

Involuntary Retirement

Characteristics and Implications

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Executive Summary

Increases in the official retirement age (ORA) are inevitable as we live longer:

While the official retirement age (ORA) is defined as the age at which one can access the Age Pension, there are many different approaches to retirement. For example, it is now common for individuals to “transition to retirement” by reducing work hours or shifting to a less demanding role in the later years of one’s career. Furthermore, there are cases of individuals “retiring” and then continuing either paid or volunteer employment in another firm or organisation.

Despite the implementation of the Compulsory Superannuation Guarantee (CSG) in 1992, it is expected that outlays on aged services, pensions and health will make up almost half of all government expenditure in 2050.¹ The aged inverse dependency ratio, a measure of the number of people of prime working age to those over 65 has declined steadily from more than 15 in 1901 to currently sit below 5. Treasury forecasts suggest that this will continue to decline and by 2050, 2.7 workers will be supporting each Australian above 65.²

Since the introduction of the Age Pension in 1908, the official retirement for males has increased by only 2 years (from 65-67), although the life expectancy at birth for males has increased from 55 to 80 years over that period. While the retirement age for women was initially 65 years, it was reduced to 60 in 1910 and then gradually increased back to 65 years from 1994.

The ORA has proved to be an effective method for increasing workforce participation amongst older workers internationally. Despite access to superannuation from the preservation age of 55 years, and the potential incentive this provides to Australians to retire early, the greatest rate of retirement is clustered around the ORA, suggesting that the ORA is a key determinant of retirement age.

A study examining the impact of a gradual shift in the ORA from 60-65 for females, announced in 1994, found that an increase in the eligibility age of one year resulted in a decline in retirement probability each year by approximately 10 per cent.

Retirement is an individual decision – down to individual circumstances and not everyone make a free choice:

Almost three-quarters of males and more than 40 per cent of females that retire before the age of 55 do so involuntarily. Health reasons are by far the biggest driver of early retirement however retrenchment and inability to find work also play a role. When a broader definition of involuntary retirement, which includes retiring to care for others, is used the proportion of females who retire involuntarily before the age of 55 increases to almost 60 per cent.

¹ Australian Government (2010).

² *ibid*

Who is at risk of involuntary retirement?

The international literature suggests factors that are predictors of involuntary retirement include work context, demographics, and human capital and finances.

ABS data shows that “community and personal service workers”, “clerical and administrative workers”, “sales workers” and “labourers” are between 50 and 35 per cent more likely to retire before the age of 60 than professional workers. Furthermore, the likelihood that professionals, technicians and managers work beyond 65 is more than 50 per cent greater than in any other occupation.

While race has been a determinant of involuntary retirement in international studies, the Australian data indicates only a negligible discrepancy in the age of retirement between those born overseas and those born in Australia.

A more telling determinant of early retirement in Australia is English language proficiency with approximately 50 per cent of Australian males with a strong command of English working until at least 60 compared to just over a quarter of Australian males with poor English. English proficiency is perhaps even more important for females with less than 10 per cent of females with poor English working beyond 60.

When the broad definition of involuntary retirement is used, the proportion of female involuntary retirees increases significantly (but is still much lower than males) due to around 15 per cent of women below the age of 55 retiring in order to care for somebody. This is consistent with prior research that has found that two key drivers of early retirement in women are the desire for joint retirement of couples³ and to care for a loved one.

Level of education is a strongly correlated with early retirement with only 16.5 per cent of males with a degree retiring before the age of 60 as opposed to almost 35 per cent of those without a post-school qualification. For females the prevalence of early retirement of those without a post-school qualification is much higher with 50 per cent of all females in this category retiring before 55.

As a large proportion of superannuation balances accrue in the last decade of employment, it is hardly surprising that involuntary retirees tend to have lower retirement savings and therefore lower incomes post retirement. Occupations with the highest incidence of early retirement are “workers in community and personal service”, “clerical and administrative workers”, “sales workers” and “labourers”, are also the occupation types with average weekly salaries below \$1,000 a week.

Research suggests that should involuntary employment be due to redundancy, low income workers will be much more likely to experience job search exclusion than those with a salary above 65,000 (53% compared to 24%). Should the ORA be raised, the potential duration of reliance on Newstart Allowance may increase for some older Australians that have been retrenched and are unable to find work.

³ See for example, Szinovacz, (2003)

Not only are those who retire involuntarily due to health reasons likely to have lower incomes, but individuals with long term health conditions will be faced with additional expenditure, particularly where pharmaceuticals are concerned, which will erode their financial well being.

Prior research has shown that social security programs are interlinked and that in the event that one benefit becomes less accessible; there is a likely to be a process of benefit substitution, that is a shift to an alternative social security program. Research found that the impact of increasing the ORA for Australian women from 60 to 65 led to substantial increases of between 12 and 24 per cent in usage of alternative pensions for cohorts no longer eligible for the age pension.

Implications for the superannuation industry

These findings have a number of implications for the superannuation industry and superannuation policy including whether more flexibility be given to early withdrawal of superannuation savings for members that meet specified criteria should the preservation age be increased. Furthermore, the superannuation industry should be supportive of national policy aimed at improving English proficiency and retraining older workers that have been made redundant.

Implications for individual funds

The findings in the report also have implications for the product offerings and services provided by individual superannuation funds. In particular, funds need to expect members to retire at different ages and to accommodate this variability through better individual advice on these issues. Funds can also play a key role to play in furthering the research undertaken in this report with their knowledge and access to data on involuntary retirement. This research would provide an important evidence base for future changes to retirement policy.

1. Introduction

In the AIST-ACFS Research Report, “The Age of Retirement” (2012), it was suggested that based on projected trends in the Australian population, there is scope for the introduction of policies that incentivise the deferral of retirement. The report argued that two avenues that should be considered for increasing workforce participation amongst older Australians are 1) raising both the preservation age and the official retirement age and 2) changing the age pension means testing arrangements.

The debate over increasing the official retirement age is receiving an increasing amount of public attention, most notably in the recent Productivity Commission Report, “An Ageing Australia: Preparing for the Future” (2013). Increasing older age participation in the workforce has considerable public benefit in terms of reducing the reliance on public funding and enhancing the sustainability of the retirement system.

But, as the AIST-ACFS Report highlighted, while in aggregate the proposed changes would improve both Australia’s fiscal sustainability and productivity, those that currently leave the workforce involuntarily may be worse off.

This report seeks to extend the research conducted in the Age of Retirement Report by contrasting the impact that increasing the official retirement age (ORA) will have for Australia in the aggregate against the consequences that it may have for those that leave the workforce early and without choice.

The first section provides an overview of recent changes in the ORA both in Australia and internationally and investigates the effect this has had on actual retirement ages. This is followed by a review of the life-cycle theories on which the Australian retirement system has been built and identifies areas in which the assumptions made in these theories do not hold. An analysis of the extent of involuntary retirement in Australia follows with a profile of those most vulnerable to involuntary retirement and an examination of the impact that early retirement can have on post-retirement outcomes.

The report concludes by looking at the potential issues for involuntary retirees that may result from an increase in the ORA and recommendations to guard against these adverse consequences are provided.

2. The Retirement “Problem”

2.1 What is retirement

Before delving into involuntary retirement and the impact that retirement is likely to have on Australian prosperity if current trends continue, it is important to define retirement and explore how this concept has changed since the middle of the 20th century.

The Oxford dictionary defines retirement as “the action or fact of leaving one’s job and ceasing to work”. While this definition provides a black and white delineation between retired and not retired, the perception of retirement in modern society has many shades of gray. For example, it is now common for individuals to “transition to retirement” by reducing work hours or shifting to a less demanding role in the later years of one’s career. Furthermore, there are cases of individuals “retiring” and then continuing either paid or volunteer employment in another firm or organisation.

An alternative measure of retirement could be based on change in employment circumstances subsequent to reaching the official retirement age (ORA) - defined by the OECD as the age at which one can receive the age pension.⁴ However, this fails to take into account those that either choose or involuntarily retire prior to reaching the official retirement age. It also fails to account for those that continue to work beyond the age of 65, something that is becoming increasingly common given average life expectancy is currently 15 to 20 years greater than the official retirement age.

For the purpose of this report, the Australian Bureau of Statistics’ definition of retirement, “people who had previously worked for two weeks or more and had retired from work or looking for work, and did not intend to look for, or take up, work in the future” will be used, with the caveat that this definition fails to account for those that retire and subsequently re-enter the workforce.⁵

2.2 Australia’s ageing population

Providing financial security in retirement has become an increasing challenge in developed countries with ageing populations. The declining ratio of working age people to those over 65 has seen governments around the world implement policies including mandatory retirement savings, incentives for older workers to remain in the workforce and directly raising the ORA to both increase older age workforce participation and to reduce the fiscal burden of providing an age pension.

Australia has not been immune from the costs associated with an ageing population and despite implementing a mandatory retirement savings mechanism in 1992 in the form of compulsory superannuation, it is expected that outlays on aged services, pensions and health will make up almost half of all government expenditure in 2050.⁶ The aged inverse dependency ratio, a measure of the number of people of prime working age to those over 65 has declined steadily from more

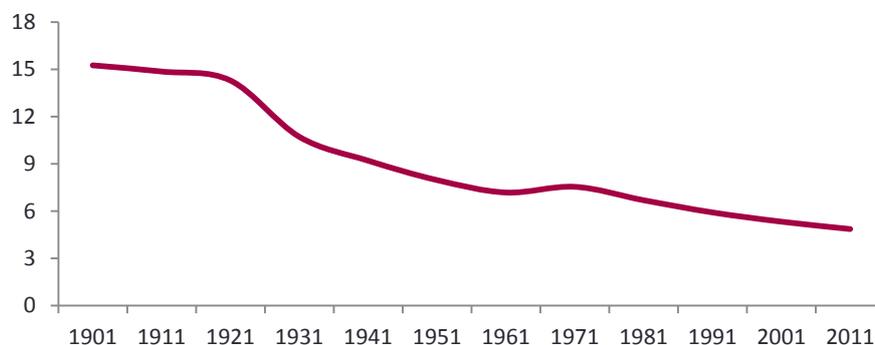
⁴ OECD, Average effective age of retirement versus the official age, 2006-2011, accessed 18/11/2013/

⁵ In Australia, survey data collected by the ABS in 2007 indicated that there were 310,000 former retirees in the workforce relative to 3.1 million retired individuals.

