



Don't stop thinking about tomorrow

The changing face of retirement - the past, the present and the future

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Foreword

Retirement and indeed the retirement expectations of Australians have changed dramatically over the past 100 years. People are living longer and enjoying better health which has translated into very high retirement expectations.

We now expect to spend around 20 years in retirement after age 65 and we expect to indulge in the good life - international travel, taking the caravan around the country, eating out, playing golf, volunteering, or spending time with grandchildren.

But in reality our retirement expectations are out of step with our retirement savings. And Australians are not really saving enough to afford a comfortable retirement.

The 24th AMP.NATSEM Income and Wealth Report, *Don't stop thinking about tomorrow*, looks at the changing face of retirement. The report considers how realistic present retirement expectations are given retirement savings and what impact increasing future superannuation contributions would have on retirement savings.

Retirement 100 years ago and now

In 1909, only around half of all people born lived to age 65 years. And if they did manage to reach age 65, men lived another 11 years and women lived another 13 years.

In 2009, the average man or woman lives longer and is much healthier - today 87 per cent of men and 92 per cent of women live until age 65 and can expect to live another 20 years.

In 1909, 23,000 people were on the Age Pension today 2.3 million are on the Age Pension (or 77 per cent of people aged over 65).

Yet despite these changes, Australians still dream of retiring earlier than at 65 years of age. But is this realistic?

Working now

Even though we are healthier and living longer, the overall workforce participation rate for men has dropped 21 percentage points since 1911, to 72 per cent in 2009. This is attributed to early retirement as well as younger men spending longer in full-time education.

For men aged 45 to 64 years the overall participation trend in the last 20 years has been slightly downward - down 3.3 percentage points. While in 2009, 79.2 per cent of men aged 55 to 59 participate in the workforce, up 4.4 percentage points on 20 years previously and almost 58.4 per cent of men aged 60 to 64 are participating in the labour force, up a staggering 8.2 percentage points from two decades ago.

While the increased participation rates for men are very encouraging, 4 in 10 Australian men are not in the workforce before the traditional retirement age of 65 years, which would have a significant impact on retirement savings.

In comparison, overall female participation in the workforce has increased over the last 20 years by 7.3 percentage points. The strongest increase has been for women aged 55 to 59 years, up 30.4 percentage points. The higher participation rates for women are likely to have a significant impact on their retirement savings.

Income now

Unsurprisingly, this report found that in 2009 men have higher average earnings and total incomes than women in all age groups. The overall average earnings of men at \$40,000 per annum are almost double the average for women at \$21,400.

Average earnings for men peak slightly at \$56,400 in the 35 to 44 age group whereas earnings for women peak at a much younger age group, \$30,700 in the 25 to 34 age group. The lower earnings for women are a result of time out of the workforce for childbirth and child-rearing and it is the lower earnings for women that significantly impact their superannuation balances.

Savings now

The personal savings, including super, for men and women peak at age 55 to 64, \$229,000 for men and \$149,100 for women, but from age 65 onwards those savings begin to decline.

Again family responsibilities and motherhood have impacted on the personal savings for women, women have on average only six-tenths the personal savings of men. On average, women have just \$79,100 while men have \$132,200 - alarmingly women only have half the super of their male counterparts in all age groups from age 35 onwards.

Interestingly the report found that South Australian men have the highest average level of personal savings at \$152,600 while Tasmanian women have the lowest at \$48,300.

Retirement in 30 years time

Life expectancy will continue to rise by 0.3 years every year, increasing life expectancy at birth by 9.0 years over the next 30 years. A high proportion of people in retirement for longer will invariably put more pressure on the government.

The report reveals that in 2040, the only group that will not enjoy significant growth in their superannuation is women aged 65 and over. This is a result of spending longer periods out of the workforce, lower earnings and earlier retirement.

By increasing the Superannuation Guarantee (SG) from 9 per cent to 12 per cent, in 30 years time the superannuation balances of men would increase by 25 per cent. For women aged 45 to 54, the increase would be 7 per cent, for women aged 55 to 64 it would be 22 per cent and for women aged 65 and over it would be 30 per cent.

The report estimates that women will raise their superannuation savings from half to 60 per cent of men of the same age over the next 30 years and by increasing the SG to 12 per cent the average superannuation balance of women would improve, but men would still have higher balances.

Increasing the SG to 12 per cent will increase Australia's retirement savings and it will reduce the Age Pension outlay by 2.3 per cent.

Conclusion

The proportion of people reaching retirement age, coupled with the fact that we expect to live much longer in retirement than 100 years ago, has placed even greater importance on the necessity to save for retirement.

The Age Pension provides the bare essentials but for some it is the only source of retirement income. If Australians want to retire at age 65 and enjoy at least 20 years of the good life we need to save more to provide for that lifestyle.

Australia is undoubtedly a wealthy nation yet our personal savings, including superannuation, are still reasonably low.

The choices are to work longer or at reduced hours, save more, have our children pay more tax, or live on just the bare essentials.

Regardless, adequate retirement funding is a critical issue we need to manage well as a nation. Increasing the SG to 12 per cent will begin to address the issue of adequate retirement funding and we need to canvas all areas of politics and the industry to explore ways to achieve this.



Craig Meller

AMP Financial Services

Introduction

The working lives of Australians have changed dramatically over the last 100 years and will continue to change in the future. These dramatic changes include the type of work undertaken, the role of women in the paid labour force, and living standards. Along with changing working lives, expectations and experience in retirement have also changed. One hundred years ago, only half the population lived to retirement age and the retirement expectations were low as health and finances usually dictated a very modest lifestyle. Today, we can expect around 20 years in retirement after age 65. Despite the increased time in retirement, many cannot wait and retire early or begin a “transition to retirement” plan well before 65. We have allowed our greater longevity and much improved health to translate into very high retirement expectations. Retirement is now often seen as a time for indulgences that were missed while working - for example, spending time with our partner or grandchildren, overseas travel, or enjoying the finer things in life.

However, these retirement expectations rely heavily on sufficient finances and continuing good health. This issue of the AMP.NATSEM Income and Wealth Report looks at the changing face of retirement. It considers how realistic present retirement expectations are given retirement savings. It considers what impact increasing future superannuation contributions would have on available funds in retirement and on government outlays for the Age Pension. It also looks at whether increased superannuation will rescue baby boomer women from the poverty that appears likely to await many of them.

In this report, we use a range of Australian Bureau of Statistics (ABS) data sources and NATSEM’s new APPSIM microsimulation model to look at retirement - the past, the present and the future.



