Dynamics of the Australian Superannuation System
The next 20 years to 2038
Deloitte Actuaries & Consultants
November 2019
Australia's total superannuation assets are projected to increase by 275% to $10.2 trillion in 2038 from $2.7 trillion today.
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In this ninth edition of Deloitte’s Dynamics of the Australian Superannuation System - the next 20 years to 2038, we model the components of the superannuation industry in Australia, project their growth, and comment on the market dynamics, demographic shifts, longevity, and what may be the asset allocation impact for the Australian share market.

Four themes have emerged:

**Change**

Several changes have occurred for superannuation in recent years (and more are coming) including:

- **Tax changes** from July 2017 included removal of tax exemption on investment income for transition to retirement income streams, reduction in concessional contributions cap to $25,000 p.a. for all ages and also a reduced non-concessional contributions cap to $100,000 p.a.

- **Transfer balance cap** was introduced from 1 July 2017, limiting how much money can be transferred to a tax-exempt income stream on retirement.

- **Concessional contribution catch-up** for individuals over a five year carry-forward period commenced from 1 July 2018.

- **Protecting Your Super** introduced bans on exit fees, caps on fees for low balances, transfers of low balance inactive accounts to the ATO for auto-consolidation, and opt-in insurance for inactive member accounts from 1 July 2019.

- **Putting Members Interests First** introduces opt-in insurance for those under 25 years or balances below $6,000 (subject to certain exemptions) from 1 April 2020.

- **SG rate increases** to come - with the next increase to 10% scheduled to occur from 1 July 2021 and to 12% by July 2025.

**Customer centricity**

- **Customer at the centre** is currently a trend across businesses everywhere.

- **End-to-end customer lifecycle** is also a journey superannuation funds have embarked on, creating and transforming their service and operational models, their systems and processes, and improving their culture.

- **Meeting customer expectations** was a significant focus of the Banking Royal Commission in 2018/2019 reinforcing superannuation funds’ focus into the future.

**Consolidation**

- **Consolidating accounts** has meant that many funds offer search and consolidate tools for their members to use and assist members with multiple accounts to consolidate their superannuation.
• **The MyGov ATO** portal provides information for individuals to see if they have multiple super accounts, and allows them to trigger a consolidation of those accounts into the account of their choice.

• **Lost or unclaimed super monies** has also been an area where the ATO is proactively working to consolidate superannuation for individuals (including inactive low balance accounts).

**Compliance**

• **Ongoing regulatory changes** mean superannuation funds face increasing compliance obligations imposed by the regulators including APRA, ASIC and the ATO.

• **SIS Act and Regulations** prescribed standards require compliance, as do APRA Superannuation Prudential Standards.

• **MySuper requirements** where funds must also comply with certain requirements in relation to the provision of MySuper accounts.

• **Choice of Fund and Superannuation Guarantee obligations** means that employers need to respect their employees’ superannuation choices.

**Adequacy and longevity**

Based on population projections for Australia, irrespective of whether improvements in average life expectancies continue, or slow down, the ‘old age dependency’ ratio in Australia is projected to worsen over the next 20 years and on to 2050.

As has been widely acknowledged, this means that managing the issues of adequacy and longevity continue to be important for individuals and for Australia as a whole.

Accordingly, we consider the impacts on retirement incomes as a proportion of final salary for individuals entering the workforce today. This reflects comparisons if their superannuation benefits are based on the current 9.5% Superannuation Guarantee (SG) rate, or an increased rate of 12% (being the ultimate maximum level per current legislation), and using different life expectancy ages.

Our research shows that an increased SG contribution rate of 12% has a material impact on the final retirement income that an individual can expect to receive. This is something that we are confident the Review of the Retirement Income System will consider as part of its deliberation on the role of compulsory superannuation, as one of the three key pillars in Australia’s current retirement income system.

We trust you will find this report useful and thought provoking and we look forward to discussing it with you as you consider the industry, your own needs and objectives, and some of the implications for your businesses of the projections we have determined.

**METHODOLOGY**

The Dynamics of Super Report is based on the Super Model which was built and is managed by Deloitte Actuaries & Consultants. It references a combination of data collected by the Australian Bureau of Statistics (ABS), the Australian Prudential Regulation Authority (APRA), the Association of Superannuation Funds of Australia (ASFA) and other public organisations and associations, together with research conducted by Deloitte.

The dynamic nature of the Super Model, which calculates the future market for superannuation assets, in aggregate, and within segments, is based on projected inflows and outputs from the system that enables sensitivity tests to be done using different rates for important variables.

