The Allen Consulting Group

Better living standards and a stronger economy: the role of superannuation in Australia

September 2009

Report to the Association of Superannuation Funds of Australia

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Introduction

Superannuation as a form of saving has existed for more than a century in Australia, but has only covered the bulk of the adult population since it became compulsory in 1992 with the 'superannuation guarantee'. Since then, superannuation has become a central plank of Australia's retirement income system.

This report outlines the evidence that superannuation continues to benefit Australians despite recent falls in the share market, and changes to legislation. It does so in three key ways.

First and most importantly, it benefits families by assisting them to save for their retirement and enabling retirees to enjoy a better standard of living than compared to being solely on the Age Pension.

Second, superannuation benefits the Australian economy because it drives economic growth through its impact on national savings and investment. In comprising a significant proportion of growth in managed funds and venture capital it provides an important boost to the local economy, the financial sector and jobs. By growing retirees' income it also stimulates spending by retirees — which also helps drive economic growth and job creation.

Third, superannuation reduces the amount the Government needs to spend on the Age Pension, thus enabling the Government to boost spending on other Government policies and programs. Superannuation also increases Government revenue indirectly by generating economic activity and directly through taxes.

Benefits to Australian families

For most households, superannuation is the largest asset after the family home. It is an increasingly important way of generating retirement income for almost all Australians. Retirees with superannuation have a significantly higher gross weekly income than those without superannuation and so generally enjoy a higher standard of living. Of retirees with superannuation in 2007, 59.8 per cent had gross weekly income of at least $300; of retirees without superannuation, only 17.5 per cent had a gross weekly income of $300 or more (ABS 2009a).

A case study of two middle-income families, one with superannuation and one without and a case study of two low-income families, one with superannuation and one without, demonstrate the financial benefits in retirement of superannuation. Holding all else constant this study finds that a middle-income family with superannuation is better off by around $116,711 than a middle-income family without superannuation. This is principally due to the different tax treatment. A low-income family with superannuation that makes additional contributions out of after-tax income is better off than a low-income family without superannuation by around $148,717. This is due to the more favourable tax treatments and the government co-contribution.

Benefits to the national economy

Over the past fifteen years, households' saving in financial assets has become heavily directed towards superannuation. Whether, and to what extent, higher flows into superannuation assets have contributed to or detracted from household saving on a net basis (i.e. whether they have been substantially offset by reductions in other saving and/or incurrence of debt to finance consumption) has been the subject of debate for several years.

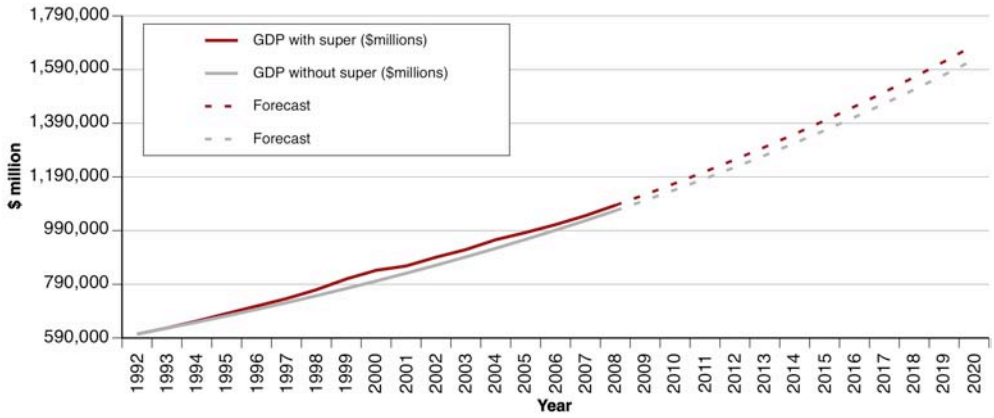
Empirical evidence indicates that the superannuation guarantee may have increased the household saving rate by up to 1.5-2 per cent of gross domestic product (GDP). That is, government policies encouraging superannuation have added to both household saving and wealth, albeit that they appear to have been 'swimming against the tide' of other strong factors reducing saving, and disposing people to incur debt.

Drawing on this empirical evidence, we estimate the contribution to GDP, capital and investment of superannuation. Our analysis takes into account that, if the superannuation guarantee did not exist, individuals would save through other savings vehicles such as cash deposits, managed funds or property investments. Therefore, the additional amount saved due to superannuation is less than the full amount of superannuation saving. Using a macroeconomic growth model that relates GDP to the amount of capital and labour in the economy, we estimate that without superannuation, investment would have been $14 billion, or 4.5 per cent lower than it actually was in 2008 ($312 billion) and capital stock would have been almost $144 billion less.

Extrapolating from these capital and investment growth figures we estimate that without superannuation, GDP would have been an estimated 1.8 per cent lower in June 2008 than it actually was. This is shown in Figure ES.1[1]. This is a difference of almost $20 billion. Without superannuation, GDP may have been only $1.06 trillion in 2008, as opposed to the actual figure of $1.08 trillion.

Figure ES.1

GDP WITH SUPERANNUATION AND GDP WITHOUT



Source: Allen Consulting Group 2009

[1] The slight hump of actual GDP relative to estimated GDP around the year 2000 can be explained by the fact that economic growth was relatively high in that time period. This does not show up in the estimated level of GDP because that is based on average growth.

In terms of per capita differences, we estimate that in 2008 without superannuation, individuals would have been worse off by $928, or almost $2,400 per household (based on statistics from ABS 2008b). As GDP per capita in 2008 was $50,586, this equates to a 1.8 per cent difference in per capita incomes. For 2009 we estimate a per capita difference of around $996, or around 1.9 per cent.

Over time, the difference between GDP with superannuation and GDP without superannuation will (hypothetically) increase. This is due to the fact that GDP with superannuation grows at a faster rate than GDP without superannuation, due to the additional investment that superannuation generates. Over time, the difference in growth rates leads to an increasing gap between GDP with and without superannuation, which is illustrated in the forecast numbers in Figure ES.1. GDP with superannuation in 2020 is estimated to reach $1.7 trillion, based on current growth levels. Without superannuation it is likely GDP would fall short by 3.2 per cent, reaching only $1.6 trillion.

The benefits of superannuation to the national economy are also evidenced by its contribution to the finance sector. Accounting for 45 per cent of the finance and industry sector in Australia, superannuation has helped drive significant growth in the finance industry and created thousands of jobs.

Superannuation funds hold a substantial portion of Australian shares by market capitalisation and this relationship has grown over time. The ASX estimates that the proportion of Australian equities held by superannuation funds has grown from 8.5 per cent in 1998 to 16.5 per cent in 2007 (ASX 2007). Based on the latest available data, we estimate that superannuation equities accounted for 23 per cent of total market capitalisation of the ASX in the 2007-08 financial year.

Superannuation funds are the largest contributor to managed funds. As at the June quarter 2009, superannuation funds accounted for 61 per cent of all consolidated assets in managed funds, 62 per cent of total unconsolidated assets, and 67 per cent of cross invested assets (ABS 2009f).

Superannuation has also helped drive investment in venture capital and later stage private equity. Australian superannuation pension funds contributed to 55 per cent of the total of funds committed toward venture capital and later stage private equity, or $9.4 billion of the total $17.1 billion committed as at 30 June 2008. Superannuation funds invested in venture capital and later stage private equity vehicles are then invested in a wide range of industries including manufacturing and utilities, finance and property, and health and services (ABS 2009f).

By ensuring that individuals retire with higher savings than they would if they relied solely on the Age Pension, superannuation also helps drive spending. Nearly $40 billion in superannuation lump sums and pensions is paid out to retirees each year (ASFA 2009). With fewer incentives to save, retirees are more likely to spend this money, and in so doing stimulate the local economy.

Benefits to Government

It is often argued that superannuation tax concessions favour high-income earners and reduce much-needed Government revenue. This is because both employer contributions and fund earnings are taxed at the rate of up to 15 per cent whereas the highest income earners are due to pay significantly more tax on their incomes.

These arguments, however, ignore the significant contribution to taxation generated by the superannuation industry. This occurs in three key ways. Firstly, superannuation contributes directly to the tax base. Secondly, by generating economic activity superannuation increases tax revenue. Thirdly, superannuation eases the burden on the Government in terms of paying for the Age Pension. These three impacts — both direct and indirect — sum to just over $15 billion (2009-10), as shown in the table below.

Table ES.1

SUPERANNUATION'S CONTRIBUTION TO TAX REVENUE

	2009-10
Direct superannuation tax revenue	$7,990 million
Tax revenue generated by economic activity from super	$5,251 million*
Savings on the Age Pension	$1,760 million
Total	**$15,001 million**

* figure is based on 2007-08 estimate

It would however, be misleading to claim that superannuation contributes significantly to tax revenue without acknowledging the value of superannuation tax concessions, which in 2009-10 were worth nearly $25 billion (Treasury 2009a). Superannuation tax concessions obviously cost the Government a significant proportion of tax revenue.

That said, without the tax concession, few Australians would contribute to superannuation beyond the mandatory component — thus reducing the total stock of superannuation contributions and in turn reducing superannuation-generated economic activity and increasing Government spending on the Age Pension. Arguments suggesting that reducing the tax concessions would increase Government revenue are therefore not as convincing as they may first appear.

Moreover, just because a Government policy poses a net cost on Government does not mean that it is necessarily a bad policy. In fact, the vast majority of Government programs and tax incentives are costly, but are pursued because they promote better and more sustainable standards of living for the long term.

Conclusions

Given these findings it is clear that superannuation should remain an integral pillar of Australia's retirement income system. Recent initiatives, such as temporary reductions to co-contributions and reducing the cap on concessional contributions, reduce incentives to contribute to superannuation. These initiatives will likely work to weaken this pillar.

Changes to the system (which have not been infrequent) also cause confusion among contributors — undermining confidence and trust — as well as directly discouraging increased contributions and placing increased emphasis on the Age Pension. Thus, while they may reduce burdens on Government budgets in the near term, they may increase burdens on *future* Government budgets, which will in turn imply higher tax burdens on the next generation.

In the interest of intergenerational equity as well as to help maintain strong flows of saving available to finance investment and growth, it is important to keep the incentives to contribute to superannuation strong.

Superannuation is the key to ensuring that today's working Australians can look forward to high standards of living in their retirement. It also helps provide the national savings required for robust investment and a stronger economy.

Chapter 1

Context

Superannuation as a form of savings has existed for more than a century in Australia, but has only covered the bulk of the adult population since it became compulsory in 1992 with the 'superannuation guarantee'. Since then, superannuation contributions have become a central plank of Australia's retirement income system.

This chapter places superannuation in Australia in context by outlining the history of superannuation and explaining recent developments. It also outlines the purpose of this report and report structure.

1.1 Purpose of this report and report structure

Superannuation has long been recognised as an important component of Australia's personal retirement savings, the national savings program and a driver of the growing financial industry. However, previously strong public and industry support for superannuation has diminished to some degree in the last twelve months. According to representatives of the superannuation industry, this 'loss of confidence' has come about as a result of the share market collapse in 2008, and recent changes to superannuation (Patten 2009).

This report outlines the evidence that superannuation continues to benefit Australians despite recent falls in the share market, and changes to legislation. It does so in three key ways.

Firstly and most importantly, superannuation benefits families by assisting them to save for their retirement and enabling retirees to enjoy a better standard of living in their retirement than compared to being solely on the Age Pension (outlined in Chapter 2).

Secondly, superannuation benefits the Australian economy because it is a key driver of economic growth through national savings and investment, and creates jobs in the finance industry. Increasing the spending capacity of retirees also helps drive the local economy (outlined in Chapter 3).

Thirdly, superannuation reduces the amount the Government will need to spend on the Age Pension, thus enabling the Government to increase spending on other Government policies and programs. It also contributes both indirectly and directly to the tax base (outlined in Chapter 4).

1.2 Superannuation in Australia

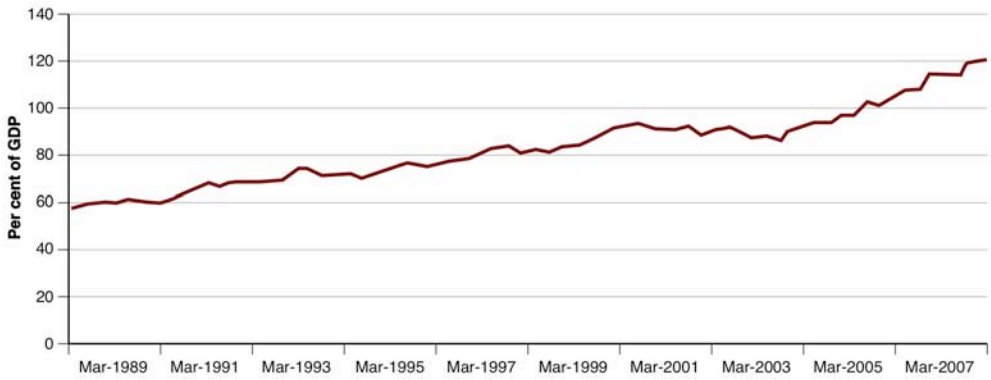
Superannuation as a form of savings has existed for more than a century in Australia, but has only become widespread since it became compulsory in 1992 with the 'superannuation guarantee'. Employers are now required by law to pay a proportion of an employee's salaries and wages into a superannuation fund, which can be accessed when the employee retires or transitions to retirement.[2]

[2] Benefits also are available in the case of Total and Permanent Disability (TPD) and hardship or compassionate release.

Since it became compulsory, superannuation contributions have become a central plank of Australia's pension system. Household asset in superannuation as a percent of GDP have risen steadily in the past decade (see below).

Figure 1.1

HOUSEHOLD ASSETS IN SUPERANNUATION (PER CENT OF GDP)

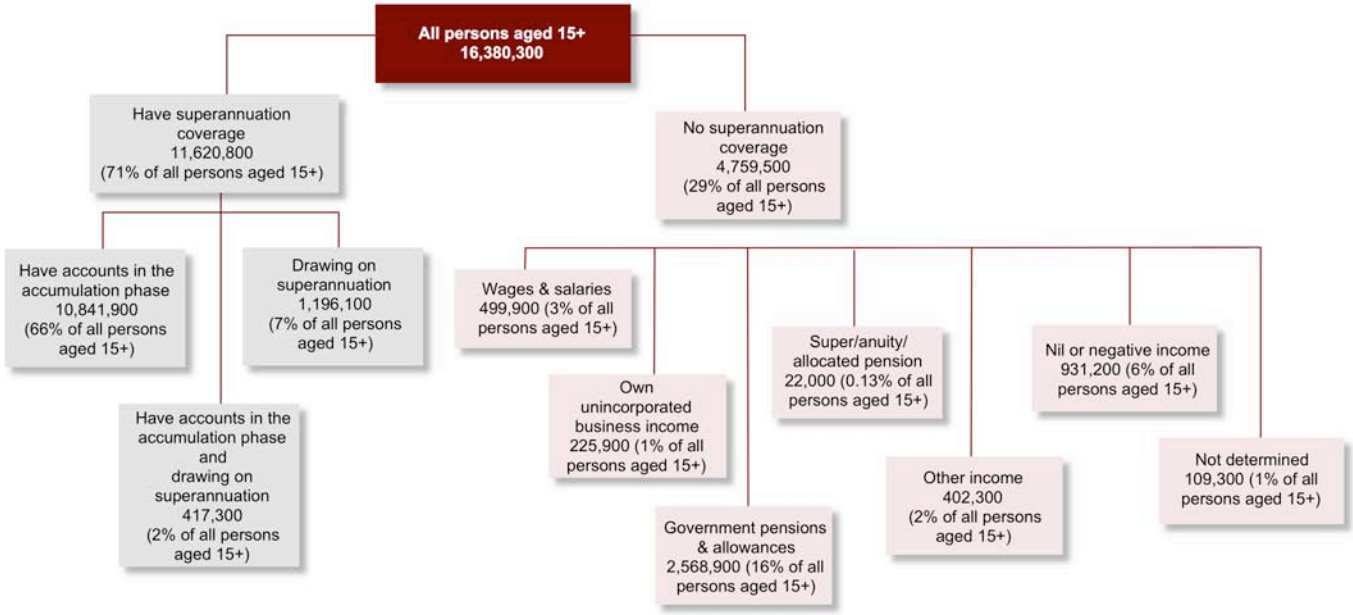


Source: ABS 2007a and 2007e.