Retirement - the past

Australia 100 years ago

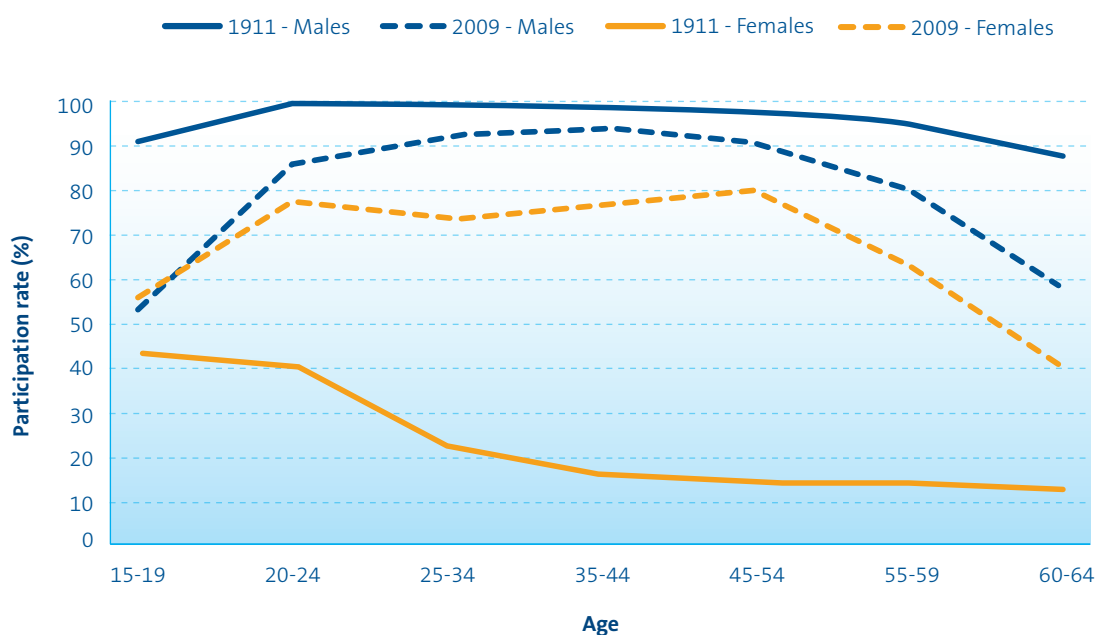
One hundred years ago, the type of work undertaken by both men and women was very different to current employment and the majority of women did not work outside the family home.

At the start of the 20th century, two-thirds of Australian workers were evenly split between two physically demanding sectors - agriculture and manufacturing. Today, less than one in 25 workers are in agriculture (3.3 per cent) and less than one in 10 are in manufacturing (9.3 per cent). The move to service industries has reduced the physical nature of employment (but not the demands in terms of hours worked or the stress involved). Employment for women in 1909 was generally sex-segregated, mainly in textiles, manufacturing and domestic services and had poor conditions and low wages.

In 1911, 93 per cent of men aged over 15 years were participating in the labour force - reflecting the smaller proportion in retirement and the fewer years in education. The younger movement into the labour force is evident with some 90 per cent of 15-to-19 year old men participating, in 2009 it was only 53 per cent. The 1911 participation rate for men remained above 90 per cent until they reached their 60s. The participation rates of men and women in 1911 and 2009 are shown in Figure 1 and Table 5 in the Appendix.

Participation in the workforce outside the home was not the norm for women in the early 1900s. Only one-quarter of women were employed in 1911 and the majority were under 35 years old. Given the role of women in that era, the type of work available and laws that limited employment of married women (the “marriage bar”¹), the low participation rate in the 15-to-19 year old age group, followed by a declining participation rate for women as they get older, is not unexpected.

Figure 1 - Labour force participation rates by sex and age, April 1911 and July 2009



Source: ABS, 2000 and 2009c.

1 In the public sector, the “marriage bar” meant that women had to resign as permanent officers of the public service when they got married. Although married women could continue to work as temporary employees, most left the workforce because in these temporary roles their opportunities were limited. Temporary employees were not allowed to supervise other staff and had limited access to superannuation (APSC 2006). This rule remained in place until 1966. Similar rules applied in the private sector.



100 years ago, very few people planned what they would do in retirement.

Retirement 100 years ago

Retirement and retirement expectations have also dramatically changed in the 100 years since the *Invalid and Old Age Pensions Act, 1908* was introduced and the Age Pension began in 1909. The pension was initially paid to those aged 65 years and over² who were of limited means, good character and who met residency and race requirements. The maximum payment that could be received in 1909 was 12 per cent of male total average weekly earnings (10 shillings per week).

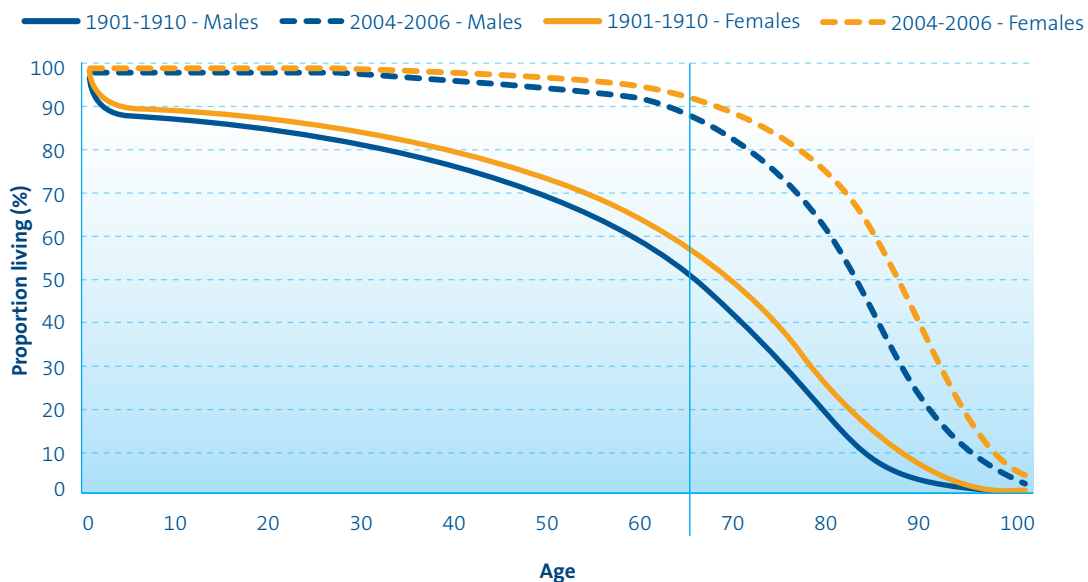
The proportion of the population living long enough and being eligible to receive this pension was very small. In 1909, only half of all people born lived to age 65 years - 49 per cent of males and 56 per cent of females (Figure 2). This, combined with large numbers of predominately young men immigrating to Australia, resulted in only 4 per cent of the population being

aged 65 years and over. If they were lucky enough to live until age 65, their life expectancy was another 11.3 years for men and 12.9 years for women.

For those who reached age 65, it seems that the strict means testing and other eligibility severely restricted the number that qualified for a pension as only 23,000, or 28 per cent of those aged over 65 years, received a pension (Cullen 2004). Another possible reason for the low proportion receiving the pension is that the hard working life resulted in the poor being underrepresented in the over 65s - unfortunately retiree income and wealth statistics are not available to confirm this.

The combination of a physically demanding working life, poorer health and lower life expectancy combined with very low pension rates would have seen few planning what they would do in retirement.

Figure 2 - Proportion of persons surviving by sex, 1901 to 1910 and 2004 to 2006



Note: To interpret this survival graph assume 100 people are alive at age 0. At any age after age 0, it shows the number of the original 100 that are still alive. For example, for 100 males aged 0 in 1901 to 1910 (blue solid line), 75 will still be alive at age 40, 50 at age 65 and 15 at age 80. For 100 females aged 0 in 2004 to 2006 (orange dotted line), 92 will still be alive at age 65, 72 at age 80 and 20 at age 94.

Source: ABS 2008, *Australian Historical Population Statistics, Cat. No. 3105.0.65.001*.

2 The eligibility age for women reduced to 60 years in 1910 and since 1994 has been gradually climbing back to 65 years.

Retirement - the present

Australia now

The living, working and retirement environments for Australians today are quite different to their 1900s counterparts. The average Australian man or woman in 2009 lives longer and is much healthier. In addition, the type of work undertaken has changed, participation by women has increased dramatically, and almost one-third of those employed work part-time. Despite these changes, Australians still dream of retiring earlier than at 65 years of age.