These variables include the Superannuation Guarantee contribution rate, levels of voluntary contributions, administration and investment costs, rates of exercise of fund choice by individuals, income stream take up rates, investment returns, inflation and salary growth and taxation on super.
Projected total superannuation assets

Despite ongoing volatility in investment markets and historically low inflation and cash rates, the Australian superannuation industry has continued to grow. Total superannuation assets have risen from $2 trillion as at 30 June 2015, to $2.7 trillion as at 30 June 2018.

The base projections from the Deloitte super model show that total superannuation assets in Australia will continue to increase to $10.2 trillion by 2038 (See Figure 1 Projected superannuation assets). These projections also reflect the legislated increases in the Superannuation Guarantee (SG) rate from 9.5% to 12% by July 2025, with the next increase (to 10%) scheduled to occur from 1 July 2021.

Caveat: There is an important caveat to the projected 275% growth to $10.2 trillion in superannuation assets by 2038. The current low interest rate environment has continued to prevail for more than five years and is now arguably the ‘new normal’ in the local economy. This is also evidenced globally in most Western economies.

Despite this, super fund returns have continued to be strong, with robust real returns consistently earned over the medium term, even though investment returns can be volatile in the short-term.

Average balances at retirement are increasing, driven both by strong investment returns and by members having received superannuation contributions for significant proportions of their working lives (noting that SG was introduced from 1992, and Award arrangements applied prior to that). Post-retirement assets are also expected to grow despite members beginning to draw down their accumulated superannuation savings over time.

As a result of this we expect strong growth in post-retirement assets over the next 20 years.

However, given that there are no maximum constraints on the pace of members drawing down their benefits in retirement, if retirees are forced to draw down greater than expected proportions of their retirement savings to meet their needs in a low return environment, then the projected asset growth to more than $10 trillion by 2038 would slow, and commensurately, the call on the government for the aged pension would be greater.

We anticipate this is a matter to be considered by the Retirement Income System Review recently announced by the Australian Government.

In our modelling for the Dynamics of Superannuation research, we made the assumption that many individuals will reduce their rate of voluntary contributions as the SG rate increases. However, the modelling has not allowed for any other changes in member behaviour which may result from the SG increase.
greater scrutiny of comparative returns and peer-relative performance metrics.

As a result some funds have moved key parts of their investment management activities in-house and in particular strategised whether to focus on alpha returns in certain asset classes. As larger funds increase in size, they have also sought more sizeable investment transactions such as those through private equity consortiums.

Dynamics of the superannuation industry

Contributions
Members are still paying significant additional contributions into their superannuation in the years approaching retirement. Hence the level of contributions remains strong year-on-year. As a result we anticipate that sizeable voluntary contributions will continue into the future, with some reduction in future voluntary contribution rates to offset, at least partially, the increase in the compulsory SG contribution rate to 12%.

Investment returns
Investment returns on superannuation assets remain a significant contributor to the growth of the superannuation industry. Over the past three years the trend for net investment income to be at least equal to total net superannuation contributions has continued; due to the strength persisting in the investment markets despite an environment of reducing interest rates.

The strategic asset allocation adopted by each superannuation member, whether that is a MySuper default option, or an investment portfolio chosen by the member, continues to have the greatest impact on the member’s final benefit; greater in fact than the selection of individual managers within each asset sector.
superannuation balance at retirement are contribution rates and investment strategy. And they are in a member’s control.

Therefore, the earlier a member gets appropriate advice on making the most of their superannuation, the better the impact will be on their final retirement outcomes.

There was a ban on the deduction of any advice fees from MySuper accounts, as well as limits on such fee deductions for choice products among Commissioner Hayne’s recommendations in his report on the recent Royal Commission into Misconduct in Banking, Superannuation and Financial Services Industry. It remains to be seen whether this limitation on advice fees within super will have an impact on individuals being advised in a way that considers their holistic financial circumstances, and how their superannuation benefit fits into that.

Given recent concern over the demographic challenges presented by an ageing population, our modelling looked at the total superannuation assets split between pre-retirement and post-retirement stages.

**Pre-retirement assets** - represent a significant and growing pool of assets in their own right. The tax-free status of investment earnings on assets backing pensions, is a major factor encouraging this growth. The tax changes applying to non-retirement phase pensions, such as transition to retirement pensions, since 1 July 2017 has resulted in a reduction in post-retirement assets, but only slightly limited the growth in total assets, as the investment earnings continue to be taxed concessionally at a 15% tax rate.

**Post-retirement pension assets** - given the long term nature of superannuation, it is important that members do not invest too conservatively in the early to middle years of their working lives, so they can maximise the impact of investment returns compounding over the long time, up to and into retirement.

Given that superannuation is preserved for retirement, these members will be able to withstand the short-term volatility inherent in growth-oriented portfolios and achieve a higher long-term average return overall.