The latest data from 2007 on superannuation coverage from the Australian Bureau of Statistics (ABS) (see Figure 1.2) shows that of all persons age fifteen or over (16.4 million) 11.6 million have some level of superannuation coverage and 4.8 million do not. Of those with superannuation, 10.8 million have accounts in the accumulation phase, another 0.4 million are accumulating and drawing on their superannuation and 1.2 million are drawing on their superannuation (ABS 2009a).

Figure 1.2

SUPERANNUATION COVERAGE ACROSS AUSTRALIA



Source: ABS 2009a

Superannuation accumulation is more common in the younger age groups, among men and among employed people. Eighty-seven per cent of people age 25-54 years have some level of superannuation coverage compared to 50 per cent of people age 55 years and over. Seventy per cent of men age 15 years and over have accounts in the accumulation phase compared to 62 per cent of women. Of these groups of men and women with accounts in the accumulation phase, 86 per cent are employed (ABS 2009a).

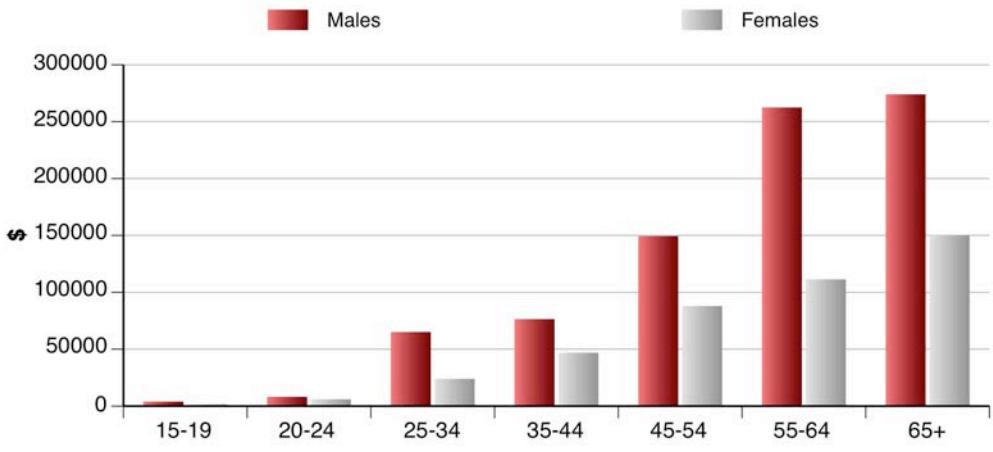
The self-employed are less likely to be contributing to, or drawing on superannuation. Of all those who own unincorporated business income, 71.7 per cent have accounts in the accumulation phase, 3.6 per cent are drawing on superannuation and 26.4 per cent have no superannuation coverage (ABS 2009a).

Superannuation (or income derived from it) is less common among retirees than people currently of working age. Current retirees mostly rely on government pensions and allowances for their source of personal retirement income. Sixty-five per cent of retired men and 67 per cent of retired women cite government pensions and allowances as their predominant source of personal retirement income (ABS 2009a). The longer a person is retired, the more likely they are to rely on pensions and allowances as their main source of income. Government pensions and allowances are the main source of income for 45 per cent of people who had retired less than five years ago, 62 per cent of people who had retired five to nine years ago, and 73 per cent of people who retired twenty or more years ago (ABS 2009a). This reflects both the running down of superannuation balances, and the fact that older age cohorts, (particularly women) have not benefited from compulsory super.

Figure 1.3 shows that the average superannuation balance for non-retirees is significantly greater for men than women and greatest for men over sixty five years of age.

Figure 1.3

AVERAGE SUPERANNUATION BALANCES, NON-RETIREES, 2006



Source: Wilkins, Warren and Hahn (2009), HILDA unit record data.

1.3 A brief history of superannuation

A range of factors has driven superannuation uptake over time. Most of all, regulatory changes have had a large impact on superannuation coverage. Initially the coverage of superannuation applied only to a minority of employees; generally higher paid white collar staff in large corporations, employees in the finance sector, public servants and members of the Defence Force (APRA 2007a). From the late 1970s and into the 1980s superannuation began to become more widely available as a result of claims lodged in the industrial relations arena (APRA 2007a).

The pre-eminence of superannuation as the preferred financial vehicle for household savings is the product of a series of reforms by the Australian Government. Since the mid-1980s governments have introduced several initiatives to promote private saving, primarily in superannuation:

- The first move toward this took place in the context of the 1985 Wages Accord negotiations, when it was agreed that a 3 per cent wage increase that was deemed due on productivity grounds should be instead paid as a superannuation benefit. The Government viewed this as part of a longer term strategy to give superannuation a central role in private saving (Edey and Gower 2000, p. 288).
- In 1991, the Government announced the 'superannuation guarantee' — from July 1992, employers were required to provide most employees with a minimum superannuation contribution of 3 per cent of earnings. The rate increased over time from 3 per cent to reach 9 per cent by July 2002. The superannuation guarantee led to a rapid expansion in the percentage of employees with superannuation, and their balances in the system.
- In 1997, the then Government introduced a broadly based savings rebate available to people who made personal superannuation contributions, or who earned net personal income from other savings and investments. The maximum rebate available was $225 in 1998-99 and $450 the following year. The rebate was abolished in 2000 as part of the Government's *A New Tax System* reforms.
- In 2004, the then Government introduced the superannuation co-contribution scheme, under which (with subsequent amendments) the Government contributed up to $1.50 for every dollar of personal superannuation contributions made by low to middle income earners (up to $61,920 from July 2009), to a maximum of $1500 per income year.
- In 2006, choice of superannuation fund legislation was introduced to allow employees the right to choose which superannuation fund their compulsory superannuation contributions are paid into.
- In the 2006-07 budget, superannuation benefits from taxed sources were made tax-free for those people aged 60 and over. One objective of this measure was to provide an incentive for workers to delay retirement; it also had the effect of making superannuation a more attractive saving vehicle. Several other changes were made at this time including the abolition of the reasonable benefit limits.
- In the May 2009 budget, the Government announced that the age at which retirees could access the Age Pension would increase from 65 to 67 over time; the annual limits on pre-tax contributions were lowered; and temporary changes to the co-contribution scheme were introduced. These changes and others are outlined in Box 1.1.

Box 1.1

KEY CHANGES TO SUPERANNUATION IN 2009 BUDGET

Cap on concessional superannuation contributions

- The Government will reduce the cap on concessional superannuation contributions from $50,000 to $25,000. This cap will be indexed.
- The existing transitional cap for concessional contributions for those age 50 years and over will also be reduced, from $100,000 to $50,000. This reduced cap will apply for the 2009-10, 2010-11 and 2011-12 financial years, after which affected persons will revert to the lower $25,000 cap (or applicable indexed amount). The transitional cap is not indexed.
- The non-concessional contributions cap will remain at $150,000 for the 2009-10 financial year, and will only increase when the new lower $25,000 cap is increased by indexation.

Minimum draw downs

- From 1 July 2009, the Government will halve the minimum amounts self-funded retirees have to draw down from their account-based pensions for 2009-10.

Co-contributions

- The Government will reduce its matching of super contributions by workers earning less than $61,920 from $1.50 for every dollar invested to $1 for the next three years. It will pay a $1.25 co-contribution for a further two years before the full co-contribution comes back in 2014.

Source: Australian Government 2009

1.4 Superannuation today

Superannuation today is essentially an investment that operates by putting aside money to create savings upon retirement. It is one of the three pillars comprising Australia's retirement income system. The other two pillars are the government funded Age Pension and voluntary saving (Treasury 2008). (Some consider home ownership to be a fourth pillar, as home owners generally enjoy higher living standards in retirements than others.)

The Age Pension provides basic support to those older Australians with no or moderate private income or assets. It supplements the other income of most retirees. A means test that takes into account a retiree's other income and assets determines the degree of supplementation.

The voluntary savings pillar enables individuals to choose how much they save, and the investment vehicle in which they save, to achieve a higher retirement income.

Compulsory superannuation requires individuals to save for their retirement and closely relates an individual's retirement income to their salary level and time in the workforce. Superannuation funds are invested and the earnings are reinvested in the super fund. Most working Australians have 9 per cent of their salary paid into superannuation by their employer. Superannuation is not compulsory for self-employed people, although many do make contributions. It is possible to make contributions over and above the compulsory levels, while still enjoying concessional tax treatment within the limits allowed (Treasury 2008).

In the Australian system, therefore, the Age Pension provides a guaranteed income, while the income generated from the other pillars depends on earnings and investments. The level of earnings of an employee determines the superannuation contribution by the employer. The earnings of a person also enable him or her to make voluntary contributions and accumulate other savings (Treasury 2008).

Chapter 2

Benefits to Australian families

For most households, superannuation is the largest asset after the family home. It is also an increasingly important way of generating retirement income for almost all Australians. Retirees with superannuation have a significantly higher gross weekly income than those without superannuation and generally enjoy a higher standard of living.

This chapter considers weekly income differentials of those retirees with superannuation and those without. Case studies demonstrate the financial benefits in retirement of superannuation. This chapter also considers other aspects of superannuation such as control of savings and investment and the influence of the sharemarket.

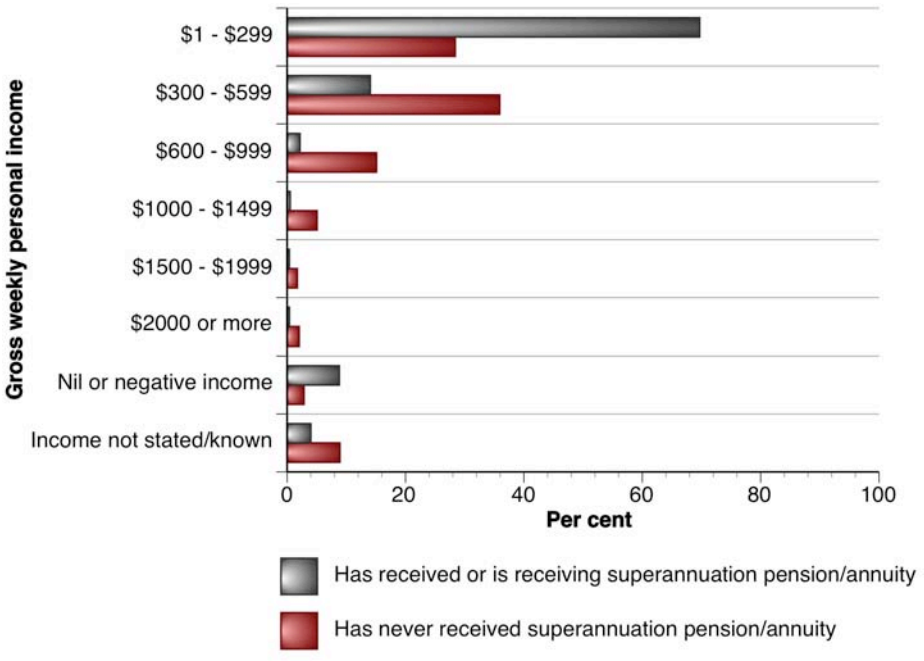
2.1 Standards of living in retirement

For most households, superannuation is the largest asset after the family home (Rothman and Tellis 2008). It is also an increasingly important part of generating retirement income for almost all Australians. Retirees with superannuation have a significantly higher gross weekly income than those without superannuation. Of retirees with superannuation in 2007, 59.8 per cent had gross weekly income of at least $300; for retirees without superannuation, only 17.5 per cent had a gross weekly income of $300 or more (ABS 2009a).

Figure 2.1 shows that the majority of retirees receiving an income of more than $300 per week have received or are receiving a superannuation pension/annuity. The majority of those receiving less than $300 per week have never received a superannuation pension/annuity.

Figure 2.1

WEEKLY INCOME OF RETIREES WITH AND WITHOUT SUPERANNUATION COVERAGE

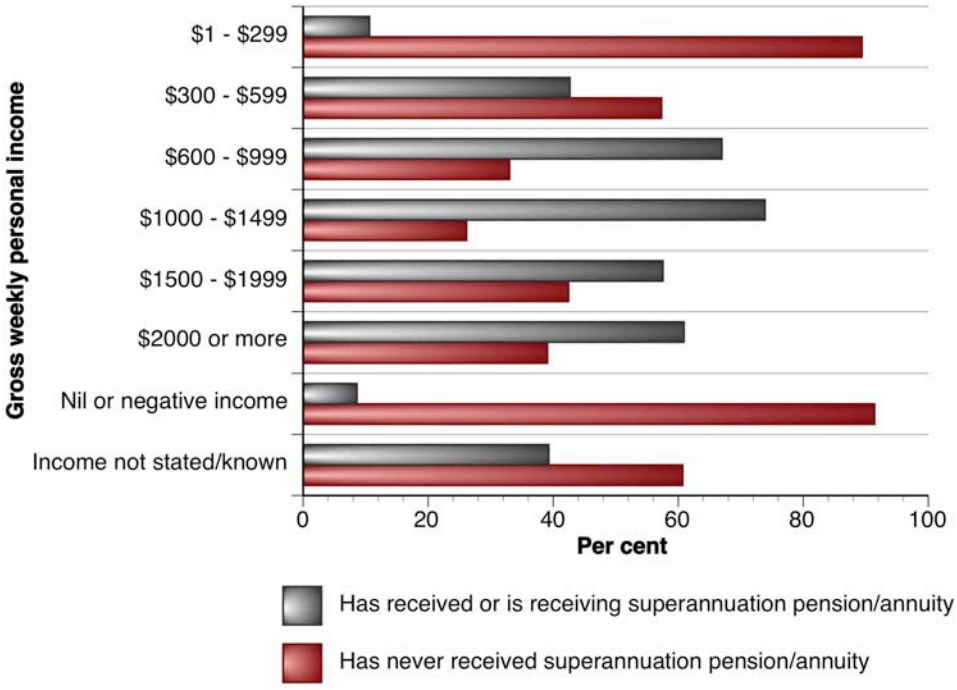


Source: ABS 2009a

Figure 2.2 provides this information in terms of percentages. It shows what proportion of retirees in each income group has received some sort of superannuation payment. It is clear that in the lower weekly income groups, the proportion without superannuation comprise the majority. As income increases, the proportion of retirees with superannuation becomes larger than the proportion of retirees without superannuation.

Figure 2.2

SUPERANNUATION STATUS, BY INCOME GROUP



Source: ABS 2009a

The full effects of superannuation however, are yet to be experienced. Out of all retirees, only 10.5 per cent relied on superannuation as their main source of income in 2007. The majority (66.2 per cent) relied on government pensions and allowances. Those whose main source of income was neither superannuation nor a government pension or allowance (23.3 per cent) relied on own unincorporated business income, or other income (ABS 2009a). This is largely because the superannuation guarantee was not introduced until 1992. According to a survey conducted by the ABS, date of retirement is a key driver of whether a retiree is likely to have superannuation or otherwise (ABS 2009a). Of retirees who retired twenty or more years ago, only 13 per cent of men and 3 per cent of women cited income from superannuation, an annuity or an allocated pension as their main source of personal income (ABS 2009a).