The living and working environment, especially for women, saw major change begin in the 1960s with the introduction of the contraceptive pill, removal of the marriage bar (see footnote 1), growth in the service sector and improved working conditions. Now, for the first time, women had control over how many children they had and when they had them. This led to a major shift in the role of women - much greater proportions began to work outside the home or undertake tertiary education. Along with this came greater financial independence, increases in age at marriage, and increased divorce.



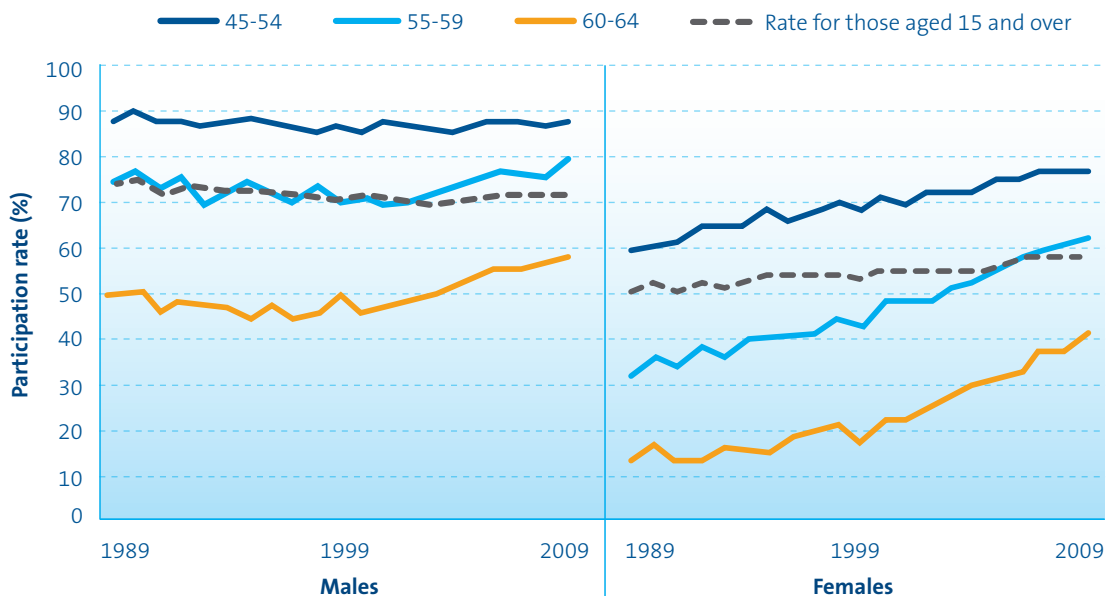
Working now

Participation rates

The labour force participation rate by age in 1911 and 2009 are shown in Figure 1 with the details in the appendix (Table 5). An overall reduction in participation is evident for men with the overall participation rate dropping from 93 per cent in 1911 to its current value of 72 per cent. The largest rate reductions are for young men but this can be attributed to a greater number

of years in full-time education. The reduction in participation rates for older men can be attributed to early retirement and, according to some researchers, the introduction of disability support and other pensions (Hugo 2001). On the other hand, female participation in the workforce is higher in 2009 for all age groups except the 65+ age group. Women in the age groups 25 to 34, 35 to 44 and 45 to 54 years now have around three-quarters participating in the labour force where less than one-quarter were at the start of the 20th century.

Figure 3 - Participation rates, people aged 45 to 64 by sex, July 1989 to 2009



Source: ABS 2009c.

Trends in labour force participation rates for men and women aged 45 to 64 years and the overall participation rate for each sex are shown in Figure 3. For men, the overall trend in the last 20 years has been slightly downward - down 3.3 percentage points. However, for men in the 55 to 59 and 60 to 64 age groups, the trends are upwards. In 2009, 79.2 per cent of men aged 55 to 59 participate in the labour force, up 4.4 percentage points on 20 years previously and almost six in 10 men aged 60 to 64 (58.4 per cent) are participating in the labour force, up 8.2 percentage points from two decades ago.

While the participation rate trends for men in this age group are very encouraging, as participation should lead to greater retirement savings, it is worth noting that four in 10 Australian

men are not in the labour force before the traditional retirement age of 65 years.

Against the slight downward trend in the overall male participation rate, the female rate has increased over the last 20 years (up 7.3 percentage points). For women aged from 45 to 64, the upward trends in the participation rates are even stronger than their male counterparts. The strongest growth over the last 20 years has been for women aged 55 to 59 years - up a staggering 30.4 percentage points. These higher participation rates for women could have a significant impact on retirement savings in the future as peak earnings for women is in the 45 to 54 age group (discussed later in the report).

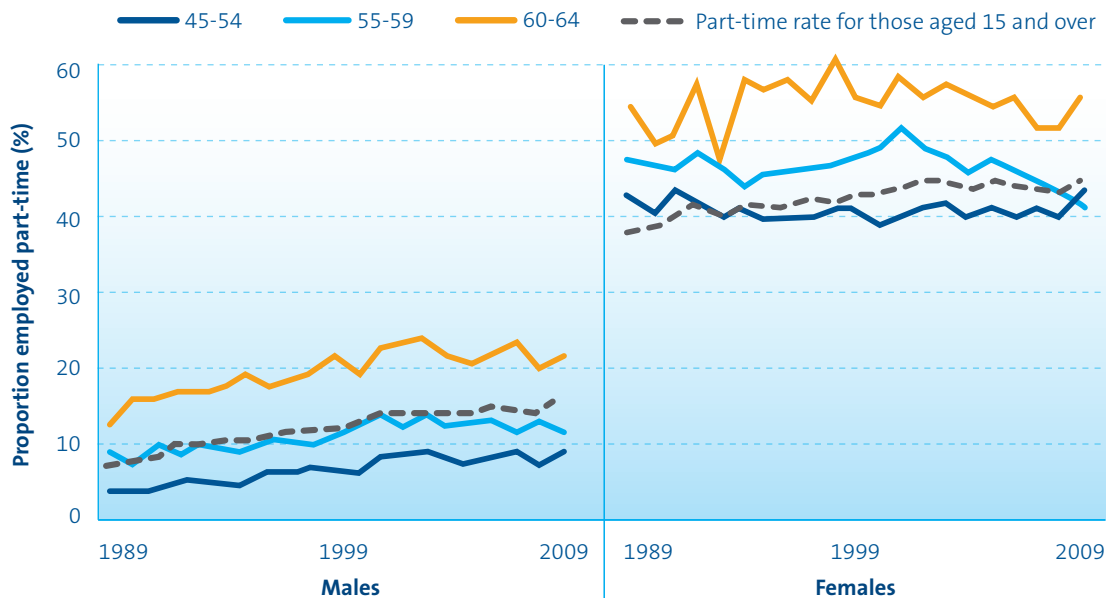
Part-time employment

An increase in proportion of people working part-time has become a feature of the last few decades. Unfortunately, we do not have data for the entire century, but in 1966 some 9.8 per cent of all employed Australians were working on a part-time basis; by 1978 this proportion was 15.6 per cent (one in 20 men and one in three women), and by July of 2009 it was 29.9 per cent (one in six men and almost half of all women).

