younger households (aged 65-75) the major source of private income is wages and salary. For older households (aged 80 and above) the major source of private income is investment income (including interest, rent and dividends). The Age Pension is also an important source of income at all ages.

Despite the continued reliance on the Age Pension, superannuation appears to provide a valuable supplement to income. The HILDA data show retirees with major sources of income other than the Age Pension have significantly higher expenditure levels and (presumable) standard of living than retirees who are fully dependent on the pension.

Younger cohorts, who have had access to the Superannuation Guarantee for a greater proportion of their careers, have significant wealth in superannuation when they enter retirement. As their income from wages/ salary declines, superannuation will become a more important source of income for these retirees and may defer dependence on the Age Pension.

For future cohorts of retirees who have experienced even greater periods of employment under the superannuation guarantee, superannuation will be an even more important component of household wealth and source of retirement income. However, reducing the rate of accumulation in superannuation amongst younger workers by either delaying the increase in the superannuation guarantee or ratcheting down the ability to make additional concessional contributions may limit the ability of future retirees to self-fund their own comfortable standard of income in retirement.

4.2 Improving data on expenditure patterns

The HILDA survey provides valuable data and insight into the expenditure levels and patterns of Australian retiree households. However, there are significant gaps in the data which would improve the understanding of retirees income needs, and aid the development of retirement income products.

Additional expenditure items

As discussed, the HILDA survey provides expenditure data on 20 items covering food, alcohol and cigarette, utilities, home maintenance, transport, healthcare, education, clothing and housing. Expanding the survey to include additional items would provide a more complete picture of retirement cost of living.

- A number of expenditure items are capture by the ASFA income standards but not included in the HILDA survey. Adding these items (which include household goods and services and leisure activities) would allow a direct comparison between actual expenditure and the most widely used retirement income targets. Expenditure on a number of these items (new and used vehicles, computers and related devices, audio visual equipment, white goods, furniture, holidays and travel costs) were initially measured by the HILDA survey, and removed after 2010.
- Aged care costs are not explicitly measured in the HILDA survey. Some expenditure on Home and Community Care services may be captured by home maintenance or out-of-pocket healthcare payments. Residential aged care costs are not measured. While only a small proportion of retirees enter residential care (and usually for a relatively short period) the costs can be significant. These include the refundable accommodation deposit, basic daily care fee, means tested fee and extra services fee. Inclusion of these fees may suggest a greater need for flexible access to capital – while some costs are means tested the average cost of a refundable accommodation deposit was $333 000 in 2015.

Savings behaviour and income sources

Comparison of retiree households' income and expenditure showed that household expenditure exceeded income for those with the lowest 20 per cent of income. Based on the data available from the HILDA survey it is unclear how these households are financing this expenditure. Expanding the sources of income measured would provide additional information about these households who may be at risk of financial hardship.

- Withdrawals from savings accounts. The 'income' measurement includes only income from interest on these accounts.
- Sale of assets, including financial assets, property, vehicles or collectibles. The HILDA survey only counts interest, rent and dividends from these assets toward income. Income from any sale is not visible.
- Loans. These households may be drawing payday loans, personal loans, or reverse mortgages to finance their expenditure. While the total value of household liabilities is recorded it is not clear how much income this contributes.

Expenditure preferences

Data from the HILDA survey show low levels of retirement expenditure when compared with widely used income standards. What is unclear is whether these levels reflect low expenditure needs in retirement (as activity decreases), or whether retirees are deliberately limiting their expenditure below their desired level. If household expenditure is being constrained (and retirees are not achieving an adequate standard of living), does this reflect the retirees' desire to self- insure against longevity risk, to leave a bequest, or some other reason?

The survey allows comparison of household expenditure against income and self-reported satisfaction, which suggest expenditure is not closely linked to either variable, but still does not explain expenditure preferences.

The retirement module of the HILDA survey (released every four year, last in 2011) also includes some questions about retirement expectations and experience:

- *Do you expect your retirement income to be more than enough, just enough or not enough to maintain your current standard of living?*
- *Would you say (your standard of living) is better or worse since you retired?*
- *Thinking about your current income [from all sources], is this more or less than you had expected it to be when you retired?*

A useful addition to the survey would be some examination of retirees' expenditure and savings preferences and decisions. These would be valuable to researchers, policymakers and product providers.

