

Vanguard[®]

How Australia Saves 2017

A report on superannuation data

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Colin Kelton
Managing Director
Vanguard Investments Australia

June 2017

Vanguard Investments Australia is delighted to introduce this inaugural edition of *How Australia Saves*.

This report is the product of a special collaboration with Sunsuper, a key strategic partner for Vanguard in Australia and one of Australia's largest multi-industry superannuation funds with over one million member accounts and \$36.3 billion in member benefits under administration at 30 June 2016.†

The focus of *How Australia Saves* is on member-level experiences and behaviours in the Australian superannuation system.

The methodology used involves in-depth analysis of choices, default outcomes and responses to incentives at an individual member level, aggregated into meaningful demographic or behavioural cohorts where appropriate. In this regard, the research stands apart from most public research data on the Australian superannuation system, which tends to be based on more "top-down" fund-level averages or commercial industry categories.

We believe that this approach will add considerable depth to an understanding of how the Australian superannuation system works, and a good baseline from which to analyse the impact of future policy developments and product innovations as they unfold.

Vanguard's US parent company has produced a major annual study titled *How America Saves* since 2000, focusing on the evolution of the defined contribution (DC) pension system in that country.

This report builds on the research approach that has been developed for the US research series, with the detailed analytics being undertaken by the same team at Vanguard's Centre for Investor Research in collaboration with our Australian team.

Vanguard is indebted to Sunsuper for making available the large volume of anonymised member information and product data that was required to undertake this analysis, spanning the five fiscal years to June 2016. We are also extremely grateful for the support of the Sunsuper team in helping to tightly define the key transaction types in the Australian system and their alignment with relevant regulatory classifications and business rules.

We commend this report to anyone who is interested to learn about how the superannuation system works, and how policy measures and product designs flow through to member-level outcomes.

In future editions of *How Australia Saves*, we propose to extend the longitudinal insights of this inaugural report in continued partnership with Sunsuper, as well as adding one or more other major superannuation funds to the analysis to broaden its coverage of the overall Australian system and demographic base.

† For more information about Sunsuper and their products, visit www.sunsuper.com.au



Scott Hartley
Chief Executive Officer
Sunsuper



June 2017

Welcome to the first edition of *How Australia Saves*. We at Sunsuper are very pleased to have supported Vanguard Investments Australia in bringing this project to fruition.

The strategic alliance between Vanguard and Sunsuper, which has been in place since March 2015, provided us with a unique opportunity to leverage the extensive work Vanguard has done in the United States with their highly acclaimed *How America Saves* report and replicate that for the Australian market.

As one of the nation's biggest profit-for-members superannuation funds, our customers sit at the heart of every initiative we undertake. As the world's largest mutual investment manager, Vanguard shares common business values with Sunsuper, not least of which is its philosophy of putting its customers first. As such, both companies invest significant resources into developing a profound understanding of the needs and wants of customers when it comes to their retirement savings.

How Australia Saves augments that work and gives us deeper insight into the attitudes and behaviours of investors in relation to superannuation. From our end, this has been undertaken with the view that this insight and analysis will ultimately generate better engagement with our customers with the aim of helping them maximise their super savings and live the retirement of their dreams.

We look forward to working with Vanguard in future years to establish *How Australia Saves* as the one of the country's foremost sources on the state of the nation's superannuation industry, investor behaviour and the financial habits of consumers.

I would like to take this opportunity to thank those in the Vanguard Centre for Investor Research in the US, as well as the team in Australia, who worked hand-in-hand with Sunsuper's Analytics and Insights team to gather and provide an in-depth study of reams of information and product data traversing the five financial years till June 2016.

This project has been months in the making, but it will prove invaluable in terms of influencing product design and customer experience, ultimately helping us, as an industry, to drive better engagement with Australian investors.

Executive summary

The Australian superannuation system is a vital component of the nation's retirement income policy framework.

Having grown from modest beginnings to near-universal coverage of the working population and over \$2 trillion in assets over the past 30 years, the system is on its way to reaching maturity as a vehicle for all facets of accumulation, management and drawdown of retirement assets.

This report focuses on the 5-year period to 30 June 2016, and on deep analysis of transaction-level data from a large multi-industry superannuation fund, Sunsuper. With a membership of over one million, some 90,000 registered employers and total assets under management of \$36.3 billion at 30 June 2016, Sunsuper is one of Australia's largest industry superannuation funds.

Mandatory foundations

The Australian superannuation system is underpinned by mandatory employer contributions for all employees earning \$450 or more per month. The superannuation guarantee (SG) policy was introduced in July 1992 and has increased in increments since then.

Over the 5-year period covered by this report, mandatory employer SG contributions increased from 9.0% to 9.25% in 2013 and then to 9.5% in 2014.

High-level savings metrics

Within the benchmark population analysed in this report, high-level metrics of member savings behaviour were stable to modestly improved over the 5-year period covered. While only 8% of working members made salary sacrifice or non-concessional contributions or both, the level of these voluntary contributions modestly trended up.

In the fiscal year ended June 2016, approximately one quarter of working members received a government incentive contribution. The average government incentive contribution received was 1.9% – resulting in an aggregate retirement savings rate for these lower income members of 11.4%.

Account balances

In 2016, the average member account balance was \$33,351; the median balance was \$10,343. During the 2012–2016 period, median balances more than doubled and average balances rose by 89%.

Investments

The percentage of fund assets invested in growth investments stood at 68% in 2016. Over the past five years the allocation to growth investments remained stable. Few members hold extreme allocations. The fraction of members with no allocation to growth options was only 1%. At the other extreme, the fraction of members investing exclusively in growth options was also only 1%. One of the benefits of lifecycle and diversified balanced options is that they eliminate extreme allocations. A total of 12% of self-directed investors hold extreme portfolios (6% with no growth options, 6% with only growth options).

Investment returns

Median estimated total returns for fund members were 3.1% for the 1-year period ended 30 June 2016. Five-year median estimated member total returns were 8.3% per year. There was wide variation in returns among members. Members holding the lifecycle option had very little dispersion in estimated returns. Self-directed members had the most dispersion in estimated total returns.

Member switching muted

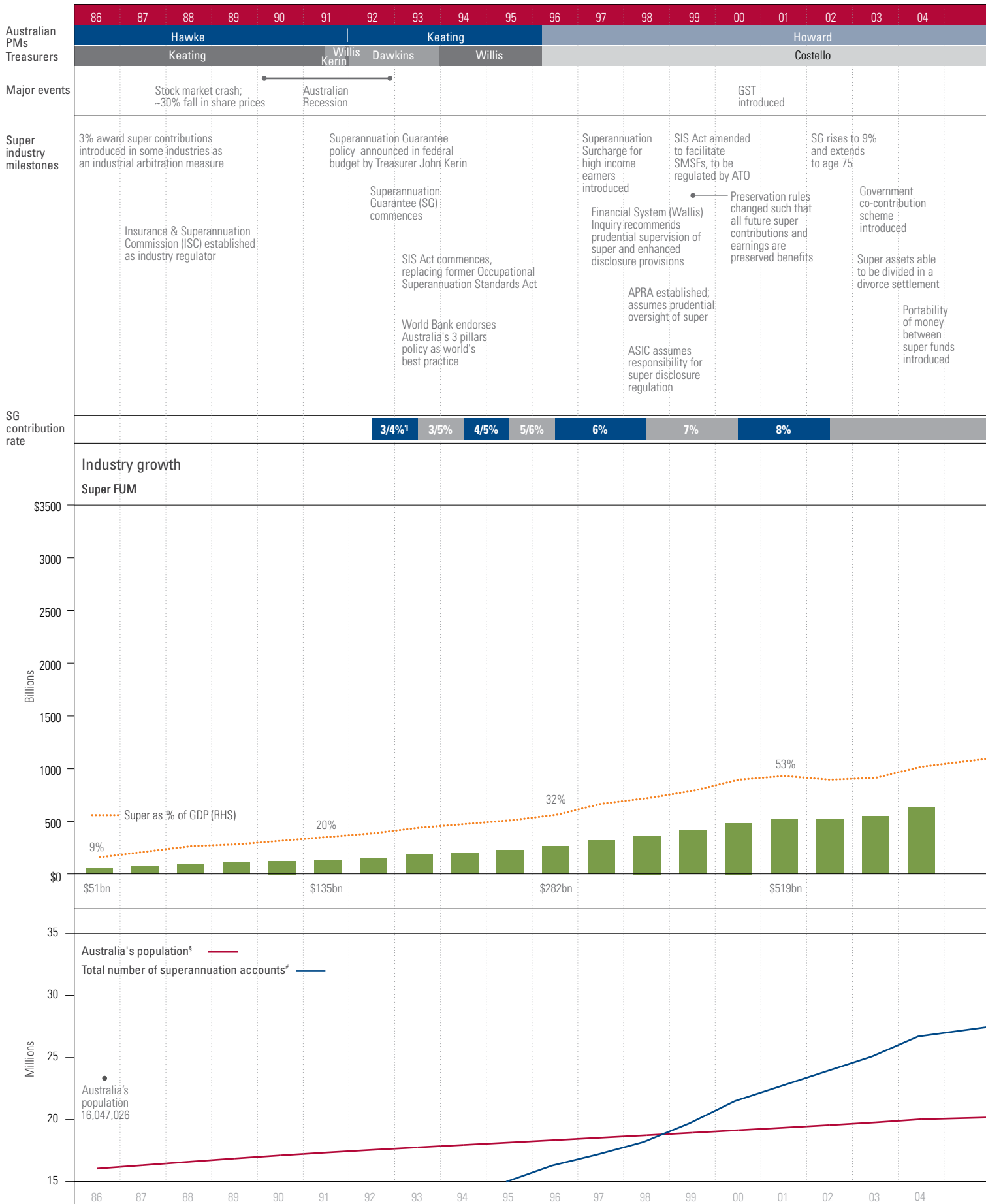
In the fiscal year ended June 2016 only 1% of total members made one or more portfolio switches or trades. This low level of switching was constant throughout the 5-year period. Both diversified balanced and self-directed members switch at higher rates. Seven percent of diversified balanced investors and 6% of self-directed investors switched in 2016.