Retirement standards

The Westpac-ASFA Retirement Standard provides detailed annual budgets for both ‘modest’ and ‘comfortable’ retirement living standards for Australians, as outlined in Table 2.1.

Table 2.1

WESTPAC-ASFA RETIREMENT STANDARD SPENDING

	Modest lifestyle single	Modest lifestyle couple	Comfortable lifestyle single	Comfortable lifestyle couple
Housing: ongoing only	$70.69	$73.11	$93.91	$96.33
Energy	$12.99	$15.47	$14.21	$16.70
Food	$70.91	$149.24	$140.67	$198.31
Clothing	$14.60	$25.19	$30.83	$56.23
Household goods and services	$49.57	$52.50	$88.10	$93.21
Health	$13.04	$24.57	$54.92	$108.01
Transport	$71.51	$72.31	$109.13	$109.93
Leisure	$44.86	$74.27	$143.51	$206.04
Personal care	$26.42	$41.64	$26.42	$41.64
Gifts and/or alcohol and tobacco			$23.65	$47.30
Total per week	**$374.60**	**$528.30**	**$725.36**	**$973.68**

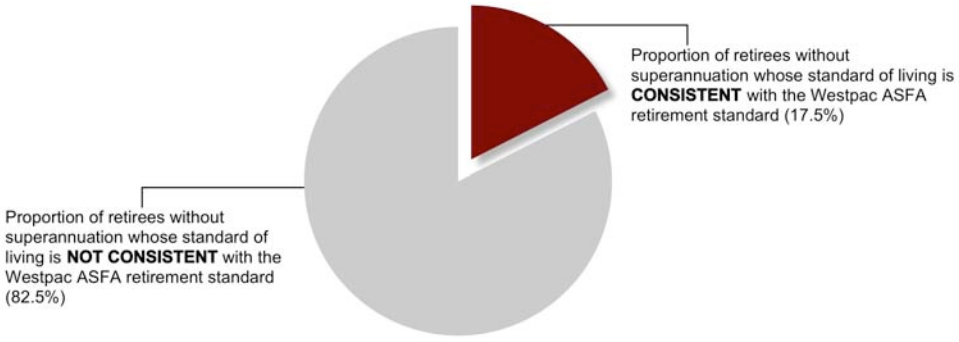
Source: Westpac-ASFA 2009, March Quarter 2009

Using the Westpac-ASFA retirement standard, a single person needs an income of around $374.60 per week, and a couple needs around $528.30 per week to fund a modest lifestyle. This is higher than the Age Pension, which currently pays $284.90 per week for a single person and $475.90 per week for a couple.[3]

Comparing the income needed according to the Westpac-ASFA retirement standard to actual income enjoyed by retirees indicates that less than 17.5 per cent of retirees without superannuation achieve a comfortable lifestyle, as shown in Figure 2.3.

Figure 2.3

WESTPAC ASFA RETIREMENT STANDARD AND STANDARDS OF LIVING



Source: Westpac-ASFA and ABS 2009a

[3] It is important to note that the Westpac-ASFA retirement standard is based on retirees owning their own home outright. This also shows in the amount of money budgeted for housing expenses.

Many people are unsure whether they are saving enough to fund a modest or comfortable lifestyle, and whether they should make additional contributions on top of compulsory superannuation contributions. Box 2.1 outlines the likelihood of achieving a modest or comfortable lifestyle through making compulsory superannuation contributions.

Box 2.1

HOW ACHIEVABLE IS A MODEST OR COMFORTABLE LIFESTYLE USING COMPULSORY SUPERANNUATION CONTRIBUTIONS?

MODEST LIFESTYLE

Con and Stacey are the parents of a low income family. Con works full time and earns $42,786 per annum. Stacey works part time and earns $10,331 per annum. They have 35 years to retirement, and make only compulsory contributions to superannuation. Assuming they retire as soon as they are eligible for the age pension, at age 67, they can afford a modest lifestyle in retirement until at least age 100. In fact, their income will be even higher than that required for a modest lifestyle during this time.

COMFORTABLE LIFESTYLE

If Con and Stacey make no voluntary contributions to superannuation, they would be able to afford a comfortable lifestyle until age 78 (assuming retirement at 67). This is not enough to cover their life expectancy at age 67, which is around 16 years for Con and 19 years for Stacey. If they put an extra $500 per year into superannuation and took advantage of the government co-contribution, they would be able to afford a comfortable lifestyle for a further six years.

Dan and Maria are the parents of a middle income family. Dan works full time and earns the median full time wage of $56,353 per annum. Maria works part time and earns the median part time wage of $20,037 per annum. If they have 35 years to retirement when they start saving, and make only compulsory contributions, they can afford a comfortable lifestyle until age 87 if they retire at 67. This is enough to cover them for their period of life expectancy at age 67.

Source: FIDO retirement planner 2009, ABS 2009c

The case studies above illustrate that compulsory superannuation contributions are effective in raising the standard of living for retirees. These calculations show that, for low-income families, compulsory superannuation contributions combined with the Age Pension are sufficient to fund a modest lifestyle in retirement for the expected duration of retirement. If low-income families make additional contributions to superannuation, a comfortable lifestyle is achievable for a significant period of time. Middle-income families who make compulsory superannuation contributions can afford a comfortable lifestyle for their full life expectancy after retirement, with the help of a part Age Pension. However, they would need to make additional contributions if they wish to extend this lifestyle beyond the average life expectancy after retirement.

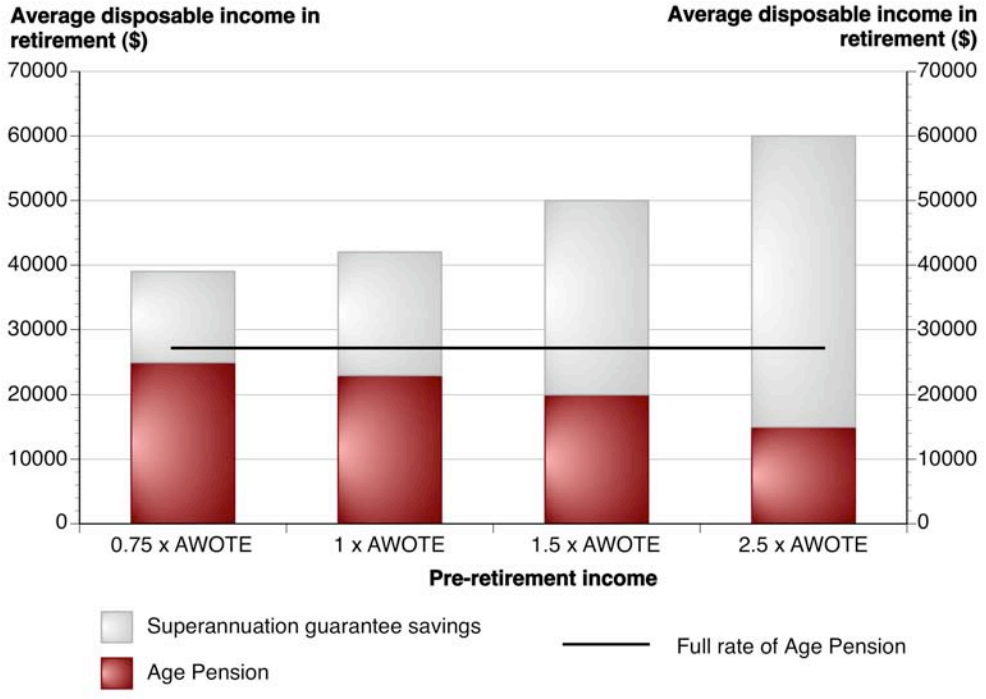
Benefits into the future

The benefits accruing to retirees as a result of compulsory superannuation will become more obvious as the effects of the superannuation guarantee become more evident into the future. It is anticipated that by the 2030s, all new retirees will have had contributions to superannuation made for them by their employers for their entire working lives. Projections by the Australian Treasury in its recent review of the retirement income system show that when compulsory contributions to superannuation are taken into account, the standard of living of retirees will be substantially higher than if people had to rely solely on the Age Pension. For example, a person on a median income,[4] with a thirty-five year working life in 2035 is expected to receive a 95 per cent part pension, supplemented with superannuation income. This would put their retirement income at substantially more than the full Age Pension.

Calculations produced by the Australian Treasury, in Figure 2.4, show that a retiree is better off in retirement if he or she has made contributions to superannuation than if he or she did not contribute to superannuation. Even individuals earning less than the average weekly ordinary time earnings (AWOTE) are better off by over $10,000.[5]

Figure 2.4

RETIREMENT INCOME COMPARED TO THE FULL AGE PENSION



Source: Australia's future tax system. The retirement income system (2009)[6]

[4] The median income is where half of all workers earn less than that amount, and half earn more.

[5] In the calculations used in the figure below, AWOTE is around $60,000. The median income over all employees (full-time and part-time combined) is around three quarters of AWOTE, or $45,000 (Treasury 2009). If only full-time employees were taken into account, the median income would be higher.

[6] It should be noted that this chart has received some criticism for the way in which incomes are calculated. Incomes are deflated to 2008-09 dollars by using the consumer price index and average weekly earnings. Given that the Age Pension moves in line with increases in average wages — in order to retain a link to

Superannuation is not the only option available to people to save for retirement. Other common options include putting money in savings accounts or term deposits; investing in bonds; investing in the share market; investing in property; or some combination of these. Superannuation however, has some benefits over these other options. Firstly, superannuation can incorporate all the other options. Most funds adopt strategies that involve buying a combination of assets, to minimise risk.

Secondly, because of the beneficial tax treatment of superannuation, people can generally put more money into superannuation than into other investment options, for a given amount of take-home pay. This is because deposits into superannuation funds can be made out of pre-tax salaries and any contributions up to $25,000 (more for those age over 50) are taxed at a concessional rate of 15 per cent, which is lower than the marginal tax rate for anyone earning more than $35,000 per year (2009-10 financial year). In the 2006-07 financial year, 77.7 per cent of tax payers fell into this category (Australian Taxation Office 2009). Investment returns from superannuation are also favourably taxed.

Box 2.2 and Box 2.3 provide a case study of two middle income and low income families, respectively, one with superannuation and one without. The case study explains that a family that places 9 per cent of their earnings in superannuation (as required by legislation) compared to a hypothetical family that did not contribute superannuation but rather saved that income, investment returns held constant, would be much better off due to tax savings.

community living standards — a more relevant approach would be to use a wages deflator (see ASFA submission to the Henry Review, 2009 for further detail on the use of deflators).

Box 2.2

CASE STUDY OF TWO MIDDLE INCOME FAMILIES

Dan and Maria are the parents of a middle income family. Dan works full-time and receives the median wage, while Maria combines work and family commitments and works part-time, receiving the median part-time wage. Because of the tax concessions on superannuation contributions and returns, Dan and Maria can save significantly more for retirement than they otherwise would have been able to.

Suppose that without superannuation they would save the same proportion of their gross income i.e. 9 per cent of their total income – this means that their net disposable income is the same in both cases. Suppose also that their gross rate of return (before tax) is 5 per cent (based on the average return on assets) for both cases. After making contributions for thirty-five years, their balances (in today's dollars) will be as follows:

SAVING THROUGH SUPERANNUATION		
	Gross annual income	Superannuation balance after 35 years
Dan	$56,353	$347,541
Maria	$20,037	$123,573
Total	$76,390	$471,114

SAVING OUTSIDE SUPERANNUATION		
	Gross annual income	Retirement savings balance after 35 years
Dan	$56,353	$234,965
Maria	$20,037	$119,438
Total	$76,390	$354,403

The difference between the two balances is $116,711, which is due mostly to the difference in tax treatment for Dan's income, and the fact that the Medicare levy does not apply to superannuation contributions.

Maria is also eligible for the full Government co-contribution to super. If she contributes an extra $1000 per year to super, the government will contribute up to $1500 on top of that[7]. If Maria saved an extra $1000 per year to take advantage of the full co-contribution, she would end up with up to $121,000 more in superannuation than she would have had if the co-contribution did not exist. This could make a substantial difference to her standard of living in retirement.

Source: ABS 2009c, Table 6; APRA 2009a, Table 13; Allen Consulting Group 2009 (see Appendix A for details)

[7] The federal Government announced temporary changes to the co-contribution scheme in the 2009-10. In the 2009-10, 2010-11 and 2011-12 the matching rate will be reduced from 150 per cent to 100 per cent, with a maximum co-contribution of $1000. The matching rate will then be increased to 125 per cent in 2012-13 and 2013-14, with a maximum co-contribution of $1,250. From 2014-15 the matching rate will revert to its previous level of 150 per cent with a maximum co-contribution of $1,500. This calculation draws on the permanent situation and does not take into account these temporary changes.

Box 2.3

CASE STUDY OF TWO LOW INCOME FAMILIES, ONE WITH SUPER, ONE WITHOUT

Con and Stacey are the parents of a low income family. Con works full-time, while Stacey combines work and family commitments and works part-time. They both have wages at the 25th percentile. This means that 25 per cent of people earn less than they do, and 75 per cent earn more.

By contributing money into a superannuation account and taking advantage of the favourable tax treatment of superannuation and the government co-contribution, Con and Stacey can significantly increase their standard of living in retirement.

Suppose that they save 9 per cent of their total income, whether they have superannuation or not. Also assume that Stacey saves an additional $500 per year. This allows her to take advantage of the government co-contribution for the case where she has superannuation.

Assuming a saving period of thirty-five years and an annual return of 5 per cent their retirement balances with and without superannuation (in today's dollars) would be as follows.

SAVING THROUGH SUPERANNUATION		
	Gross annual income	Superannuation balance after 35 years
Con	$42,786	$363,871
Stacey	$10,331	$164,485
Total	$53,117	$428,356

SAVING OUTSIDE SUPERANNUATION		
	Gross annual income	Retirement savings balance after 35 years
Con	$42,786	$178,397
Stacey	$10,331	$101,242
Total	$53,117	$279,639

The difference between the two balances is $148,717, which is due to the more favourable tax treatment of Con's superannuation, and the fact that Stacey receives the government co-contribution.

It should be noted that the difference could be even larger if Stacey took full advantage of the government co-contribution by saving $1000 per year on top of the mandatory 9 per cent and if Con took advantage of the partial co-contribution that he is eligible for.

Source: ABS 2009c, Table 6; APRA 2009a, Table 13; Allen Consulting Group 2009 (see Appendix A for details)

Realistically though, a family may not be likely to save as much as 9 per cent of their income if it was not compulsory — thus it is possible that the differential may be far greater than the amounts in the case studies in Box 2.2 and Box 2.3.

Most people are myopic when it comes to managing their finances and if left to their own devices are likely to put off saving for retirement until later in life. In particular, most young people would be unlikely to save any money for retirement unless they were required to do so.

The literature on household saving decisions offers some cause for concern that an under-saving bias may be an important feature of household behaviour. Theorists argue that people choose immediate pleasures and want 'instant gratification' instead of waiting for larger rewards. Consumers often display a high degree of impatience and short-sightedness when making decisions about the future. One example is of a person who tends to splurge today and vow to exercise/diet/save tomorrow (Laibson 2005). This sort of attitude induces consumers to follow a path of least resistance, and is therefore argued to create a general bias towards under-saving relative to the optimum.

These theoretical results seem consistent with survey evidence suggesting that households tend to hold assets that cannot easily be converted to cash (especially houses) and also frequently borrow with credit cards that involve relatively high interest rates (Laibson, Repetto and Tobacman 2003). It also helps to explain why people fail to plan rationally for retirement and/or systematically under-estimate how much saving will be needed to achieve their aspirations. For example, studies in the United States show that of the employees who receive employer-matching contributions, half of the employees contribute below the match threshold, forgoing match payments that average 1.3 per cent of their annual pay (Choi, Laibson and Madrian 2005). Even providing the under-savers with specific information about the 'free lunch' had little impact.