Healthcare costs

The HILDA data suggest private health costs (fees paid to health practitioners, medicines, prescriptions and pharmaceuticals, and private health insurance) are relatively constant through retirement. Simultaneously, research shows the cost of delivering healthcare increases with the patient's age. As Australia's population ages and the baby-boomers move through retirement these costs are projected to grow significantly. Whether these costs remain primarily with government or are increasingly passed on to the retiree population will be a policy question for the future.

Fund member demographics

The published data provide useful insights into the expenditure patterns and economic positions of Australian retirees. However, as discussed, retirees are a diverse group with distinct wealth levels and costs of living. Alternatively, some superannuation funds have quite homogenous membership. For these funds, the HILDA data may be able to provide quite an accurate picture of their members' assets held outside of superannuation, income from welfare payments and private (non-superannuation) sources, and expenditure patterns. Trustees could use these details to estimate the income streams their members would require from superannuation, and design appropriate income products.

> A key finding is that expenditure does not appear to decline through retirement

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Appendix 1: The household income and labour dynamics in Australia survey

This report uses data from the Household Income and Labour Dynamics in Australia (HILDA) survey to examine patters of expenditure amongst households of retirement age in Australia. Initiated in 2001, HILDA is a longitudinal panel survey which collects information on household-level economic and subjective well-being, labour market dynamics and family dynamics. Interviews are conducted annually with all adult members of each household, who are followed over time. As well as the core annual survey an additional 'wealth' module is conducted every four years. The latest data available are from survey WAVE 14, conducted in September 2014 (Summerfield et al. 2016).

The value of the HILDA database is that it follows individual households over time, allowing analysis of households' changing economic positions. It also provides a more granular level of analysis across age and income cohorts than is generally available utilising other public data sources. The breadth of the survey allows analysis of the relationship between a number of social and economic variables.

The HILDA survey sample (initially 7682 households) was selected in 2001 using a stratified three-stage clustered design. It was restricted to households living in private dwellings, stratified by state, and within the five most populous states by metropolitan and non-metropolitan areas. Household locations were selected systematically to ensure the sample had a wide spread across Australia, with probability proportional to the number of (occupied and unoccupied) dwellings. The HILDA sample has evolved over time due to population changes, household changes, and sample attrition. To remedy this, 2153 households were recruited to the survey in 2011. To ensure the results are still representative cross-sectional and longitudinal populations weights are provided. The results presented in this paper have all been adjusted using the provided cross-sectional weights.[11]

The HILDA sample included 9538 households in 2014. Of these, 2112 households were represented by a 'first responding person' aged 65 and above (considered here to be 'retiree households'). Of these retiree households 1069 are single person households, and 1010 are couples households; 1669 are home owners, 352 are renters, and 84 live rent free.

Table A1 shows the income, expenditure and wealth items measured by HILDA.

Table A1: HILDA income, expenditure and wealth variables, 2014

INCOME	EXPENDITURE	WEALTH
Private Income • Wages and salary • Business income • Investment income • Regular private pensions • Regular private transfers • Irregular income a Public transfers • Government pensions • Government parenting payments • Government allowances • Family payments • Bonus payments • Other non-income support payments • Other government benefits • Other regular public income • Foreign pensions	Household expenditure • Groceries • Alcohol • Cigarettes and tobacco • Public transport and taxis • Meals eaten out • Motor vehicle fuel • Men's clothing and footwear • Women's clothing and footwear • Children's clothing and footwear • Telephone rent and calls, internet charges • Private health insurance • Other insurance • Fees paid to health practitioners • Medicines, prescriptions and pharmaceuticals • Electricity, gas bills and other heating fuel • Repairs, renovation and maintenance to home • Motor vehicle repairs and maintenance • Education fees Housing • Rental payments • Mortgage repayments	Assets • Bank accounts • Superannuation • Cash investments • Equity investments • Trust funds • Life insurance • Home asset • Other property assets • Business assets • Collectibles • Vehicles • Credit cards Liabilities • HECS debt • Personal debt • Business debt • Home debt • Other property debt

Notes: a 'Irregular income' includes superannuation lump sums, as well as inheritances, redundancies, irregular payments from parents, and lump sum workers compensation pay-outs.