**Generational change** - each subsequent generation is building larger real superannuation balances, underpinned by longer periods of higher rates of compulsory SG contributions. As final balances grow, increasingly higher proportions of members will take their benefits as an income stream by gradually drawing down their balance over time – although many will continue to face the risk of outliving their savings due to continuing improvements in mortality.

**Figure 3: Projected superannuation assets (2018 to 2038)**

Source: Deloitte Actuaries & Consultants, 2019
Looking to the near future: As Baby Boomers retire, and Generation X approaches and enters retirement, there will be significant growth in post-retirement assets. However, it appears that there will also be significant leakage from the superannuation sector. We anticipate a considerable proportion of benefits will continue to be withdrawn as lump sums, either at retirement, or as ad-hoc withdrawals from account-based pension accounts. This is rather than using the benefit to provide a regular income stream over an individual’s remaining lifetime.

Sequencing risk: The intentions, and ultimately, actions of members in choosing how they will take their superannuation benefits have major implications for asset allocation.

In post-retirement, members are generally less able to withstand the impact of negative returns, and are more exposed to sequencing risk around the timing of withdrawing their benefit. Likewise, as pre-retirement members reach the final years of their working lives, they will also be less prepared to accept negative returns and will need to avoid the risk of a sudden drop in their savings as they enter retirement. This will particularly be the case as the average savings balance at retirement continues to climb and hence become more significant for individual members as a source of retirement monies.

The increase in the use of lifecycle types of asset allocations in MySuper offerings i.e. those more heavily weighted to growth assets at younger ages, and gradually becoming more conservative as the individual ages over time, is in response to this trend. Likewise there is an increased application by super funds of lifecycle investment designs which continue through retirement, not just up to the point of retirement.

Groups: There is no ‘one size fits all’ approach that applies to individuals of any generation. Individuals will generally be in one of the following groups when they retire:

- **Small balances**: Those with relatively small superannuation balances i.e. less than $75,000.
  - These individuals will deplete their superannuation quickly after retirement, and then need to fall back on the ‘age pension’ safety-net.

- **Reasonable balances**: Those with reasonable levels of superannuation and other savings, but with total balances that will not be adequate to support them over the entire period of their remaining life.
  - This group is likely to also receive additional support through the age pension.
  - These individuals will be spending all of their investment earnings each year, supplemented by drawing down their capital more quickly than would be appropriate if it were to last for the rest of their lives.

- **Significant balances**: Those with significant superannuation and other assets, who will have enough savings to support themselves independently throughout their retirement.
  - A large part of their retirement income will be their investment income with potentially little or no need to use their capital each year.
  - Unless they mismanage their money (e.g. wilful overspending), they will be self-sufficient and will not require any support from the age pension.

Where people retire before the age pension eligibility age, they may need to draw down their superannuation more quickly during this early part of their retirement before they are eligible for the age pension. This in turn will mean they will have a lower remaining superannuation balance at pension age and will be likely to be more heavily reliant on the age pension as they grow older.

It is therefore important to consider the interaction between the age pension eligibility age, and superannuation preservation age, to ensure that the overall outcomes of the Australian retirement system are not undermined.

We note this specific issue has recently been considered by Treasury and the Productivity Commission, and is flagged as an option in the Actuaries Institute’s 2019 Green Paper on ‘Options for an Improved and Integrated System of Retirement’.

We expect that this is also a topic that the Retirement Income System Review will consider as it identifies the current structures of the retirement income system, including distributional impacts across the population and over time, and the impact of current policy settings on public finances.

This means: Superannuation funds and other financial institutions in Australia will have to create retirement products suitable for differing groups of retirees at different life stages in the coming years. Each of the above groups face very different investment and life challenges and will require different responses to assist them.

This provides real opportunities as well as challenges for the industry to innovate and develop products and solutions which will enable retirees to manage the retirement risks of longevity and investment risk, but which still retain simplicity so that members understand them.
Restructuring and consolidating the industry continues due to both internal and external forces. Ultimately the industry is dominated by:

- Self-Managed Superannuation Funds (SMSFs)
- Industry funds
- The retail giants, predominantly the large banks and life insurers
- Public sector funds

Some funds and financial services providers are also proactively encouraging members to consolidate their superannuation arrangements, which is bolstering the continuing consolidations. Many funds offer search and consolidate tools for their members to use, and will assist members with multiple accounts to consolidate their superannuation.

The ATO provides information through the MyGov portal for individuals to see if they have multiple super accounts, and it supports them to trigger a consolidation of those accounts into the account of their choice. Also the ATO will proactively work to consolidate lost or unclaimed super monies (including inactive low balance accounts) held by the ATO into the active superannuation accounts of individuals.