⁶ Australian Government (2010).

than 15 in 1901 to currently sit below 5. (Figure 1) Treasury forecasts suggest that this will continue to decline and by 2050, 2.7 workers will be supporting each Australian above 65.⁷

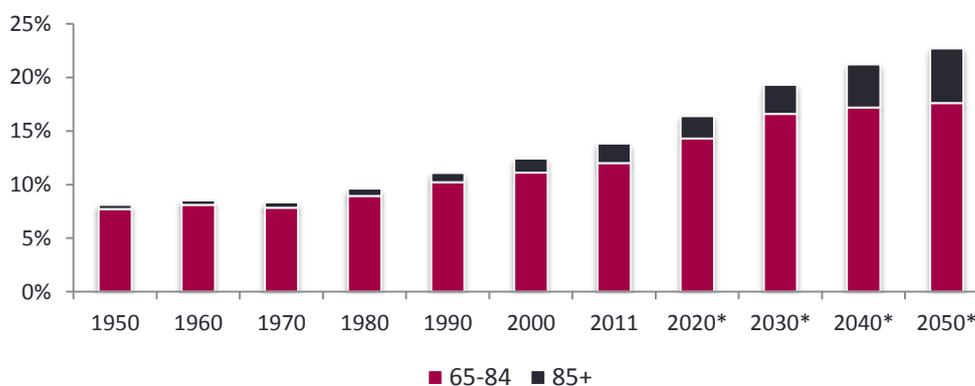
Figure 1 Aged Inverse Dependency Ratio Time Series



Source: ABS(2013), Australian Historical Population Statistics

The proportion of Australians over 85 is also growing rapidly, a result of improved health services and living conditions leading to increased longevity. (Figure 2) Assuming a large proportion of the Australians over 85 retired at the official retirement age, almost 2 per cent of all Australians have been retired for at least 20 years. The number of Australians above 85 is expected to more than quadruple by 2050.

Figure 2 Proportion of population aged 65+



* Treasury estimates

Source: ABS (2013), Australian Historical Population Statistics and Treasury Intergenerational Report (2010)

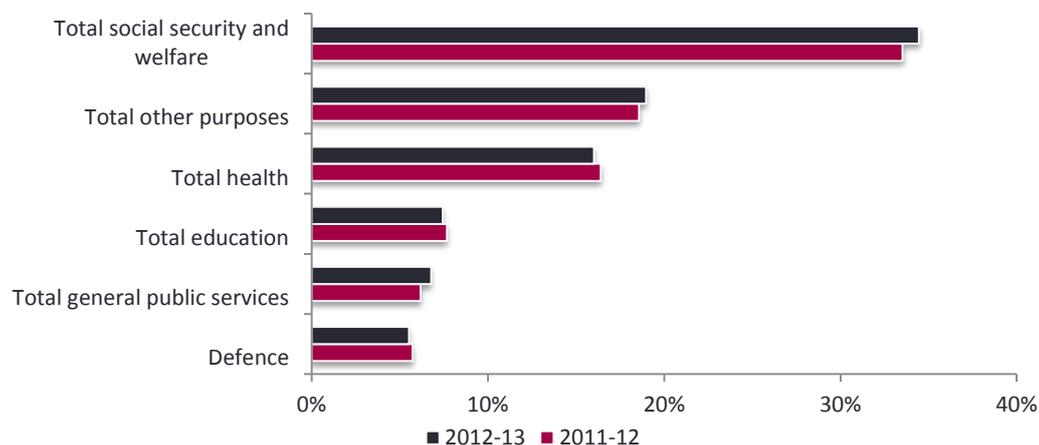
Holding all else constant, an ageing population can adversely impact a country for the following reasons:

- Real GDP per capita, often used as a measure of the economic prosperity of the population of a country, declines as a result of reduced workforce participation; and
- Reduced tax revenues and increased government expenditure on aged entitlements and services to assist with health care provision combine to put a strain on a government's fiscal sustainability.

⁷ ibid

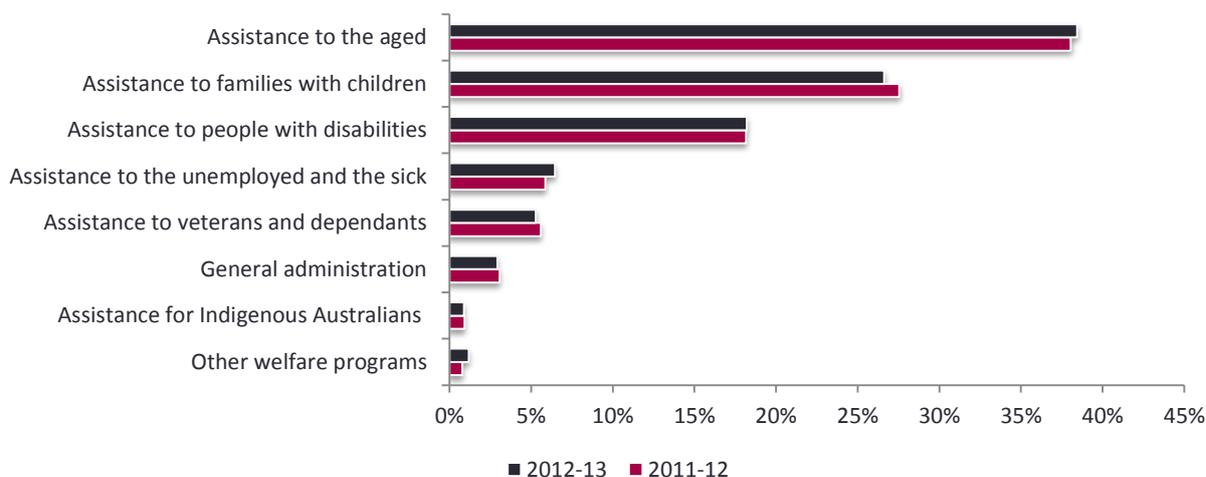
The impact the ageing population is having on government expenditure can already be seen in the Federal Government's budget for 2012-2013 with more than 25 per cent of total budgeted expenditure relating to health and aged services. Figures 3 and 4 below provide an indication of health and aged services relative to other public services. Furthermore, Treasury estimates suggest that these two areas of expense are likely to see the largest increases over the next 40 years.

Figure 3 Expenditure by Sector as a Percentage of Total Government Expenditure



Source: Australian Government (2013), Final Budget Outcome 2012-2013

Figure 4 Expenditure on Social Security as a Percentage of Total Social Security Expenditure

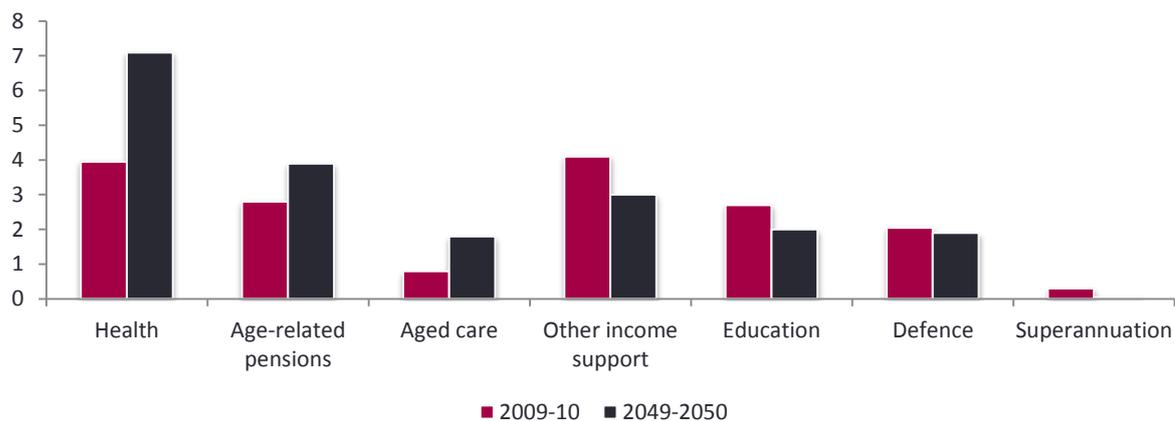


Source: Australian Government (2013) Final Budget Outcome 2012-2013

Absent any change in the retirement habits of Australians, these trends are forecast to result in 0.2 per cent lower GDP growth per capita each year over the next 40 years because of lower workforce participation, a fiscal gap of 2.8 per cent of GDP and a net debt position of 20 per cent of GDP by 2050.⁸ The same estimates project that 25 per cent of the population will be above the ORA in 2050 and ABS data shows that the average 65 year old retiree can expect to live for around 20 years in retirement.⁹

⁸ Australian Government (2010).

⁹ Australian Bureau of Statistics, 2011, CAT 4102.0, Australian Social Trends

Figure 5 Government Spending by Category (as percentage of GDP)

Source: Australian Government (2010), Intergenerational Report

2.3 Increasing the official retirement age: A solution?

Studies have shown that an effective direct policy measure for increasing workforce participation rates amongst older workers is to increase the age at which individuals have access to the age pension.¹⁰ Such measures have been implemented in Australia and internationally in recent years and have become the subject of much public debate.

The age pension has been a right for older Australians since the early 20th century reflecting a cultural view that wellbeing in retirement should be the responsibility of all Australians. The Australian age pension differs to some schemes provided internationally in that eligibility and the amount received is completely removed from time in the workforce and taxation paid. “Fairness” is instead measured by two means tests which first determine eligibility and then the amount to be received based on the individual’s assets and income. As outlined in Table 1 below, while the rate of the age pension as a proportion of the median Australian wage and the basis for eligibility have shifted over time the ORA has barely moved.

Table 1 outlines the history of the Age Pension in Australia. It is notable that since its introduction in 1908 at 65 years for both men and women, the ORA for males has increased by only 2 years, although the life expectancy at birth for males has increased from 55 years to 80 years over that period. While the retirement age for women was initially 65 years, it was reduced to 60 in 2010 and then gradually increased back to 65 years from 1994. Further changes to the ORA were announced on the 3rd of December 2007 when, in response to Australians “being healthier and living longer” and to “address the challenge of an ageing population”, the then Treasurer, Wayne Swan announced that the ORA for both males and females would be gradually increased from 65 to 67 for both males and females.