Income and expenditure are measured annually; wealth is measured every four years (2002, 2006, 2010 and 2014). A number of expenditure items were discontinued after 2010: new vehicles, used vehicles, computers and related devices, audio visual equipment, white goods, furniture, holidays and travel costs.

Source: Department of Social Services 2015

[11] Details about the sample selection and weighting are provided in (Watson 2012).

One limitation of the HILDA sample is that it excludes people living in remote and sparsely populated areas. Further, given the longitudinal nature of the survey, it does not include people who have arrived in Australia since 2011. Given the low rates of migration amongst older Australians this issue should have minimal effect on the results presented in this report.

A more significant limitation in assessing retirement expenditure is that the survey excludes some areas of expenditure. It does not measure the costs of aged care. Given recent changes to the funding of Aged Care these costs are not widely understood, and data on their magnitude and patterns of spending would be useful to researchers.

HILDA also does not ask respondents to report on all categories of leisure activity, including for example holidays and some areas of home renovation. These are areas of expenditure that are likely to be higher in the early stages of retirement, and higher amongst higher income households, and so the data may be somewhat skewed. Finally, the HILDA survey only asks respondents to report their actual expenditure and does not incorporate benefits. The actual cost of a household's health care or public transport may therefore be under-reported if these costs are being born by government through pensioner entitlements.

Appendix 2: Other retirement expenditure data

Australian Bureau of Statistics

The Australian Bureau of Statistics' (ABS) Household Expenditure Survey (HES) provides detailed expenditure data, covering the levels and patterns of household spending on over 600 items. It also covers how expenditure varies according to income levels and other household characteristics, such as size, location, and source of income throughout Australia. The HES was first released in 1974 and is currently published every six years. The latest HES (conducted over the 2009-10 financial year) comprised a sample of 9774 households. Every six year the HES is integrated with the Survey of Income and Housing (SIH). The SIH was conducted biennially (it was conducted annually from 1994 to 2003). The latest SIH was conducted in 2013-14 and covered approximately 8000 households. Previously known as the Survey of Income and Housing Costs, the SIH measures household income, wealth and housing costs. It also collects information about sources of income, amounts received, housing characteristics, household characteristics, and personal characteristics. In the combined sample, some dwellings are selected to complete both the SIH questionnaire and the HES questionnaire, while other dwellings were selected to complete the SIH questionnaire only. The combined survey publishes data on expenditure, income, housing, assets and liabilities, alongside general information on household age, birthplace, cultural background, employment, education and disability (Australian Bureau of Statistics 2011). The sample size of the ABS data is similar to that of the HILDA data set, but household income, wealth and expenditure data cannot be compared on a single household basis as not all dwellings complete all surveys.[12]

ANU, Rice Warner and AMP

In 2008 a research team from the Australian National University received a grant from the Australian Research Council to explore *Expenditure needs and drawdown of retirement savings during later life: how important are demographic factors and financial resources?*. This project involved a survey of 3485 members of National Senior Australia designed to answer the questions:

- What are the causes of differences between respondent needs and consumption patterns over the course of retirement?
- How do respondent concerns about specific financial risks in retirement match with the strategies that they have taken or intend to take to manage these risks?
- Have respondents changed their superannuation and non-superannuation savings and investments since the GFC, and if so, what changes have they made and why have they made these changes?
- To what extent are individuals with different characteristics likely to amend their lifestyle downwards when faced with financial loss?
- How do preferences for short-term consumption versus saving vary when faced with financial gain?
- How do unexpected adverse events change an individual's financial behaviour including consumption patterns?

Their survey found: retirees are concerned about their financial wellbeing, with many obtaining financial advice and reducing household consumptions; the major financial concern cited was that inflation would erode the value of savings and investments; financial literacy levels are low, especially among younger retirees (Higgins and Roberts 2011).

Australian Taxation Office

The Australian Taxation Office (ATO) publishes data on superannuation drawdown behaviour. These data show the average income withdrawn from superannuation accounts annually by member age. These data provide an estimation of retirement income. As it only reports income from superannuation it does not reveal the full scope of retirement income. Further, it is unclear how much of this income is spent each year, and how much is reinvested outside the superannuation system.