Fund rollouts and withdrawals

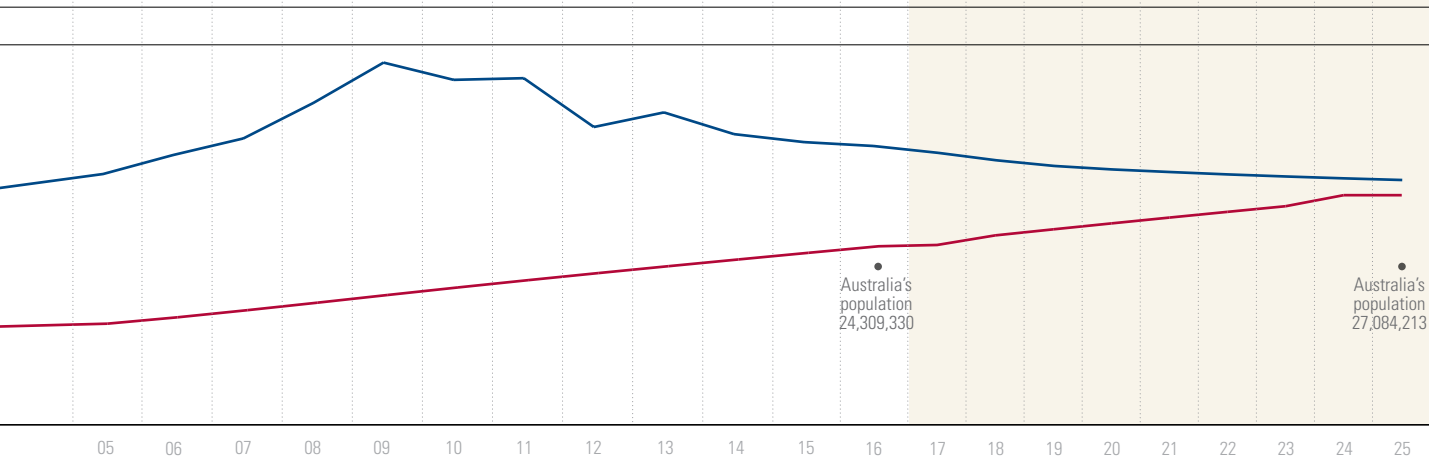
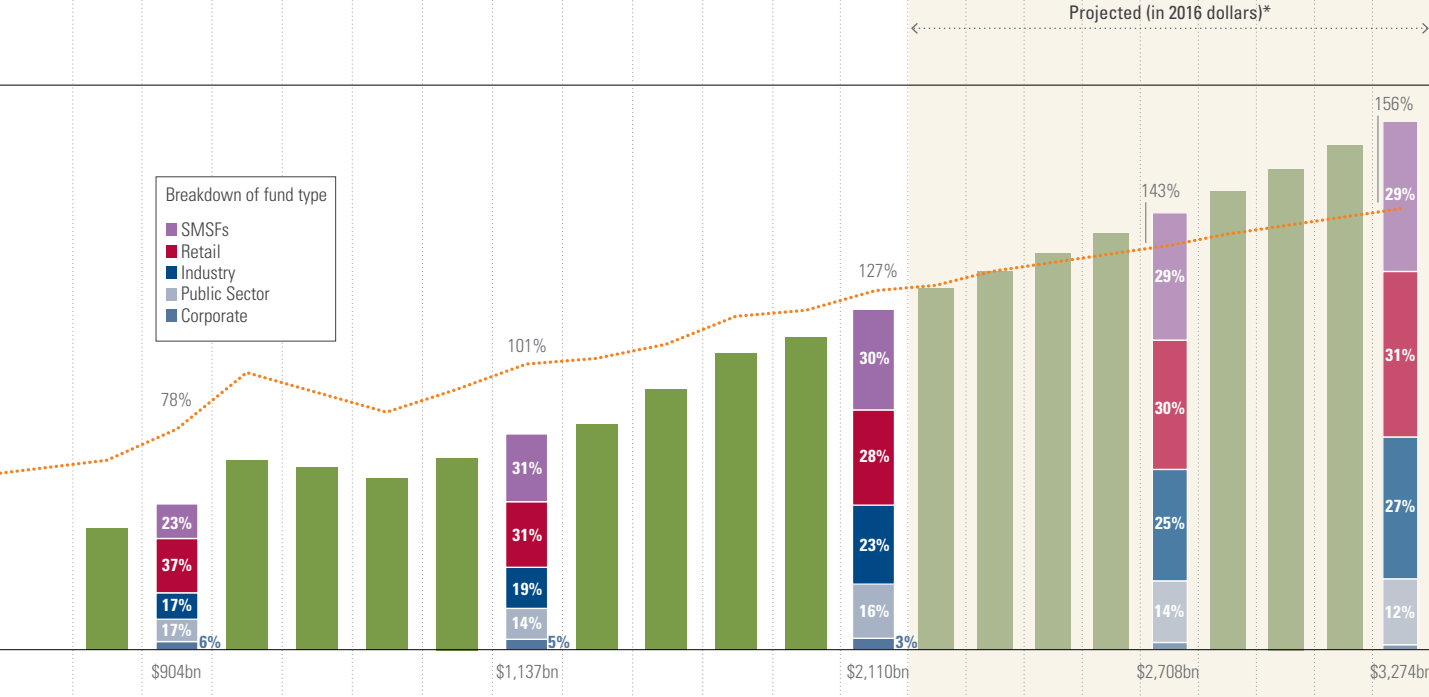
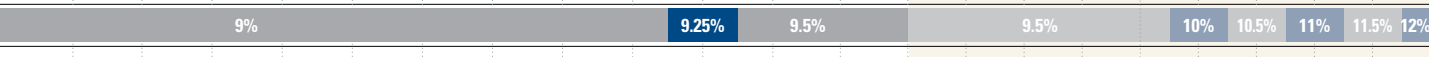
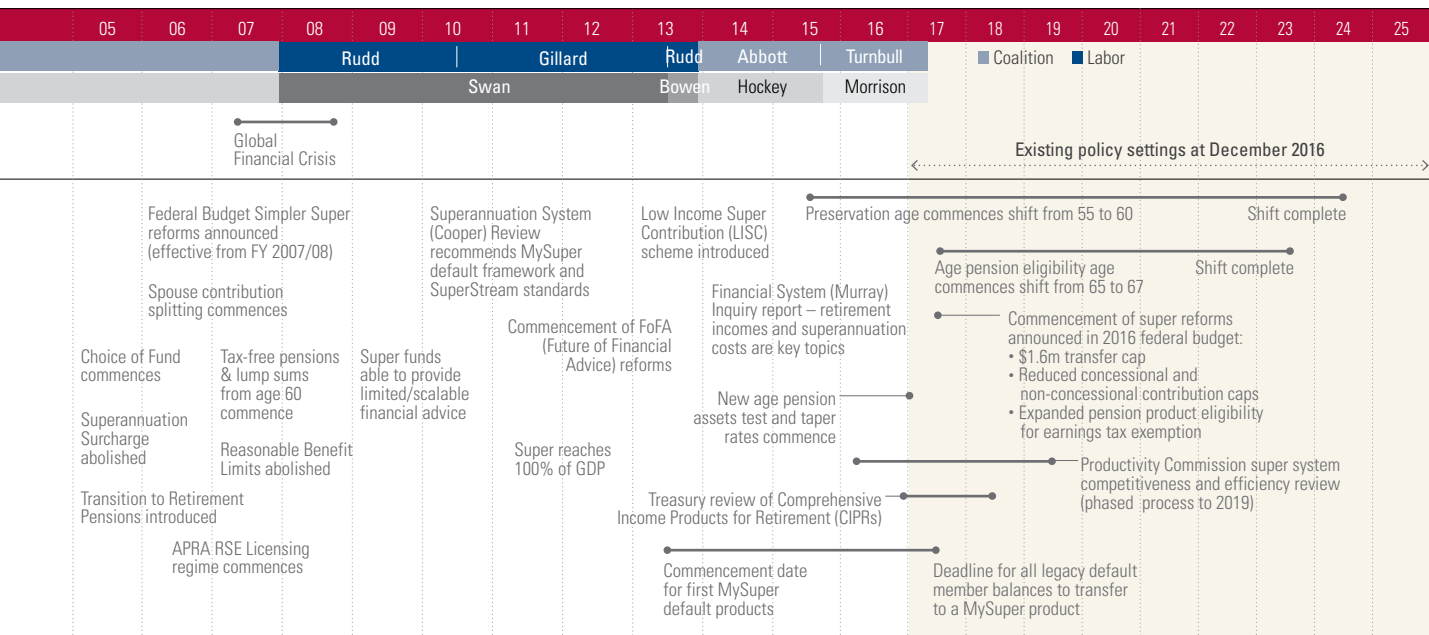
Only 4% of members had a full rollout to another super fund and 1% had a partial rollout. Less than 0.5% of members had rollouts to a self-managed super fund.

Pensioner members comprised only 1% of members. Pensioner members withdrew only 8% of total pensioner account balances. Another 6% of members appeared to be retirement eligible. Retirement eligible members withdrew or rolled out 8% of total retirement eligible account balances. Finally, 5% of members had reached their preservation age and 11% of transition to retirement eligible members had an account withdrawal or rollout.

Key superannuation milestones



* Rice Warner Superannuation Market Projections Report 2016 * In the first 3 years of the SG, a higher contribution rate applied to employers with payrolls above \$1 million per annum.
 † Source: Australian Bureau of Statistics, *Australian Demographic Statistics Sep 2016* (ABS catalogue 3101.0) for 1986-2016 data; *Population Projections 2012 (base) to 2101* (Medium series), ABS catalogue 3222.0 for 2017-2025 projections * Source: Rice Warner



Essentials of Australia's superannuation system

The Australian superannuation system has evolved dramatically over the past 25 years.

Yet it remains a work in progress.

In this inaugural edition of *How Australia Saves*, we preface our report with a high level overview of the policy essentials of the Australian retirement savings system.

This overview should assist readers who are unfamiliar with the product categories, regulatory definitions and transaction types that are exemplified in the main body of this report. It is framed around the three high-level tiers or "pillars" of the Australian superannuation system, as commonly referred to in comparisons of global retirement funding systems by bodies such as the Organisation for Economic Co-operation and Development (OECD) and the World Bank.

For readers seeking more detail on the specific demographic drivers, industry segmentation and regulatory oversight of the Australian system, these can be found in a companion publication, *Australian Superannuation System Overview*, being published by Vanguard as a supplement to this report.¹

Policy settings

First tier

A taxpayer-funded age pension

- Universally available, subject to means testing and certain residency requirements.
- Accessible from age 65, increasing in phases to age 67 by the year 2023.

Australia's taxpayer-funded age pension has existed since the very early years of the nation's Federation, commencing in July 1909.²

The government age pension is today a critical part of the nation's social welfare infrastructure, with a maximum rate set according to an indexation formula that equates to approximately 28% of male average full-time earnings, adjusted twice-yearly.³ Up to 30 June 2017, the minimum access age is 65 but in common with many other countries this is being increased in increments to age 67 between 2017 and 2023. Further increases to age 70 have been foreshadowed by the Australian Government for later years but have not been legislated to date.

At June 2016 the full age pension payment rate for a single pensioner was \$873.90 per fortnight, or \$658.70 per fortnight for each member of a couple. Pension eligibility is subject to means tests on both income and assets. While most superannuation balances are included, the family home is excluded from the assets test. Allowances are made for non-homeowners, couples with only one partner eligible, and couples separated by illness.

¹ Available at www.vanguard.com.au/howaustraliasaves

² Major superannuation and retirement income changes in Australia: a chronology (Parliamentary Library of Australia, March 2014). Prior to the 1908 Commonwealth legislation, predecessor taxpayer-funded pension schemes had been established in the colonies of New South Wales and Victoria in 1900, and in the State of Queensland in 1908.