¹⁰ See for example, Gruber and Wise (2005)

Table 1 History of the Age Pension in Australia

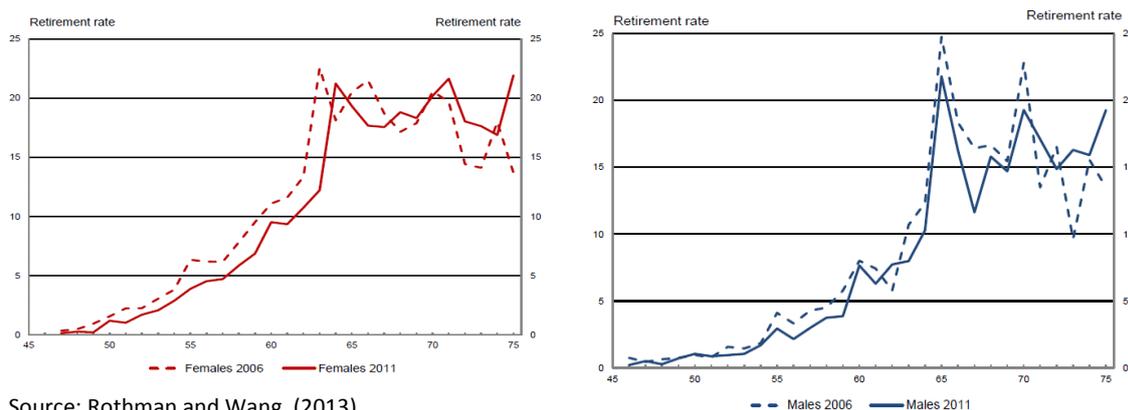
	Milestone
1908	Means tested flat-rate age pension income support introduced for men and women aged 65
1910	Pension age for women reduced to 60
1962	Minimum residency requirements reduced from 25 to 10 years
1963	Different rates for single and married couples introduced
1969	Partial pensions introduced with a marginal means test
1970	Means testing eliminated (Whitlam Government)
1975	Means testing reintroduced (Fraser Government)
1985	Means testing based on both assets and income introduced
1997	The single pension fixed at 25 per cent of average weekly earnings
1994-2014	Age pension age for females increased progressively from 60-65 through to 2014
2017-2023	Age pension age to be increased progressively to 67

As is discussed below, increasing the ORA has proved to be an effective method for increasing workforce participation amongst older workers internationally. In the Australian context however, a second key determinant of retirement age is the age at which superannuation can be accessed – the preservation age. It has been argued that the preservation age, currently set at 60, may both encourage Australians to retire before the ORA and result in greater reliance on the age pension in the future due to earlier draw down of superannuation balances.¹¹ A 2006 study by Felmingham et al based on HILDA survey data found that a greater proportion of respondents found that reaching the preservation age was in fact a more important factor for retirement than the ORA. Actual data from 2006 and 2011 however shows that the greatest rate of retirement is clustered around the ORA, suggesting that the even in the Australian context, the ORA is a key determinant of retirement age. (Figure 6)

A 2005 study of 12 countries conducted by Gruber and Wise based on simulation estimated that increasing the ORA by 3 years would on average reduce the proportion of retirees leaving the labour force within 4 years of the effective retirement age by almost half. The same authors provide empirical examples of reductions in the ORA in Germany and France resulting in approximately a one-to-one reduction in the effective retirement age in those countries. A 2013 study conducted in the Netherlands by Bernal and Vermuelen also found that changes to the ORA had a direct impact on the average effective retirement age, albeit much weaker than that found in the German and French studies.

¹¹ A detailed analysis of the interaction between the ORA and the PA and its impact on retirement decisions is provided in the AIST-ACFS report *The Age of Retirement, 2012*.

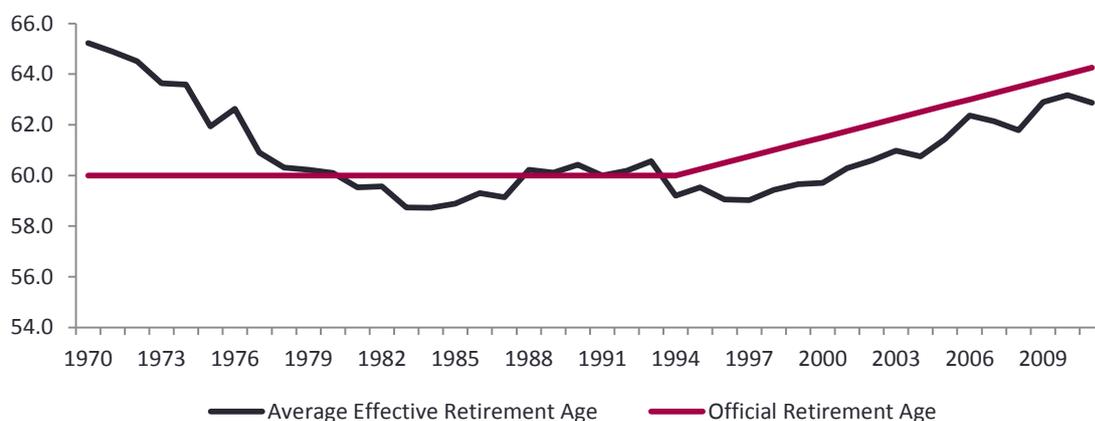
Figure 6 Retirement Rates Australia: 2006 -2012



Source: Rothman and Wang (2013)

In Australia, empirical observations on the impact of changes in the ORA on the effective age of retirement are limited as very few adjustments to the ORA have been made. The only instance of a change in the ORA that is accompanied by reliable data on retirement is the gradual shift in the ORA from 60-65 for females that was announced in 1994. With the caveat that the analysis is limited to a single event study, both Figure 7 below and Figure 6 above show an obvious shift in the effective retirement age that closely tracks the new ORA. This observation is supported by a 2012 study by Atalay and Barrett which found that an increase in the eligibility age of one year resulted in a decline in retirement probability each year by approximately 10 per cent¹² and a 2013 report by the Productivity Commission estimates that by raising the ORA to 70 by 2035 will increase fiscal savings by around \$4.5 billion or \$150 per capita.¹³

Figure 7 OECD Average Effective Age of Retirement and ORA Australian Females: 1970-2011



Source: OECD (2013)

The above discussion provides a compelling case for supporting an increase in the ORA given demographic trends and their forecast impact on both productivity and fiscal sustainability. Up until this point however, the implicit assumption has been that retirement is a voluntary choice. The remainder of this report will challenge this assumption and look at the implications of an increase in the ORA for involuntary retirees.

¹² Atalay and Barrett (2012).

¹³ Productivity Commission (2013)

3. When Retirement is not a Planned Event

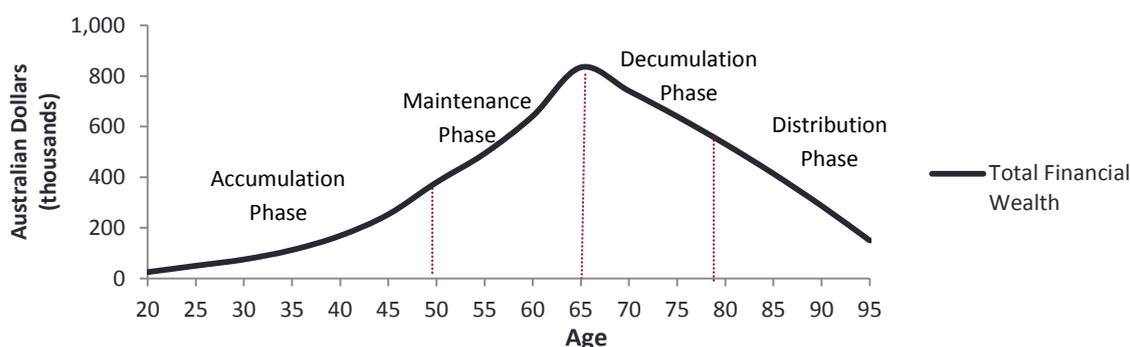
3.1 Traditional models of retirement and where they fall short

Traditional economic theory is built on the foundation that every decision is the result of a rational analysis of trade-offs. The option that generates the greatest 'utility' or satisfaction is then chosen. This forms the foundation of the classical life-cycle model of retirement in which the age at which an individual retires is determined by the satisfaction derived from leisure relative to work compared to the potential increase in future consumption that would result from continued work. In this framework, retirement is a smooth and planned process.¹⁴ The key determinants of retirement in this model are therefore:

- the availability and level of age pension benefits
- incentives for continued work such as tax breaks or increased pension benefits upon retirement
- disincentives for continued work such as means testing for eligibility of the age pension
- the relative satisfaction derived from leisure over work

Under this framework it is assumed that individuals have the ability to perfectly plan in advance both the optimal age at which to retire and to accumulate the required amount of retirement savings that should be made in order to sustain the desired standard of living in retirement. This idea of a planned and smooth glide-path to retirement also features in retirement calculators, portfolio allocation models and in the design of retirement systems. Figure 8 provides an illustration of the assumed glide-path and the four phases that make up an individual's investor life-cycle under these assumptions.¹⁵

Figure 8 The investor life-cycle (continuous working life)



Source: ACFS

Under this life-cycle framework social security arrangements provided in Australia would appear to promote early retirement. These incentives are present both in the universal pension rate, which is

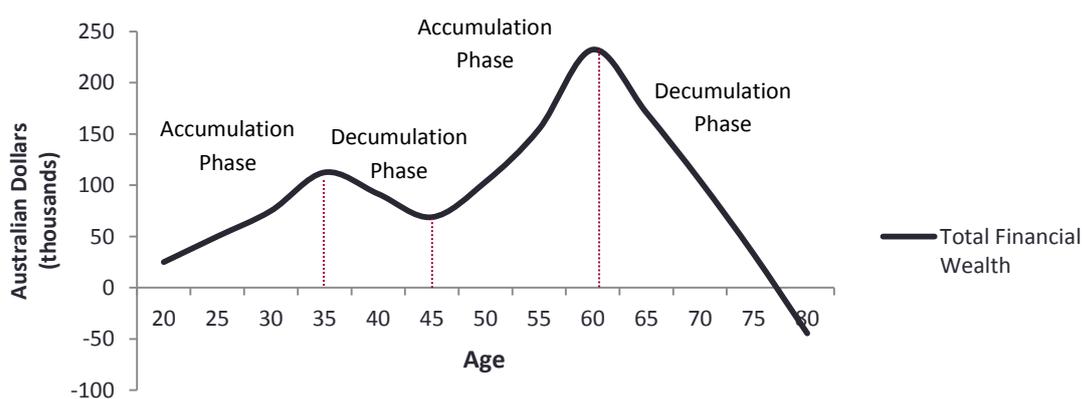
¹⁴ Dorn and Sousa-Poza (2010)

¹⁵ The age at which each phase begins and ends depends on the financial capital and desired retirement objectives of the individual

unadjusted for age of retirement, and the means testing of the age pension, which penalise an individual for accumulating additional assets prior to retirement.¹⁶

A key failing of the life-cycle model is that it assumes a continuous working life absent of breaks for change of career, raising a child or injury. A non-continuous working life impacts both the amount of financial wealth one can accumulate throughout one's working life but may also result in the need to liquidate a proportion of savings prior to retirement. When these assumptions are allowed for, the investor life-cycle may include a number of accumulation and decumulation phases at the expense of maintenance and distribution phases. Figure 9 below shows the investor life-cycle of an individual who stops working for a 10 year period beginning at 35 to care for a child and then retires at around 60 due to ill health. It is important to note that as a result of the career break, the individual is required to draw down a portion of their financial assets prior to retirement. In addition to the partial liquidation of financial assets to finance the career break, the need to retire earlier than desired means that the individual's retirement savings are completely depleted prior to reaching 80 with nothing to bequest to future generations.