The positive effects of starting to save for retirement early are illustrated in Box 2.4. The superannuation guarantee ensures that this happens.

Box 2.4

CASE STUDY: EFFECT OF STARTING RETIREMENT SAVINGS EARLIER

The time frame used for retirement savings can have a significant effect on total retirement savings, due to the effect of compound interest.

Let's take Joe as an example. He is 25 years old and has just started his first real job. He has about 40 years until retirement, and is deciding whether to start putting extra money into superannuation, or whether to wait until he has reached some other goals, like owning a home and starting a family. Assume that if he waits he will start making extra contributions from age 45, with 20 years to retirement.

Suppose Joe has $50 per fortnight he can save. Assuming a 5 per cent net return on his savings, he gets the following closing balances on super (rounded to the nearest $'000):

- $161,000 if he starts saving at 25; and
- $44,000 if he starts saving at 45.

Another way to compare the two time horizons is to see how much money Joe would have to save if he wanted to retire with $200,000 after 40 or 20 years of saving. If he starts saving at 25, he needs to save about $62 per fortnight to reach his goal; if he starts at 45, he needs to save about $227 per fortnight (rounded to the nearest $1). This is almost four times as much per fortnight, despite the time horizon being only half. For higher rates of return the effect becomes even more dramatic.

Source: Allen Consulting Group 2009

Besides encouraging people to save, making it hard to access those savings is one of the main benefits of superannuation. In principle, generally, assets in a person's superannuation account are locked until they reach the preservation age, which is 55 for those born before 1960, increasing to 60 for those born after 1964. In certain circumstances assets may be released early; the rules are administered by the trustees of individual superannuation funds, and by the Australian Prudential Regulation Authority (APRA). The circumstances in which early release is possible are outlined in Box 2.5.

Box 2.5

EARLY RELEASE OF SUPERANNUATION FUNDS

Superannuation funds can be released:

- to pay for medical costs, for the member or a dependant, required to treat a life-threatening condition or to alleviate acute or chronic physical pain or an acute or chronic mental condition;
- to help pay for medical transportation to and from the types of medical treatment mentioned above;
- to assist with mortgage repayment where the mortgagee is planning to sell the property because repayments are in arrears;
- to help pay for modifications to the home or a motor vehicle, where such modifications are necessary due to severe disability;
- to help pay for funeral expenses related to the death of a dependant, where the dependant was reliant on the member either financially, domestically or personally;
- to provide assistance with care when the member or a dependant is suffering from a terminal medical condition;
- to assist if the member suffers a total and permanent disability;
- to assist if the member is in severe financial hardship.

In addition to this, funds may also be released to temporary residents who leave Australia permanently, and to people whose balance is less than $200, after their employment has been terminated.

Source: APRA 2009

2.2 Control of savings and investment

Although compulsory, superannuation allows families to have a degree of control of their savings and investments. This control is manifest in two ways. Firstly, superannuation provides flexibility over investment choice and the way in which families can invest their funds. Secondly, superannuation provides flexibility on the age at which one retires - allowing an individual to retire earlier than they could if they were to rely solely on the Age Pension.

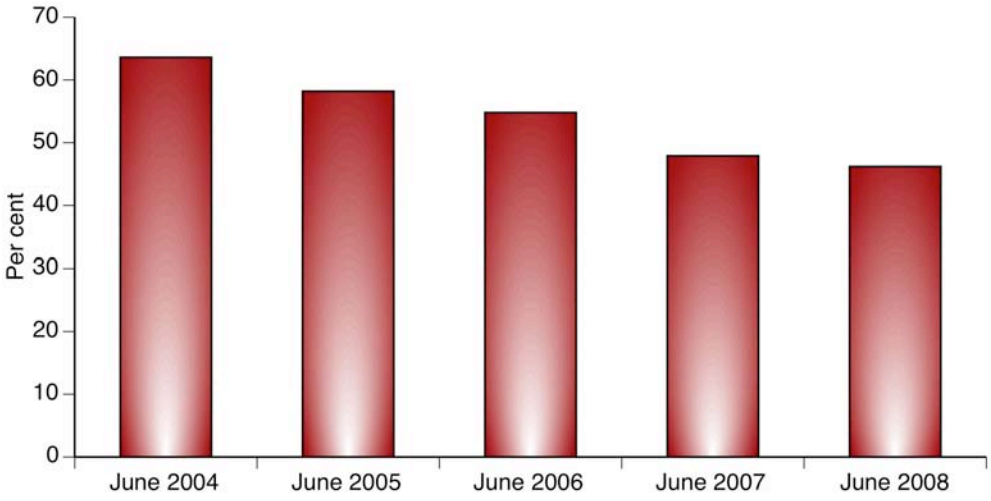
Flexibility on investment choice

The vast majority of superannuation funds (62 per cent of funds, representing 93 per cent of total superannuation assets (ABS 2009a)) offer a range of investment choices to members, thus families have access to a wide range of investment options.

That families make use of these investment options is demonstrated by the fact that in 2008, only 46 per cent of assets were held in the default investment strategy, down from 64 per cent in 2004 — as shown in Figure 2.5.[8]

Figure 2.5

PROPORTION OF ASSETS IN THE DEFAULT STRATEGY



Source: APRA (2007, 2009a, 2009b)

Flexibility on age of retirement

Superannuation provides control over savings because it allows workers to retire earlier than if they were solely reliant on the Age Pension. For people born before 1960, superannuation can be accessed from age 55, which will increase to age 60 for people born after 1964. This is still younger than the pension age of 65, which is set to increase to 67 by 2023 — announced by the Rudd Government earlier this year.

According to one survey only 64 per cent of people intend to work past the age of 65, leaving the remainder reliant on superannuation contributions to enable them to retire at 60 (refer Box 2.6). (However, the age at which people intend to retire does not always correspond to the age at which they actually retire. Of the 1.9 million retirees who had worked at some time in the last twenty years, the most common main reason for retiring was the retiree's health. The average age at retirement for those retiring for health reasons was 57 (ABS 2009e)).

Box 2.6

RETIREMENT INTENTIONS

In a survey of retirement intentions, the ABS found that of all employed people who intend to retire:

24% intend to retire age 70 years or over (30% of men and 17% of women);

40% intend to retire age 65–69 years (45% of men and 34% of women);

24% intend to retire age 60–64 years (18% of men and 31% of women);

9% intend to retire age 55–59 years (5% of men and 13% of women);

[8] Whilst the proportion of non-default investment shows that families consider carefully their superannuation investment strategy and have the ability to invest their assets where they like, default strategies also have some merit. Typically, a default strategy constitutes a balanced fund with a significant proportion invested in growth assets – and so, default strategies are (historically) capable of generating sound long term returns.

1% intend to retire age 45–54 years (less than 1% of men and 2% of women); and

2% were unable to provide an intended age of retirement.

The same report found that in 2007, the average age at retirement for people age 45 years and over was 52 years (58 years for men and 47 years for women).

Source: ABS 2009a

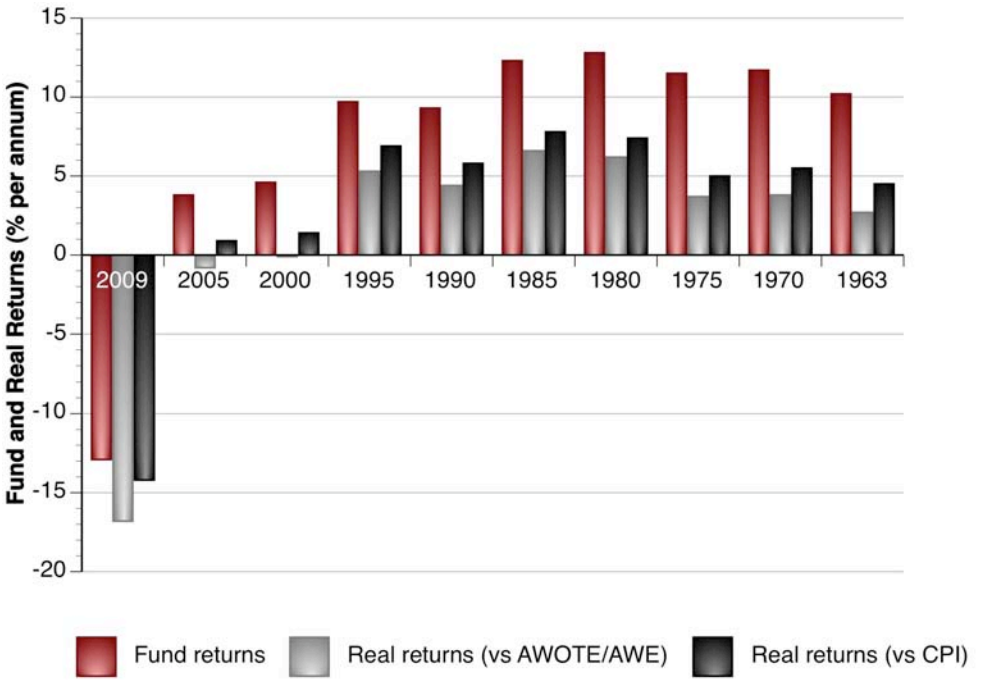
2.3 Influence of the sharemarket

Over the past two years, and in the most recent financial year, the value of superannuation funds has declined due to the global financial crisis. While this has unsettled some contributors to superannuation and in particular, those planning to draw-down their superannuation in the near term, it does not undermine the benefits of superannuation as a key plank in Australia's retirement income system. Superannuation is a very long term investment – for a young person just entering the workforce it may be forty years until they access their superannuation. It is therefore important to keep in mind the long term performance of superannuation; it would be impossible for any investment vehicle to deliver real growth every single year.

Over the past fifteen years since 1994-95 the median performance of growth funds has only been negative three times, in 2001-02, 2007-08 and 2008-09; all of these instances coincide with a collapse in the share markets, and would have affected anyone with exposure to the share markets. Overall, growth has been positive, at an average since 1994-95 of 6.9 per cent for growth funds, which is 4.2 per cent above the average inflation rate over that period (Chant West 2009). Given that most superannuation funds aim to realise returns of 4 per cent above the inflation rate, superannuation funds have performed well over the medium term. Figure 2.6 shows average returns from superannuation funds, nominal and real, since certain points in time. It demonstrates that over the medium term, superannuation returns average around 10 per cent and real returns around 5 per cent. It is only when taking an average over a short time horizon, and in particular, over the recent downturn, that returns from superannuation are low.

Figure 2.6

RETURNS ON SUPERANNUATION, NOMINAL AND REAL, AVERAGES OVER TIME

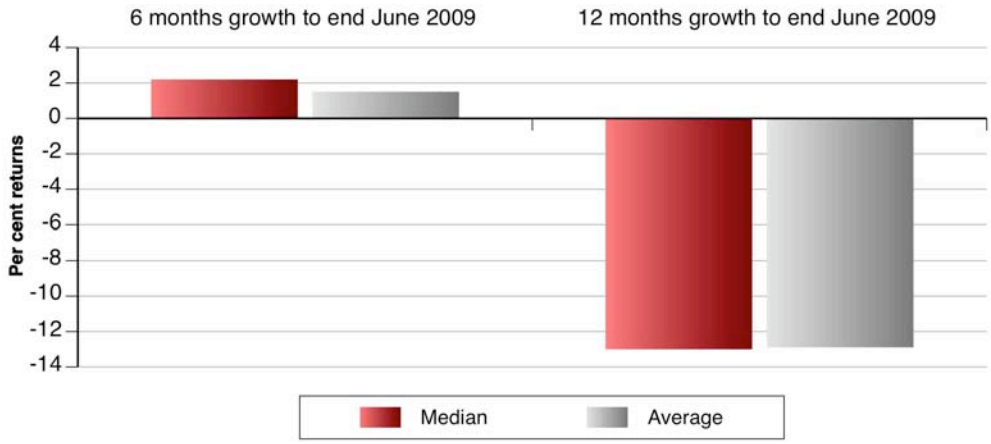


Source: ASFA 2009

Reflecting the volatility of the market, share prices have rebounded relatively strongly recently to counteract some of the falls experienced in 2008 (and early 2009). Figure 2.7 shows the recent rebound in the six months to June 2009 (average and median) compared to the twelve-month fall to June 2009.

Figure 2.7

SUPER FUNDS - GROWTH RISK PROFILE (61 - 80%), RETURNS TO 30 JUNE 2009



Source: Chant West 2009a

The existence of volatility of superannuation investments in 2008 and early 2009 does not provide an adequate case for reducing the role of superannuation in Australia's retirement income system. Instead, it provides an argument for greater education about superannuation and how it is subject to rises and falls. Greater education would provide individuals contributing to superannuation with a better understanding of risk and the kind of risk portfolio they would prefer.

Chapter 3

Benefits to the national economy

Over the past fifteen years, households' saving in financial assets has become heavily directed towards superannuation. Whether higher flows into superannuation assets have contributed to or detracted from household saving on a net basis has been the subject of debate for several years. Empirical evidence, however, indicates that the superannuation guarantee may have increased the household saving rate by up to 1.5-2 per cent of GDP (Connolly and Kohler 2004). That is, government policies encouraging superannuation appear to have added to both household saving and wealth.

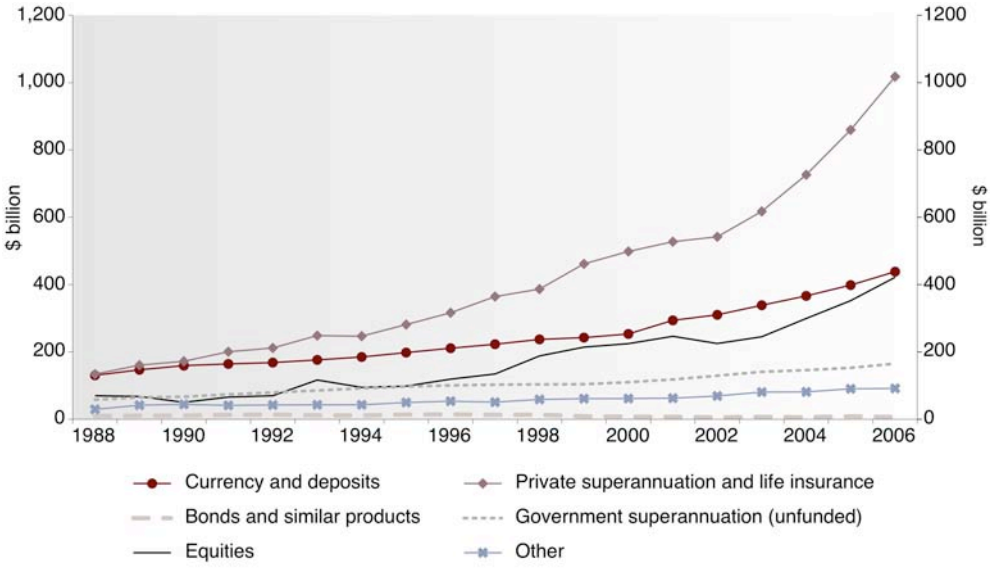
This chapter considers the relationship between superannuation, national savings and economic growth. It also considers the economic contribution of the superannuation industry in terms of revenue and jobs and its impact on managed funds and venture capital. Finally, it briefly notes the role of superannuation in promoting better governance.

3.1 Investment and national savings

Over the past fifteen years, households' saving in financial assets has become heavily directed towards superannuation. From 1988 to 2006, Australian households' holdings of financial assets increased by $1720 billion, with an average growth rate of 9 per cent each year. This growth includes both new savings and increases in the value of the assets. Over the same period, private superannuation and life insurance grew by $890 billion, accounting for more than half of the total growth. In addition, unfunded government superannuation grew by $110 billion (6 per cent per annum). Equities and bank deposits have also been growing substantially, by an average of 9 per cent and 7 per cent each year respectively since 1988. However, households' holdings of bonds and similar products have fallen by a total of 25 per cent (1.4 per cent annually) since 1988. Other financial assets rose from $37 billion to $91 billion, an average annual increase of 5 per cent (Allen Consulting Group 2007). This growth is shown in Figure 3.1. (Categories are those used by the ABS.)