³ Commonwealth of Australia, Department of Human Services, at <https://www.humanservices.gov.au/customer/services/centrelink/age-pension>.

The means tests are structured such that age pension eligibility gradually tapers down once certain income or asset thresholds are exceeded. To illustrate their effect, in the case of a single pensioner who owned their own home, the maximum assets that could be held or fortnightly income received while retaining eligibility for the full age pension were \$205,500 and \$162 per fortnight respectively at June 2016. After that, pension eligibility tapered down at the rate of \$1.50 per \$1,000 of assets and \$0.50 per dollar of income, until reaching an upper threshold of either \$788,250 in assets, or \$1,909.80 of income per fortnight, beyond which the individual was no longer eligible for a pension payment. Higher dollar thresholds apply for retiree couples, non-homeowner singles and couples, and couples separated by illness.⁴

Across the system, the effect of these dual means tests is that around the top one-quarter of the retiree wealth distribution receives no age pension entitlement unless they deplete their private savings below the relevant thresholds later in life.

With a growing and ageing population, the number of Australian retirees depending on the age pension for at least part of their retirement income is expected to increase for the foreseeable future, notwithstanding the continued growth of the second and third tier superannuation systems. Strategies to maximise eligibility for the age pension and ancillary public benefits, such as healthcare and transport concessions, are also key elements of superannuation member decision-making and financial advice strategies.

Consequently, Australia's public age pension system will remain an integral part of the country's retirement income system. The age pension provides an annuity-like safety net underpinning the long-term savings of most Australian retirees.

Second tier

A universal occupational defined contribution superannuation system

- Funded by mandatory contributions by employers (currently at 9.5% of salaries).
- Accessible from age 60 (or earlier for those born before 1 July 1964).

The cornerstone of Australia's private retirement income system is its mandatory employer-funded defined contribution system, known as the superannuation guarantee (SG).

A precursor to the SG was the introduction of industry-wide employer superannuation contributions in some sectors in the late 1980s, as an industrial award entitlement in lieu of salary increases. This was expanded to a universal entitlement in 1992 for employees earning at least \$450 per month, with an initial contribution rate of 3% of salaries, or 4% for employers with payrolls over \$1 million.

The minimum SG contribution rate has been increased in numerous increments over the past 20 years to its current level of 9.5% of salaries for all eligible employees, and is scheduled to increase to 12% by the year 2025.

Default settings and member inertia are important elements of the Australian system, especially during the early accumulation phase. However, Australian superannuation fund members have a wide range of self-selection pathways available to them during their working lives and through retirement.

These pathways, and their influence on members' transaction behaviour and on competitive dynamics in the superannuation industry, are a key focus of the analysis in this report.

⁴ Historical rates sourced from <http://www.taxfp.com.au/GovernmentBenefits/AgePension-TaxPackQ6/IncomeTest.aspx>. Maximum age pension rates cited for June 2016 were set in March 2016 and include the maximum Pension Supplement and Energy Supplement. It should be noted that a number of significant structural changes have now been implemented to the asset test thresholds and taper rates (i.e. beyond normal indexation adjustments), effective from 1 January 2017. These are detailed at <https://www.humanservices.gov.au/customer/services/centrelink/age-pension>.

Third tier

- Tax incentives for additional voluntary contributions, over and above the mandated employer contributions.

On top of the mandatory SG system, various incentives are provided for additional voluntary contributions by individuals to their superannuation accounts.

These measures include:

- For salary-earners, the opportunity to make additional pre-tax contributions in lieu of take-home pay. These are generally described as concessional or salary sacrifice contributions. In the fiscal year ending June 2016 the maximum concessional contribution cap was \$30,000 for individuals aged under 49, and \$35,000 for those aged 49 and over.⁵
- For self-employed individuals and small business owners, the ability to make tax-deductible contributions and in some cases transfer the proceeds from the sale of a business into a superannuation fund.⁶
- For all members, the ability to contribute from after-tax earnings, or from sales/transfers of other investments such as shares or property. These are called non-concessional or after-tax contributions. In the fiscal year ending June 2016 the maximum non-concessional contribution cap was \$180,000, with those under the age of 65 being able to use “bring forward” provisions to contribute up to \$540,000 in a single year.⁷

The limits for both concessional and non-concessional contributions are being tightened from 1 July 2017, as discussed below in the tax settings section.

There is also a range of policy measures aimed at increasing the superannuation balances of specific targeted groups, including:

- A government co-contribution scheme to supplement after-tax contributions made by lower income-earners.
- Low Income Superannuation Contribution (LISC), designed to compensate employees on low incomes for tax paid on their mandatory employer superannuation contributions, which might otherwise exceed the rate paid on take-home pay.

- Facilities for individuals to split their prior year’s employer contributions with their spouse and make after-tax spouse contributions, to optimise savings at an overall household level.

Tax settings

These discretionary contribution options are largely driven by the taxation structure of the Australian superannuation system, under which:

- SG and salary sacrifice contributions and all fund earnings are taxed at a concessional rate of 15% during the accumulation phase. This compares to a top marginal income rate of at least 47% including the 2% Medicare levy (or 49% while the temporary deficit repair levy of 2% on income over \$180,000 per year remains in place).⁸
- Investment earnings in the retirement phase after age 60 are tax-free, provided that the member has satisfied a “condition of release”, generally retirement, and their drawdowns are taken as lump sums or from eligible retirement income stream products.

The extent of tax concessions, particularly for more affluent and older superannuation fund members, is a key focus of some significant regulatory adjustments currently being made to the system. These include the introduction of an upper limit of \$1.6 million on the value of superannuation savings that can be transferred to a tax-exempt retirement account, a reduced concessional contribution cap of \$25,000 per annum regardless of age, and a reduction in the non-concessional contribution cap to \$100,000 per annum, or \$300,000 broadly every three years under the “bring forward” provision.

However, as these measures were legislated in late 2016 and mostly take effect from 1 July 2017, they are not reflected in the analysis in this report, which covers the five fiscal years ending 30 June 2016.⁹

Superannuation in 2016

As a result of its long-established second and third tier policy framework, Australia today has one of the world’s largest and fastest growing private pension (superannuation) systems, with over \$2.1 trillion in total assets at 30 June 2016, and close-to universal coverage of the entire adult working population of some 12 million people.¹⁰

5 Australian Taxation Office, Key Superannuation Rates and Thresholds

6 From 1 July 2017, the ability to make tax-deductible contributions is also being extended to ordinary wage and salary earners, generally to enable them to gain tax concessions equivalent to salary sacrifice, in cases where this facility is not offered by their employer.

7 Australian Taxation Office, Key Superannuation Rates and Thresholds

8 Since 2012-13, an additional 15% tax under Division 293 of the Income Tax Assessment Act has applied to reduce the degree of tax-concessions enjoyed by high income earners with respect to their concessional contributions. In the fiscal year ended 30 June 2016 the threshold for Division 293 tax was income greater than \$300,000 per year. This threshold is being reduced to \$250,000 from 1 July 2017.

9 For further details of See <http://www.treasury.gov.au/Policy-topics/SuperannuationAndRetirement/Superannuation-Reforms>. These changes are expected to significantly influence member behaviours in fiscal years 2016/17 and beyond, and will consequently be reflected in future editions of this report.

10 Source: Australian Prudential Regulatory Authority (APRA) *Quarterly Superannuation Performance* (September 2016). Mandatory superannuation contributions are required for all employees aged 18 and over, and earning at least \$450 per month. Self-employed individuals, who comprise approximately 10% of the working population, are not covered by the mandatory system but can access broadly equivalent tax concessions by making tax-deductible voluntary contributions; in 2012-13 approximately 25% of self-employed individuals contributed on this basis. (Source: ASFA, *Super and the Self-Employed*, May 2016)

This makes the Australian superannuation system the world's fourth-largest private pension savings pool in terms of total assets, and amongst the largest in terms of size relative to the domestic economy, at approximately 126% of GDP (in \$US terms). The Australian system has also been growing at among the fastest rates of any developed economy pension system, with a compound annual growth rate of 7.9% per annum (in local currency terms) for the 10 years ended December 2016.¹¹

Future growth projections

The superannuation asset base is projected to increase further over coming decades, notwithstanding increasing levels of drawdown by members who are now in or approaching retirement.

Estimates of future industry growth vary widely depending on the investment return, regulatory and behavioural assumptions used. A recent projection suggests that the total industry will reach \$4.2 trillion (approximately double its current size), equating to 171% of projected GDP, by the year 2031.¹²

Still a maturing system

Despite its size and rapid growth rate, the Australian system is yet to reach full maturity, as older segments of the workforce have only had the benefit of mandated employer contributions since the early 1990s, and it took more than 20 years for the rate of those contributions to reach their current level of 9.5% of salaries.

The system will not reach maturity until at least the mid-2030s, when those approaching retirement will have spent their entire working lives accumulating compulsory superannuation savings – and another 25 years after that for all of those contributions to have been at the maximum proposed level of 12%, assuming continuity of current policy settings.

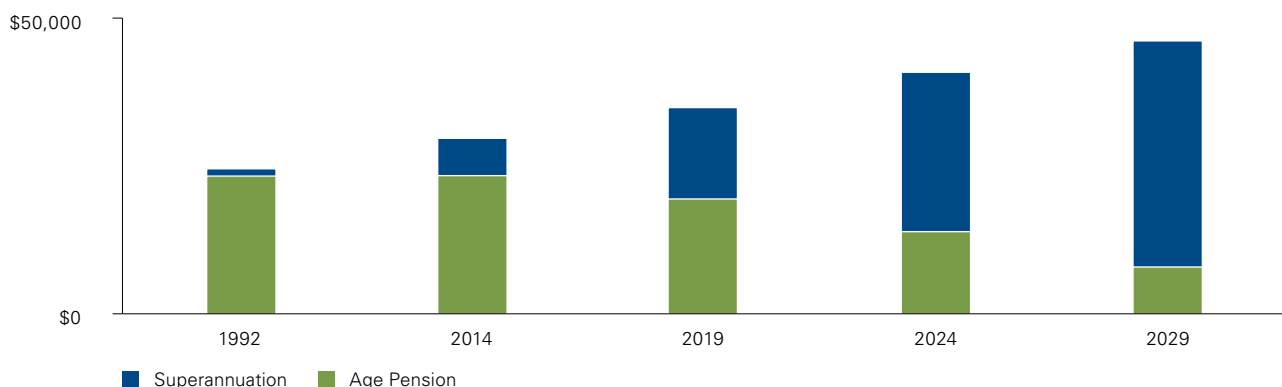
Reflecting these trends, the transition of the superannuation system into a broader lifetime pension system has begun in earnest in recent years, with the movement into retirement of the initial cohort of the baby boomer generation.