Figure 9 The investor life-cycle (non-continuous working life)



Source: ACFS

The design of the superannuation system fails to account for a non-continuous working life. The requirement that one must reach the preservation age prior to drawing on financial assets held in a superannuation account means that superannuation cannot be used to fund liquidity needs prior to retirement which could result from the need to leave work to care for a child, retrenchment or early involuntary retirement. Furthermore, most superannuation adequacy calculators also assume a continuous working life which can result in an overly optimistic forecast of retirement outcomes.¹⁷

¹⁶ Warren and Oguzoglu (2010)

¹⁷ For example see ASIC's Moneysmart Retirement Calculator <https://www.moneysmart.gov.au/tools-and-resources/calculators-and-tools/retirement-planner>

3.2 Involuntary retirement

Alternative models of retirement include “choice” as an additional factor in the retirement decision.¹⁸ The extent of choice is driven primarily by health factors, availability of employment and caring responsibilities. Quinn and Burkhauser (1990), note that once an individual’s choice is removed due to any of these factors, the classical life-cycle trade-off between an increase in future income and leisure as a determinant of retirement becomes irrelevant. For these involuntary retirees, changes in the ORA or incentives for continued work will have no impact on their effective age of retirement but can have an impact on wellbeing in retirement.

To assess the prevalence of involuntary retirement a measurable definition of involuntary retirement must first be determined. In a 2010 Australian study, Barrett and Brzozowski measure involuntary retirement using the reason given by survey respondents for leaving their last job.¹⁹ The study breaks involuntary retirement (at any age) down into two categories, a strict definition of involuntary retirement that is applied to those that are either laid off or forced to leave the job due to health reasons, and a broader definition which also includes individuals that left the workforce to care for a family member, due to pregnancy or due to dissatisfaction in their job. Using these definitions the study found that more than a quarter under the first definition and almost 40 per cent using the second definition of all retirement was involuntary. (Table 2)

Table 2 Prevalence of Involuntary Retirement in Australia

	2001	2007
Involuntary I (health, redundancy)	27%	25.6%
Involuntary II (as above, caring for others, etc)	40.7%	35.3%

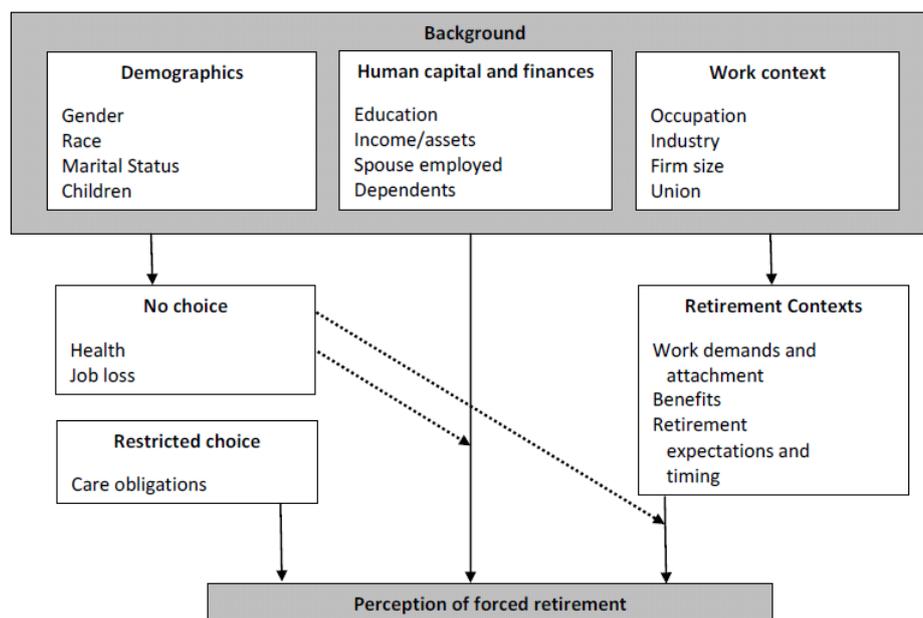
Source: Adapted from Barrett and Brzozowski (2010)

3.3 Characteristics of involuntary retirees

In addition to determining the prevalence of involuntary retirement across different age groups this report seeks to identify those most at risk of involuntary retirement. A 2005 study by Szinovacz & Davey shows that involuntary retirement is a function of a number of different factors that evolve across an individual’s life. These factors include both characteristics unique to an individual such as health, past education, skills and training, work history and broader characteristics that include the structure of an economy and the rate of technological development and its impact on industrial change. (Figure 10)

¹⁸ See for example, Barnes-Farrell (2003).

¹⁹ Involuntary Retirement and the Resolution of the Retirement-Consumption Puzzle* Barret and Brzozowski (2010)

Figure 10 Theoretical model of predictors of forced retirement perspectives

Source: Szinovacz & Davey (2005)

A review of the international literature shows a consistent negative employment effect of health and disability on labour force participation.²⁰ Furthermore, a 2010 Canadian study²¹ on involuntary retirement found that social-demographic and social-economic characteristics, level of education and level of income level were all important predictors of early retirement and individuals with a disability were seven times more likely to experience involuntary retirement. The study also found that individuals with a lower level of education, lower incomes or who had immigrated to Canada were more likely to retire involuntarily. This finding is supported by a number of other studies which find that individuals with less formal education have a higher probability of unstable working lives and have higher risk of unemployment later in life.²²

The following section utilises many of the factors that have been derived from prior studies to investigate characteristics of early retirees in an Australian context.

²⁰ See for example, Szinovacz & Davey (2005).

²¹ Denton et al (2010).

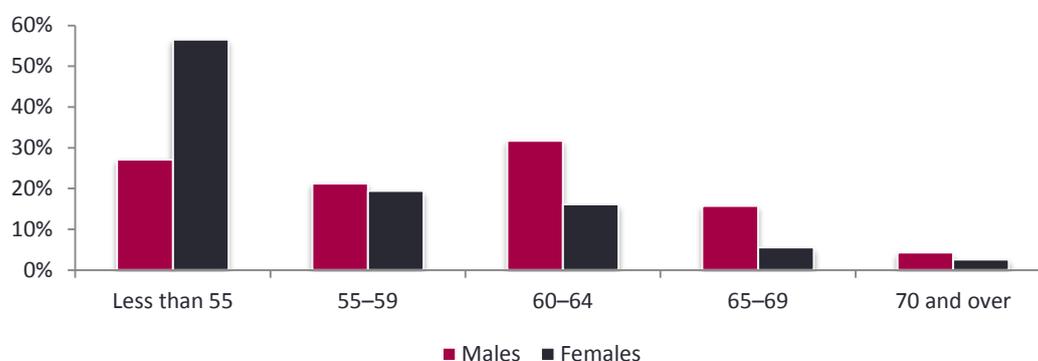
²² See for example, Flippen & Tienda (2000).

4. Profiling Involuntary Retirement in Australia

4.1 Early retirement in Australia

According to a 2011 ABS data almost 1.4 million Australians that are currently retired, did so before the age of 55 and 86 per cent of retirees had retired before the age of 64. The ABS notes that due to survivorship bias²³ and because older Australians still in the work force are not surveyed, the actual proportion of all Australians that retire before these ages would be lower. Despite this caveat, it is informative that around one in four males and more than half of the females surveyed retired before the age of 55. (Figure 11) The data also shows that 2.7 million of Australians retirees did so before the age of 65.

Figure 11 Age of retirement for Australians aged 45 and over who have retired from the labour force (% of total)



Source: ABS (2011) Retirement and Retirement Intentions Australia

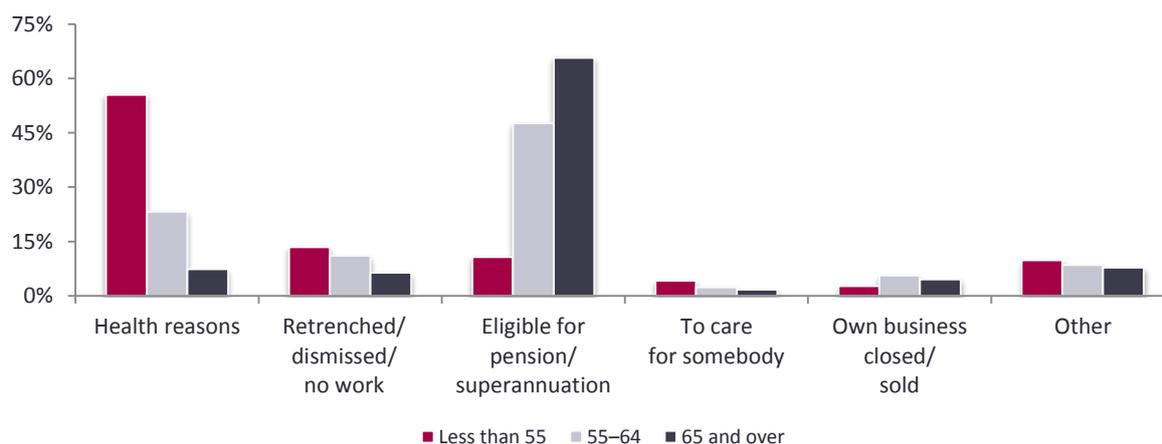
Under the assumption that retirement is entirely a voluntary and rational choice, the large number of early retirees in Australia suggests that by the age of 65 Australians have generally accumulated a portfolio of financial wealth that, when supplemented by the age pension provides a satisfactory level of retirement. Once this assumption is relaxed, the above observation could result from three scenarios 1) the private savings of Australians are sufficient before the age of 65 to provide for a comfortable retirement 2) the Australian retirement system and age pension scheme provide disincentives for continued work 3) retirement is not a voluntary choice and despite inadequate savings for retirement, many Australians are forced to retire early.

According to a 2012 study by Rice Warner, the number of retirees that rely on either a full or part pension is around 75 per cent, suggesting that the first scenario listed does not explain the prevalence of early retirement. The second scenario is more difficult to measure, as noted in section 3.1, the Australian retirement system does provide disincentives for continued work such as means testing for the age pension and a universal pension rate regardless of age of retirement and a recent study by Warren and Oguzoglu (2010) shows that these incentives are likely to lead to an increase in early retirement. However, the third scenario - involuntary retirement – can be measured and appears to be a key driver of early retirement, as explained in the remainder of this section.