The final report of the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry (Hayne Royal Commission) was published in February 2019. One of the early impacts of the Royal Commission’s findings was that some retail funds experienced reputational damage due to areas of misconduct associated with fees for no service and conflicts of interest and duties. As a result, the growth in assets for retail funds has been constrained over the past year, while industry funds have been seen to be ‘net winners’ from the Royal Commission fallout.

Choice of Fund is now well entrenched in the Australian superannuation system. It was introduced in July 2005, and has reinforced the concept of superannuation effectively being deferred pay for employees. More members are retaining their existing superannuation funds when changing employers, rather than simply joining an employer’s default. The Hayne Royal Commission also recommended that an individual only have a single default fund for life, which would further separate the default superannuation fund from being an employer-related decision.

Market share by major segments

Figure 4 shows the movement of total assets in each segment from 2004 to 2018 compiled from APRA data and the Deloitte Super Model projected movement from 2018 to 2038.
Australia’s compulsory superannuation system means that overall superannuation assets have continued to grow recently, both in respect of contribution inflows exceeding benefit outflows, as well as robust investment returns. However, increased switching activity, particularly post the Hayne Royal Commission, has resulted in some funds (particularly retail funds) experiencing significant outflows, while others have seen strong inflows as a consequence.

Some highlights from these projections include:

• **Growth:** Industry funds and SMSFs are expected to grow significantly over the next 20 years with similar rates of overall growth, and slightly above the rate of growth of retail funds and public sector funds. (See Figure 4).

• **Industry funds:** It is not yet clear how successful industry funds and the large wealth management businesses will be in curtailing the rapid growth in post-retirement assets for SMSFs, particularly in light of the slow progress in the development of more innovative retirement income products.

There is considerable scope for funds to capitalise on the opportunity to develop new initiatives to better meet member needs in an increasingly customer-centric world. This includes providing members with more individual flexibility and tailoring. Those that do this well will be most successful in retaining and growing their market share.

• **Industry and SMSFs largest overall:** Our projections indicate that the industry funds will grow strongly such that they will be on par with SMSFs as the largest market segments in coming years, with each verging on $3 trillion in assets by 2038.

• **Retail funds:** The attention of retail funds has been preoccupied in the past year as they deal with the repercussions of the Hayne Royal Commission and issues identified such as fee for no service, conflicts of interest, and grandfathered commissions, and attempt to counter the resultant outflows of member funds as consumers react to the negative publicity arising from the Royal Commission findings.

• **SMSFs – post retirement bulge:** However SMSFs are still expected to be the largest sector by far in the post-retirement superannuation market, reaching $900 billion in 2038, and quickly eclipsing the retail segment. (See Figure 7)

• **Other funds:** Public sector funds are expected to continue to grow at a reasonable rate over the period, while the corporate segment will continue to slowly decline.

**Assumptions:**

• These projections assume no changes in the current legislative environment applying to superannuation.

• However, given the significant debate in the market and government around the level of tax concessions and product structures for superannuation, and numerous reviews (Financial Services Inquiry, Productivity Commission Inquiry into Competitiveness and Efficiency of Australia’s superannuation system, Hayne Royal Commission, and the Retirement Income System Review which is currently underway), change is likely.

• Nevertheless, as any future changes are still hypothetical and unpredictable, we have not taken any potential changes into account for the purposes of this report.

Robust investment returns and Australia’s compulsory superannuation system both mean superannuation assets have continued to grow overall. However, this has not been steady growth across all sectors, given significant fund switching post Hayne.
Pre and post-retirement assets

Figure 6 shows that industry funds will become the largest pre-retirement sector in the next few years. Retail funds will also continue to grow, but their growth rates are not expected to be as strong, reflecting the divestment of wealth management and superannuation businesses by many banks, and the impacts arising from the Hayne Royal Commission’s and Productivity Commission’s recommendations. SMSFs continue to remain popular, although their growth is expected to be less strong for pre-retirement assets than post-retirement assets.

Figure 7 shows that SMSFs dominate the post-retirement space, offering greater control over superannuation and the ability to harness the flexibility of family-based accounts for those members with larger account balances in particular.

The recent introduction of transfer balance caps has inhibited the projected growth of post-retirement assets for SMSFs somewhat. This merely means that, in retirement, many SMSFs will have retirement-phase income streams which are eligible for tax exemptions on investment returns, as well as unpreserved monies remaining in accumulation accounts which are not subject to any minimum drawdown requirements and are freely available to be withdrawn by members as and when they see fit.