Trends in proportions of the employed working part-time for men and women aged 45 to 64 years and the overall part-time rate for each sex are shown in Figure 4. A much higher proportion of women has traditionally worked part-time than

men. This continues today, with 16.4 per cent of employed men and 45.4 per cent of employed women working part-time in July 2009. The proportion of men working part-time has more than doubled over the last 20 years from 7.6 per cent. Over the last few years, the trend for men aged 55 to 59 has gone in the opposite direction to men aged 45 to 54 and men aged 60 to 64. The share of men working part-time has reduced for men aged 55 to 59 whereas it has increased for the other two age groups. For women, the same age groups have behaved similarly. Women aged 55 to 59 are strongly tending towards full-time employment while women aged 45 to 54 and 60 to 64 are increasingly working part-time.

Figure 4 - Proportion of the employed working part-time, people aged 45 to 64 by sex, July 1989 to 2009



Source: ABS 2009c.



Transition to retirement strategies are effective at keeping people in the labour force.

Transition to retirement

Figure 4 shows the proportion of people working part-time generally increases with age and it shows that the age group with the highest proportion of part-timers is those aged 60 to 64. More than one-fifth of men aged 60 to 64 (21.7 per cent) and almost six in 10 women (56.7 per cent) are working on a part-time basis as they approach pension age.

In 2005, the government introduced changes to the retirement income system to allow greater access to superannuation. One change, called “transition to retirement” allows people who have reached superannuation preservation age but not retired from the workforce to access their superannuation as an income stream. The increased participation rates of those aged 60 to 64 years over the last few years combined with the increased proportions of these people working part-time suggest that the previous and current federal government’s transition to retirement strategies are effective at keeping people in the labour force.

Income and savings now

In this section we consider the average total income and personal (non-housing) wealth of Australians. These estimates of income and wealth by age provide a background to the discussion of Australians approaching and currently retired in the next section.

Income

A feature of earnings and income in Australia is shown in Table 1, which sets out the estimated 2009 average earned and total income³ by sex and age group, is that men have higher average earnings and total incomes than women in all age groups. The overall average earnings of men at \$40,000 per annum is almost double the average for women at \$21,400.

Table 1 - Earned and total personal income by age and sex, 2009

AGE GROUP	MALES		FEMALES	
	EARNED INCOME \$ PA	TOTAL INCOME \$ PA	EARNED INCOME \$ PA	TOTAL INCOME \$ PA
15-24	27,900	31,800	22,200	27,000
25-34	51,000	57,800	30,700	38,000
35-44	56,400	68,300	27,100	37,900
45-54	54,900	68,700	30,000	38,700
55-64	34,400	52,600	15,000	27,100
65-74	3,800	28,000	1,400	19,900
75+	500	25,200	300	20,200
All 15+ Ages	40,000	53,300	21,400	32,200

Note: The averages shown are for all people in this age group with the exception that the 15 to 24 Age Group does not include those who are full-time students. Values have been rounded to the nearest \$100.

Source: NATSEM calculations, see technical notes.

³ See the technical notes for a definition of total income and how it was estimated.

It might be expected that average earnings would continue to grow right up to retirement age. However, people retiring early or transitioning to retirement by reducing their working hours have an impact on the average earnings, and the peak generally occurs before retirement. The high proportion of men working full-time across most age groups results in average earnings for men being fairly constant across the age groups 25 to 34 through to 45 to 54 with a slight peak of \$56,400 in the 35 to 44 age group. Earnings for women peak at a much younger age group (\$30,700 in the 25 to 34 age group). This reflects the impact on average earnings of women taking time out of the labour force for childbirth and child-raising or having lower earnings because they work part-time or in lower level positions to enable them to balance their family commitments.

Average total incomes (that is income from all sources including earnings, investments, government payments and other income) peak for both men and women in the 45 to 54 age groups. The highest average total income for men is \$68,700 in the 45 to 54 age group, while the highest average for women is \$38,700 in the same age group.

One very clear impact from the lower earnings of women will be lower superannuation balances. The primary form of superannuation growth for most employees is compulsory employer contributions under the Superannuation Guarantee (SG). As SG contributions are based on earnings, higher earnings mean greater contributions to superannuation and increased levels of superannuation.

³ See the technical notes for a definition of total income and how it was estimated.



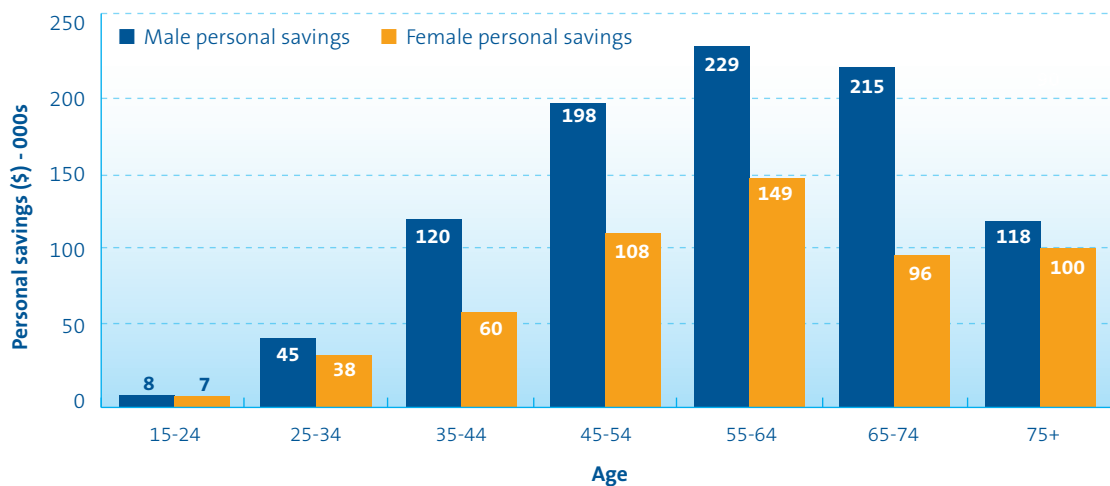
Savings

In previous *AMP/NATSEM Income and Wealth* reports we have considered the wealth of a household. In this report we focus on personal savings or non-housing personal wealth that could possibly be used to supplement or even replace the Age Pension in retirement. Real estate assets have been excluded because they are generally household assets rather than personal ones and are rarely liquidated to provide a source of finance in retirement. Due to the changing marital statuses of many people and the impact this can have on finances (see *AMP/NATSEM Income and Wealth* issue 10 "Love can hurt, divorce will cost"), personal savings rather than household

wealth is the focus of this report. The types of assets included in the definition of personal savings are estimated 2009 values of cash deposits, shares, business assets (net) and superannuation⁴.

The average wealth values shown in the following tables and figures include everyone aged 15 years and over, including those who do not own that type of asset. For example, the average superannuation balance includes those that do not have any money in superannuation. Similarly, for earnings, the averages shown include those who are unemployed or not in the labour force. Full-time students under 25 years are the only exception.