Figure 3.1

GROWTH IN HOUSEHOLD FINANCIAL ASSETS ($ BILLION)



Source: ABS 2007, *Australian National Accounts: Financial Accounts*, Catalogue No. 5232.0, Canberra, Table 15.

Table 3.1 shows the multiple kinds of assets held by households in 2007, excluding the family home. This breakdown for household savings shows that 78 per cent of household have some of their assets in deposits with banks and similar institutions. In addition, 63.2 per cent of households have assets in superannuation, and 31.6 per cent have direct ownership of shares (ING Direct-Melbourne Institute 2007). It is clear that many households have assets in multiple forms; for example, a particular household may have some assets in the form of bank deposits, some in superannuation, and further assets in an investment property or in shares. Importantly, the Table shows that of all types of savings, superannuation is one of the most popular.

Table 3.1

FORMS OF CURRENT HOUSEHOLD SAVINGS, JUNE 2007 (PER CENT)

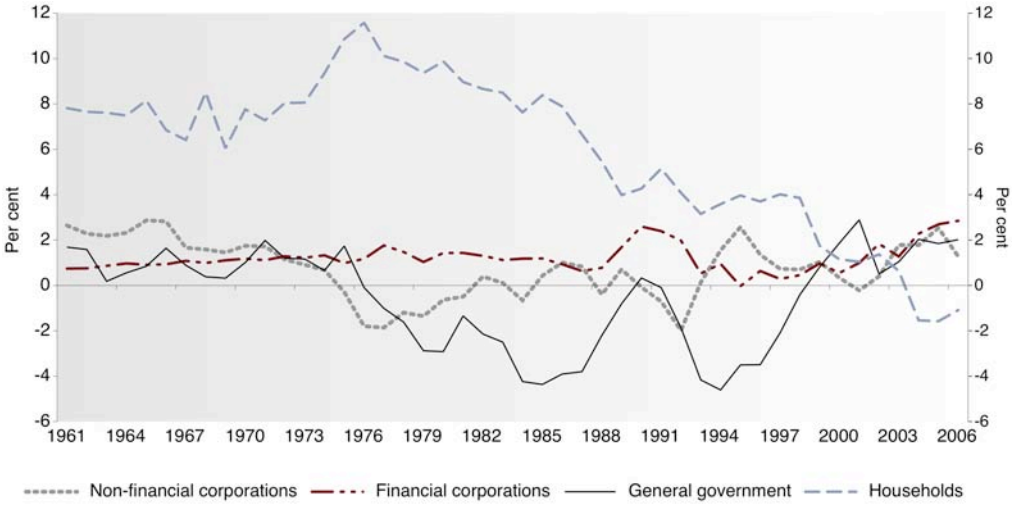
Form of saving	Per cent
Deposits with bank-like institutions	78.0
Managed funds	20.4
Cash management trusts	9.7
Direct ownership of shares	31.6
Bonds, debentures	n/a
Holiday home, investment properties	18.3
Superannuation	63.2
Other	1.4
Don't know	1.9
No savings	4.9

Note: Percentages may not sum to 100 per cent as household may hold multiple assets.
Source: ING Direct-Melbourne Institute 2007, p. 5.

Whether higher flows into superannuation assets have contributed to or detracted from household saving on a net basis (i.e. whether they have been substantially offset by reductions in other saving and/or incurrence of debt to finance consumption) has been the subject of debate for several years. At first glance, it would not appear to be the case that superannuation has contributed to household savings, as household saving has declined at the same time as the superannuation guarantee was introduced — as shown in Figure 3.2.

Figure 3.2

NET SAVING BY SECTOR (PER CENT OF GDP)



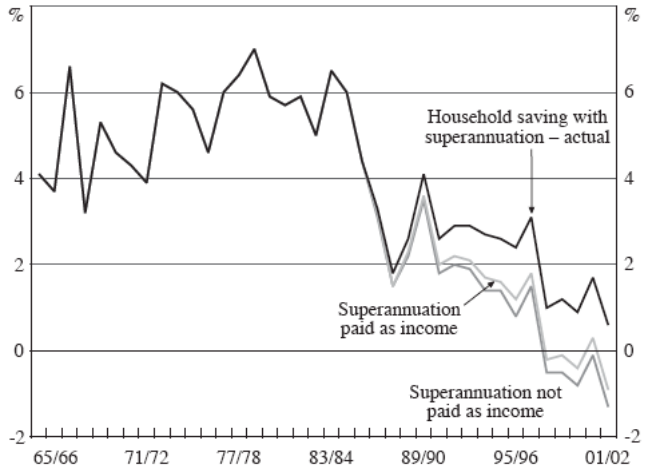
Source: Allen Consulting Group 2007

However, empirical evidence indicates that the superannuation guarantee may have increased the household saving rate by up to 1.5-2 per cent of GDP in 2001-02 (see Figure 3.3). Connolly and Kohler (2004) modelled the impact that superannuation had on household saving between 1966-67 and 2001-02. The study found that only part of compulsory superannuation contributions have been offset by reductions in other saving. The offset was estimated to be around 38 cents in each dollar in superannuation contributions, that is, 62 cents in the dollar is saved additionally. This estimate is in line with other Australian studies. Most estimates of the compulsory superannuation offset in Australia have relied on judgement or extrapolation from the experiences of other countries, with estimates between 30 and 50 cents per dollar (summarised in Connolly and Kohler 2004, pp. 16-17). The study also found that contributions to voluntary superannuation have roughly been offset by a decrease in other voluntary saving (an offset factor of 130 cents).

The study also estimated the counterfactual saving rate, that is, what the household saving rate would have been in the absence of compulsory superannuation and voluntary superannuation (depicted in Figure 3.3). The analysis shows that compulsory superannuation may have increased the household saving rate by up to 1.5-2 per cent of GDP in 2001-02. That is, government policies encouraging superannuation have added to both household saving and wealth, albeit that they appear to have been 'swimming against the tide' of other strong factors reducing saving, and disposing people to incur debt. Moreover, debt that remains after retirement will effectively reduce superannuation available to fund income.

Figure 3.3

EFFECT OF COMPULSORY SUPERANNUATION ON HOUSEHOLD SAVING — SCENARIO ANALYSIS (PER CENT OF GDP)



Source: Connolly and Kohler 2004

This figure shows that over the last four decades, it is estimated that actual household saving with superannuation would have exceeded the savings rate if superannuation were paid as income and if superannuation were not paid as income. The scenario where superannuation is paid as income reflects the possibility that superannuation was paid in lieu of pay rises – that is, the compulsory payment of superannuation by employers reduced the actual take-home pay of employees. Thus it is estimated that superannuation contributions may have increased national household savings by as much as 1.5-2 per cent of GDP in 2001-02 (Connolly and Kohler 2004).

Drawing on this analysis it is possible to estimate the contribution to national GDP[9]. This analysis takes into account the fact that without superannuation, individuals would save for retirement in other ways such as through cash deposits, managed funds or property investments.

Using a macroeconomic growth model that relates GDP to the amount of capital and labour in the economy, the effect of a decrease in investment through superannuation on GDP growth was estimated.[10]

The estimate of investment without superannuation compared to investment with superannuation is shown in Figure 3.4.

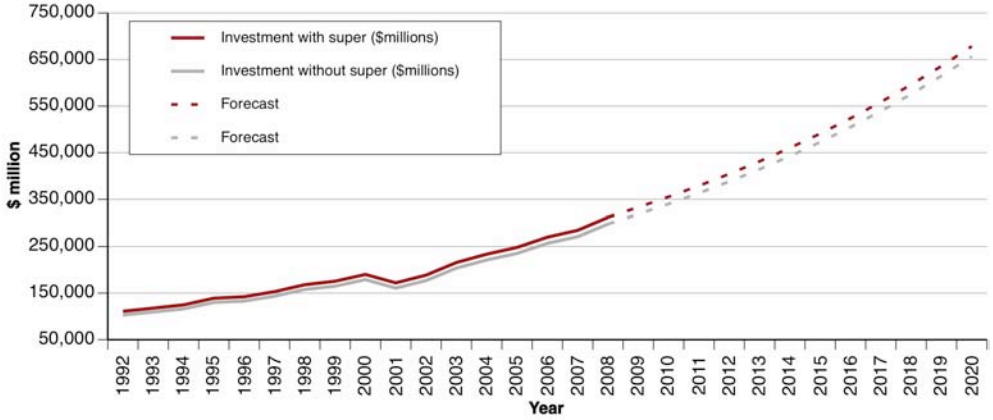
[9] See Appendix B for details.

[10] This required deducting the effect of superannuation from the amount of investment. As previously stated, superannuation may have increased national household saving by 1.5-2 per cent of GDP. An increase of 1.5 per cent was used for modelling purposes. Out of superannuation balances invested in default strategies, around 87 per cent is invested within Australia (APRA 2009b). Therefore it was assumed that of the additional saving generated by superannuation, 87 per cent was invested in Australia. The amount resulting from this calculation was deducted from the amount of investment to get an estimate of what investment would have been without superannuation.

We estimate that without superannuation, investment would have been $14 billion, or 4.5 per cent lower than it actually was in 2008 ($312 billion). (The drop in investment around 2001 is due to the economic slowdown Australia experienced at that time due to the bursting of the dot-com bubble.[11])

Figure 3.4

INVESTMENT WITH SUPER COMPARED TO INVESTMENT WITHOUT SUPER

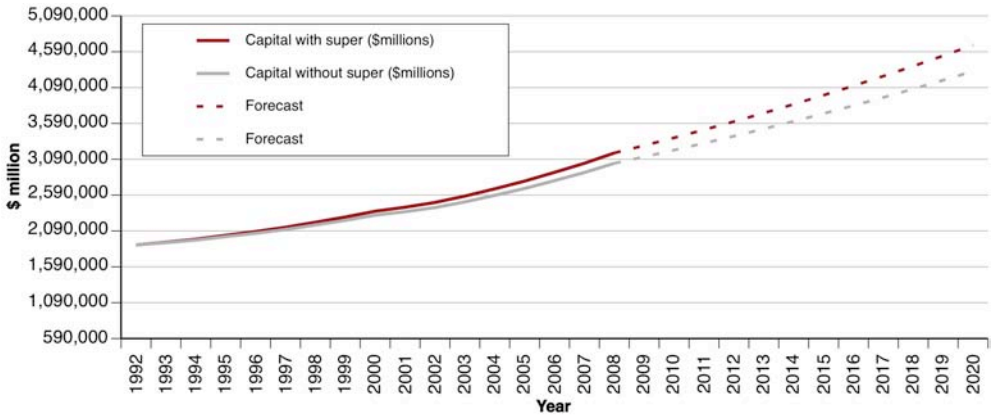


Source: Allen Consulting Group 2009

The estimate of investment without superannuation was used to estimate what the level of capital stock would have been without superannuation. This is shown in Figure 3.5. Due to the additional investment generated by superannuation, capital stocks grew faster than they would have without superannuation from 1992 onward. The difference between the level of capital stock with and without superannuation grows over time due to compounding. Our estimate suggests that in 2008, capital stock was almost $144 billion more than it would have been without superannuation, that is, $3,033 billion. This difference is set to increase over time, as illustrated in Figure 3.5.

Figure 3.5

CAPITAL STOCK WITH SUPER COMPARED TO CAPITAL STOCK WITHOUT SUPER



Source: Allen Consulting Group 2009

[11] It should be noted that there has been controversy in the literature about whether, or rather, to what extent, increased domestic saving will lead to higher domestic investment (see for example, Fitzgerald 1996, *Public Policy and National Saving.)*

The effect of superannuation on GDP was then calculated by entering the estimated level of capital without superannuation into the growth model.

Without superannuation, GDP would have been an estimated 1.8 per cent lower in June 2008 than it actually was. This is shown in Figure 3.6. This is a difference of almost $20 billion. Without superannuation, GDP may have been only $1.08 trillion in 2008, as opposed to the actual figure of $1.1 trillion.

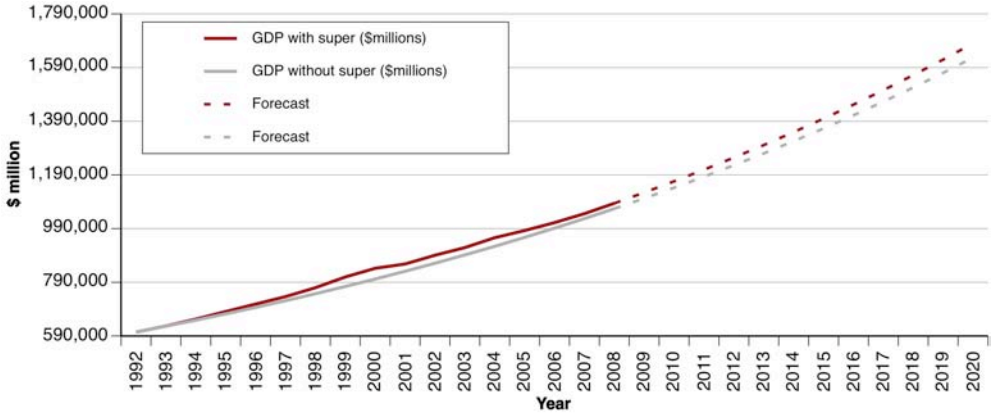
In terms of per capita differences, we estimate that without superannuation, individuals would have been worse off by $928, or almost $2,400 per household (based on statistics from ABS 2008b). As GDP per capita in 2008 was $50,586, this equates to a 1.8 per cent difference in per capita incomes. For 2009 we estimate a per capita difference of around $996, or 1.9 per cent.

Over time, the difference between GDP with superannuation and GDP without superannuation will (hypothetically) increase. This is due to the fact that GDP with superannuation grows at a faster rate than GDP without superannuation, due to the additional capital that superannuation generates. Over time, the difference in growth rates will lead to an ever increasing gap between GDP with and without superannuation, which is illustrated in the forecast numbers in Figure 3.6.

GDP with superannuation in 2020 is estimated to reach $1,679 billion, based on current growth levels. Without superannuation it is likely GDP would fall short by 3.2 per cent, reaching only $1,626 billion.

Figure 3.6

GDP WITH SUPERANNUATION AND GDP WITHOUT



Source: Allen Consulting Group 2009

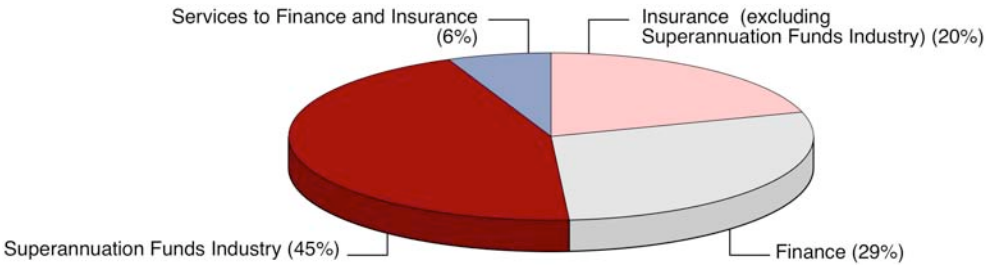
3.2 The superannuation industry

With aggregate assets of over $1.03 trillion dollars (as at March 2009) and large annual flows, superannuation impacts significantly on financial markets, particularly the Australian stock exchange (APRA 2009c). Superannuation can stimulate investment, which enables Australian companies to expand and drives economic growth. From June 2002 to June 2008 total assets held by superannuation funds more than doubled from $518.1 billion to $1170.4 billion (APRA 2009b).