Typically people create their own SMSF when experiencing a major change (e.g. on retirement or change of employment), having already accumulated a sizeable superannuation balance, as this is often a time when they seek formal or informal advice, or simply review their overall financial

Figure 5: Proportion of Superannuation assets by market segment (APRA classification)

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry</th>
<th>SMSF</th>
<th>Public</th>
<th>Retail</th>
<th>Corporate</th>
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<tr>
<td>2018</td>
<td>23%</td>
<td>28%</td>
<td>22%</td>
<td>25%</td>
<td>2%</td>
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<tr>
<td>2028</td>
<td>28%</td>
<td>28%</td>
<td>20%</td>
<td>23%</td>
<td>1%</td>
</tr>
<tr>
<td>2038</td>
<td>29%</td>
<td>29%</td>
<td>18%</td>
<td>24%</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

Figure 6: Pre-retirement assets by market segment

Source: APRA and Deloitte Actuaries & Consultants, 2019
situation. There are a number of factors that suggest this will continue, including the tax benefits readily available within an SMSF structure for those transitioning from pre-retirement to post-retirement.

We note that there is nothing standing in the way of other funds offering these same tax advantages to their members, other than the ability of their systems and processes to make this work.

Some industry funds have introduced direct investment features which seek to provide very similar benefits to individual members, although there are generally limitations on how much of a member’s accounts can be allocated to direct investments and a more restricted range of permitted direct investments (e.g. shares in ASX 200 companies).

Ongoing disruption in the financial advice industry due to the introduction of the Financial Adviser Standards and Ethics Authority (FASEA) requirements, and upcoming bans on grandfathered commissions in a post Future of Financial Advice (FOFA) world, are also expected to result in fewer customers transferring from other fund types at retirement.

Other key points regarding post-retirement include:
The significant proportion of benefits which are taken as a lump sum has a dampening effect on the level of post-retirement assets. Apart from SMSFs, growth in post-retirement assets will be relatively modest over the next 10 years due to the:

- Rate of drawdowns from post-retirement accounts (regular pension payments plus additional ad-hoc amounts) remaining a relatively high proportion of account balances each year.
- Fairly low proportions of retirement benefits being converted into post-retirement income streams.

Even for SMSFs, the growth in post-retirement assets is lower than previously forecast, as the level of benefit payments is consistently higher than the level of contribution inflows into the SMSFs.

Growth in post-retirement assets will be relatively modest over the next 10 years based on rate of drawdowns and proportions being converted into income streams. SMSF growth will be lower than previously forecast, as the level of benefit payments is consistently higher than contribution inflows.
Improved longevity means the proportion of retirees to working Australians has almost doubled in the past 60 years.

The 36-member country Organisation for Economic Co-operation and Development (OECD) has observed that Australia’s population is healthier than the OECD average, considering life expectancy and other general measures of health status. Like most OECD countries, Australia has enjoyed large gains in life expectancy over the past decades, thanks to improvements in living conditions, public health interventions and progress in medical care. The healthy life expectancy (i.e. the years lived free of a disability or a severe or profound limitation on core activities) has also been increasing.

Although there have been periodic fluctuations in the pace of improvement, most countries have seen sustained improvements in life expectancy in recent decades. However, the pace of mortality improvements has been slowing since 2011 in Australia and several other OECD countries. The OECD has observed that the reasons for the slowdown in improvements are complex, but is more pronounced at older ages. This is linked to slowing improvements in cardiovascular disease, prevalence of obesity and diabetes, increased deaths due to respiratory illnesses in some more severe winters, and increased deaths from dementia and Alzheimer’s disease.

Around 65% of older Australians currently receive at least a partial age pension, which is a decrease from 75% of older people twenty years earlier. In addition, access to superannuation to supplement the age pension has become increasingly important. In 1997, 12% of retired Australians stated that superannuation was their main source of income, but this had effectively doubled to 25% by 2016–17.

In 2017 there was one retiree aged 65 or older for every four working Australians, and this is expected to reduce to by two-fifths to about 2.4 workers for each retiree by 2050.

A key factor which will affect the old-age support ratio will be the age at which individuals retire from work, and whether this increases in line with increasing longevity. As discussed earlier in this report, it is important to consider the interaction between the age pension eligibility age and superannuation preservation age, and this is explored further below.

Global longevity: While Australia does have a longevity ‘problem’, many other developed countries share the same issues. Many countries have a lower old age support ratio than Australia (where Australia’s relative high immigration levels has created one of the youngest countries among advanced economies). The OECD average old-age support ratio is currently less than four workers for each retiree, and this is expected to worsen to less than two workers per retiree by 2050. These ratios are expected to worsen in all countries over the period to 2050. (See Figure 8.)