Figure 5 - Average personal savings by age and sex, 2009



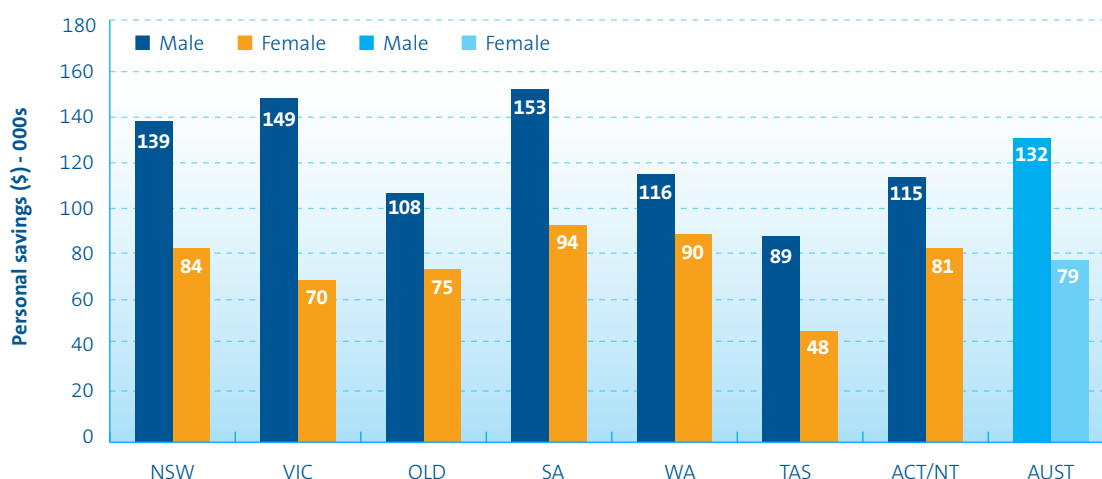
Source: NATSEM calculations see technical notes.

⁴ See the technical notes for a full definition of personal savings.

Up until retirement age, the levels of savings are strongly related to age (Figure 5). This relationship is much stronger than earnings to age. For both sexes, average savings grow steadily from close to zero on arrival into the labour force (\$8,200 for men and \$6,600 for women) to an average value at age 55 to 64 that is more than 20 times greater (\$229,000 for men and \$149,100 for women). From age 65 onwards the level of personal savings declines.

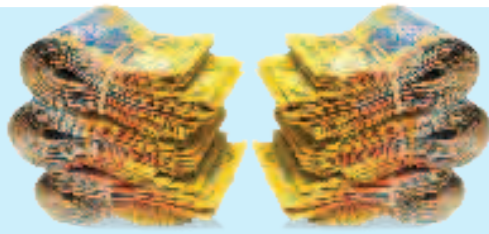
Again, family responsibilities and motherhood have impacted on the personal savings of women. Women have on average only six-tenths the personal savings of men, that is on average women have \$79,100 while men have \$132,200. Examination by asset type shows that superannuation, the asset most closely related to earnings, has the most significant gender difference; with women only having around half the level of their male counterparts in all age groups from age 35 onwards (Table 6 in the appendix).

Figure 6 - Average personal savings by sex and state/territory, 2009



Source: NATSEM calculations, see technical notes.

The overall average personal savings for men is \$132,200, and for women the average is \$79,100. However, there are considerable differences between states. South Australian men have the highest average level of personal savings at \$152,600 while Tasmanian women have the lowest at \$48,300 (Figure 6). More detailed breakdowns are provided in the Appendix (Tables 7, 8 and 9). The higher level of savings by South Australians cannot be attributed to the lower cost of housing in that state (Adelaide had a median house price of \$355,000 in December 2008) as Tasmania has even lower housing prices (Hobart median house price of \$300,000 in December 2008) (ABS, 2009b Table 8). Similarly, despite Tasmanians having the lowest savings and incomes, the levels of saving do not seem to relate to earnings or total income. If this were correct, South Australians should be at or near the top of the income rankings but they are not and, in fact, rank second bottom, only one higher than Tasmania. High levels of savings by those living in country South Australia appear to be the primary contributors to the high average value in that state (Table 7). Higher proportions of their funds held as cash deposits seem to have contributed to South Australians having higher personal savings (Table 8). Conversely, in Tasmania the low personal savings appear to be an outcome of lower average earnings and the poor recent performance of most superannuation funds resulting in low average superannuation balances and superannuation representing a high proportion of their savings (Tables 8 and 9).



The overall average personal savings for men is \$132,200, for women the average is just \$79,000.

Table 2 - Average earned income, total income and non-housing personal wealth by family type, 2009

	FAMILY EARNED INCOME \$ PA	TOTAL FAMILY INCOME \$ PA	FAMILY CASH DEPOSITS \$	FAMILY SHARES \$	FAMILY NET BUSINESS \$	FAMILY SUPER \$	FAMILY TOTAL SAVINGS \$
UNDER 65 YEARS							
Couple with children	88,300	112,900	28,900	11,900	43,500	71,200	155,400
Couple only	75,500	92,200	23,000	9,600	34,400	90,500	157,600
Sole parent	23,300	47,700	10,000	7,100	3,700	26,100	46,900
Lone male	33,800	41,700	18,200	7,400	23,200	29,600	78,400
Lone female	28,300	34,700	16,700	4,600	8,300	30,000	59,500
All under 65	55,300	70,300	21,200	8,500	26,700	53,800	110,100
65 YEARS AND OVER							
Couple only	5,000	45,500	44,000	23,300	55,000	67,700	190,100
Lone male	2,700	25,700	55,800	26,400	13,700	35,700	131,700
Lone female	800	22,400	43,900	16,400	20,200	18,400	98,900
All over 65 years	3,100	33,700	46,500	21,500	34,600	44,000	146,600

Source: NATSEM calculations, see technical notes.

Up to now in this report, we have considered a person's earnings, income and savings at a personal level but in reality for most people there is considerable sharing of income and savings within a family. A breakdown of the types and levels of asset holdings by age group and family type will provide a better view of this sharing (Table 2). While it is not surprising that all family types aged 65 and over have very low earnings, it is surprising that their total incomes at \$33,700 are less than half of those aged under 65 years (\$70,300). Couples with children have the highest incomes of any family type (\$112,900 on average) while lone females have the lowest total income in both the under 65 (\$34,700) and the over 65 age groups (\$22,400).

Having children does not appear to impact on savings as couples with children have only \$2,200 less in savings (\$155,400) than the under 65 couple only savings of \$157,600.

Retirement now

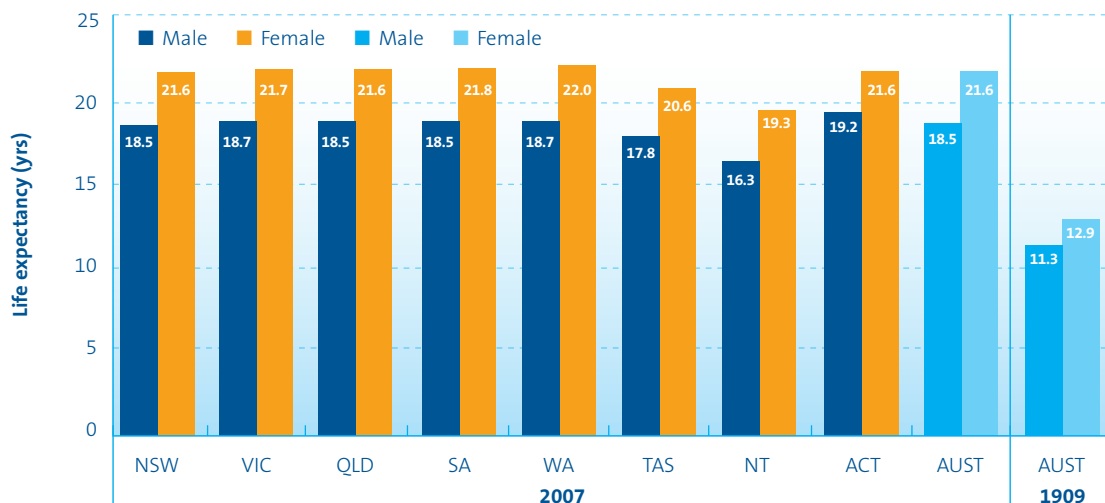
A major change from the early 1900s to the early 2000s has been the introduction of the Superannuation Guarantee (SG). This legislation ensures that almost everyone who works as an employee will have something saved for their retirement. This is important as the proportion of people reaching retirement age has increased dramatically along with how long they expect to live in retirement, and this is putting financial pressure on the government budget due to increased Age Pension costs.