The rate of transfer of these retirees and their accumulated assets into the post-retirement phase is set to accelerate in coming years, with post-retirement assets projected to increase from approximately \$661 billion in 2016 to \$1.4 trillion in 2031, and retirement income account numbers to grow from around 2.0 million to 4.1 million over the same period.¹³

Figure 1 shows how the maturing second and third tiers of the Australian system are expected to gradually reduce the degree of retirees' dependency on the age pension, as the proportion of retirement incomes attributable to mandated employer contributions and tax-preferred voluntary contributions increases.

Figure 1. Average retirement income at age pension qualifying age¹⁴

Singles above age pension age (excluding non-super assets)



Source: Productivity Commission, *Superannuation Policy for Post-Retirement* (2015) Vol. 2, p. 181.

11 Source: *Willis Towers Watson Global Pension Assets Study 2017*. The other countries in the comparison group were the US, UK, Japan, Canada, the Netherlands and Switzerland. These countries, together with Australia, accounted for 92% of total assets across 22 major pension markets included in this study.

12 Rice Warner *Superannuation Market Projections Report 2016* p. 14 – Year 2031 projections are in 2016 dollars.

13 Rice Warner *Superannuation Market Projections Report 2016* pp. 27 and 32.

14 Note figures in this table are in 2014 dollars.

Unique structural characteristics

Australia's superannuation system has evolved to having several structural characteristics that distinguish it from other major world pension markets.

Dominant defined contribution orientation

Defined contribution (DC) funds dominate the Australian system, accounting for approximately 87% of total assets. Just 13% of total system assets are in defined benefit (DB) schemes, with the majority of these now being closed to new members.

Multiple dimensions of member choice

A related development has been that the Australian superannuation system has evolved further down the path of individual consumer-level choice. However, participation in the system itself is mandatory; there is no choice to opt out of it altogether.

The choices available to members include not just a variety of investment options within whichever fund they originally join – a common feature of DC plans everywhere – but also the option to split their superannuation between different funds, and even the ability to establish a self-managed superannuation fund (SMSF).

Choice architecture

MySuper default

Since 2013, all Australian Prudential Regulation Authority (APRA) regulated funds seeking to be nominated as default providers have been required to offer a MySuper product as the default for members who do not make an active investment selection.

The MySuper designation applies to simple, relatively low-cost investment products that can be easily compared across different providers, based on standardised public disclosures on metrics such as fees and charges, investment objectives, risks and performance relative to relevant industry benchmarks over uniform timeframes.

Further requirements include that the MySuper product:

- Has a diversified portfolio that the Trustee decides is suitable in the absence of a direct investment choice by the member.
- Offers a standard level of life and total and permanent disability (TPD) insurance coverage, with members being able to opt out or apply to purchase additional insurance cover.

At 30 June 2016, there were 115 MySuper products registered across the Australian superannuation system, ranging in size from \$2.1 million to \$69.1 billion. Total assets of all MySuper products were \$474 billion, or approximately 37% of the total APRA-regulated market.¹⁵

The majority of MySuper products have a single diversified portfolio covering all members, with strategic allocations to growth assets such as shares and property generally in the vicinity of 60-75%, and higher in some cases.

¹⁵ APRA Annual Superannuation Bulletin June 2016 (issued February 2017) p. 8

A smaller proportion (around one-third) of all MySuper options are offered on some form of “lifecycle” basis, with higher exposures to growth assets reducing as members move between age segments over time.¹⁶ Many of these lifecycle options have only two or three phases of in-built asset allocation changes; more tailored target retirement date or “glide path” designs remain relatively uncommon in Australia at this stage.

By 1 July 2017, providers of MySuper products will be required to transfer all members who were in previous default options into their registered MySuper product.

Choice products

In addition to their MySuper offering, most funds offer a wide range of Choice product options for members who wish to make their own investment selections. Choice products typically include a range of diversified portfolio options, usually labelled for target risk characteristics, such as growth, balanced, or conservative. Discrete options in major asset classes are also offered, such as Australian and international equities, fixed interest, cash, and listed property.

Depending on the fund’s rules and procedures, members can generally allocate their portfolios across multiple choice options, switch between them at any time, and provide different selections for future contributions than those applying to existing balances. Members can also elect to retain accounts in multiple funds.

Accessing superannuation benefits

Preservation age

Since 1999, all superannuation contributions have been required to be retained in the superannuation system until the member reaches his or her preservation age, subject only to some very limited exceptions for situations of extreme financial hardship, permanent incapacity or terminal illness.¹⁷

Preservation age has historically been age 55 for all Australians born prior to 1 January 1960. Preservation age is now in the process of being increased in gradual increments between 2015 and 2024, such that the standard preservation age will be 60 years of age for Australians born on or after 1 July 1964.

There is presently no facility for members to withdraw money from their superannuation savings prior to preservation age to meet other spending needs such as home mortgage deposits.

Transition to retirement

Superannuation fund members can partially access superannuation benefits without needing to actually retire, by way of a Transition to Retirement (TTR) facility. This facility allows a member to draw down on their superannuation savings while still in the workforce after reaching preservation age, at the same time they are still receiving employer SG contributions.

¹⁶ Ibid.

¹⁷ Note also that certain superannuation benefits that relate to contributions made prior to 1999 (“restricted non-preserved” contributions) can be accessed on a change of employment; while other legacy components (“unrestricted non-preserved” contributions) can be withdrawn at any time. However generally these types of withdrawals are discouraged by tax rules if accessed prior to preservation age, and both of them have been effectively “frozen” in dollar terms at their 1999 levels so they will eventually wash out of the system.

Standard retirement and age thresholds

Apart from the TTR facility, the general threshold for being able to access superannuation benefits is to have reached preservation age and retired. This is known as the retirement condition of release. The next major threshold date is age 65, when superannuation benefits can be fully accessed without needing to formally retire from the workforce.

As noted earlier, 65 is also the age at which eligible Australians have historically been able to access the age pension. This eligibility age is rising to 65.5 years from 1 July 2017, and in further increments to 67 years by 2023.

Australians who will be eligible for a full or part age pension who wish to retire earlier will therefore generally need to self-finance some initial years of their retirement from their own superannuation savings, unless they are prepared to remain in the workforce until their mid-60s or beyond.

Countervailing this, with changing labour market dynamics and improved health of older workers, especially in white collar and service industries, the Australian system also gives fund members some incentives to remain in the workforce beyond their preservation or age pension eligibility age. Since 2013, mandated employer SG contributions have had no upper age limit for anyone remaining in "gainful employment", and members are able to continue to make voluntary additional contributions until they reach 75 years of age provided they satisfy a relatively modest "work test".¹⁸

Account-based pensions

The dominant form of retirement income stream product in Australia is known as an account-based pension (ABP). ABPs are highly flexible vehicles allowing retirees a similarly broad range of investment strategies as available during the accumulation phase, while retaining full access to their capital and highly concessional taxation treatment, including tax exemption both on income drawn from the ABP and on investment returns after age 60. The main condition for access to this generous taxation incentive is that ABP account-holders are required to make annual withdrawals of at least the prescribed age-based minimums (Figure 2)

On the flipside, ABPs have no maximum annual drawdown limit, meaning that holders of ABPs can choose to withdraw higher proportions of their savings to finance higher spending in retirement or meet unanticipated expenses.¹⁹ Retirees using this feature are at risk of exhausting their capital sooner and thereby increasing their reliance on the public age pension.

Figure 2. Account-Based Pension Minimum Annual Drawdowns

Age	<65	65–74	75–79	80–84	85–89	90–94	95+
Minimum drawdown	4%	5%	6%	7%	9%	11%	14%

¹⁸ The work test requires members aged between 65 and 74 years old to establish that they have been engaged in gainful employment for at least 40 hours in any 30 day (or less) period during a financial year in which they wish to make a contribution (either concessional or non-concessional). In 2016 the Federal Government announced an intention to remove the work test but has since deferred this initiative until an indeterminate future date.

¹⁹ The exception to this is for transition to retirement pensions (i.e. those commenced between preservation age and age 65, without the individual actually retiring), where there is a maximum annual drawdown of 10% of capital permitted.

Other retirement income stream products

Apart from ABPs, and with some limited exceptions, the only other type of retirement income stream product that qualifies for earnings tax exemption (prior to July 2017) is a traditional lifetime annuity that is indexed to a standardised measure such as wages or inflation growth.²⁰

While products of this type have experienced some renewed interest in volatile market conditions over recent years, they still represent a small proportion of the total market. As in other pension markets these products remain relatively unpopular as they require investors to forego access to their capital in return for the guaranteed income stream.

However, there has recently been a significant review of the post-retirement product landscape in Australia, focusing on the absence of products that offer protection against longevity risk, apart from the relatively inflexible option of lifetime annuities. As a result of this review, the rules around eligibility for concessional taxation treatment in the post-retirement phase are being expanded to accommodate a much broader array of approaches to consuming lump sum benefits over the course of retirement, effective from 1 July 2017.²¹

It is also proposed that superannuation funds trustees, other than SMSFs, will be able to develop mass-customised Comprehensive Income Products for Retirement (CIPRs) that blend characteristics of both account-based and deferred income stream products, with implementation expected in the fiscal year ended 30 June 2019.²²

As a result, over coming years the Australian superannuation system is expected see the development of a range of new retirement income stream products such as deferred annuities, variable annuities, collective defined contribution schemes and group self-annuitisation products.

Looking ahead, retirement product development is expected to be a fertile ground for innovation in the superannuation industry as more and more Australians move into the retirement phase with increasing account balances. This process will continue to drive the competitive dynamics of the industry, as the commercial viability of industry participants will increasingly be shaped by their success in retaining and transitioning members' assets from the accumulation to pension phase.

²⁰ The exceptions include certain legacy defined benefit pensions paid by some public sector and corporate funds.

²¹ Australian Treasury, Retirement Income Streams Review Final Report (May 2016)

²² Australian Treasury, Development of the Framework for Comprehensive Income Products for Retirement (December 2016). See also Financial System Inquiry Final Report Chapter 2 – The Retirement Phase of Superannuation (Dec 2014); Improving Australia's Financial System – Government Response to the Financial System Inquiry (Oct 2015), pp. 3-8 and 12-14

Introduction

This report is based on an in-depth analysis of member-level experiences and behaviours in the Australian superannuation system. This analysis is undertaken in three key aspects:

- **Accumulating fund assets.** The level of contributions is fundamental to retirement savings adequacy. Fund contributions are affected by the level of mandated employer SG contributions, member salary sacrifice and non-concessional contribution rates, and the value of government incentive contributions.
- **Managing member accounts.** After deciding whether or not to make additional contributions to a fund, members' most important decision is how to allocate their holdings among the major asset classes. The vast majority of such investment decisions are increasingly influenced by the employer-selected default fund, as well as the default investment option within the fund. These investment decisions – including the types of investment options offered by the fund, the choices employers make from among super funds, and any choices members may make – have a direct impact on account performance over time. Thus, investment choices, in conjunction with the level of fund contributions, ultimately influence members' level of retirement readiness.
- **Accessing plan assets.** Members can rollout their savings to another super fund at any time. Members having met their preservation age may be able to start an income stream or take a withdrawal.