In 2017 we had 4 working Australians to every retiree aged 65 and over. The OECD expects this to reduce to 2.4 workers to each retiree by 2050.
Clearly without a robust and sustainable superannuation system, Australians will not be able to maintain their current standard of living if these longevity improvements occur. The reality is that unless Australians accept a drop in their standard of living there are only three choices:

- **Work longer and defer the age** at which the age pension is accessed (which has already been done by gradually increasing the pension eligibility age to 67).
- **Increase tax revenue** from working Australians to fund the Government’s aged pension, healthcare and other social security commitments.
- **Make more Australians self-sufficient** in retirement.

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**Figure 8: Global old age support ratios (Current and 2050)**

Number of people of working age (20-64) per person of pension age (65+)

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<thead>
<tr>
<th>Country</th>
<th>Current</th>
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<tbody>
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<td>Indonesia</td>
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<td>2.2</td>
<td>3.0</td>
</tr>
<tr>
<td>France</td>
<td>1.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Greece</td>
<td>1.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Germany</td>
<td>1.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Finland</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Italy</td>
<td>1.4</td>
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</tr>
<tr>
<td>Japan</td>
<td>1.3</td>
<td>2.1</td>
</tr>
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</table>

**Source:** OECD & Deloitte Actuaries & Consultants, 2019
Will retiree savings be sufficient to meet an individual’s needs for the unknown period of their retirement? Or will they need to have recourse to the age pension, due to living longer or drawing down their monies too quickly?

Over the past 20 years, the proportion of older Australians in receipt of a full age pension has been falling, while the proportion receiving a partial age pension has remained fairly stable. This means that the proportion not receiving any age pension has been increasing.

A key driver of this will be that the accumulated superannuation savings are becoming more substantial for individuals at retirement. However, a continuing uncertainty is whether those retirement savings will be sufficient to meet an individual’s needs for the full (unknown) period of their retirement. Or whether they will need to fall back on the age pension, due to living longer and/or drawing down their monies too quickly (given lack of maximum drawdown restrictions).

Statistics published by the Australian Bureau of Statistics show that Australians are increasingly working to older ages. In January 2018, Australians aged 65 and over had a workforce participation rate of 13% (17% for men and 10% for women), compared with 8% in 2006 (12% for men and 4% for women).

This increasing trend is likely to continue as the retirement intentions of Australians change. In 2016-17, 20% of Australians aged 45 and over intended to work until age 70, much higher than just 8% in 2004-05.

The Green Paper on ‘Options for an Improved and Integrated System of Retirement’ published by the Actuaries Institute in August 2019 covered options to embed automatic adjustments to reflect changes in longevity in both the preservation age for superannuation and the Age Pension eligibility age.

The paper noted that by 2024 there will be a seven-year gap between the preservation age (which will then be age 60 for everyone) and the Age Pension eligibility age (which will have increased to age 67 by July 2023. In September 2018 the Government scrapped plans to increase it further to age 70).

The Actuaries Institute argued that an option worth considering is maintaining a fixed gap between the Age Pension eligibility age and the superannuation preservation age. They argue that such an option balances the objective of superannuation substituting or supplementing the Age Pension with the fact that the superannuation benefit belongs to the individual, at least partly from wages they have forgone albeit in return for a tax concession.

While the ability to work longer, or enter into alternative careers at the end of their mainstream working lives, will suit many, this will not suit all retirees, especially those with heavy physical jobs, in poor health, or with limited ability to retrain or start a new career. For this cohort, superannuation, and the ability to access it, is critical if they need to cease work prior to being entitled to apply for the Government pension.
Investing Super Assets

Across superannuation funds in Australia, about two-thirds of assets are invested in ‘growth’ type of assets - equities, property and growth alternative investments. The high allocation to growth assets recognises that the Australian superannuation system is predominantly comprised of defined contribution arrangements where the benefits payable to members are directly linked to the investment return earned on those assets, both during accumulation phase and also throughout the drawdown period in retirement.

In particular, there is a high percentage of assets invested in equities, of which a significant proportion are domestic (Australian) equities. This is illustrated in Figure 9.

There are several reasons Australian shares are attractive to superannuation funds.

- The dividend imputation system in Australia means that superannuation funds effectively receive refunds of excess franking credits on franked dividends, boosting overall investment returns
- Many Australians hold Australian shares directly as a result of past demutualisations and privatisations, and as a result they are comfortable and familiar with these investments and their growth potential
- The investment horizon for superannuation investments is long, spanning more than 40 years between starting work and retirement, and extending into the retirement phase
- Recent falling interest rates has meant that more conservative investments such as bonds and cash have struggled to achieve a return much more than keeping up with inflation

Currently the total investment by superannuation funds in Australian shares (including allocations within managed funds and Pooled Superannuation Trusts) comprises about 35% of the total market capitalisation of the Australian Stock Exchange (ASX).