Today, 87 per cent of men and 92 per cent of women live until age 65 (see Figure 2) and can expect to live for approximately another 20 years after age 65 (Figure 7 - 18.7 years for men and

21.5 years for women). While the life expectancy at age 65 varies between the states and territories, all values are significantly above the 1909 levels (Figure 7). Improved sanitation, better diet, education, improved therapeutic measures, advances in drug therapy, and other measures have all contributed to improving the life expectancy of Australians (Hugo 2001). This greater longevity is one of the reasons that 13 per cent of the Australian population is now aged 65 and over.

A feature of retirement today is that despite the introduction of compulsory superannuation in 1992, more than three-quarters (77 per cent) of older Australians receive income support in the form of the Age Pension or Department of Veterans Affairs Service Pension (Harmer, 2008) from the government.

Figure 7 - Life expectancy at 65 years by sex and state/territory, 2007



Source: ABS 2007 Deaths, Australia, Cat. No.3302.0.

Age pension

Some aspects of the Age Pension have not changed since 1909, such as the aim (to provide a financial safety net for older Australians) and residency, age and means criteria must still be met to receive the pension. Other aspects of the pension have changed considerably. For example, the 2009 Federal Budget increased the maximum pension rate to 27.7 per cent of male total average weekly earnings (it was 12 per cent in 1909)

and now 77 per cent receive the income support compared with 28 per cent in 1909.

The greater longevity, greater numbers of older people and higher proportion receiving a pension have resulted in 2.3 million older Australians now receiving either the Age Pension or Department of Veterans Affairs Service Pension (Harmer 2008).



In the future, the government will require higher levels of self-reliance in retirement.

Retirement expectations

Improved health, increased longevity and compulsory saving for retirement have led to some great expectations of what can be done in retirement. In general discussion on retirement expectations, one or more of the following are often suggested:

- more time spent on myself
- overseas holidays
- an active lifestyle
- interstate visits to children
- childcare for grandchildren
- continuing work, but less hours and in a less stressful paid position
- undertaking voluntary work
- continuing our current high standard of living (two cars, frequent restaurant meals, etc).

While these are perfectly fine aspirations, they cannot be turned into reality without substantial retirement savings or a comfortable retirement income.

Research by the Australia Institute has found two quite different views on early retirement and retirement expectations among those approaching retirement age. The first view is that of many high income earners. These people are not considering retirement in the traditional sense. They will simply “shift down a gear and enjoy the flexibility to pursue their interests” (Hamilton and Hamilton 2006) at some stage. The second view is that of many low income earners. This group want the traditional early retirement but believe they will need to continue to work up to and beyond retirement age for financial reasons.

Table 3 - Average total income and personal savings by age and labour force status, 2009

SEX	AGE	EMPLOYED FULL-TIME		EMPLOYED PART-TIME		NOT IN THE LABOUR FORCE	
		TOTAL PERSONAL INCOME \$ PA	PERSONAL SAVINGS \$	TOTAL PERSONAL INCOME \$ PA	PERSONAL SAVINGS \$	TOTAL PERSONAL INCOME \$ PA	PERSONAL SAVINGS \$
Male	45-49	84,900	243,000	44,400	145,600	19,400	74,200
	50-54	75,200	208,900	40,500	162,000	14,800	45,600
	55-59	77,500	277,900	40,100	205,400	22,900	131,000
	60-64	71,100	260,600	43,600	380,700	19,600	154,000
	65+	53,100	889,500	53,800	410,600	23,200	107,500
Female	45-49	59,600	97,200	35,900	97,600	13,900	62,000
	50-54	61,100	204,900	31,200	122,200	9,100	41,400
	55-59	57,800	149,500	32,000	200,600	13,300	112,300
	60-64	56,200	178,800	36,200	205,800	14,700	135,500
	65+	46,700	219,500	45,000	562,600	18,900	81,600

Note: Total Personal Income refers to income received by a person from all sources (earnings, government payments, investments and other income). Personal savings include personal cash deposits, shares, net business assets and superannuation.

Source: NATSEM calculations, see technical notes.

Some of the advantages of continuing in full-time employment up until retirement age are shown in Table 3. The table shows the average total personal income and personal savings of those aged 45 and over by labour force status. While those in full-time employment may not have the leisure time of those not in the labour force, they do have a total personal income which is around four times higher than those not in the labour force and generally those in full-time employment have savings double the level of those not in the labour force.

A detailed examination of men and women not in the labour force shows average cash, shares and business assets declining between the 45 to 49 age group and the 50 to 54 age group. This suggests these assets are being drawn down over this period. From the 55 to 59 age group to the 60 to 64 age group, the superannuation balances of those not in the labour force increases as people with high superannuation balances move from employment to early retirement. It is generally agreed that a person needs an income around two-thirds (65 per cent) of their pre-retirement total income to provide an adequate standard of living in retirement (Senate 2002).

If we assume that a person has a pre-retirement income equal to the current average earnings then this would produce a requirement for a retirement income of \$40,475 per annum (65 per cent of AWOTE of \$62,270)⁵. The savings of those currently aged 65 and over and retired (\$107,500 for men and \$81,600 for women) are enough to last from age 65 to 68 years (for women) and until age 69 years for men according to the AMP retirement simulator⁶. Using data from the table and the AMP retirement simulator it is clear that, on average, the large personal savings of those in full-time employment can meet their expectations, provided it is not eroded by reducing participation to part-time or leaving the labour force before age 65 years.

Government role

The changing demographics are putting budgetary pressure on government and they are trying to minimise the financial burden. The ageing population is impacting on government outlays related to health, the Age Pension, and aged care. In the government's second Intergenerational Report, it provides estimates of the changes over the next 40 years in

terms of how much the government will spend per person after allowing for inflation. It estimates that total health expenditure will increase 3.5 times from \$1,858 per person to \$6,458 per person, in real 2006-2007 dollars; the cost of the Age Pension will increase 3.2 times from \$1,231 per person to \$3,942 per person; and the cost of aged care will increase 4.7 times from \$378 per person to \$1,769 per person (Treasury 2007).

Against this background, a possible option for the government is to increase income tax to fund these increased outlays. However, this may create intergenerational inequity. Government support in old age has always been based on a form of intergenerational income transfer - one generation works and pays taxes to fund the retirement of a previous generation. While this has worked well in the past, the growing proportion of those aged 65 and over will put tremendous pressure on future systems. A shift towards greater self-reliance (through private retirement saving) allows each generation to save for its own retirement and reduces the burden on the next generation. Facilitating this self-reliance is a critical part of the government plan to manage future financial pressure (Henry 2009).

There is some evidence in Table 3 of accelerated saving for retirement leading to greater self-reliance in the future. The government has already begun moving towards improving self-reliance by encouraging continuing participation in the labour force and improving the targeting of the pension to those most in need. The government has introduced a phased increase in the superannuation preservation age from 55 to 60; the Income Tax Review has noted they will recommend the preservation age gradually align with the Age Pension (but a decision by the government will not be made on this recommendation until 2010); and incentives have been introduced to encourage continued participation in the labour force (for example, tax-free access to superannuation from age 60 and ability to access superannuation and still work). In regards to the Age Pension, the government has begun aligning eligibility age for men and women; gradually increasing the pension age for women from 60 to 65; gradually increasing the eligibility age from 65 to 67 years; and, increasing payments to those most in need (singles) while limiting the amounts paid to those of high means.