Health and Retirement Study (USA)

The University of Michigan Health and Retirement Study (HRS) is a longitudinal panel study that surveys a representative sample of approximately 20 000 people in America over the age of 50. The survey is conducted biennially, with the support of the National Institute on Aging and the Social Security Administration. The survey is designed to explore changes in labour force participation and the health transitions of individuals in their final years of employment and through retirement.

[12] The Survey of Income and Housing and Household Expenditure surveys are partially integrated every six years allowing comparison of income and expenditure across a sub-sample of households. This last occurred in 2009-10.

The survey was initiated in 1992 and collects information on income, work, assets, pension plans, health insurance, disability, physical health and functioning, cognitive functioning, and health care expenditures. A supplemental survey to the HRS – the Consumption and Activities Mail Survey – specifically tracks consumption and expenditure in the final years of employment and through retirement. Data collected in the HRS can be linked to other administrative records including Social Security, Medicare, and Employer Records enabling deeper analysis of the experience of retirees. (University of Michigan 2016)

Consumer Expenditure Survey (USA)

The Consumer Expenditure Survey is conducted by the Bureau of Labor Statistics and the U.S. Census Bureau. It comprises the Quarterly Interview Survey and the Diary Survey, that together provide information on the buying habits of American consumers, including data on their expenditures, income, and household characteristics. The results are used to measure the impact of policy changes on economic groups, to determine thresholds for the Supplemental Poverty Measure, by businesses and academic researchers studying consumers' spending habits and trends, and to revise the Consumer Price Index. The most recent data available are for 2014-15.(United States Department of Labor 2015)

Family Expenditure Survey (UK)

The Family Expenditure Survey has been conducted by the Office for National Statistics since 1950. It provides information on a range of economic and social data including households and personal incomes, and expenditure. The survey is designed primarily to produce data for the Consumer Price Index and the Retail Price Index and national accounts estimates of household expenditure, and analysis of the effect of taxes and benefits. In 2014, 4982 households in Great Britain took part in the survey. (Economic and Social Research Council 2016)

Appendix 3: Retirement expenditure research

A Longitudinal Study of Income, Assets and Decumulation – Centre of Excellence in Population Ageing Research

Wu et al. studied the wealth and income of a group of Centrelink recipients (that is, retirees receiving a full or part Age pension) using a longitudinal data set compiled by the Department of Families, Housing, Community Services and Indigenous Affairs. They found expenditure levels low compared with the ASFA Income Standards – for homeowners, only the top two quintiles had an expenditure above the ASFA 'modest' level (well below the 'comfortable' level). While younger retirees ran down their financial wealth, older retirees were more likely to maintain their assessable asset (most households assets excluding the family home)[13] balance or even increase their savings. Despite having relatively low levels of wealth and income, participants tended to preserve both their financial and residential wealth (Wu et al. 2015).

Our analysis similarly finds household expenditure levels appear low compared with the ASFA Income Standards (section 3.1). Our analysis does not find any substantial differences in the expenditure levels of younger and older retirees (section 3.2).

Super Tax Targeting – Grattan Institute

Daley and et al., assess the impact of superannuation tax concessions which they argue should be better targeted to make the current system less expensive and achieve greater equity. Using data from the 2009-10 ABS Household Expenditure Survey, they contend that the ASFA 'comfortable' income standard is generous enough to fund an 'affluent' lifestyle, above that enjoyed by most Australians while they are still working. They note income needs are lower in retirement than while working, as retirees are no longer saving and are unlikely to be making mortgage repayments. They further claim that less than half of all retirees draw down their assets in retirement, and 40 per cent are net savers.(Daley, Coates, and Wood 2015)

Our analysis similarly finds that the median households of any age do not meet the ASFA 'comfortable' Income Standards – even among those still working (section 3.1). We do not explore wealth levels through retirement.

Living Standards after Retirement: Perceptions and Expenditure Patterns – Social Policy Research Centre

Bradbury and Mendolia used data from two ABS Household Expenditure Surveys (1998-99 and 2003 04) to examine expenditure patterns in retired and non-retired households. Their analysis showed income falls in retirement while financial satisfaction increases. This is despite their analysis implying after housing income should increase post-retirement to allow households to maintain the same level of expenditure they had prior to retirement (especially for low income households). (Bradbury and Mendolia 2012)

Our analysis similarly finds older retirees have lower levels of income and high levels of financial satisfaction than younger cohorts of retirees (section 3.5 and 3.10).