Superannuation has been responsible for a significant proportion of the growth in Australia's growing financial services and insurance industry. The superannuation industry has experienced the fastest growth amongst the finance and insurance industry. Superannuation currently accounts for 45 per cent of the finance and industry sector in Australia — as shown in Figure 3.7 below. As a significant contributor to this industry, it has helped drive strong growth in the sector, increasing Australia's place a southern hemisphere leader in finance and insurance (IBISWorld 2008).

Figure 3.7

BREAKDOWN OF THE FINANCE AND INSURANCE INDUSTRY IN AUSTRALIA



Source: IBISWorld 2008

The majority of superannuation firms are domestically owned and operated. The superannuation industry has directly created thousands of jobs. It is estimated that the industry accounts for around 60,000 jobs, predominantly in Sydney and Melbourne (IBISWorld 2008). The estimated market shares of the top four players in the superannuation industry totals 15 per cent, indicating a low level of industry concentration.

AMP Limited (1.8 per cent of market share of the finance and insurance industry) is Australia's largest retail and corporate superannuation provider, and one of the region's most significant investment managers with more than $129 billion in assets under management. Another major superannuation provider is AustralianSuper, with an estimated market share of 1.5 per cent (IBISWorld 2008).

There are twelve Australian pension funds in the top 300 global pension funds, as measured by consultants Watson Wyatt. In combination the twelve funds hold assets of USD210 billion, as shown in Table 3.2.

Table 3.2

AUSTRALIAN SUPER FUNDS IN GLOBAL 300 RANKING

2008 Rank	2007 Rank	Top 300 Ranking	$US m	% of Top 300 assets
52	66	Future Fund	45,193	0.4
100	89	State Super	24,107	0.2
120	121	AustralianSuper	20,316	0.2
144	143	QSuper	17,344	0.2
155	124	UniSuper	16,345	0.2
202	186	ARIA	15,795	0.2
205	na	ESS Super	12,187	0.1
230	230	First State Super	10,906	0.1
251	238	REST	10,242	0.1
271	260	Hesta	9,417	0.1
272	na	Sunsuper	9,368	0.1
279	275	Cbus	8,938	0.1
na	295	Telstra Super		
		Total	**210,020**	**2.0**

Source: Watson Wyatt 2009

In terms of internal competition, the insurance and superannuation companies are experiencing fairly strong competition, with many fund managers vying for super funds (IBISWorld 2008).

Box 3.1

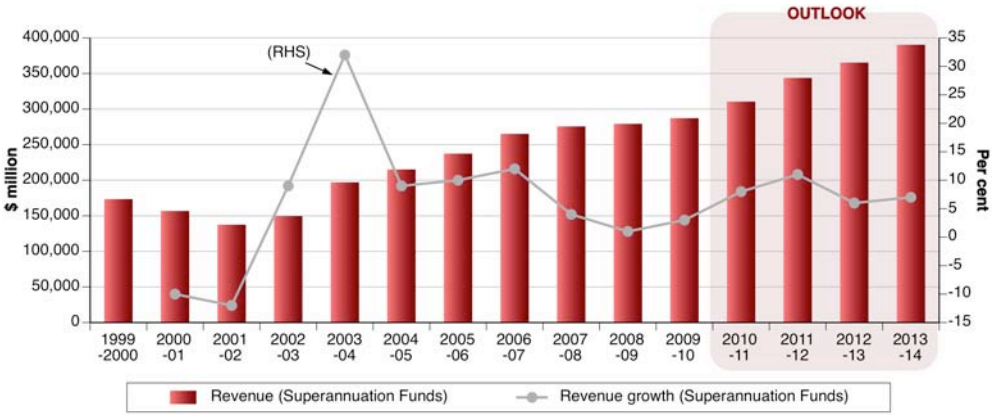
OUTLOOK FOR THE SUPERANNUATION INDUSTRY

It is forecast that the superannuation industry will continue to grow largely due to growth in superannuation assets as a result of compulsory superannuation contributions. Due to government initiatives, demographic changes, higher life expectancy and the need to continue to build retirement savings, more employees are more likely to work past the age of 55 and in many cases 60. In addition, voluntary contributions are expected to increase between 2008-09 and 2013-14 in line with an aging of the population. This is likely to be the result of more expert opinion from financial planners on investments or savings being provided to people approaching retirement. The favourable taxation rate on voluntary contribution encourages people close to retirement to top-up their retirement assets to reach their desired level of retirement funds. This increase in voluntary contributions in addition to compulsory contributions will increase overall investment returns due to compounding, which will spur revenue growth even further. Revenue and revenue growth for superannuation fund providers from 1999-2000 to 2013-14, actual and forecast, is shown in Figure 3.8.

Source: IBISWorld 2008

Figure 3.8

REVENUE AND REVENUE GROWTH FOR SUPERANNUATION FUND PROVIDERS



Source: IBISWorld 2008

3.3 Superannuation and the stock market

Superannuation funds hold a substantial portion of Australian shares by market capitalisation and this relationship has grown over time. The ASX estimates that the proportion of Australian equities held by superannuation funds has grown from 8.5 per cent in 1998 to 16.5 per cent in 2007 (ASX 2007). Based on the latest available data, the Allen Consulting Group estimates that superannuation equities accounted for 23 per cent of total market capitalisation of the ASX in the 2007-08 financial year.[12]

This is consistent with trends in domestic investment more broadly. Total levels of domestic institutional investment (including banks, life and other insurance companies, pension funds and other financial institutions) grew from $34.1 billion (23.1 per cent of total investments) in 1988 to $600.6 billion (40.4 per cent of total investments) in 2007 (ASX 2007). By contributing to total market capitalisation, superannuation helps grow the available funds that can be used by Australian companies to invest and expand.

Superannuation funds are the largest contributor to managed funds. As at the June quarter 2009, superannuation funds accounted for 61 per cent of all consolidated assets in managed funds, with public unit trusts, life insurance funds and other funds comprising the remaining 39 per cent (ABS 2009f). Of total unconsolidated assets, superannuation funds held 62 per cent in the June 2009 quarter and 67 per cent of cross invested assets (ABS 2009f).

Recognition of the opportunities created by the growth in funds under management has driven significant global interest in establishing and building funds management operations in Australia. The size of the domestic industry, together with the availability of a highly skilled, multilingual workforce, strategic time zone and access to world class infrastructure, have proven critical factors in the decision by global investment houses and service providers to establish operations in Australia (Austrade 2008).

[12] This estimate is based on the following data: total market capitalisation of the ASX in the 2008 financial year $1500 billion (ASX 2009a); total superannuation assets $1,170.4 billion (APRA 2008); 30% of superannuation assets invested in Australian equities (APRA 2008).

As a result of the contribution of superannuation, Australia is now said to do better than would be expected. In the words of UK financial commentator Sundeep Tucker:

> 'Australia now punches above its weight in global financial services. This is despite its relatively small population of 20 million and its distance from the main Euro-Atlantic markets. As the world's centre of gravity shifts towards Asia in the 21st century, Australia and its financial sector appear well positioned to increase in strategic relevance'.
>
> Sundeep Tucker, *Financial Times*, 6 September 2006 (cited in Austrade 2008).

Superannuation has also helped drive investment in venture capital and later stage private equity. Venture capital and later stage private equity is high risk capital directed towards businesses with prospects of rapid growth and/or high rates of return. Australian superannuation pension funds contributed to 55 per cent of the total of funds committed toward venture capital and later stage private equity, or $9.4 billion of the total $17.1 billion committed as at 30 June 2008. Of all funding committed to venture capital and later stage private equity, 89 per cent comes from Australia. Of all funds from Australia, Australian superannuation funds contribute 62 per cent of all venture capital and later stage private equity (ABS 2009f).

Superannuation funds invested in venture capital and later stage private equity vehicles are then invested in a wide range of industries, helping to drive growth in Australian businesses with prospects of rapid growth or high rates of return. Of the total value of nearly $8 billion invested in 2007-08, manufacturing and utilities, and finance and property industries were the predominant industries of investment, followed by health and services, transport and communications industries and construction industries (ABS 2009f).

3.4 Superannuation driving local economy spending

By ensuring that individuals retire with higher savings than they would if they relied solely on the Age Pension, superannuation also helps drive spending. Nearly $40 billion in superannuation lump sums and pensions is paid out to retirees each year (ASFA 2009). With little incentive to save, retirees are more likely to spend this money, and in so doing stimulate the local economy. A considerable proportion of retirees use their lump sum payments to pay off the home, pay for home improvement or buy a new home (ABS 2009a). While many also invest the money elsewhere or roll it over, paying off or buying a vehicle or paying for a holiday are also common uses. It is likely that in the future, because of the superannuation guarantee, more individuals will have larger superannuation savings and thus have more of an ability to spend on some of these items (ABS 2009a).

3.5 Better governance

Superannuation funds and fund managers can promote better corporate governance. Twenty-two superannuation funds are signatories to the United Nations Principles for Responsible Investment (UNPRI 2009). In addition, superannuation organisations such as the Australian Council of Super Investors (ACSI) are signatories. The UN principles provide guidelines to investors about responsible investment. In particular this relates to environmental, social and corporate governance issues, which may affect long-run company performance. Among other things, the principles require signatories to be active shareholders who take part in annual general meetings; to seek disclosure of environmental, social and corporate governance issues by the entities in which they invest; and to report on their activities and progress towards implementing the principles.

As an example of the way superannuation encourages better governance, the Association for Superannuation Funds Australia produces a series of *Best Practice Papers and Alerts* which are designed to inform and assist trustees in the performance of their duties and the operation of the funds they control. They cover a wide range of issues covering such topics as Anti-Money Laundering and Counter-Terrorism Financing, clear, concise and effective communication, managing compliance in the context of outsourcing and delegation of trustee functions, and managing the risk of fraud and theft (ASFA 2009a).

APRA and the ATO also play a role in regulating superannuation. APRA supervises regulated superannuation funds and Approved Deposit Funds and Pooled Superannuation Trusts, all of which are regulated under the *Superannuation Industry (Supervision) Act 1993*. The ATO supervises Self Managed Superannuation funds (APRA *n.d.*).

In addition to influencing the way corporations are managed directly through taking an active part in shareholder meetings, many superannuation funds also offer ethical investment options. This may relate to investing in 'green' funds, of companies with responsible environmental practices, or in companies that treat their employees and the community well. By investing in sustainable companies like these, other companies may be encouraged to adopt more sustainable practices as well.

Box 3.2 provides a case study on Australian Ethical Investments Ltd.

Box 3.2

CASE STUDY ON AUSTRALIAN ETHICAL INVESTMENTS

Australian Ethical Investment Ltd was established in 1986 for the purpose of environmental and socially responsible investment. Australian Ethical offers five retail investment trusts, with around 140 individual investments, and a retail superannuation fund. The company has a commitment to improve the ethics of corporate Australia and promote ecologically sustainable and socially just enterprises through judicious investment throughout Australia. It currently manages five public unit trusts. Since November 1998, its wholly–owned subsidiary, Australian Ethical Superannuation Pty Ltd, has been Trustee for accumulation and pension superannuation strategies – each being modelled on one of the Australian Ethical Trusts.

All investments are selected to assist in:

- achieving a just and sustainable society;
- protecting the natural environment; and
- providing a competitive financial return to investors.

Source: Australian ethical investments website 2009

In the wake of the global financial crisis there has been considerable debate about the way companies are run; especially about issues such as executive pay, which many people regard as excessive. Large institutional investors such as superannuation funds can play an important role in the governance of companies by voting at annual general meetings. Box 3.3 provides a case study on how superannuation funds improved corporate governance in 2008.

Box 3.3

CASE STUDY ON HOW A SUPER FUND IMPROVED CORPORATE GOVERNANCE

In late 2008, as a result of the global financial crisis, many investors decided to vote against measures during the season of annual general meetings (AGMs). In particular, investors voted against remuneration packages for executives, which were deemed excessive in the context of the financial crisis. For example, the remuneration packages for Boral and Transurban were voted down. Major superannuation funds such as UniSuper and AMP voted against these measures.

Even if they do not affect the overall outcome of the vote, voting against a measure, or voting against the appointment of a director may send a powerful message to companies.

'This round of AGMs has shown that shareholders expect executive remuneration to be geared to the long term. They won't accept excuses for failure. We are expecting boards to take notice' (Australian Council of Superannuation Investors chief executive Ann Byrne).

Source: Hepworth and Kitney 2008, 'Angry shareholders turn up the heat on directors', *Australian Financial Review*, 1 December 2008; Poljak 2008, 'Transurban pay deal voted down', *Australian Financial Review*, 29 October 2008; AMP Capital Investors 2009; UniSuper 2008.

Implications of recent superannuation changes

This chapter has shown that superannuation contributes significantly to the national economy in a variety of ways. It is of concern therefore, that recent changes to superannuation regulations will likely have the effect of reducing superannuation contributions – which in turn will reduce capital and investment in the Australian economy.

At the 2009 budget, the Government decided to introduce reforms to superannuation concessions to ensure spending is better targeted and fiscally responsible in the short and long term. From 1 July 2009, the Government reduced the annual cap on concessional superannuation contributions from $50,000 to $25,000, and the transitional cap (which applies until 30 June 2012 for those aged 50 years and over) from $100,000 to $50,000.

The Government said that less than 2 per cent of people who make concessional contributions would be affected by this measure (regardless of their age). These caps would improve equity by reducing the disproportionate benefits received by higher income earners who can afford to make larger concessional contributions (Australian Government 2009). While this may or may not be the case, it is clear that the effect of this policy will be to reduce the capital stock in the Australian economy.

The Government assumes it will save $4.2 billion over four years, or approximately $1 billion each year. Assuming that the savings from limiting concessional contributions come from individuals who pay tax at a marginal rate of 47 per cent, this suggests that $3.1 billion per year less is saved into superannuation. If this money were saved through other mechanisms, there would be no impact on capital formation. But, if the $3.1 billion dollars were not saved, then savings would be reduced by $1.6 billion, which is after tax income. Assuming $1.6 billion was spent instead of put into superannuation, capital formation would be reduced by $1.4 billion (because around 87 per cent of superannuation funds are invested in the Australian economy). Assuming a return on investment of 5 per cent per annum, then in ten years time the cumulative effect of the investment in the Australian economy foregone sums to $20.7 billion.

Chapter 4

Benefits to government

It is often argued that superannuation tax concessions favour high-income earners and reduce much-needed Government revenue. This is because both employer contributions and fund earnings are taxed at around 15 per cent whereas the highest income earners are due to pay significantly more tax on their incomes. These arguments however ignore the significant contribution to taxation generated by the superannuation industry.

This chapter explains the ways in which superannuation contributes to tax revenue, directly and indirectly, noting the cost to Government through tax concessions. It also compares Australia with other OECD countries and finds that Australia is better off than most in terms of forecast spending on the Age Pension and private superannuation saving.

It concludes the report by noting that superannuation is the key to ensuring that today's working Australians can look forward to high standards of living in their retirement. Superannuation also helps provide the national savings required for robust investment and a stronger economy.

4.1 Superannuation and tax

It is estimated that superannuation funds tax in 2009-10 will be $7,990 million — a decline from 2008-09 levels by 12.8 per cent. This is due to declines in investment returns and partly due to realised foreign exchange hedging losses. In addition, taxable contributions are expected to fall through a combination of low growth in wages, weaker employment and the policy decision to reduce the concessional contributions caps for superannuation. A recovery in superannuation tax is expected to begin in 2010-11 – as discussed in Box 4.1.