⁵ The method used here is a one-number-fits-all solution. The Senate recommendation is for a more sophisticated relative measure such as provided by the AMP Superannuation Adequacy Index. This Index is a relative measure of living standards before and during retirement.

⁶ <https://www.amp.com.au/MyRetirementSimulation/showSimulator#modeller>

Retirement - the future

The discussion in the previous section on retirement expectations highlighted how the concept of retirement is changing. In the future, retirement will mean different things to different people. Some will still see it as a period for complete withdrawal from the labour force and a focus on non-work related activities. Others will have a new vision where they continue to be engaged with the labour force but perhaps on their own terms - a different industry, a different role, reduced hours and other like choices.

It is clear that one aspect of retirement in the future is that the government will require higher levels of self-reliance. It can be expected that the government will continue to better target the Age Pension to those with the greatest need and to encourage longer participation in the labour force (where superannuation accumulates rather than gets drawn down).

Australia in 30 years time

Male life expectancy at birth has increased from 55.2 years in 1901 to 1910 to 78.7 years now and for females from 58.8 years to 83.5 years. The gains have been attributed to improved living conditions in the early 20th century and improving social conditions and advances in medical technology in the latter part of the century. Over the last 20 years there have been further improvements in life expectancy, in part due to lower levels of deaths among older people from heart disease (ABS 2008a). The ABS projects that life expectancy at birth will rise by 0.3 years every year, if this improvement continues. If this trend estimate is correct, life expectancy at birth will increase by 9.0 years over the next 30 years.

Actuaries have also calculated that over the last few decades there has been an accelerating trend in improvements in mortality rates (Stevenson 2008). While more data and study are needed, Australians may live around three to eight years longer than currently expected after age 65. Using a mixture of approaches, a reasonable estimate is that the improvements will add approximately six years to current life expectancies. Even with the retirement age increasing from 65 to 67 years, the expected 20 years in retirement may in fact have increased to 24 years.

In 1909, only 4 per cent of the population was aged 65 and over. In 2009, 2.9 million people or 13.5 per cent of the population are in the same age group. In 30 years, the longer life expectancy could see around 7.0 million people (22 per cent) aged 65 years and over (ABS 2008a).

Retirement in 30 years time

Having a higher proportion of people in retirement for longer will put even further pressure on the government. In turn, it will put more pressure on the government to better target their scarce resources and facilitate self-reliance. While the government believes greater retirement savings will lead to a reduction in those receiving the full rate of the Age Pension, it is not projecting a significant change to the proportion not receiving any pension. Treasury estimates that the proportion receiving the full pension would decline from around 60 per cent to 38 per cent over the next 40 years and those not receiving a pension would increase from 20 per cent to 22 per cent (Treasury 2007).

Using APPSIM, a new dynamic microsimulation model being developed at NATSEM, it is possible to simulate the accumulation of superannuation over the next 30 years and look at the impact of the growth in superannuation on government outlays for Age Pension payments. In Table 4 the estimated mean superannuation balances are projected for 2010 and 2040 for those aged 45 years and over. The superannuation balances are a sum of compulsory superannuation guarantee contributions (9 per cent), voluntary contributions (using a distribution based on ABS survey data) and projected investment returns. The assigning of voluntary contributions and investment returns are based on microsimulation techniques. The microsimulation modelling techniques of estimating future superannuation balances are quite different to the techniques used in the *AMP Superannuation Adequacy Report* (Access Economics 2008). For example, it does not use average superannuation contributions but estimates individual contributions based on the characteristics of the person and the probabilities for that individual.



Table 4 - Estimated superannuation balances* under two scenarios, 2010 and 2040

AGE GROUP	SUPER 2010		SUPER 2040		12% SG SUPER 2040	
	MALES \$	FEMALES \$	MALES \$	FEMALES \$	MALES \$	FEMALES \$
45-54	103,400	61,400	225,400	145,100	284,000	155,900
55-64	113,200	54,500	350,900	200,300	434,600	245,000
65 and over	43,000	42,300	142,400	61,600	176,100	80,300

Note: *Preliminary estimates from APPSIM, see technical notes.

Source: NATSEM.

In 2040, the Superannuation Guarantee (SG) scheme will be mature and the average person will have been contributing to superannuation for most of their working life (possibly more than 40 years). In 2010, the SG scheme is not mature and the average person has only been able to contribute since 1993 (17 years) and the SG rate was raised from its original value of 3 per cent to its current value of 9 per cent over a period of years.

In 2040, the simulation estimates that the only group that has not enjoyed significant growth in their superannuation is women aged 65 and over. The reason for this is the longer periods out of the labour force, lower earnings, and earlier retirement.

At present, a number of organisations and industry groups are suggesting that the SG rate be increased from its current 9 per cent to 12 per cent. Using APPSIM, it is possible to simulate the impact of a new SG rate. The last two columns of Table 4 show the 2040 projected outcomes under this scenario. For men, the change to 12 per cent over the 30 years results in an increase of 25 per cent while for women, the increase varies with age. For those women aged 45 to 54, the increase is only 7 per cent; for those aged 55 to 64 it is 22 per cent; and, for women aged 65 and over, it is 30 per cent but the balance is still very low at \$80,300.

As the SG contributions are linked to earnings, the system will always be better for those with higher earnings. As mentioned previously, balancing family and employment usually sees women earning less than men. Given this, it is not surprising that women's superannuation is traditionally around half of the level of men at the same age. Greater labour force participation, especially full-time employment, will help to reduce the gap but it will be some time before men and women have equal balances. The simulation estimates that current labour force participation rates by women will raise their superannuation from half to 60 per cent of men at the same age over the next 30 years. Increasing the SG to 12 per cent would improve the average superannuation balances of women, but the gap would widen by four percentage points due to the higher earnings of men.

The Age Pension means-testing includes "free" areas where a certain level of assets does not impact on the rate of payment. For example, a single person who is a homeowner can have up to \$178,000 in assessable assets without it affecting the pension payment rate. For this reason, as superannuation balances or other personal savings grow, Age Pension outlays will not automatically decrease. Under the 12 per cent scenario simulated, Age Pension outlays in 2040 will only be 2.3 per cent lower than under the 9 per cent scenario. So increasing the SG contribution rate from 9 per cent to 12 per cent will increase the superannuation of most Australians but it will not produce significant savings for the government.

Conclusion

Just to reach retirement was the dream in 1909. As only half the population reached age 65 years and a physically demanding working life left many people with few healthy years left to enjoy in retirement. Very little time, if any, was spent planning what to do in these retirement years.

One hundred years after the Age Pension began, Australian men and women have an expectation they will spend 20 healthy years in retirement doing all the things they have always wanted to do. The expectations for these years cannot be satisfied if the Age Pension is the only source of retirement income - it is designed to provide the basics, not pay for a lifestyle that includes travel, a range of activities and eating out regularly. The pension needs to be supplemented or replaced by savings made during working life to provide this level of lifestyle. With personal savings still reasonably low, it seems there will be an expectation-reality gap for many people, particularly for women.