²³ Assuming a life expectancy of 75, an individual that retires at 55 would be expected to participate in the survey for another 20 years, whereas one that retires at 65 would have an expected survey participation duration of 10 years.

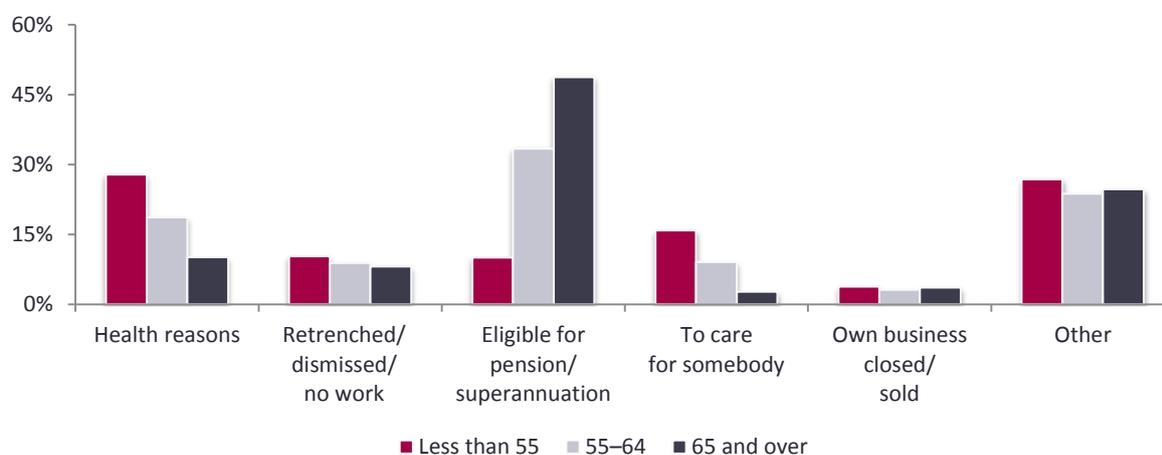
Figures 12 and 13 below illustrate the major drivers of retirement across different age groups. Using the strict Barrett and Brzozowski definition of involuntary retirement from section 3.2 of this report, almost three-quarters of males and more than 40 per cent of females that retire before the age of 55 do so involuntarily.²⁴ Health reasons are by far the biggest driver of early retirement however retrenchment and inability to find work also play a role. . When a broader definition of involuntary retirement, which includes retiring to care for others, is used the proportion of females who retire involuntarily before the age of 55 increases to almost 60 per cent.

Figure 12 Reasons for ceasing last job: Australians aged 45 and over and retired: Males



Source: ABS (2011), Retirement and Retirement Intentions Australia

Figure 13 Reasons for ceasing last job - people aged 45 and over and retired: Females



Source: ABS (2011), Retirement and Retirement Intentions Australia

As shown in table 3 below, the proportion of involuntary retirees declines significantly as retirement age increases. This is driven mostly by a sharp reduction in the proportion of those retiring due to health reasons and an increase in those retiring because they are eligible for either the pension or have reached preservation age.

²⁴ It is important to note that the statistics provided in the ABS data are generated from a subjective survey of reason for retirement and therefore do not provide an objective measure of whether the health condition was such that the individual was forced to retire.

Table 3 Involuntary Retirement as a Percentage of Total Retirement by Age of Retirement

		Less than 55	55–64	65 and over
Involuntary Retirement (Strict)				
	Males	71.79%	39.96%	18.38%
	Females	41.99%	30.68%	21.85%
Involuntary Retirement (Broad)				
	Males	76.02%	42.30%	20.18%
	Females	57.85%	39.76%	24.59%

Source: Derived from ABS (2011), Retirement and Retirement Intentions Australia

4.2 Characteristics of involuntary retirees

From the preceding discussion it would appear that in the aggregate, involuntary retirement is a major factor leading to early retirement. Understanding the characteristics of those most at risk of early involuntary retirement and the alternatives available to these groups is important for any discussion on optimising retirement systems.

According to Szinovacz & Davey (2005), the following broad factors are all predictors of involuntary retirement:

- Work context
- Demographics
- Human capital and finances

By using ABS and Hilda data, the following section identifies to what extent these factors are correlated to early retirement.

1. Work context

According to the theoretical model of predictors of forced retirement perspectives developed by Szinovacz & Davey, work context is determined by four factors: industry, occupation, firm size and union membership. Table 4 below provides ABS statistics on the age of retirement based on the industry of last employment by retirees.

The statistics are surprising in that the industries that are most susceptible to early retirement according to the data are not those typically associated with manual labour which might be expected to lead to increased risk of injury and poor health. The two industries with by far the greatest risk of early retirement are “accommodation and food services” and “administrative and support services”. To reconcile these findings with the reasons for early retirement presented earlier, these industries either have a greater prevalence of poor health outcomes, a greater instance of retrenchment (and are less likely to hire older staff) or have a greater proportion of females in the workforce.²⁵ Given the discrepancy in rate of early retirement between these two industries and other industries. It is likely that all three factors play a role however further research should be conducted to quantify the drivers of early retirement in these industries.

²⁵ As shown in Figure 11, females on average are more likely to retire before 60 than males.

The industries with the lowest rates of early retirement show that those in agriculture, professional and service based employment and the arts.

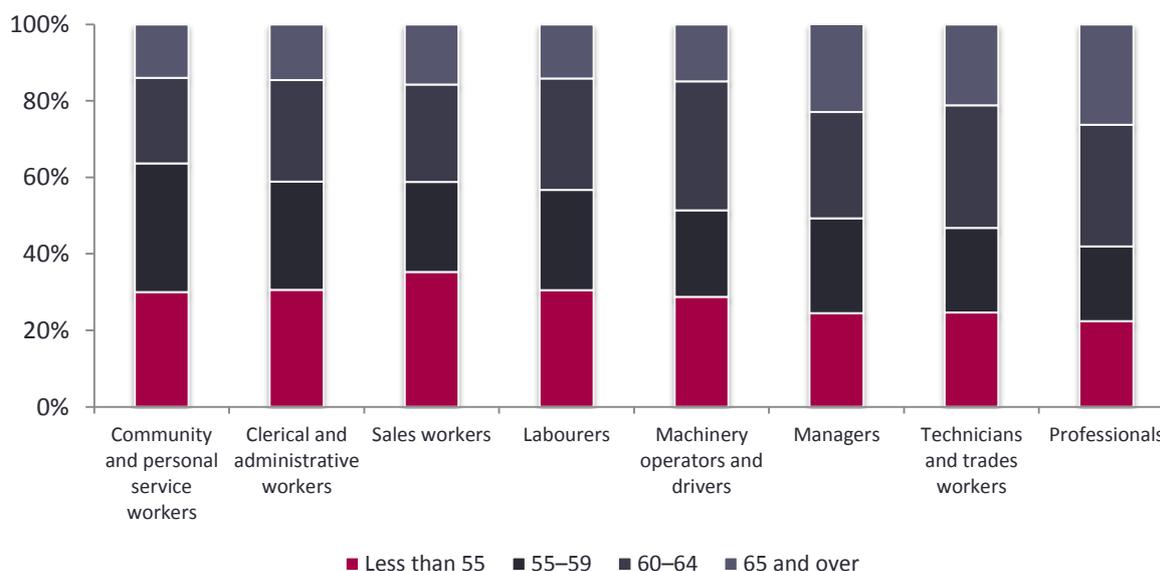
Table 4 Retirement age based on industry of last job (% of total retirees within industry)

Industry of last job	Under 60	Less than 55	55–59
Accommodation and food services	74%	45%	29%
Administrative and support services	67%	43%	24%
Other industries	64%	34%	29%
Electricity, gas, water and waste services	62%	24%	38%
Wholesale trade	61%	18%	43%
Health care and social assistance	56%	31%	25%
Education and training	55%	26%	29%
Transport, postal and warehousing	55%	25%	29%
Retail trade	53%	33%	20%
Public administration and safety	53%	23%	30%
Manufacturing	51%	31%	21%
Construction	49%	26%	23%
Mining	45%	27%	18%
Arts and recreation services	41%	16%	26%
Other services	40%	14%	26%
Professional, scientific and technical services	38%	19%	19%
Agriculture, forestry and fishing	23%	13%	10%

Source: ABS (2011), Retirement and Retirement Intentions

In addition to industry of employment, type of occupation is shown to be a key determinant of early retirement. Figure 15 below, derived from ABS data shows that workers in “community and personal service”, “clerical and administrative workers”, “sales workers” and “labourers” are between 50 and 35 per cent more likely to retire before the age of 60 than professional workers. Furthermore, the likelihood that professionals, technicians and managers work beyond 65 is more than 50 per cent greater than in any other occupation.

Figure 14 Type of occupation effect on age of retirement



Source: ABS (2011), Retirement and Retirement Intentions

2. Demographics

The second broad determinant of retirement identified by Szinovacz & Davey is demographics. The factors identified in the model that are explored further as determinants of retirement in this section are race and gender.