Our analysis shows that most members have seen their retirement savings grow over 1- and 5-year periods. Meanwhile, more members would benefit from voluntary salary sacrifice and non-concessional contributions.

The benchmark population

The benchmark population includes 1.1 million fund members as of 30 June 2016 (Figure 3). A subset of these members, about 640,000, received SG contributions in 2016.

Throughout this report we examine member behaviour through an investor type lens. The three investor types are:

- **Lifecycle.** Lifecycle members were invested in a diversified investment strategy which has in-built incremental changes to a more conservative asset allocation each year after members reach age 55.

The lifecycle strategy was the default option since 2014 for these members, and at June 2016 accounted for 83% of fund members.

- **Diversified balanced.** Diversified balanced members invested in a single diversified option other than the lifecycle option. There were 5% of members in this category at June 2016.
- **Self-directed.** Self-directed members constructed their own portfolios using the available fund investment options. There were 12% of members in this category at June 2016.

We examine member behaviour for all members, and where applicable, for members receiving SG contributions. Members receiving SG contributions are younger, and have shorter fund tenure, than the all-member cohort (Figure 4). However, members receiving SG contributions tend to have larger account balances.

Figure 3. Population, 2016


	All members	Members with SG contributions
Number of members	1.1 million	640,000
Investor style		
Lifecycle	83%	83%
Diversified balanced	5	5
Self-directed	12	12

Source: Vanguard using Sunsuper data, 2017

Figure 4. Population demographics, 2016

	All members	Members with SG contributions
Percentage female	45%	45%
Percentage male	55	55
Average age	38	37
Median age	36	34
Average fund tenure	8	7
Median fund tenure	7	6
Average salary		\$47,744
Median salary		\$38,885
Average account balance	\$33,351	\$39,909
Median account balance	\$10,343	\$16,956


Source: Vanguard using Sunsuper data, 2017



Accumulating superannuation assets

Member accounts are underpinned by mandatory employer SG contributions, now at the level of 9.5% of salary per annum.

Members can make additional contributions within regulated limits, and incentive contributions are paid by the Government in some cases.



Accumulating superannuation assets

Contribution rates

Mandated SG contributions paid by employers are the main source of funding for eligible employees. Discretionary member contributions generally play a secondary role particularly at younger ages. The level of aggregate contributions is a critical determinant of whether the member will achieve an adequate level of savings for retirement.

Since fiscal year 2014, the mandatory SG rate has been 9.5% of salary. In fiscal year 2013, it was 9.25%, and in prior years covered by this research it was 9.0%.

On top of SG contributions from their employers, members have the option of making salary sacrifice or non-concessional contributions, or both.

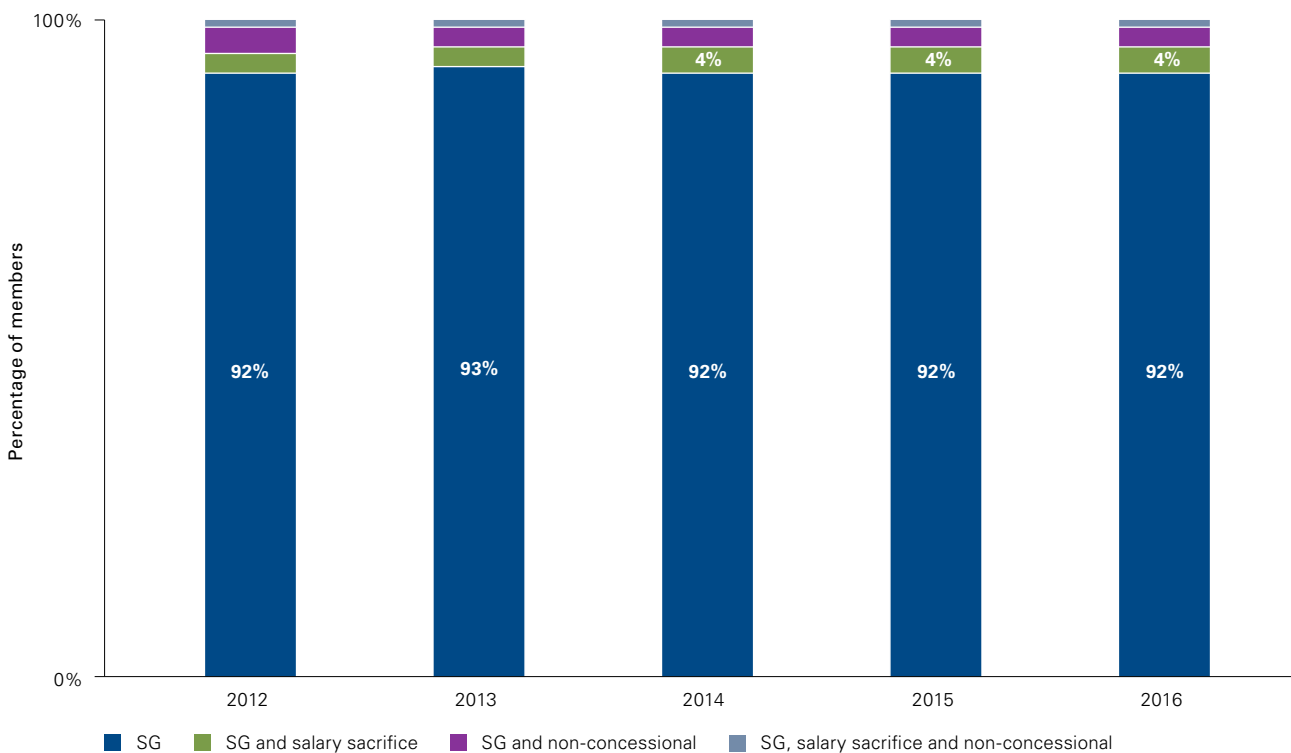
Salary sacrifice contributions are withheld from the members' pay and remitted to the fund along with the mandatory SG contributions. A 15% tax is withheld prior to depositing the contributions to the fund, but this is usually lower than the marginal income tax rate that would have applied had the money been taken as salary.

Non-concessional contributions are periodic contributions a member deposits to the fund from after-tax monies.

In the fiscal year ended June 2016, 92% of active members had only SG contributions paid into their accounts (Figure 5). Another 4% of members made salary sacrifice contributions, 3% made non-concessional contributions, and 1% made both salary sacrifice and non-concessional contributions (in each case in addition to receiving the 9.5% employer SG contribution).

Figure 5. Contribution types

Members with SG contributions during the fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

We infer members' salary by using the level of the mandatory SG contributions adjusted for the 15% tax. This enables us to calculate the percentage of salary contributed to the fund.

Overall, most members had contribution rates less than 10% per annum throughout the full five years of this analysis (Figure 6). Four percent of members had contribution rates between 10% and 15%, and 3% of members had contribution rates that were 15% or higher in the year ended June 2016.

Lifecycle members were most likely to have contribution rates lower than 10% (Figure 7). Members with contribution rates between 10% and 15% were 13 years older than those with contributions below 10% with a median age of 46, and those with contribution rates above 15% were 23 years older with a median age of 56. Members with contribution rates greater than 10% had double the fund tenure of members with contribution rates less than 10%. Finally, members with contribution rates greater than 10% had wages that were more than two-thirds higher than those members with contribution rates less than 10%.

Figure 6. Distribution of contribution rates

Members with SG contributions during the fiscal year ended 30 June

	2012	2013	2014	2015	2016
Percentage of members					
<10%	93%	94%	94%	94%	93%
10%–15%	5	4	4	4	4
>15%	2	2	2	2	3

Source: Vanguard using Sunsuper data, 2017

Figure 7. Demographic characteristics by contribution rate, 2016

Members with SG contributions during the fiscal year ended 30 June

	<10%	10%- 15%	>15%
Percentage of members with SG contributions	93%	4%	3%
Lifecycle	79%	3%	1%
Diversified	4	<0.5	1
Self-Directed	10	1	1
Gender			
Female	45%	49%	48%
Male	55	51	52
Age			
<25	23%	6%	3%
25–34	30	17	7
35–44	21	23	12
45–54	16	28	24
55–64	8	22	41
65–69	1	3	11
70+	1	1	2
Median age	33	46	56
Fund tenure			
0–1	27%	7%	8%
2–3	15	9	9
4–6	15	14	12
7–9	14	18	17
10–13	15	23	23
14–19	9	17	16
20+	5	12	15
Median fund tenure	5	10	11
Salary			
<\$10,000	21%	3%	11%
\$10,000–\$29,999	22	12	15
\$30,000–\$49,999	19	19	13
\$50,000–\$74,999	20	28	20
\$75,000–\$99,999	9	14	15
\$100,000–199,999	8	18	22
200,000+	1	6	4
Median salary	\$36,928	\$63,116	\$62,335

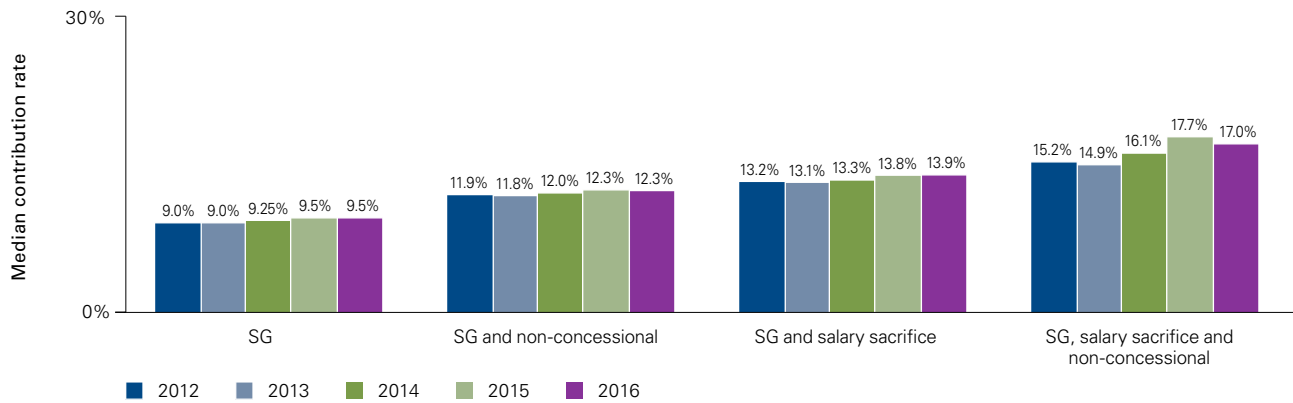
Source: Vanguard using Sunsuper data, 2017

Members making both salary sacrifice and non-concessional contributions had the highest median contribution rates at 17.0% for the fiscal year ended 30 June 2016 (Figure 8). Members with salary sacrifice and SG had median contribution rates of 13.9% and

members with non-concessional and SG contributions had median contribution rates of 12.3%. Aggregate contribution rates have risen modestly over the 5-year period.