If we assume that superannuation funds seek to retain the same percentage allocation to Australian shares, we have estimated that the proportion of the ASX market capitalisation represented by superannuation funds would increase to more than 60% by 2038 – which is almost double the current allocation! This is illustrated in Figure 10.

**Figure 9: Allocation to equities**

<table>
<thead>
<tr>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate</td>
<td>Industry</td>
<td>Public</td>
<td>Retail</td>
<td>SMSF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This means superannuation funds would dominate the Australian Stock Exchange holdings if they continue to hold a similar allocation of assets to Australian shares as they hold now. However, a key issue will be whether there will be enough capacity in the ASX to support this level of demand from superannuation funds, given that there are also individuals and companies seeking to invest non-superannuation monies.

Source: APRA and Deloitte Actuaries & Consultants, 2019
Will this mean that superannuation funds would need to make increased use of synthetic investments, such as options contracts, to simulate the returns on the actual shares if they cannot hold the actual stock itself?

Will this increasing demand for Australian equities mean that domestic shares become over-priced as the supply of listed companies cannot keep pace?

Will superannuation funds increasingly look to become significant shareholders in selected companies, and would this potentially result in some companies becoming private (unlisted) entities as they are effectively taken over by a consortium including superannuation funds?

Currently the total investment by superannuation funds in Australian shares comprises about 35% of the total market capitalisation of the ASX. If they retain the same percentage allocation, this will increase to more than 60% by 2038 – almost double the current allocation – and so dominating the ASX’s holdings. A key issue will be if the ASX will have enough capacity to support this level of demand from super funds, given individuals and companies also seek to invest non superannuation monies.
Because individuals do not know how long they will live, they face longevity risk in the sense that they may outlive their superannuation savings. As pointed out, the alternative is that they are too conservative in drawing down their account balance, so experiencing a lower income in retirement than necessary and ultimately leaving money unspent at death.

To illustrate the impact of a retiree living to different ages, we have considered a 25 year old entering the workforce with no superannuation savings. This individual will receive employer contributions equal to the current Superannuation Guarantee rate of 9.5% p.a. throughout their lifetime, before retiring at age 65. We have modelled the amount that this individual could withdraw from their superannuation balance as a percentage of final salary, such that the member receives the same benefit in real terms throughout their remaining life, assuming that they die at four ages specified in Figure 11.

Note: The income replacement percentages depend on the assumptions applied for investment returns and expenses, and are based on simplified assumptions in relation to no time out of the workforce and smooth salary increases.

It is not the exact amount of replacement percentage which is important, but rather the relativity between the percentages based on different individual life expectancies, or different contribution rates (see Figure 12).

We provide more information in Figure 13 on the life expectancy for 25 year olds today. However, it is worth noting here that the average life expectancy for a 25 year old today, assuming they live to retirement age, is between 85 and 90+ (depending on gender and the extent of continuing future mortality improvements), with a quarter of them living beyond age 90 and potentially well into their late 90s.

As a comparison, we have also modelled the same person, but assume that their employer contributions are equal to 12% of salaries throughout their working life (being the rate to which the current Superannuation Guarantee rate is currently legislated to rise to).

Figure 12 compares the income replacement rate which could be achieved by having that higher contribution rate throughout their working period, and retaining all other underlying assumptions unchanged.

It is evident from Figure 12 that contributions of 12% of salaries would make a meaningful difference to the eventual retirement income of individuals, particularly those who are going to live longer than average. As women tend to live longer than men, this also means that women would tend to have a lower replacement rate than men if they were otherwise equal in all other areas (i.e. same age, period in the workforce, salary pattern, and accumulated superannuation balance at retirement date).

It is worth comparing the above figures with the latest data from the OECD on gross pension replacement rates (as at 2016). This showed that gross pension entitlements divided by average lifetime gross pre-retirement earnings for Australia was 32.2% for men and 29.4% for women, compared to OECD averages of 52.9% for men and 52.3% for women.

---

**Figure 11**

<table>
<thead>
<tr>
<th>Assumed Age at Death</th>
<th>Annual Income Drawn as % Final Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>46%</td>
</tr>
<tr>
<td>90</td>
<td>40.5%</td>
</tr>
<tr>
<td>95</td>
<td>37%</td>
</tr>
<tr>
<td>100</td>
<td>35%</td>
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**Figure 12**

<table>
<thead>
<tr>
<th>Assumed Age at Death</th>
<th>9.5% Contributions</th>
<th>12% Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>46%</td>
<td>59%</td>
</tr>
<tr>
<td>90</td>
<td>40.5%</td>
<td>52%</td>
</tr>
<tr>
<td>95</td>
<td>37%</td>
<td>47.5%</td>
</tr>
<tr>
<td>105</td>
<td>35%</td>
<td>44.5%</td>
</tr>
</tbody>
</table>

---

The lower percentages for Australia compared to Figure 12 are indicative of retirees today not having had superannuation of at least 9.5% throughout their working lives.