Variability in expenditure preferences among elderly Australians – Higgins and Roberts

Higgins and Roberts analysed data from the ABS Household Expenditure Survey to explore variation in expenditure preferences with respect to age and some socio-demographic variables (after controlling for financial restraints). They developed expenditure estimates for different ages and levels of financial resources, which were compared with the ASFA Income Standards. Their research found evidence of a substantial decline in total expenditure (after controlling for financial resources) – for the median pensioner expenditure was estimated to have dropped between 20 and 30 per cent between ages 55-64 and 75+, and the drop was even more significant for self-funded retirees. Their findings suggest a drop in expenditure needs and preferences with advancing age for non-financial reasons, and a possible bequest motive among wealthier retirees. (Higgins and Roberts 2011)

Our analysis found little evidence of a decrease in expenditure levels through retirement (section 3.2).

[13] Assets included in the Age Pension means test.

Appendix 4: Comparison of ASFA and HILDA expenditure figures

The following tables compare ASFA's suggested retirement expenditure with observations from the HILDA survey.

All figures reported below are for couples with no children or dependents.

Household expenditure – food, 2014 ($)

	65-84		85+	
ASFA	Modest	Comfortable	Modest	Comfortable
Groceries and fresh food	8,020	9,955	8,020	9,955
Lunches and dinners out	1,278	4,106	652	2,092
HILDA	Median	Average	Median	Average
Groceries	8,368	9,431	10,042	11,826
Meals eaten out	1,606	2,563	1,421	2,247

Household expenditure – alcohol and cigarettes, 2014 ($)

	65-84		85+	
ASFA	Modest	Comfortable	Modest	Comfortable
Alcohol consumed in home (or equivalent spent)	2,053	770	2,092	785
Gifts and/or alcohol or tobacco	0	0	0	0
HILDA	Median	Average	Median	Average
Alcohol	9,431	735	11,826	735
Cigarettes and tobacco	2,563	0	2,247	0

Household expenditure – utilities, 2014 ($)

	65-84		85+	
ASFA	Modest	Comfortable	Modest	Comfortable
Electricity and gas	2,966	3,074	3,074	2,966
Communications	865	1,727	1,711	856
HILDA	Median	Average	Median	Average
Electricity bills, gas bills and other heating fuel	1,616	1,330	1,760	1,130
Telephone rent and calls/ internet charges	1,902	1,236	2,038	1,100

Household expenditure – home maintenance and insurance, 2014 ($)

	65-84		85+	
ASFA	Modest	Comfortable	Modest	Comfortable
Home improvements	0	475	484	0
Repairs and maintenance	594	832	848	605
Rates	1,426	1,675	1,706	1,453
Building and contents insurance	1,129	1,426	1,453	1,155
HILDA	Median	Average	Median	Average
Other insurance	1,829	1,540	1,384	1,331
Home repairs, renovations and maintenance	2,056	460	1,019	242

Household expenditure – transport, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
Public transport	282	282	520	520
Taxi fares	0	0	2,340	2,080
Car transport and running costs	4,844	7,288	0	0
HILDA	**Median**	**Average**	**Median**	**Average**
Public transport and taxis	214		276	
Motor vehicle fuel	2,112	1,499	1,588	886
Motor vehicle repairs and maintenance	910	620	664	478

Household expenditure – healthcare and insurance, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
Co-payments and out of pocket	607	2,014	1,994	1,989
Chemist	157	1,148	2,080	1,040
Health insurance	3,130	3,904	4,096	3,284
HILDA	**Median**	**Average**	**Median**	**Average**
Fees paid to health practitioners	1,206	520	1,018	549
Medicines, prescriptions and pharmaceuticals	647	380	737	382
Private health insurance	1,840	1,670	1,456	1,527

Household expenditure – clothing, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
Clothing and footwear	1,532	3,065	3,065	1,532
HILDA	**Median**	**Average**	**Median**	**Average**
Men's clothing/ footwear	494	310	321	257
Women's clothing/ footwear	929	438	1,033	408
Children's clothing/ footwear	63	0	43	0