Figure 8. Contribution rates

Members with SG contributions during the fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Contribution rates by investor type

Broken down by three investor types described in the introduction page, 20% of diversified balanced investors made salary sacrifice or non-concessional contributions or both during the fiscal year ended June 2016 (Figure 9). In the same year, 15% of self-directed investors also made additional contributions but only 6% of lifecycle investors did so. Diversified balanced investors also had the highest overall contribution rates in 2016 (Figure 10).

Employee demographics have a strong influence on contribution rates (Figure 11). Members with salary sacrifice contributions have higher salaries. Members with salary sacrifice or non-concessional contributions or both are older, while members with SG contributions only are younger, have shorter fund tenure, and lower salaries.

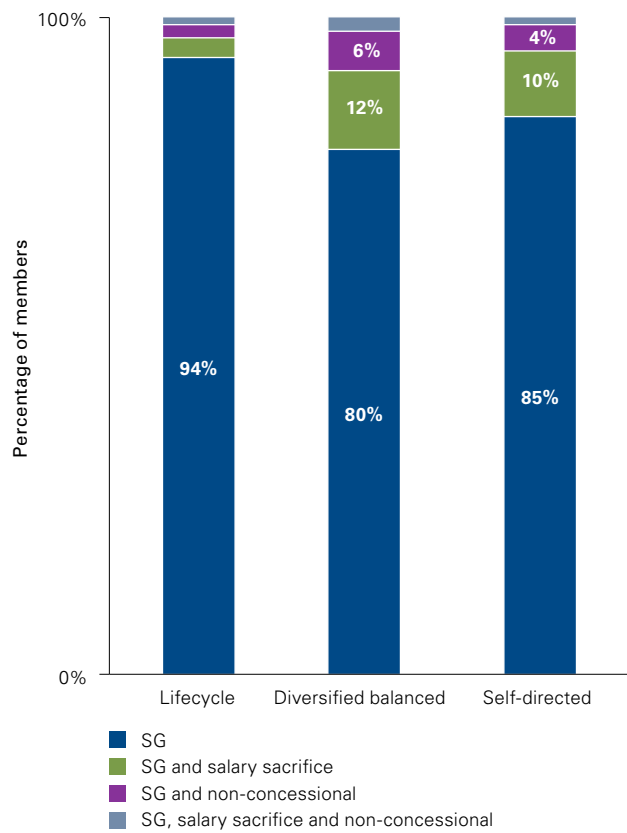
Contribution rates also are correlated with account balances. Members with SG contributions alone have lower account balances while members with both salary sacrifice and non-concessional contributions have higher account balances.

These results reflect the incentives inherent in Australia's superannuation rules, which provide comparatively greater tax concessions for contributions by higher salary-earners, and higher dollar contribution caps to older members. The greater capacity of older and higher-paid workers to make discretionary contributions after meeting their other financial commitments is also evident. Fewer than 0.1% of members made salary sacrifice or non-concessional contributions at the maximum regulated limits in 2016.

One especially noteworthy figure is the higher proportion of females taking advantage of non-concessional contributions compared to males, across all investor types.

Figure 9. Contributions by investor type, 2016

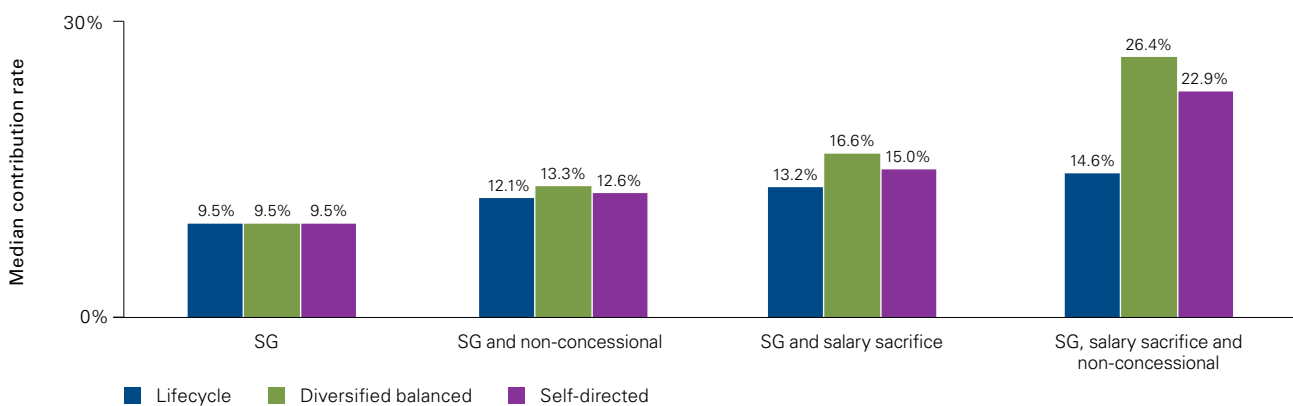
Members with SG contributions during the fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 10. Contribution rates by investor type, 2016

Members with SG contributions during the fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 11. Member demographics by contribution and investor type, 2016

Members with SG contributions during the fiscal year ended 30 June

	Lifecycle	Diversified balanced	Self-directed
Percentage of members	83%	5%	12%
SG			
Percentage of members	78%	4%	10%
Percentage female	46%	45%	40%
Percentage male	54	55	60
Median age	32	39	39
Median fund tenure	4	9	11
Median salary	\$33,295	\$51,375	\$55,158
Median account balance	\$10,915	\$36,610	\$42,985
Median savings rate	9.5%	9.5%	9.5%
SG and non-concessional			
Percentage of members	2%	<0.5%	<0.5%
Percentage female	59%	60%	56%
Percentage male	41	40	44
Median age	48	54	49
Median fund tenure	11	11	11
Median salary	\$43,260	\$39,095	\$43,473
Median account balance	\$56,089	\$69,985	\$68,346
Median savings rate	12.1%	13.3%	12.6%
SG and salary sacrifice			
Percentage of members	3%	<0.5%	1%
Percentage female	43%	41%	38%
Percentage male	57	59	62
Median age	47	54	51
Median fund tenure	9	10	11
Median salary	\$74,311	\$87,443	\$90,644
Median account balance	\$77,424	\$134,906	\$124,557
Median savings rate	13.2%	16.6%	15.0%
SG, salary sacrifice and non-concessional			
Percentage of members	<0.5%	<0.5%	<0.5%
Percentage female	57%	55%	51%
Percentage male	43	45	49
Median age	53	59	58
Median fund tenure	12	11	12
Median salary	\$56,874	\$59,082	\$62,939
Median account balance	\$81,654	\$148,786	\$144,255
Median savings rate	14.6%	26.4%	22.9%

Source: Vanguard using Sunsuper data, 2017

Member demographics vary by investor type. Self-directed investors are more likely to be male, have longer fund tenure, and higher salaries (Figure 12). Lifecycle investors are more likely to be younger, have shorter fund tenure, and lower salaries. Diversified investors are more likely to be older than other members.

Government contributions

The Australian government makes two types of payments targeting lower-income workers:

- **Low-income super contributions.** LISC contributions are designed to compensate members on low or zero marginal income tax rates for tax paid on their mandated SG contributions.
- **Government co-contribution.** Government co-contributions are designed as an incentive for low-to-middle income earners to make non-concessional contributions on top of the SG contributions paid by their employer. They provide a matching contribution of up to \$500 per year for members whose annual income falls within the eligible income range. The eligible income range was between \$35,454 and \$50,454 in fiscal year ended June 2016.

In 2016 one quarter of members received either or both of these types of government contributions (Figure 13). On average, these members received 1.9% in additional contributions, bringing their total contribution rate to 11.4%. In 2016, members receiving these contributions were more likely to be female, had lower salaries, and had smaller account balances (Figure 14).

Spouse contributions

Contributions can be made on behalf of spouses in Australia's superannuation system, with a tax offset being available to the spouse making the contribution. Less than 0.5% of members received spouse contributions in 2016. Of these, 85% were female, and the median contribution was \$3,000.

Figure 12. Member demographics by investor type, 2016

Members with SG contributions during the fiscal year ended 30 June

	Lifecycle	Diversified balanced	Self- directed
Percentage of members	83%	5%	12%
Female	46%	46%	41%
Male	54	54	59
Age			
<25	25%	10%	5%
25–34	29	25	30
35–44	20	21	27
45–54	16	21	20
55–64	9	18	14
65–69	1	4	3
70+	<0.5	1	1
Median age	33	42	40
Fund tenure			
0–1	30%	6%	4%
2–3	16	10	5
4–6	15	18	13
7–9	13	23	23
10–13	12	26	35
14–19	9	9	14
20+	5	8	6
Median fund tenure	5	9	11
Salary			
<\$10,000	22%	9%	8%
\$10,000–\$29,999	23	17	15
\$30,000–\$49,999	19	19	18
\$50,000–\$74,999	20	24	25
\$75,000–\$99,999	8	12	14
\$100,000–199,999	7	15	16
\$200,000+	1	4	4
Median salary	\$34,945	\$54,015	\$57,386

Source: Vanguard using Sunsuper data, 2017

Figure 13. Government incentive contributions*Members with incentive contributions during the fiscal year ended 30 June*

	2012	2013	2014	2015	2016
Low-income super contribution					
Percentage of members			21%	23%	22%
Average as a percentage of prior year wages			1.8	1.7	1.7
Median as a percentage of prior year wages			1.4	1.4	1.7
Co-contribution					
Percentage of members	4%	3%	1%	1%	1%
Average as a percentage of prior year wages	4.9	4.9	1.5	1.1	1.1
Median as a percentage of prior year wages	1.7	1.7	0.4	0.4	0.4
Low-income super and co-contribution					
Percentage of members			1%	1%	1%
Average as a percentage of prior year wages			5.1	4.9	5.2
Median as a percentage of prior year wages			3.1	3.1	3.2
All members with incentive contributions					
Percentage of members	4%	3%	23%	25%	24%
Average as a percentage of prior year wages	4.9	4.9	1.9	1.9	1.9
Median as a percentage of prior year wages	1.7	1.7	1.4	1.4	1.4

Source: Vanguard using Sunsuper data, 2017

Figure 14. Government incentive contributions, 2016*Members with incentive contributions during the fiscal year ended 30 June*

	Lifecycle	Diversified balanced	Self-directed
All members with incentive contributions			
Percentage of members	21%	1%	2%
Percentage female	59%	64%	59%
Percentage male	41	36	41
Median age	30	41	39
Median fund tenure	5	8	10
Median prior year salary	\$22,622	\$25,493	\$25,809
Median account balance	\$8,753	\$21,116	\$25,739
Median incentive contribution rate	1.4%	1.4%	1.4%

Source: Vanguard using Sunsuper data, 2017

Account balances

Account balances are a widely cited measure of the overall effectiveness of superannuation funds and are determined by contribution levels and investment performance over time, less fees. These fees include both administration and investment fee components, as well insurance premiums where applicable.