To consider the likelihood of individuals needing to finance their retirement for lengthy periods, we have calculated the life expectancy for the average 25 year old today based on the latest Australian Life Tables 2010-2012, both before and after allowing for assumed mortality improvements (as published by the Australian Government Actuary).

**Figure 13**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half of 25 year olds will live beyond age...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALT10-12; no improvements</td>
<td>83</td>
<td>87</td>
</tr>
<tr>
<td>ALT10-12, improvements over long term (125 years)</td>
<td>87</td>
<td>91</td>
</tr>
<tr>
<td>ALT10-12, recent improvements (25 years)</td>
<td>91.5</td>
<td>93</td>
</tr>
<tr>
<td>A quarter of 25 year olds will live beyond age...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALT10-12, no improvements</td>
<td>89.5</td>
<td>92.5</td>
</tr>
<tr>
<td>ALT10-12, improvements over long term (125 years)</td>
<td>92.5</td>
<td>95.5</td>
</tr>
<tr>
<td>ALT10-12, recent improvements (25 years)</td>
<td>95</td>
<td>96.5</td>
</tr>
<tr>
<td>Half of 25 year olds today who live to age 65 will live beyond age...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALT10-12, no improvements</td>
<td>85</td>
<td>88</td>
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<tr>
<td>ALT10-12, improvements over long term (125 years)</td>
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<td>97</td>
</tr>
</tbody>
</table>

2. Australian Life Tables 2010-12

**THIS MEANS**

Even ignoring any future improvements in mortality, it is more likely than not that individuals entering the workforce today will live beyond age 85. And that a quarter of them will live beyond age 90. Once future mortality improvements are taken into account, individuals are expected to live beyond age 90 on average, with a quarter living into their late 90s and beyond.

Given this, it can be seen from Figure 12 that increasing the minimum SG rate to 12% would make a meaningful difference – in the order of 10% of final salary - in terms of the retirement income stream able to be drawn down from superannuation.
In this edition of the *Dynamics of the Australian Superannuation System* we have considered what the industry should expect in the next 20 years around:

- **The size** of the superannuation assets
- **Sectoral growth**
- **Shifting demographics and longevity** in an ageing population
- **The dominance** of superannuation assets relative to GDP and in domestic asset allocations (e.g. the Australian sharemarket)

Funds are increasingly balancing the different challenges associated with:

- A climate of constant **change** as funds respond to the latest regulatory developments and improvements in fund governance and cultures
- Increased and more directed focus on member outcomes and **customer** experiences, and refining systems and processes to achieve this
- Enduring trend of **consolidation**, both of funds themselves and amalgamation of member accounts
- **Robust and demanding compliance** obligations

Superannuation balances will continue to increase in both size and importance as individuals can expect to spend around 20 years on average in retirement. In such a landscape, financing the retirements of Australians becomes an imperative for business and governments. To that end there are a number of proposed actions that they can consider including:

- **Expand investment opportunities** both locally and globally, and leverage broader opportunities for diversification of portfolios.
- **Introduce new investment options** to target the income needs of retirees and those approaching retirement including:
  - Tailored investment options which protect short-term income drawdowns to manage sequencing risk but also capitalise on growth potential for balances supporting a long time horizon throughout retirement
  - Segment member groups based on capacity to handle volatility and risk-reward trade-offs relative to how the member is tracking against desired income objectives.
- **Communication campaign to recognise the value of a compulsory superannuation system** without which most Australians would be unlikely to independently save for their own retirement on a regular and sustained basis. Key messages to include the facts that:
  - A key driver of growth for individual superannuation balances has been the strength of investment returns, particularly over the longer term.
  - By investing small amounts regularly by way of SG contributions, over time investment returns increase exponentially as investment earnings are earned on the investment growth itself.
  - Engage the traditionally disengaged - aka younger individuals - with ‘tools’ that help them to understand the value of compound interest and deferred gratification, so they can see the value of their ‘nest egg’ and balance that against all the other uses they probably see for their money right now.
- **Boost the population** and the size of the asset pool through:
  - Migration and increased working life
  - Immigration (at working ages) to keep the dependency ratios down. This is evidenced by 80% of net overseas migration coming from people under age 35.
  - We note that the population projections assume mid-level immigration, without which things would be worse.

These are just some of the levers that business and government can pull to help manage the shifting dynamics of the retirement income system over the coming decades.

Deloitte’s team of superannuation partners and specialists look forward to discussing these changes and working with you to consider ways to develop appropriate and sustainable solutions.
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