Prior studies have shown that race is a key determinant of involuntary retirement. Denton et al (2010) show that the odds of an immigrant or non permanent resident retiring involuntarily when compared to a permanent resident are more than 2:1.²⁶ The Australian data is less conclusive with only a minor difference in the rate of retirement before 60 between males born in Australia (47.4%) and those born overseas (49.8%). The discrepancy between females born overseas (76.5%) and females born in Australia (75.5%) is even smaller. (Tables 5 and 6)

Table 5 Retirement statistics based on country of birth: Males

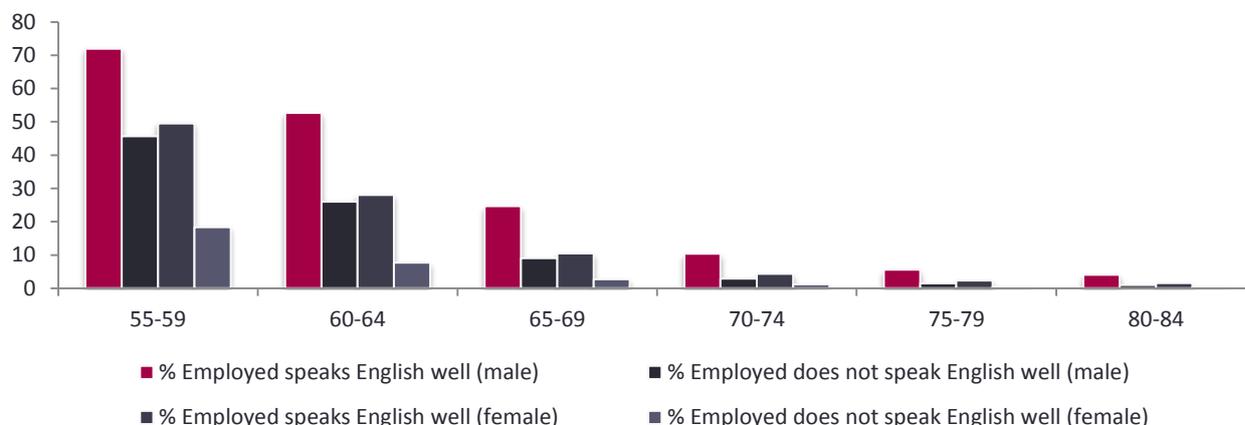
Retirement Age	Less than 55	55–59	60–64	65–69	70 and over
Born in Australia	26.7%	20.7%	32.6%	15.2%	4.8%
Born overseas	27.9%	21.9%	30.1%	16.7%	3.4%

Table 6 Retirement Statistics based on country of birth: Females

Retirement Age	Less than 55	55–59	60–64	65–69	70 and over
Born in Australia	56.2%	19.3%	15.6%	6.1%	2.7%
Born overseas	57.1%	19.4%	17.1%	4.1%	2.3%

A more telling determinant of early retirement in Australia is English language proficiency with approximately 50 per cent of Australian males with a strong command of English working until at least 60 compared to just over a quarter of Australian males with poor English. English proficiency is perhaps even more important for females with less than 10 per cent of females with poor English working beyond 60. (Figure 15)

Figure 15 Level of Employment by English Proficiency, 2006



Source: Census (2006)

²⁶ Denton et al (2010), Retirement Decisions of People with Disabilities: Voluntary or Involuntary.

As the prevalence of overseas workers that retire early is overall similar to those born in Australia it would appear that rather than employer discrimination based on race, poor English skills may be an impediment for an individual to transition to a less physically demanding role with age.

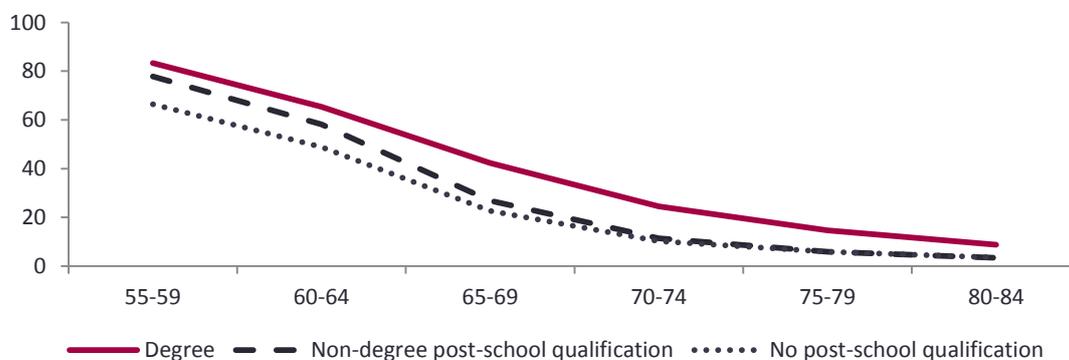
A number of studies have investigated the role of gender in determining retirement outcomes. For example a 2011 research report shows that the superannuation balances of women were on average, at any point of time, more than \$30,000 a year less than that of males.²⁷ This has been attributed to less continuity in the working lives of females as a result of raising children and lower average wages. Involuntary retirement under the strict definition is much lower amongst females than males purely due to a far lower incidence of retirement due to health reasons. (Figure 12 and 13) When the broad definition of involuntary retirement is used, the proportion of female involuntary retirees increases significantly (but is still much lower than males) due to around 15 per cent of women below the age of 55 retiring in order to care for somebody. This is consistent with prior research that has found that two key drivers of early retirement in women are the desire for joint retirement of couples²⁸ and to care for a loved one.

3. Human Capital and Finances

The final broad predictor of retirement outlined in the theoretical model is human capital and finances. Szinovacz & Davey argue that level of education and level of income are both predictors of involuntary retirement.

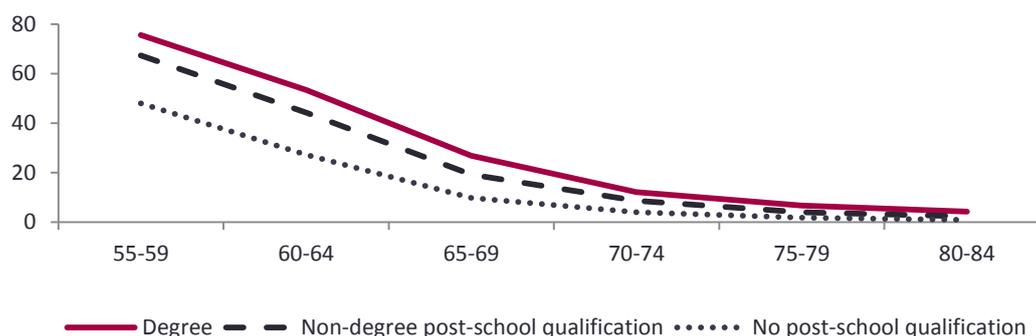
In Australia, level of education is strongly correlated with early retirement with only 16.5 per cent of males with a degree retiring before the age of 60 as opposed to almost 35 per cent of those without a post-school qualification. For females the prevalence of early retirement of those without a post-school qualification is much higher with 50 per cent of all females in this category retiring before 55. The proportion of Australians with a degree that continue to work well beyond the official retirement age is also much larger which suggests that the general capacity to work longer will continue to grow as the proportion of Australians with a university degree increases. This is consistent with evidence earlier in this section that shows those in professional, services and technical based employment are less likely to experience early retirement.

Figure 16 Employment rate based on level of education: Males (per cent of total)



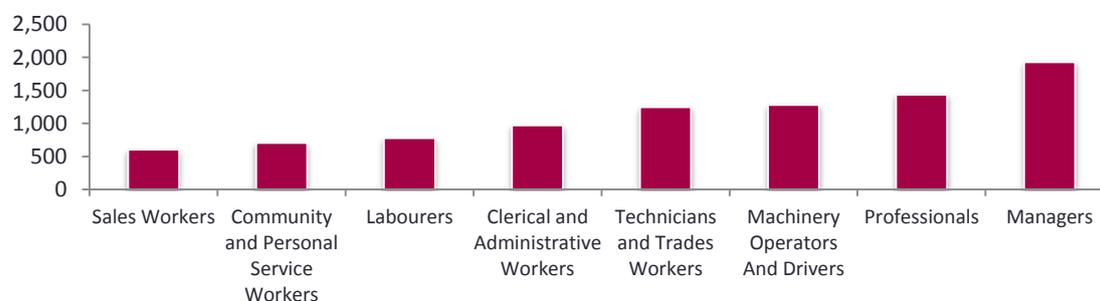
²⁷ ASFA, (2011).

²⁸ See for example, Szinovacz, (2003)

Figure 17 Employment rate based on level of education: Females (per cent of total)

Source: McDonald (2011) Employment at older ages in Australia: determinants and trends

As level of income is also perhaps the most important factor in an individual's ability to build a portfolio of assets to fund retirement outside of the age pension, a connection between level of income and involuntary retirement has major implications for retirement system design and proposed increases in the ORA. In a 1998 Study conducted in the United States, Schultz et al found that the average income of voluntary retirees was more than 30 per cent higher than that of involuntary retirees.²⁹ Unfortunately, level of income prior to retirement is not captured in ABS statistics however average weekly wage by occupation is available and shown in Figure 18 below. When compared to Figure 14, it is clear that the occupations with the highest incidence of early retirement are also the four occupation types with average weekly salaries below \$1,000 a week.

Figure 18 Average weekly earnings by occupation.

Source: ABS (2012) Employee Earnings and Hours, Australia

4.3 The impact of early retirement on financial wellbeing

Previous studies on the impact of early retirement on retirement outcomes have shown that households forced to take retirement due to a shock such as illness or retrenchment fare much more poorly in retirement and have a much greater drop in their standard of living post-retirement than those that have a planned, voluntary retirement.³⁰

Figures 20 and 21 below provide an outline of weekly income distributions for males and females based on their age of retirement. It is clear from the diagrams that as the age of retirement

²⁹ Schult et al (1998).

³⁰ See for example, Haider and Stephens (2007)

increases, the proportion of people on between \$200 and \$400 a week, (which corresponds with the weekly rate of the age pension³¹) drops at a diminishing rate with each additional five years of employment. The largest drop occurs for males that retire between 55 and 59 as opposed to before 55 and for females that work to at least 60 rather than retire before 55. On average around one half of males who retire between 55 and 59 are expected to rely solely on the age pension compared with 60 per cent of males that retire before the age of 55. For females the gap is even more dramatic with one half of females who retire before 55 depending solely on the age pension compared with less than 40 per cent of those that work until 60.³²

Figure 19 Personal weekly income distribution by age of retirement Males:

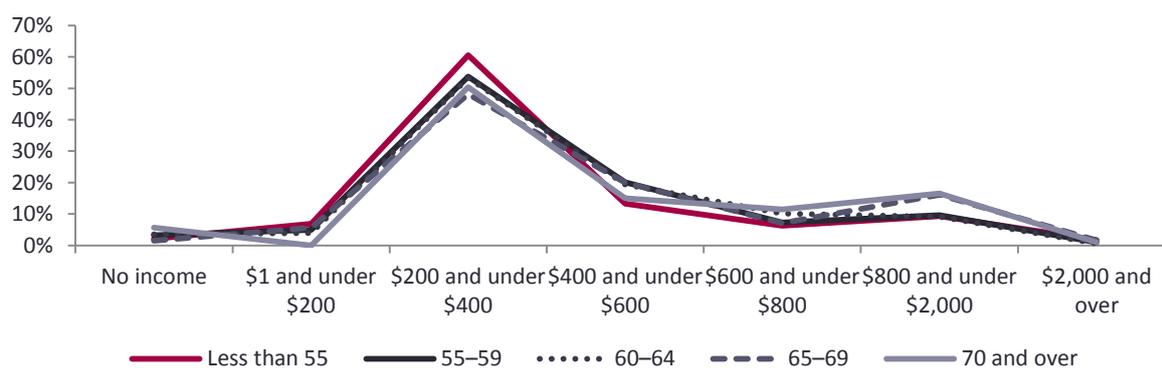
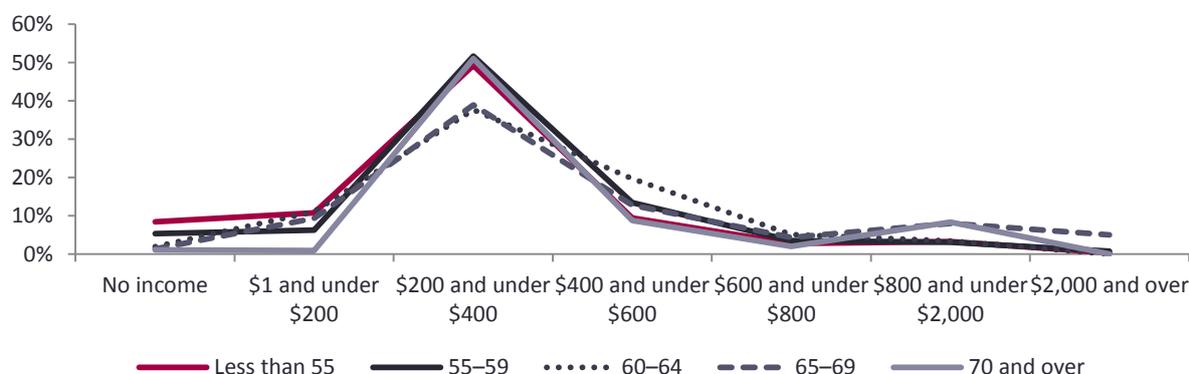