Average versus median balances

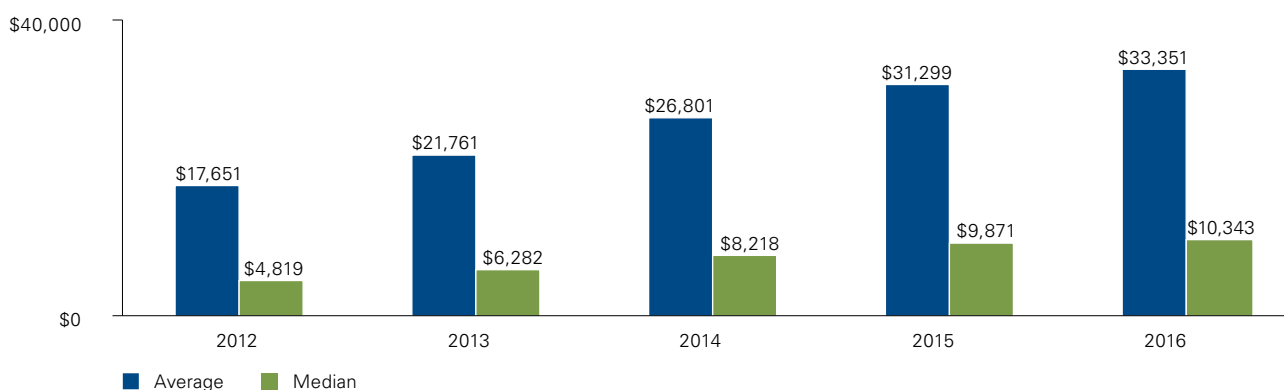
In June 2016, the average account balance for members was \$33,351; the median balance was \$10,343 (Figure 15). In 2016, members' average account balances rose by 7% and median account balances rose by 5%. The median 1-year member total return was 3.1% in 2016 (see page 40). During the 2012–2016 period, median balances more than doubled and average balances rose by 89%.

Sunsuper explanatory note. The Sunsuper customer base has two distinct segments. Firstly the public offer general division which has lower average balances with a digitised, highly automated service model. Secondly the corporate and institutional division which has significantly higher average balances and an active account management model. Over recent years the growth of the corporate and institutional division has seen average account balances grow significantly, resulting in a skewed distribution of assets (Figure 16).

Because of the skewed distribution of assets, average balances are indicative of members at about the 75th percentile (i.e., about 75% of all members have balances below, and 25% have balances above the average). Average balances are more indicative of the results experienced by longer-tenured, more affluent, or older

Figure 15. Account balances

All members fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 16. Distribution of account balances

All members fiscal year ended 30 June

	2012	2013	2014	2015	2016
Percentage of accounts					
<\$1,000	25%	22%	18%	17%	19%
\$5,000–\$4,999	26	24	23	21	19
\$5,000–\$9,999	13	13	13	12	11
\$10,000–\$24,999	17	18	18	18	17
\$25,000–\$49,999	11	12	13	14	14
\$50,000–\$74,999	4	5	6	7	7
\$75,000–\$99,999	2	2	3	4	4
\$100,000+	2	4	6	7	9

Source: Vanguard using Sunsuper data, 2017

members. The median balance represents the typical member: half of all members have balances above the median, half have balances below.

Change in account balances

The change in average and median account balances in 2016 results from a combination of evolution in the member base and market performance.

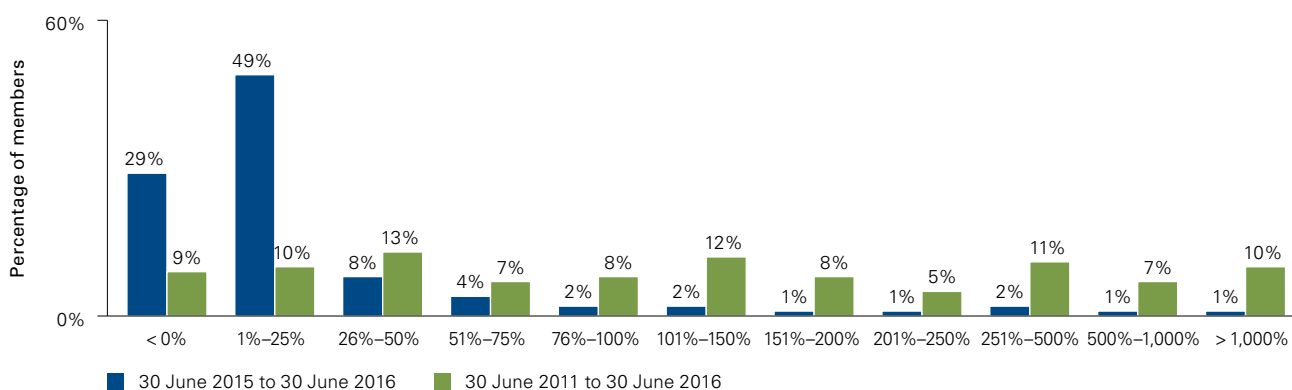
When we examine continuous members – those with an account balance in both June 2015 and June 2016 – the median account balance rose by 3% (Figure 17). Seven in 10 of these continuous members saw their balances rise because of investment returns or ongoing contributions or both.

Stretching this analysis over a longer period to cover continuous members with a balance in both June 2011 and June 2016, the median account balance over these five years rose 113%, and 91% of continuous members had a higher account balance in 2016 than in 2011.

Account balances are widely available on statements and websites, and are often cited as members' principal tool for monitoring investment results. Because of ongoing contributions, account balances will appear to be less negatively impacted during falling markets. This "contribution effect" may mask the psychological impact of falling share prices on members.

Figure 17. Change in account balances, continuous members

Members with a balance at both the beginning and end of the period



	30 June 2015 - 30 June 2016	30 June 2011 - 30 June 2016
Median change	3%	113%
Percentage of members with positive changes	71%	91%

Source: Vanguard using Sunsuper data, 2017

Account balances by member demographics

Median and average account balances vary considerably by member demographics (Figure 18).

Among the factors influencing account balances are salary, age, and fund tenure. These three factors are intertwined. Not only do salaries, on average, tend to rise somewhat with age, making saving more affordable, but older members generally save at higher rates (Figure 19). Also, the longer an employee's tenure, the more likely the employee is to earn a higher salary and contribute at higher levels. Longer-tenured members also have higher balances because they have been contributing to their fund for a longer period.

Gender also influences current balances. Fifty-five percent of members are male, and men have average balances that are about 30% higher than those of women. Gender is often a proxy for other factors, such as income and job tenure.

Figure 18. Account balances by member demographics, 2016

All members fiscal year ended 30 June

	Average	Median
All	\$33,351	\$10,343
Investor type		
Lifecycle	\$25,176	\$7,622
Diversified balanced	\$82,035	\$35,265
Self-directed	\$72,184	\$35,123
Gender		
Female	\$28,569	\$9,641
Male	\$37,331	\$11,054
Age		
<25	\$4,241	\$1,560
25–34	\$17,871	\$8,993
35–44	\$37,265	\$19,227
45–54	\$52,429	\$25,569
55–64	\$74,113	\$31,094
65–69	\$96,447	\$26,576
70+	\$105,107	\$25,678
Fund tenure		
0–1	\$8,152	\$653
2–3	\$16,314	\$3,870
4–6	\$26,846	\$9,874
7–9	\$39,202	\$20,195
10–13	\$51,788	\$30,023
14–19	\$51,362	\$33,516
20+	\$67,336	\$43,894

Source: Vanguard using Sunsuper data, 2017

Figure 19. Account balances by member salary, 2016

Members with SG contributions during the fiscal year ended 30 June

	Average	Median
Salary		
<\$10,000	\$8,578	\$405
\$10,000–\$29,999	\$18,689	\$4,901
\$30,000–\$49,999	\$31,362	\$16,550
\$50,000–\$74,999	\$48,099	\$33,739
\$75,000–\$99,999	\$70,172	\$53,392
\$100,000–199,999	\$107,656	\$83,585
\$200,000+	\$208,810	\$161,112

Source: Vanguard using Sunsuper data, 2017



Managing member accounts

Member investment decisions are a critical determinant of long-term retirement savings growth.



Managing member accounts

Asset and contribution allocations

In a defined contribution system like Australia’s, asset allocation is a critical determinant of the long-term performance and risk profile of an individual member’s portfolio. A sufficient allocation to growth assets such as shares, to a level consistent with the member’s retirement time horizon, is a key component of ensuring that superannuation savings grow in real terms during the contribution phase and beyond.

We begin this chapter with an analysis of the distribution of member accounts across six categories, including both discrete asset class options (fixed interest and cash, property, and shares) and multi-asset class options (diversified balanced, lifecycle and pension). For each period we then report an aggregate growth asset exposure at the total fund level, for both end-of-year balances and annual contributions.

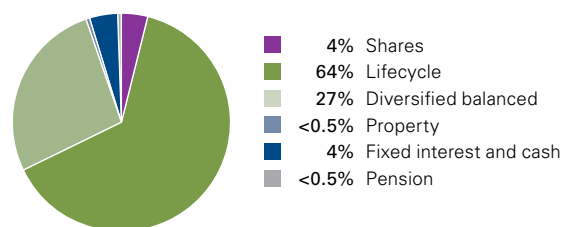
In the case of the multi-asset class options, the definition of which assets count as growth assets for this purpose is as per the fund’s investment policy.²³

At 30 June 2016, 68% of fund assets and 69% of member contributions were invested in growth assets [Figure 20]. The majority of these growth asset holdings were via the underlying asset class allocations of balanced funds, including the default lifecycle fund. Only around 4% of the total growth asset exposure was through dedicated share investment options.

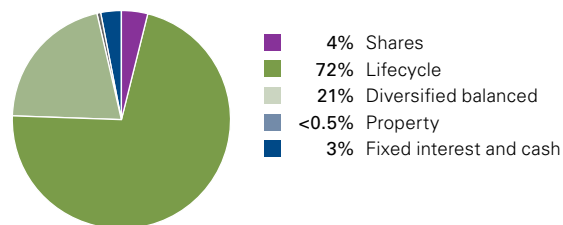
This overall average growth allocation suggests that members are taking a substantial, but still reasonable, level of growth asset risk in their superannuation portfolios, while remaining widely diversified.