Box 4.1

SUPERANNUATION FUNDS TAX – CURRENT STATUS

The recovery in superannuation tax is expected to begin in 2010-11 with 15.9 per cent growth, as the impact of declining returns and foreign exchange hedging losses is exhausted and the outlook for the labour market improves. Voluntary contributions are expected to also improve as equity markets recover and confidence improves. In the projection years, superannuation funds tax is expected to continue to bounce back, showing 12.6 per cent growth and 9.5 per cent growth in 2011-12 and 2012-13 respectively, based on the assumption of a recovery in employment and corporate profits and as the stock of capital losses runs down. While the abolition of the superannuation surcharge prevents future liabilities from accruing, a very small allowance has been made in relation to liabilities that accrued prior to 1 July 2005.

Source: Australian Government 2009, Budget 2009-10, Statement 5, Revenue

Superannuation tax concessions

Superannuation is favourably taxed compared to other kinds of savings. Most superannuation attracts a flat rate of tax of 15 per cent on funds at entry and up to 15 per cent on the annual income earned (Freebairn and Scutella 2008).[13] Box 4.2 provides information on the current tax treatment of superannuation.

Box 4.2

TAX TREATMENT OF SUPERANNUATION

Superannuation is essentially taxed at three points: on pre tax income contributed to the fund, on income generated from assets held in the fund, and on some income withdrawn from the fund. Most income withdrawn from superannuation by persons age 60 and over is not taxed. Contributions to a superannuation fund made by an employer on behalf of an employee, including those under salary sacrifice arrangements are taxed at a flat rate of 15 per cent. Those who are not on a wage, including the self-employed, can claim a tax deduction for their personal contributions — taxed also at 15 per cent in the fund subject to the indexed annual limit. Personal contributions by employees are made from after-tax income and are fully taxed before being paid into the fund, although they may attract a co-contribution from the Government. The earnings of superannuation funds are taxed at up to a 15 per cent flat rate. However, due to available offsets such as imputation credits the average tax paid on earnings is 7.1 per cent. Capital gains are taxed at 10 per cent if the asset has been held for twelve months. Earnings in the fund are not taxed when an individual's account begins to be paid out as an income stream. Superannuation benefits derived from previously taxed contributions and accumulations are exempt from tax when paid to beneficiaries age 60 or more, while such benefits paid before age 60 are taxed at concessional rates. Where the benefit is paid from a fund that did not pay tax on its contributions and earnings, such as many government sector funds, tax is paid on the benefit but at a lesser rate after age 60.

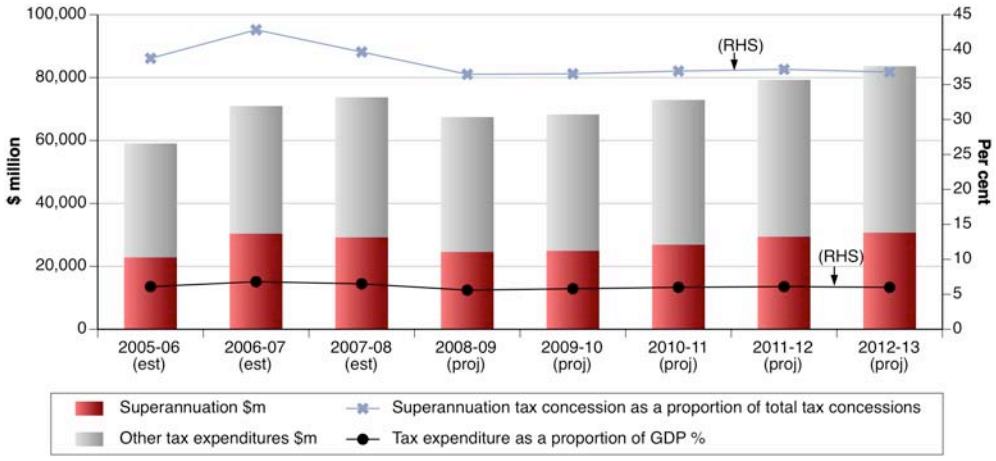
Source: Davidson and Guest 2007; Nielson 2009; Ingles 2009

It is often argued that superannuation tax concessions favour high-income earners and reduce much-needed Government revenue (see for example, Ingles 2009; Freebairn and Scutella 2008). This is because both employer contributions and fund earnings are taxed at the rate of 15 per cent whereas the highest income earners are due to pay significantly more tax on their incomes (45c for every $1 dollar over $180,000). Superannuation tax concessions comprise a large proportion of total tax concessions — around 35 to 40 per cent on average, as shown below.

[13] The official tax rate is 15 per cent but imputation credits are also accessible, depending on the cash/shares mix.

Figure 4.1

TOTAL MEASURED TAX EXPENDITURES



Source: Treasury 2009a, Tax Expenditures Statement 2008

This analysis however ignores the significant contribution to taxation generated by the superannuation industry in three key ways. Firstly, superannuation contributes directly to the tax base. Secondly, by generating economic activity superannuation increases tax revenue. Thirdly, superannuation eases the burden on the Government purse in terms of paying for the Age Pension. These three impacts, direct and indirect, sum to just over $15 billion (2009-10), as shown in the table below.

Table 4.1

SUPERANNUATION'S CONTRIBUTION TO TAX REVENUE

	2009-10
Direct superannuation tax revenue	$7,990 million
Tax revenue generated by economic activity from super	$5,251 million*
Savings on the Age Pension	$1,760 million
Total	**$15,001 million**

* figure is based on 2007-08 estimate

Direct superannuation tax revenue

Based on Treasury forecasts, superannuation will generate approximately $8 billion in revenue in the 2009-10 financial year.[14]

Tax revenue generated by economic activity from superannuation

Using an average tax rate of 26.4 per cent and assuming superannuation generates economic activity of approximately $19.9 billion (see Chapter 3 for further details), then taxation generated by superannuation is approximately $5.3 billion. The average tax rate was derived by dividing total taxation revenue by total GDP.

[14] It should be noted that some commentators argue this is an underestimate as tax paid on superannuation by life offices is paid as company tax.

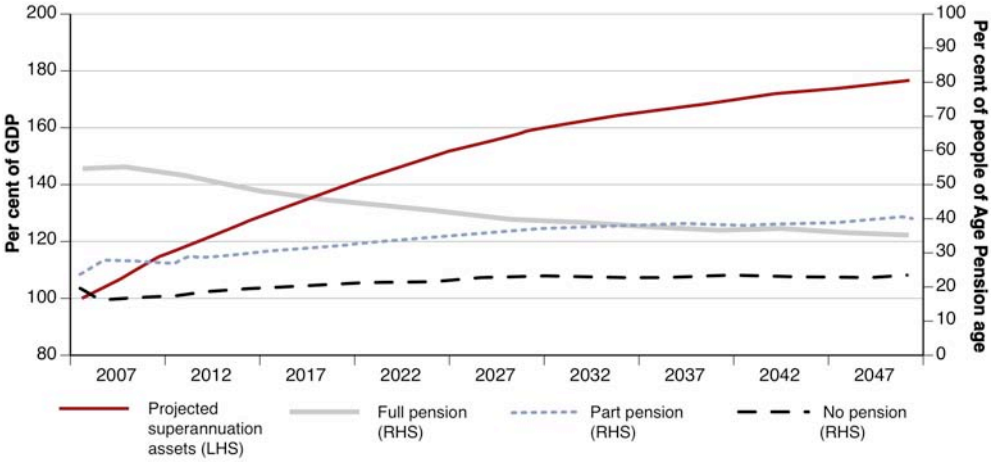
Savings on the Age Pension

Additionally, superannuation also saves the Government at least $1.8 billion per year in terms of expenditure not required on the Age Pension.[15]

Superannuation is important in reducing the future cost of the Age Pension. Forecasts by the Australian Treasury show that once the superannuation guarantee matures in the late 2030s, fewer people will receive a full Age Pension. It is estimated that by 2050, 28.3 per cent of the population age 65 and over will receive a full pension; 45.3 per cent will receive a part pension; and 26.4 per cent will receive no pension at all (Harmer 2009).

Figure 4.2

PERCENTAGE OF RETIREES ON FULL, PART OR NO PENSION



Source: Australian Treasury, Intergenerational Report 2007

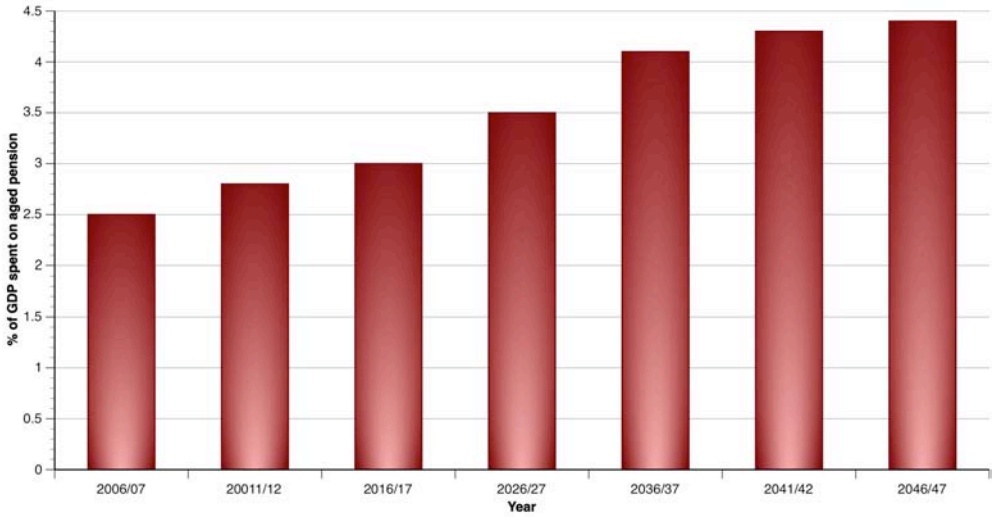
Due to the forecast relative decrease in reliance on the full pension, Treasury estimates that the superannuation guarantee will reduce the total value of pension spending by some six per cent (Harmer 2009). The gradual increase in the pension age from 65 to 67 by 2023, announced earlier this year (subsequent to the estimation by Harmer 2009) implies that the reduction of the total value of pension spending will be greater than 6 per cent. Reduced Government expenditure on the Age Pension helps finance expenditure on other key sectors that are likely to comprise a larger portion of government spending into the future, such as health care.[16]

[15] This estimate is based on Treasury modelling. Due to the forecast relative decrease in reliance on the full pension, Treasury estimates that the superannuation guarantee will reduce the total value of pension spending by some six per cent (Harmer 2009). The Age Pension in 2009-10 costs the Government $29,335 million.

[16] Even still, as the population ages, government expenditure on the Age Pension is expected to increase significantly. Treasury forecasts show that expenditure on the Age Pension will increase from 2.5 per cent of GDP in 2006-07 to an estimated 4.4 per cent of GDP by 2046-47 (Treasury 2007).

Figure 4.3

GOVERNMENT SPENDING ON AGE PENSION AS PERCENTAGE OF GDP



Source: Australian Treasury, 2007, Intergenerational report

It would however, be misleading to claim that superannuation contributes significantly to tax revenue (approximately $15 billion in 2009-10) without acknowledging the value of superannuation tax concessions. Superannuation tax concessions obviously cost the Government a significant proportion of tax revenue. Treasury reports that superannuation tax concessions will cost nearly $25 billion in the 2009-10 financial year (Treasury 2009a). Some commentators argue however, that this method of calculating the cost of superannuation tax concessions over-estimates the burden on the Government Budget. Under an alternative methodology, the superannuation tax concessions would have an estimated aggregate cost to revenue of $4.6 billion in 2007-08 compared to the usual methodology, which estimated superannuation tax concessions at an aggregate cost to revenue of over $26 billion in 2007-08 (Treasury 2008). Further detail on the two methodologies is provided in Box 4.3.

Box 4.3

CALCULATING TAX CONCESSIONS

Treasury's calculation

Treasury's calculation in the Tax Expenditures Statement assumes that income taxed as 'superannuation' is otherwise taxable in the hands of the employee. The ATO and Treasury therefore calculate the 'concession' as the gap between an assumed marginal personal tax rate and the contributions rate of 15 per cent.

Alternative methodology

An alternative way to calculate the value of the tax concession is to use an expenditure tax benchmark. Under the pre-paid expenditure tax benchmark, the value of the concession is the difference between the tax paid if the superannuation contribution were taxed as income at the individual's personal tax rate (plus the Medicare levy) and the tax paid in the fund, less the tax paid on earnings in the fund. Benefits are tax exempt under this benchmark, which is consistent with the tax exemption of superannuation benefits in Australia's retirement income system.

Source: Access Economics 1998; Treasury 2008

Without the tax concession, few Australians would contribute to superannuation beyond the mandatory component — thus reducing the total stock of superannuation contributions and in turn reducing superannuation-generated economic activity and increasing Government spending on the Age Pension. Arguments suggesting that reducing the tax concession would increase Government revenue are therefore not as convincing as they may first appear.

Moreover, just because a Government policy poses a net cost on Government does not mean that it is necessarily a bad policy. In fact, the vast majority of Government programs and tax incentives are costly, but are pursued because they promote better and more sustainable standards of living for the long term.

4.2 Comparison with OECD countries

The following section comparing the Australian retirement income system with other OECD countries provides insight into why Australia's system is the aspiration of many.

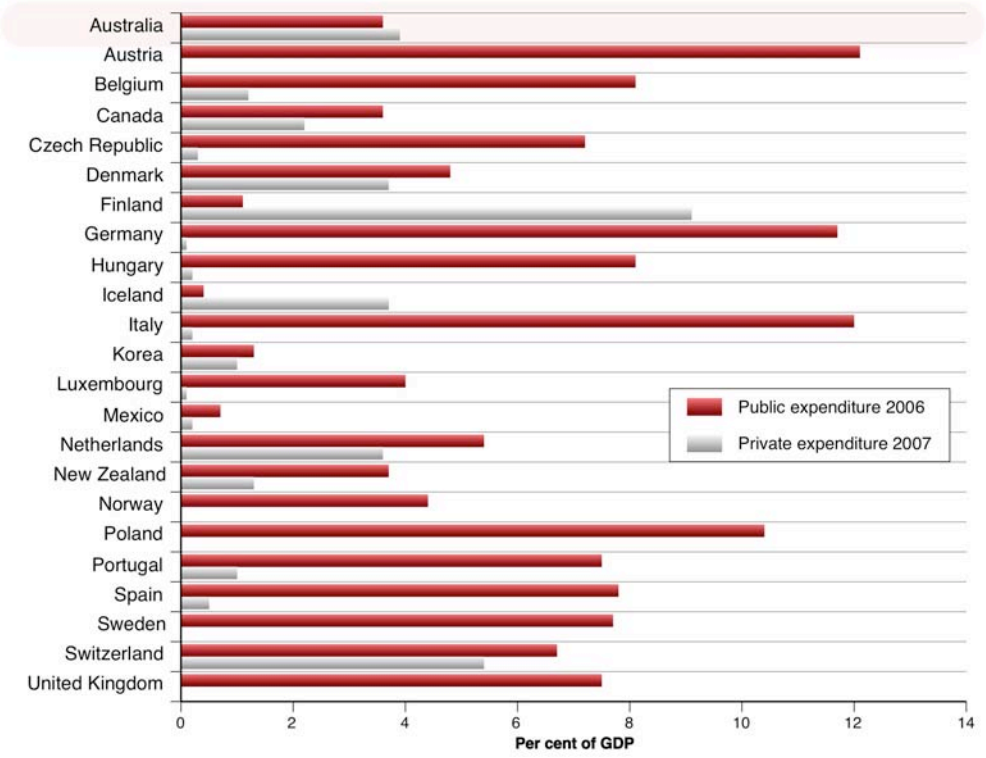
Australia has over $1 trillion in funds under management. During the 1990s, the volume of funds under management increased almost three-fold, with funds under management almost doubling over the second half of the decade (Austrade 2008). This performance owes much to the introduction of the superannuation guarantee, which has been praised as one of the most progressive Government-led retirement provision policies in the world, including from the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD) (Austrade 2008).