As the baby boomers head into retirement over the next 10 years and realise that they do not have the funds to meet their expectations, the pressure will rise on future governments to provide more. But this seems highly unlikely - future governments will be under considerable financial pressure from the increased proportion of retirees and smaller tax base. The government has already put in place a number of measures to help Australians be more self-reliant and it is more realistic to expect future governments will continue to move in that direction.

Being impatient and retiring early will not help. In fact, it will ensure that a short period of the “good life” is followed by around two decades of very modest living. Staying in the labour force will help as superannuation will continue to accumulate rather than being drawn down. However, even staying in the labour force longer will not provide a “comfortable” retirement for all groups.

In 30 years, the superannuation balances for Australians approaching retirement will be considerably higher, as they have been contributing for all of their working life. Despite this, some people, particularly women, will still have a “very modest” living standard in retirement and will continue to rely on government income support.

According to NATSEM simulations, increasing the minimum superannuation guarantee contribution to 12 per cent is only part of the solution. While it would improve the average superannuation balances of women, the gender gap would widen by four percentage points due to the higher average earnings of men. From the government’s perspective, it would only reduce Age Pension outlays by a small percentage.



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Technical notes and definitions

Participation rate

The labour force participation rate is, for any group, the labour force (either employed or unemployed) expressed as a percentage of the civilian population aged 15 and over in the same group.

ABS survey data files

A number of figures and tables in this report are based on NATSEM calculations which use a Confidentialised Unit Record Files (CURF) from the Australian Bureau of Statistics as a foundation. CURFs contain the most detailed level of information that can be released. The CURF in this report is the 2005-06 Survey of Income and Housing Costs (ABS 2008b). The figures and tables in this report present 2009 values which have been obtained by inflating or deflating the values recorded on the CURF. The benchmark used to inflate or deflate a value is discussed below.

Total personal income

Total income is defined as the income the person received from all sources - earnings, government benefits, investments and other personal income. Earnings include salary sacrificed amounts if applicable. The June 2009 estimates have been calculated by using the change in average weekly ordinary time earnings to inflate the value recorded for each person on the 2005-06 ABS Survey of Income and Housing CURF to June 2009. The new weekly values have then been annualised.

Personal non-housing savings

Personal savings is defined as the sum of the value of cash deposits, shares, superannuation and own business (net). Cash deposits include accounts held with financial institutions, debentures, bonds, loans to other people, trusts and other financial investments. The 2009 estimates have been calculated by using applicable interest rates, the change in the ASX 200 and average superannuation returns to update the values recorded for each person on the 2005-06 ABS Survey of Income and Housing CURF to June 2009.

APPSIM

APPSIM is a dynamic microsimulation model that simulates all of the major events that happen to Australians during their lifetime, on the basis of probability equations based on actual Australian data. The model starts with a large representative sample of Australians and then simulates up to 50 years into the future. The simulated events include mortality, household formation and dissolution, fertility, education, labour force participation, earnings, savings, retirement, wealth, health, social security and taxation.

APPSIM is being developed as part of a five year research project. As the model is still under development, its projections should be treated as experimental.

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Appendix

Table 5 - Labour force participation rates by age and sex, April 1911 and July 2009

AGE GROUP	MALES		FEMALES	
	1911 %	2009 %	1911 %	2009 %
15-19	90.0	53.8	43.5	57.1
20-24	97.7	83.8	40.2	74.9
25-34	98.0	91.1	22.9	73.3
35-44	97.3	90.9	16.7	76.1
45-54	95.8	88.7	15.5	78.5
55-59	92.7	79.3	14.6	63.6
60-64	85.8	59.0	13.1	41.8
65 and over	55.3	15.2	7.9	6.0
Overall 15+ participation rate	93.0	72.0	25.0	58.3

Source: ABS, 2000 and ABS, 2009a.

Table 6 - Non-housing personal wealth by age, sex and type of asset, 2009

AGE GROUP	MALES					FEMALES				
	CASH DEPOSITS	SHARES	NET BUSINESS	SUPER	TOTAL	CASH DEPOSITS	SHARES	NET BUSINESS	SUPER	TOTAL
<25	3,800	500	400	3,500	8,200	3,100	400	200	2,800	6,600
25-34	8,100	3,600	13,200	19,900	44,800	17,300	1,700	5,400	14,100	38,400
35-44	31,300	11,300	30,100	47,100	119,800	15,200	7,300	12,200	25,700	60,300
45-54	23,000	13,000	67,500	94,300	197,800	19,800	7,900	31,400	48,500	107,600
55-64	41,000	14,700	42,400	130,900	229,000	41,500	12,000	34,900	60,700	149,100
65-74	42,800	18,000	64,800	88,900	214,500	34,400	11,800	8,200	41,400	95,700
75+	54,800	33,700	13,300	16,200	118,000	48,900	21,300	21,200	8,800	100,300
All Ages	26,200	11,500	34,400	60,100	132,200	23,700	7,900	17,000	30,500	79,100

Source: NATSEM calculations, see technical notes.

Table 7 - Non-housing personal wealth by sex and state/territory, 2009

STATE/ TERRITORY	CAPITAL CITY		BALANCE OF STATE		OVERALL	
	MALES \$	FEMALES \$	MALES \$	FEMALES \$	MALES \$	FEMALES \$
NSW	149,900	86,200	120,000	79,700	138,800	83,700
VIC	154,400	64,300	132,900	85,300	148,500	70,300
QLD	118,200	74,600	99,100	75,400	107,700	75,000
SA	128,000	77,700	223,400	139,300	152,600	93,800
WA	114,200	68,400	122,900	162,200	116,300	90,200
TAS	92,100	50,800	86,100	46,400	88,700	48,300
ACT/NT	-	-	-	-	115,000	80,900
AUST	139,500	74,600	120,800	86,900	132,200	79,100

Source: NATSEM calculations see technical notes.

Table 8 - Average earned income, total income and Non-housing personal wealth by state/territory, 2009

STATE/ TERRITORY	EARNED INCOME \$ PA	TOTAL PERSONAL INCOME \$ PA	CASH DEPOSITS \$	SHARES \$	NET BUSINESS \$	SUPER \$	TOTAL \$
NSW	31,800	43,700	29,900	9,600	28,300	43,100	110,900
VIC	29,900	41,900	19,300	10,500	30,600	48,200	108,600
QLD	29,600	41,700	21,600	9,600	16,400	43,700	91,300
SA	27,300	39,800	39,200	8,400	31,800	43,500	122,800
WA	32,000	44,300	22,000	10,300	24,400	46,500	103,200
TAS	23,300	35,300	17,400	4,300	9,800	36,600	68,100
ACT/NT	41,500	52,400	14,800	10,800	10,500	61,900	98,000
AUST	30,600	42,600	24,900	9,700	25,600	45,100	105,400

Source: NATSEM calculations see technical notes.

Table 9 - Proportional asset distribution of non-housing personal savings by state/territory, 2009

STATE/TERRITORY	CASH DEPOSITS %	SHARES %	NET BUSINESS %	SUPER %	TOTAL %
NSW	27.0	8.6	25.5	38.9	100.0
VIC	17.8	9.7	28.2	44.4	100.0
QLD	23.7	10.5	17.9	47.9	100.0
SA	31.9	6.8	25.9	35.4	100.0
WA	21.3	10.0	23.6	45.0	100.0
TAS	25.6	6.3	14.4	53.7	100.0
ACT/NT	15.1	11.0	10.7	63.2	100.0
AUST	23.7	9.2	24.3	42.8	100.0

Source: NATSEM calculations, see technical notes.



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