Figure 20 Personal weekly income distribution by age of retirement: Females



Source: ABS Retirement and Retirement Intentions, Australia, July 2010 to June 2011

According to the Association of Superannuation Funds of Australia's (ASFA) Retirement Standard³³, a weekly income of \$440 for singles is required for a modest lifestyle and \$802 is the threshold for a comfortable standard of living in retirement. Based on the ABS data, the likelihood of being able to fund a modest or comfortable lifestyle in retirement increases if an individual works beyond 60.

³¹ The weekly age pension is approximately \$375 for singles and \$283 each for couples. (Department of Health Services, 2013)

³² Females who work beyond 70 are an exception to this trend, with a similar proportion of females who retire after 70 relying solely on the age pension as those that retire before 55. However, the proportion in this group who have a personal income of more than \$800 a week is also significantly higher than for any age group.

³³ ASFA Retirement Standard (2013), <http://www.superannuation.asn.au/resources/retirement-standard>

Another area of concern is the interaction between early retirement and superannuation outcomes. The ABS provides data on the primary use of superannuation based on the age of retirement for both males and females which are presented in Figures 22 and 23.³⁴

Figure 21 Primary use of Superannuation lump-sum by age group: Males

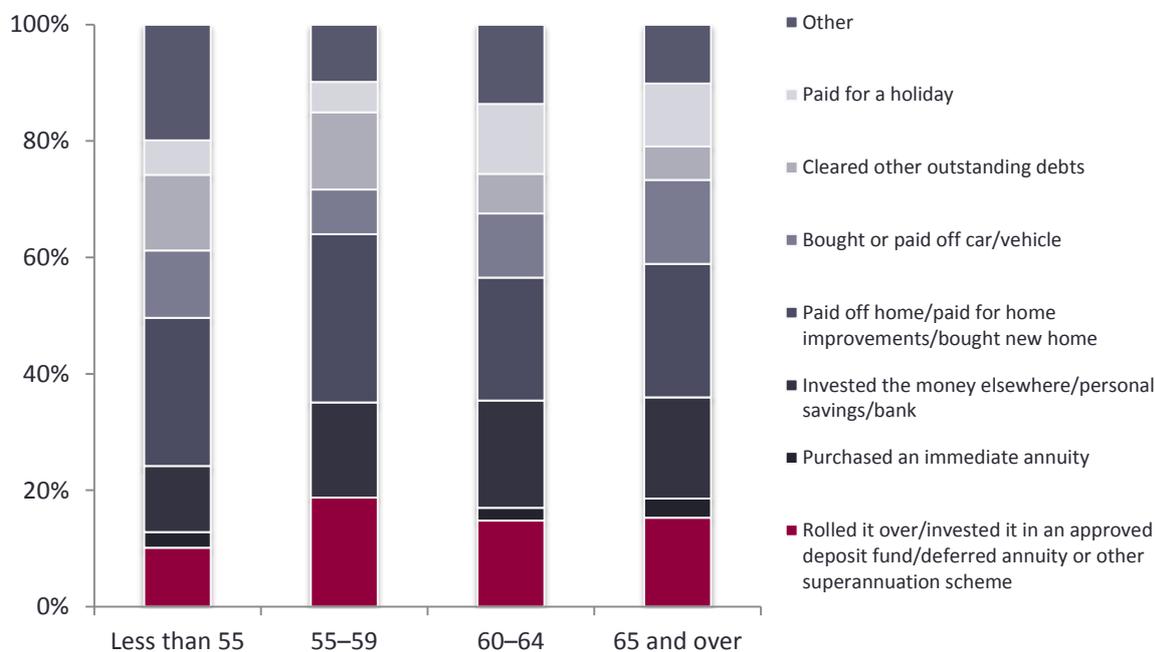
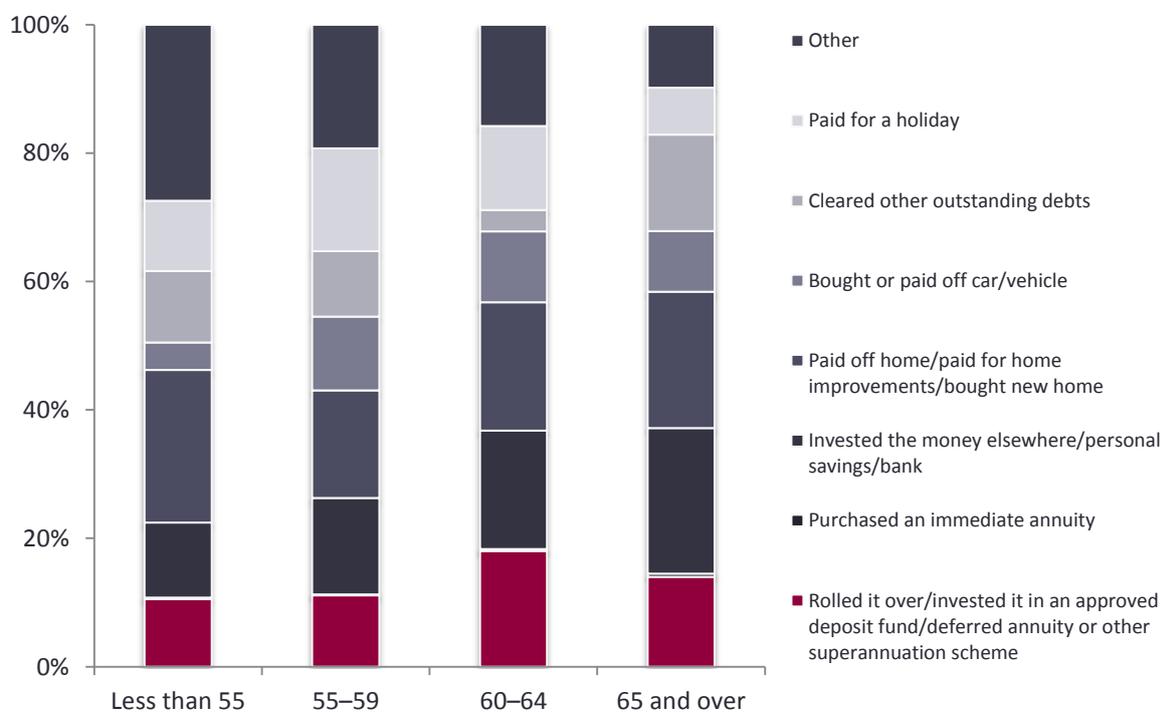


Figure 22 Primary use of Superannuation lump-sum by age group: Females



Source: Derived from ABS CAT 6238: Retirement and Retirement Intentions

³⁴ The ABS does warn that some of the data points could have a standard error as high as 50%.

There is a marked increase in the proportion of male retirees above 55 that reinvest their superannuation lump sum either into an approved superannuation scheme or through alternative investments. For females, a similar jump occurs for those retiring after 60. These statistics are consistent with the income in retirement observations (Figures 20 and 21) which show that income in retirement is positively correlated with retirement age.

This result is in part due to the nature of the defined contribution fund whereby a large proportion of the final retirement balance results from returns in the later stages of the investor's life-cycle by which stage the portfolio size is much larger than the ongoing contributions being made by the individual.³⁵ Due to a shorter duration investor life-cycle, involuntary retirees have less opportunity to compound these important returns on a large portfolio balance and as a result miss out on the potential to significantly increase the size of their retirement portfolio prior to retirement.

³⁵ Basu and Drew (2009)

5. Issues Stemming from Involuntary Retirement

5.1 Poverty for older Australians

Section 4.1 showed that involuntary retirement amongst early retirees in Australia could be as high as 70 per cent for males and more than 40 per cent for females. This is a concerning statistic when the financial characteristics of early retirees (more than half of which rely on a full age pension) presented above are considered. It also brings to the fore issues of poverty that may arise from increasing the ORA as an increase in the ORA will extend the period between involuntary retirement and eligibility for the age pension for involuntary retirees. The interaction between preservation age and the ORA is also important in this regard as superannuation, if accessible, could feasibly assist involuntary retirees in funding this period between the date of involuntary retirement and becoming eligible for the age pension.

In order to assess the potential for poverty caused by involuntary retirement it is important to first consider the alternative benefit schemes that involuntary retirees may be able to claim. As discussed earlier in this report, the three broad reasons for involuntary retirement are retirement for health reasons, retirement due to retrenchment and retirement in order to care for somebody. The cause of involuntary retirement has major implications for the alternative benefit schemes available to the individual.

Involuntary retirement due to health reasons will generally provide the retiree access to the disability support pension (DSP) and potentially additional support through the National Disability Insurance Scheme "DisabilityCare Australia" introduced in July 2013, depending on the degree of illness. The level of income provided through the DSP is equal to that provided by the age pension and is also subject to the same means and asset tests. In addition to means and asset testing, eligibility for the DSP requires a medical impairment of more than 20 points as assessed by a physician. This is deemed to be the level at which a medical impairment has a significant impact on an individual's ability to work. In addition to loss of employment income and the inability to make further contributions to superannuation, involuntary retirees who retire due to health concerns are in many cases likely to require additional expenditure on health care and medical services. For some retirees, eligibility for DisabilityCare Australia will assist in covering some of these expenses but for others these costs will increase the amount of retirement income required beyond the suggested \$440 per week for a modest standard of living.