Compared to other OECD countries, Australia spends less on the Age Pension and individuals contribute more to their own retirement income. This is mainly because of the way the Age Pension operates in Australia — that is, it is means tested, whereas many others are not. In most OECD countries the Age Pension is based on the recipient's (average) pre-retirement income (OECD 2009).

Compared to other OECD countries, Australia's public and private pension expenditure as a proportion of GDP is low. In particular, public expenditure on the pension is considerably lower than other OECD countries — as shown in Figure 4.4 Private expenditure is toward the upper end when compared to other OECD countries. It is significantly higher than private expenditure in Belgium, Italy and Spain, but lower than in Finland and Switzerland.

Figure 4.4

PUBLIC AND PRIVATE EXPENDITURES ACROSS THE OECD



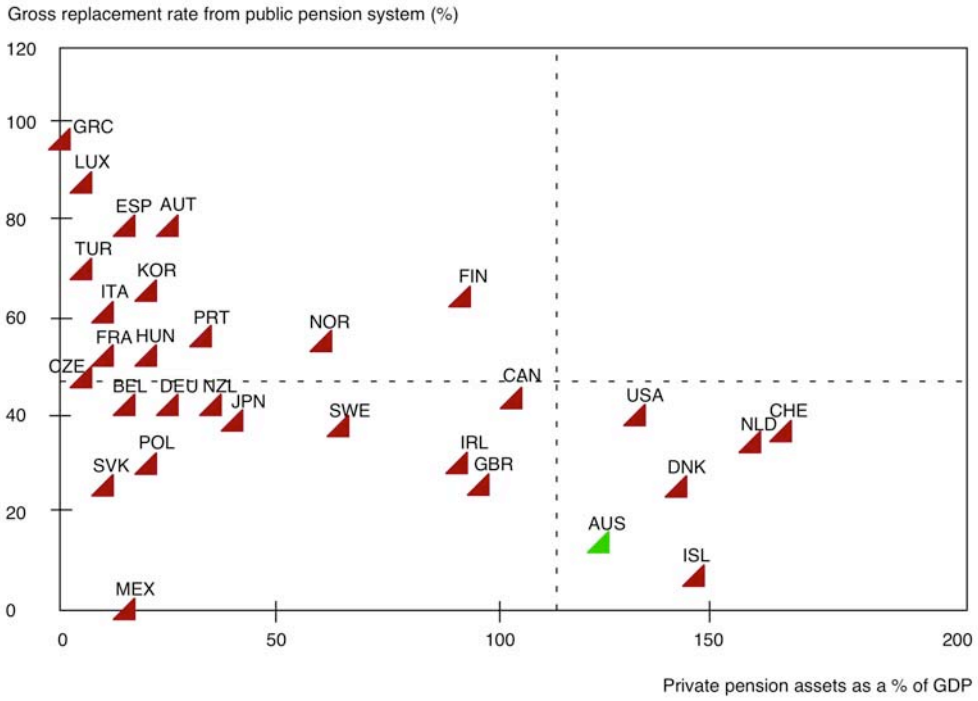
Source: OECD Population and Migration – Elderly population public and private pension expenditures

Figure 4.5 shows the status of OECD countries in terms of the gross replacement rate[17] from the public pension system (i.e. the Age Pension against private pension) assets as a percentage of GDP. It shows that relative to the other OECD countries, Australia's public pension system provides a very low replacement rate. It also shows that relative to the other OECD countries, Australia has more private pension assets (i.e. superannuation assets) as a percentage of GDP. This demonstrates the relative success of Australia's superannuation scheme in increasing private pension assets and reducing the burden on Government. However this does not rule out the need for Australians to save more money into superannuation in order to ensure a comfortable standard of living in retirement.

[17] The replacement rate is the ratio of an individual's pension in a given time period and income in a given time period.

Figure 4.5

PENSION ASSETS AS PERCENTAGE OF GDP AND GROSS REPLACEMENT RATE FROM PUBLIC PENSION SYSTEM IN OECD COUNTRIES

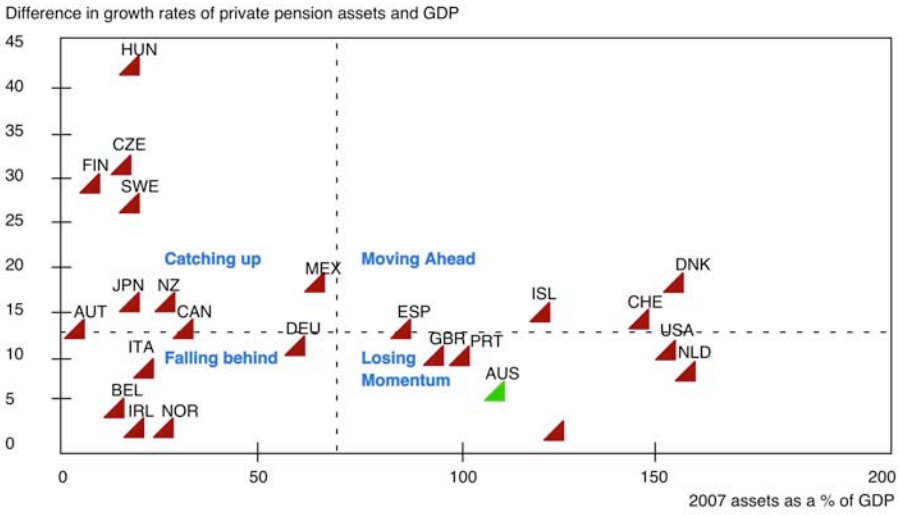


Source: OECD private pensions outlook 2008

Figure 4.6 below shows pension assets (i.e. all forms of investment with a value associated to a pension plan) as a percentage of GDP and pension asset growth rates in OECD countries. The vertical line in the chart represents the average percentage of GDP that private pension assets represent; the horizontal line represents the average difference in growth rates between GDP and private pension assets. It shows that in terms of the difference in growth rates of private pension assets and GDP, Australia is slightly above average compared to other OECD countries. It also shows that relative to other countries Australia in 2007 had a relatively high ratio of assets to GDP. Having a relatively high proportion of pension assets, together with a relatively high growth rate of pension assets relative to GDP indicates that Australia is 'moving ahead' of other OECD countries with respect to retirement savings.

Figure 4.6

PENSION ASSETS AS PERCENTAGE OF GDP AND PENSION ASSET GROWTH RATES IN OECD COUNTRIES



Source: OECD private pensions outlook 2008

4.3 Conclusions

Given these findings it is clear that superannuation should remain an integral pillar of Australia's retirement income system. Recent measures to reduce incentives to contribute to superannuation, such as temporary reductions to co-contributions and reducing the cap on concessional contributions, may work to weaken this pillar.

Changes to the system (which have been frequent) also cause confusion among contributors — undermining confidence and trust — as well as directly discouraging increased contributions and placing increased emphasis on the Age Pension. Thus, while the recent changes may reduce burdens on Government budgets in the near term, they may increase burdens on *future* Government budgets, which will in turn result in higher tax burdens on the next generation.

Thus, in the interest of intergenerational equity as well as to help maintain strong flows of saving available to finance investment and growth, it is important to keep the incentives to contribute to superannuation strong. Superannuation is also the key to ensuring that today's working Australians can look forward to high standards of living in their retirement. It also helps provide the national savings required for robust investment and a stronger economy.

Appendix A

Modelling of case studies

A.1 Superannuation balances for low and middle income families

In modelling our case studies we have used a static future value analysis, keeping the rate of return and contributions constant. The main aim of the analysis is to compare two different situations (super vs. no super, and saving early vs. saving late), so indexing income and contribution would only complicate matters unnecessarily. The analysis assumes that current policy settings will remain in place, except where otherwise stated.

The parameter values used in our evaluation are set out in Table A.1. The gross rate of return used for all calculations is five per cent. This is based on the average returns of superannuation funds since 1999 (APRA 2009b). The time horizon for investments is 35 years, except where mentioned otherwise.

Income levels in the case studies are based on data from the Australian Bureau of Statistics (ABS). The low income is taken from the 25th percentile of weekly total cash earnings. The middle income is the median of weekly total cash earnings (ABS 2009c, Table 6).

In order to keep results more easily comparable we have assumed that families will dedicate the same proportion of pre-tax income to retirement saving, whether they save in within the superannuation framework or not. The gross contributions are calculated as nine per cent of pre-tax income (the same amount as compulsory employer contributions under the superannuation guarantee). Net contributions are then calculated by deducting tax from the gross contributions. If contributions are made into superannuation, this tax rate is taken as 15 per cent; if contributions are not made into superannuation, the tax rate is the same as the marginal tax rate on total income (including the Medicare levy, where applicable). We have used the tax rates for the 2009-10 financial year.

Table A.1

PARAMETER VALUES FOR CASE STUDIES

Parameter	Value
Gross rate of return	5%
Time horizon	35 years
Low income full time	$42,786 per annum
Low income part time	$10,331 per annum
Middle income full time	$56,353 per annum
Middle income part time	$20,037 per annum
Contributions with super	9% of before-tax income, minus 15% concessional tax rate
Contributions without super	9% of before-tax income, minus tax at the marginal tax rate (including the Medicare levy, where applicable)

Source: Allen Consulting Group, ABS (2009c, Table 6)

A.2 Sufficiency of compulsory superannuation payments

According to the Westpac-ASFA retirement standard, a single person needs an income of $374.60 per week and a couple needs an income of $528.30 per week to fund a modest lifestyle. For a comfortable lifestyle $725.36 and $973.68 a week are needed, respectively.

We used the FIDO retirement planner (FIDO 2009) in order to calculate whether these lifestyles are achievable with just superannuation guarantee payments. For this, we used the same low and middle income families as for the calculations in Appendix A.1.

We assumed that our subjects were 32 years old, giving them 35 years until retirement at the age pension eligibility age of 67. We also assumed they started with no superannuation savings. We used the default parameter values in the FIDO calculator. Where after-tax contributions were made, these were made by the lower income spouse, to take maximum advantage of the government co-contribution.

Appendix B

Modelling notes for macroeconomic impact of superannuation

B.1 Data

For the modelling we used data for the period 1992-2008 (the latest year for which all data were available). This coincides with the period after the superannuation guarantee was introduced, and is thus the appropriate period for modelling the impacts of superannuation on the Australian economy.

We used the chain volume measures of GDP, end of year capital stock (to measure the amount of capital available for production) and of gross fixed capital formation (to measure investment, of which superannuation forms part) from the Australian System of National Accounts (ABS 2008a). We also used data on total employment from ABS (2009d). The data used are in Table B.1.

Table B.1

DATA USED FOR MACROECONOMIC ANALYSIS

Year	GDP ($millions)	Employment ('000)	Capital stock ($millions)	Investment ($millions)
1992	604,629	7,666.98	1,895,111	110,916
1993	627,012	7,677.60	1,932,806	117,690
1994	652,732	7,921.67	1,974,373	124,744
1995	681,004	8,270.93	2,028,863	138,940
1996	708,925	8,366.67	2,081,593	142,153
1997	736,573	8,419.00	2,141,382	153,074
1998	769,719	8,617.57	2,211,419	167,979
1999	809,744	8,742.25	2,284,161	175,522
2000	842,134	9,009.68	2,365,079	190,032
2001	858,134	9,089.73	2,420,968	171,942
2002	890,743	9,248.36	2,487,408	188,581
2003	919,247	9,456.32	2,576,012	215,650
2004	956,017	9,638.72	2,677,659	233,564
2005	982,786	10,007.95	2,785,479	247,997
2006	1,012,269	10,252.36	2,907,318	269,936
2007	1,045,674	10,533.36	3,033,921	284,707
2008	1,084,156	10,782.33	3,177,511	312,237

Source: ABS (2008a, 2009d)

B.2 Model

Step one

To model the effect of labour and capital stocks on GDP we used a Cobb-Douglas production function. This function uses the amount of capital and labour to estimate what GDP will be. The function we used is GDP = $cK^{0.4}L^{0.6}$, where c is a constant, K is the amount of capital and L is the amount of labour.

When using a Cobb-Douglas production function the exponents on K and L are equal to the weight of capital and labour on the economy. The value of capital is roughly equal to 40 per cent of GDP, while the value of labour is roughly equal to 60 per cent of GDP. The constant is used to calibrate the model, and is a proxy for technological advances and other things that are not captured by labour and capital.

Cobb-Douglas production functions are especially useful as they allow for the estimation of the growth rate of GDP based on the growth rate of capital and labour.

In order to calibrate the model, we used the average growth rate of GDP from 1992-2008 (3.7 per cent), the average growth rate of capital (3.3 per cent) and the average growth rate of labour (2.2 per cent). The relationship between these growth rates should be

(GDP growth rate) = constant + 0.4 x (capital growth rate) + 0.6 x (labour growth rate).

Based on this formula we found that the constant was 1.11 per cent.

Step two

After calibrating the model, we estimated the effects of superannuation on GDP. In order to get an estimate of GDP without the effects of superannuation, first we needed to adjust the level of investment to reflect the effect of superannuation.

Given that superannuation adds an estimated 1.5 per cent of GDP to national savings (Allen Consulting Group 2007), and around 87 per cent of that is re-invested domestically (APRA 2009b), we adjusted investment levels down by 87 per cent of 1.5 per cent of GDP.

Then we used the adjusted level of investment to estimate the level of capital stock. To do this we assumed that the ratio of investment to capital in 2008 would be the same without superannuation as it is with superannuation. The estimated value of the capital stock in 2008 was then used to estimate the growth rate of capital without superannuation. This was used to calculate the level of capital stock in the intervening years.

The estimated growth rate of capital was then used in the Cobb-Douglas model to estimate an adjusted growth rate for GDP.

The adjusted level of GDP was calculated by applying this new growth rate to the level of GDP in 1992, for each year until 2008. Comparing this estimated level of GDP to the actual level of GDP shows that without superannuation, GDP would be an estimated 1.8 per cent lower than it is now.

In addition, we forecast the path of GDP, capital and investment with and without superannuation until 2020, using the average annual growth rates from 1992-2008.

Detailed results are in Table B.2.

Table B.2

DETAILED RESULTS OF MACROECONOMIC ANALYSIS

Year	GDP without super ($millions)	Capital without super ($millions)	Investment without super ($millions)
1992	604,629	1,895,111	103,038
1993	626,382	1,927,222	109,521
1994	648,917	1,962,981	116,240
1995	672,263	2,011,328	130,067
1996	696,449	2,057,640	132,916
1997	721,505	2,110,625	143,477
1998	747,463	2,173,359	157,950
1999	774,354	2,238,363	164,972
2000	802,213	2,310,962	179,060
2001	831,074	2,358,738	160,761
2002	860,973	2,416,468	176,976
2003	891,949	2,495,314	203,673
2004	924,038	2,586,283	221,108
2005	957,282	2,682,651	235,192
2006	991,722	2,791,902	256,747
2007	1,027,401	2,905,061	271,083
2008	1,064,364	3,033,762	298,112
2009*	1,102,657	3,124,303	318,452
2010*	1,142,327	3,217,546	340,167
2011*	1,183,424	3,313,573	363,349
2012*	1,226,000	3,412,465	388,097
2013*	1,270,108	3,514,308	414,516
2014*	1,315,802	3,619,191	442,719
2015*	1,363,141	3,727,204	472,825
2016*	1,412,182	3,838,441	504,962
2017*	1,462,988	3,952,998	539,267
2018*	1,515,622	4,070,973	575,885
2019*	1,570,149	4,192,469	614,972
2020*	1,626,639	4,317,592	656,694

Source: Allen Consulting Group 2009, * Forecast

Appendix C

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