Household expenditure – education, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
N/A	–	–	–	–
HILDA	**Median**	**Average**	**Median**	**Average**
Education Fees paid to Schools, Universities and Other Education Providers	127	0	599	0

Household expenditure – rent and mortgage, ASFA and HILDA, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
N/A	–	–	–	–
HILDA	**Median**	**Average**	**Median**	**Average**
Rent payments	902	0	2,455	0
Mortgage repayments	1,301	0	–	0
Second mortgage repayments	477	0	18	0

Household expenditure – household goods and services, ASFA and HILDA, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
Household cleaning and other supplies	791	1,319	1,319	791
Home and community care contribution	0	0	1,560	1,560
Domestic cleaning services	0	0	2,600	0
Cosmetic and personal care items	151	157	157	151
Barber or hairdressing	455	1,056	1,056	455
Music and CDs	0	110	110	0
Newspaper and magazines	98	423	423	98
Computer, printing and software	216	216	216	216
Household appliances	153	606	606	153
Pest control, alarm services	0	648	648	0
HILDA	**Median**	**Average**	**Median**	**Average**
N/A	–	–	–	–

Household expenditure – leisure, ASFA and HILDA, 2014 ($)

ASFA	65-84		85+	
	Modest	Comfortable	Modest	Comfortable
Membership clubs	99	492	501	100
TV, DVDs, digital cameras	46	91	93	47
Cinema, plays, sport and day trips	959	688	351	489
Domestic vacations	1,868	3,934	2,005	952
Overseas vacations	0	2,753	0	0
Sundry items	590	1,518	1,548	601
HILDA	**Median**	**Average**	**Median**	**Average**
N/A	–	–	–	–

Appendix 5: HILDA sample

The Household, Income and Labour Dynamics in Australia (HILDA) survey is a household-based panel study which began in 2001. It collects information about households' economic and subjective well-being, labour market dynamics and family dynamics.

Data in this primarily drawn from the most recently data available – the WAVE 14 survey was conducted in 2014 and published in 2015. Supporting data are drawn from earlier WAVES of the survey.

Interviews are conducted annually with all adult members of each household – these individuals are followed from year to year. As well as the core survey additional modules are included each year. A wealth module was included in 2002, 2006, 2010 and 2014.

The HILDA survey sample (initially 7682 households) was selected in 2001 using a stratified three-stage clustered design. It was restricted to households living in private dwellings, stratified by state, and within the five most populous states by metropolitan and non-metropolitan areas. Household locations were selected systematically to ensure the sample had a wide spread across Australia, with probability proportional to the number of (occupied and unoccupied) dwellings.

The HILDA sample has evolved over time due to population changes, household changes, and sample attrition. To remedy this, 2153 households (5477 individuals) were recruited to the survey in 2011. To ensure the results are still representative cross-sectional and longitudinal populations weights are provided. The results presented in this paper have all been adjusted using the provided cross-sectional weights.

The HILDA sample included 9538 households in 2014. Of these, 2112 households were represented by a 'first responding person' aged 65 and above.

The tables below summarise the characteristics of households in the sample, with a reference person aged 65 and above.

AGE	NUMBER OF HOUSEHOLDS
65-69	676
70-74	488
75-79	375
80-84	307
85+	266

HOUSEHOLD TYPE	NUMBER OF HOUSEHOLDS
Couple family with no dependents	911
Lone person	959
Other	242

HOME OWNERSHIP	NUMBER OF HOUSEHOLDS
Home owner (including mortgagees)	1,669
Renting	352
Other	91

LOCATION	NUMBER OF HOUSEHOLDS
ACT	39
NSW – Sydney	324
NSW – balance of state	350
NT	6
QLD – Brisbane	164
QLD – balance of state	232
SA – Adelaide	126
SA – balance of state	69
Tasmania	67
Victoria – Melbourne	322
Victoria – balance of state	206
WA – Perth	147
WA – balance of state	60

PENSION STATUS	NUMBER OF HOUSEHOLDS
Self-funded (receive no pension income)	464
Pensioner – pension is largest source of income	1,109
Pensioner – pension is not largest source of income	485

Notes

Australian Institute of Superannuation Trustees
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