While the DSP provides income support equal to the age pension for those unable to continue work due to health reasons, involuntary retirement due to retrenchment or inability to find employment will, from a government support perspective, leave retirees financially worse off. The Newstart Allowance is a pension available to Australians that are actively looking for employment and are below the age pension eligibility age. To be eligible for the Newstart allowance, an individual must demonstrate that they are actively seeking employment on an ongoing basis and must pass both an asset and income means test. The level of income support provided through the Newstart Allowance is \$501 per fortnight for singles, \$250 less than what is available through the age pension.

The reduced rate of the Newstart Allowance when compared with other support payments provides an incentive for increased workforce participation, an admirable objective. However, the rate of Newstart Allowance is such that relying on it for a prolonged period is not feasible. This raises a significant problem for older workers who have been retrenched as data shows that, despite government efforts, age discrimination continues to exist in the workplace and lower income workers who are more vulnerable to involuntary retirement are also more likely to experience discrimination of this nature. (Figure 23) A survey by the Productivity Ageing Centre also found that low income workers were much more likely to experience job search exclusion than those with a salary above 65,000 (53% compared to 24%) as were workers above 55 years of age. (46% compared with 30% for people aged 45-54 years).³⁶ Should the ORA be raised, the potential duration of reliance on Newstart Allowance may increase for some older Australians that have been retrenched and are unable to find work.

Figure 23 Number of age discriminations reported to have been experienced or perceived by employment status and personal income (%)



Source: Productive Ageing Centre (2013)

5.2 Increased health care requirements

Increased health care expenditures relative to individuals making a planned exit from the workforce have implications for the amount of retirement income those that retire due to health reasons will require. The ASFA retirement standard for a modest lifestyle allocates \$38.80 a week per individual (\$74.89 per couple) toward health costs that are allocated primarily to health insurance. (Table 7)

Table 7 ASFA Retirement Standard: Health Expenditure Breakdown

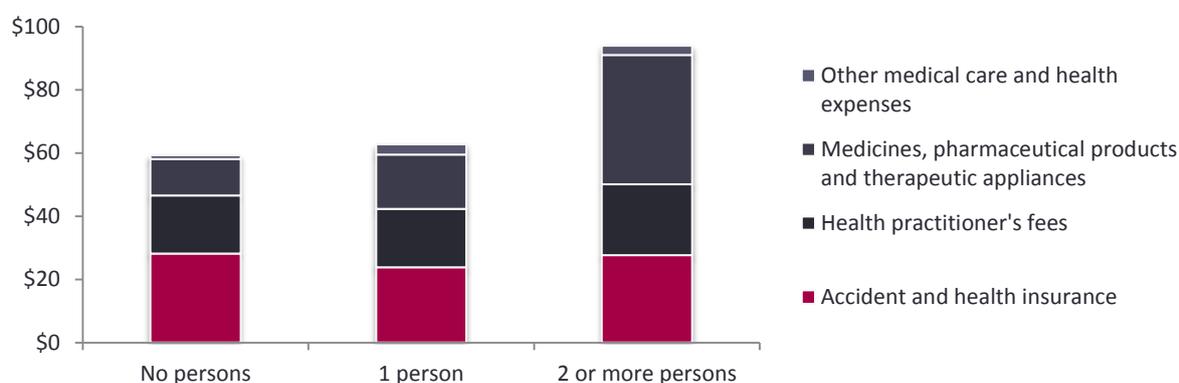
Expenditure items	Modest single female	Modest couple	Comfortable single female	Comfortable couple
Health insurance	30.1	60.2	38.19	75.07
Chemist	1.69	3.01	12.17	22.07
Co-payment and out of pocket	7.01	11.67	26.62	38.73
Total health services	38.8	74.89	76.98	135.87

Source: ASFA (2011)

³⁶ Productive Ageing Centre (2013)

While the ABS does not provide individual data on the impact of long-term health conditions on medical expenditure, household figures are available from which trends can be observed.³⁷ (Figure 24) Not surprisingly, the average weekly household expenditure on health care increases significantly as the number of people within the household with long-term health conditions increases. What is worth noting is how the breakdown of medical expenditure changes in relation to the number of people with long-term health conditions. While the expenditure on health insurance and practitioner fees remains relatively constant, the major change occurs in expenditure on pharmaceuticals, increasing by almost 50 per cent to more than \$17 for households that have one person with a long-term health condition. This is five times more than the allocation to pharmaceuticals recommended by the ASFA retirement standard and suggests that the figures provided in the standard underestimate the cost of retirement for those that retire due to health reasons.

Figure 24 Weekly Household Expenditure on Health by Persons with Long-term health condition



Source: ABS (2013) CAT 6530 Household Expenditure Survey

The financial profile of early retirees provided earlier in combination with a likely increase in health related expenses in retirement for involuntary retirees that retire due to health reasons all suggest that the likelihood of financial distress for this group is increased.

5.3 Benefit substitution

The availability of alternative pensions also raises a second issue that will have a direct impact on the extent to which increasing the ORA will raise workforce participation amongst older workers; benefit substitution. Prior research has shown that social security programs are interlinked in that when eligibility requirements for one program are increased or the relative generosity of the program is reduced, the take up of other social security programs is increased.³⁸ A 2012 study conducted by Atalay and Barrett³⁹ on the impact of increasing the ORA for Australian women from 60 to 65 found substantial increases of between 12 and 24 per cent in usage of alternative pensions for cohorts no

³⁷ The ABS numbers cannot be compared directly with the ASFA retirement standard as the number of people that constitutes a household can vary.

³⁸ For example see, Coe & Haverstic (2010)

³⁹ Atalay & Barrett (2012)

longer eligible for the age pension. This is consistent with data on the ratio of disability pension recipients to age pension recipients which has increased since 1998 despite an increase in the proportion of Australians being above pension age. (Figure 25)

Figure 25 Ratio of Disability Support Pension recipients to Age Pension recipients: 1998-2008



Source: ABS (2013) CAT 4102.0, Australian Social Trends

These findings suggest that while increases in the ORA have been shown to increase workforce participation amongst older Australians, in order to reduce the incidence of benefit substitution amongst involuntary retirees, further increases in the ORA should be accompanied by programs to improve training and workforce opportunities for involuntary retirees that retire due to either health concerns or inability to find work.

6. Conclusions and Policy Recommendations

The 2012-2013 Federal Government budget showed more than 25 per cent of total expenditure is being allocated to health and aged services. With the baby boomers only just beginning to retire, the fiscal strain that will be caused as a result of government provision to aged services is expected to increase and result in a fiscal gap of 2.8 per cent of GDP and a net debt position of 20 per cent of GDP by 2050.

As discussed in section 1 and in the Age of Retirement Report published in 2012, raising the ORA has been shown to be an effective policy measure for increasing workforce participation amongst older workers. Given the pressure already being put on Australia's fiscal position as a result of the nation's ageing demographic and continued increases in life expectancy, increasing the ORA is a sensible and necessary policy option. However, rather than increases determined on an ad hoc basis, it is recommended that changes in the ORA should have a consistent and logical link to increases in life expectancy to assist Australians in planning for retirement, to maintain confidence in the system and to uphold a connection between the ORA and the capacity for older Australians to remain in the workforce. While maintaining this view, this report has sought to uncover some of the unintended consequences that will result from further increases in the ORA.

Those most affected by increases in the ORA will be involuntary retirees that leave the workforce before due to ill health, or as a result of retrenchment and inability to find work. As evidenced by weekly incomes in retirement, the majority of retirees in this category derive very little income from retirement portfolios and are almost completely reliant on the age pension. To the extent that this involuntary retirement is a function of either skill obsolescence or age discrimination, increasing the ORA may extend the period of reliance on reduced income substitutes for the age pension and increase the potential for poverty amongst these members of society.

Those most susceptible to this risk are those with lower levels of education, poor English proficiency and those employed in less specialised occupations. The Australian Government has been active in this regard with programs such as Experience+ and Skills Connect to provide incentives for businesses to both employ and provide training opportunities to mature age workers however the efficacy of programs such as these will become even more crucial as the ORA increases.

Another issue raised in this report is the potential for increased workforce participation driven by increases in the ORA to be offset by benefit substitution. The largest proportion of early retirements occur due to poor health. Therefore, strategies to increase workforce participation amongst mature workers must also consider programs to increase the employment opportunities and support services available for people that retire for this reason. Australia's National Disability Insurance Scheme that was introduced in 2013 could have a role to play in this regard. Ensuring that tests for eligibility to the Disability Support Pension are adequate will also play a key role in minimising benefit substitution.

A final issue is the relationship between the ORA and the preservation age at which superannuation can be accessed. As noted in the report, the current design of the superannuation scheme is built around the assumption of a continuous working life. This assumption does not hold in the instance

of involuntary retirement and will impact those that need liquidity prior to reaching the preservation age. As the ORA increases, maintaining the preservation age at 60 for individuals that retire involuntarily could play an important role in funding the period between when involuntary retirement occurs and the age pension is available. This outcome, while failing to curb reliance on the age pension, is not entirely at odds with the superannuation scheme's objective of providing an adequate income in retirement.

Conversely, extending the gap between the ORA and preservation age may also provide incentives for individuals that would otherwise remain in the workforce to retire once reaching the preservation age and running down superannuation balances prior to reaching the age pension age. Therefore, it is recommended that the preservation age should move in accordance with changes in the ORA with early release provisions that do not incur additional taxation provided to individuals who meet specific criteria to determine involuntary retirement.

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APPENDIX 1: ASFA Retirement Standards and Health Expense Breakdown

	Modest lifestyle – single	Modest lifestyle – couple	Comfortable lifestyle – single	Comfortable lifestyle – couple
Housing - ongoing only	\$63.11	\$60.58	\$73.14	\$84.79
Energy	\$42.95	\$57.04	\$43.59	\$59.11
Food	\$74.45	\$154.23	\$106.36	\$191.45
Clothing	\$18.16	\$29.47	\$39.30	\$58.95
Household goods and services	\$26.47	\$35.89	\$74.46	\$87.23
Health	\$38.80	\$74.89	\$76.98	\$135.87
Transport	\$95.87	\$98.59	\$142.87	\$145.58
Leisure	\$71.61	\$106.69	\$217.02	\$297.40
Communications	\$9.50	\$16.63	\$26.10	\$33.22
Total per week	\$441.71	\$635.19	\$802.22	\$1,096.90
Total per year	\$23,032	\$33,120	\$41,830	\$57,195

Expenditure items	Modest single female	Modest couple	Comfortable single female	Comfortable couple
Health insurance	30.1	60.2	38.19	75.07
Chemist	1.69	3.01	12.17	22.07
Co-payment and out of pocket	7.01	11.67	26.62	38.73
Total health services	38.8	74.89	76.98	135.87