Figure 20. Fund asset and contribution allocation summary, 2016

*Fund asset allocation (68% growth)
All members as of 30 June*



*Fund contribution allocation (69% growth)
Members with SG contributions in the fiscal year ended 30 June*



Source: Vanguard using Sunsuper data, 2017

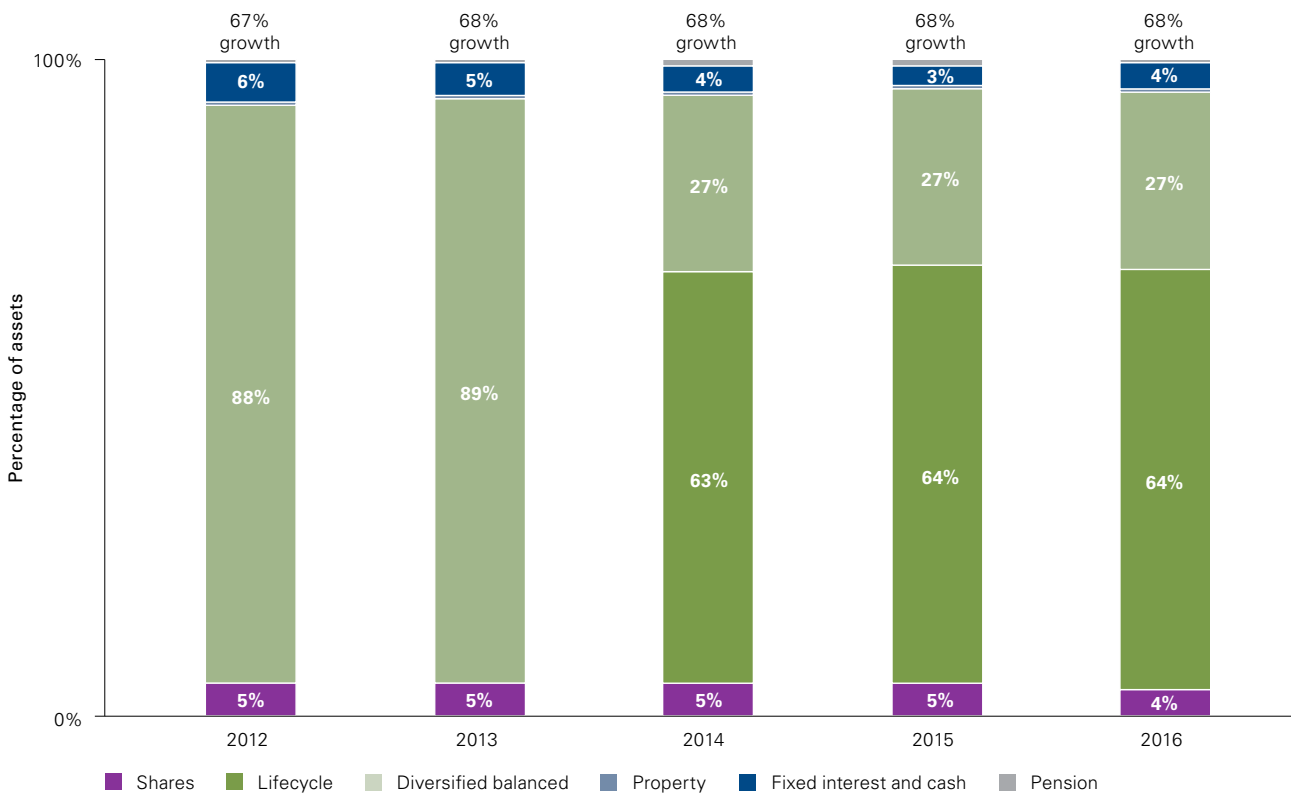
²³ For this analysis the definition of growth assets included Australian and international shares, private capital, diversified strategies and 50% of the allocation to property and infrastructure. The remaining 50% of infrastructure and property, along with fixed interest, hedge funds, and cash, were counted as defensive assets.

The percentage of total fund assets invested in growth assets has been consistent for the full 5-year period (Figure 21). As noted earlier in the report, in 2014 the member default option was evolved to a lifecycle option from a diversified balanced option. However this change has not significantly altered the fund-level growth asset exposure to date. The majority of default option members are below the age at which their exposure to growth assets in the lifecycle strategy begins to reduce.

Approximately 7 in 10 fund contribution dollars were invested in growth investments during 2016, with nearly three-quarters of contributions being invested in the lifecycle option (Figure 22). Member contribution allocations to growth investments have also remained steady at about 69% for the full 5-year period.

Figure 21. Fund asset allocation summary

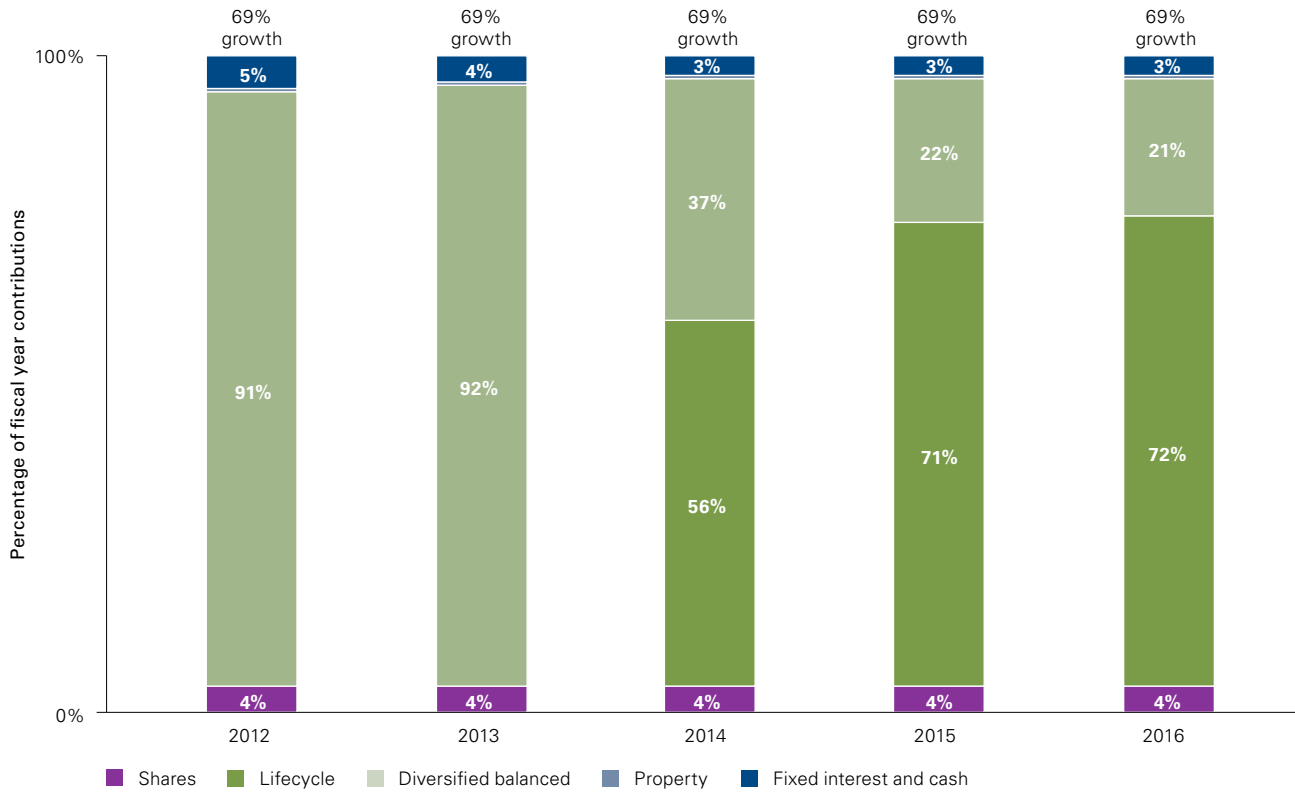
All members fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 22. Fund Contribution allocation summary

Members with SG contributions in the fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 23. Asset allocation by member demographics, 2016

All members as of 30 June

	Fixed interest and cash	Property	Diversified balanced	Lifecycle	Shares	Pension	Percentage growth
Investor type							
Lifecycle				100%			70%
Diversified			98%			2%	65
Self-directed	14%	2%	64	2	17%	1	63
Gender							
Female	4%	<0.5%	27%	66%	3%	<0.5%	67%
Male	4	<0.5	28	62	5	1	68
Age							
<25	<0.5%	<0.5%	10%	89%	1%	<0.5%	71%
25–34	1	<0.5	20	75	4	<0.5	71
35–44	2	<0.5	22	71	5	<0.5	72
45–54	2	1	22	69	5	1	71
55–64	6	<0.5	36	53	4	1	61
65–69	11	<0.5	59	26	4	<0.5	52
70+	15	1	65	16	3	<0.5	51
Fund tenure							
0–1	3%	<0.5%	20%	70%	3%	4%	64%
2–3	4	1	21	71	3	<0.5	67
4–6	4	1	28	64	3	<0.5	67
7–9	4	1	30	59	6	<0.5	68
10–13	4	<0.5	35	52	8	1	68
14–19	3	<0.5	22	72	3	<0.5	68
20+	3	<0.5	23	72	2	<0.5	67
Account balance							
<\$10,000	1%	<0.5%	9%	89%	1%	0%	70%
\$10,000–\$24,999	1	<0.5	15	82	2	<0.5	70
\$25,000–\$49,999	1	<0.5	19	77	3	<0.5	70
\$50,000–\$74,999	2	<0.5	21	74	3	<0.5	70
\$75,000–\$99,999	2	<0.5	22	72	4	<0.5	70
\$100,000+	6	1	37	49	6	1	69

Source: Vanguard using Sunsuper data, 2017

Asset allocation by member demographics

Asset allocation decisions vary somewhat by member demographics (Figure 23). However, given that 83% of members were lifecycle investors, differences are somewhat nuanced. Older members hold somewhat larger allocations to fixed interest and cash. Older members are also more likely to hold a diversified balanced option and less likely to hold the lifecycle option. More than 75% of assets for members younger than 35 – and close to 90% of assets for members younger than age 25 – are invested in the lifecycle option.

Members with larger account balances also hold somewhat larger allocations to fixed interest and cash, and shares. Members with larger account balances are also more likely to hold a diversified balanced option and less likely to hold the lifecycle option. Nearly all members with account balances less than \$25,000 hold the lifecycle option or a single diversified balanced option.

Members with higher salaries hold somewhat larger allocations to fixed interest and cash and shares (Figure 24).

Figure 24. Asset allocation by member salary, 2016

Members with SG contributions in the fiscal year ended 30 June

Salary	Fixed interest and cash	Property	Diversified balanced	Lifecycle	Shares	Pension	Percentage growth
<\$10,000	3%	<0.5%	27%	66%	3%	1%	67%
\$10,000–\$29,999	3	<0.5	23	70	3	1	67
\$30,000–\$49,999	2	<0.5	22	73	3	<0.5	68
\$50,000–\$74,999	2	<0.5	21	74	3	<0.5	69
\$75,000–\$99,999	2	<0.5	24	70	4	0	70
\$100,000–199,999	3	1	29	61	6	<0.5	70
\$200,000+	5	1	35	49	10	<0.5	71

Source: Vanguard using Sunsuper data, 2017

Member demographics vary by investor type. Self-directed investors are more likely to be male and have longer fund tenure (Figure 25). Lifecycle investors are more likely to be younger and have shorter fund tenure. Diversified investors are more likely to be older than other members.

Figure 25. Demographic characteristics by investor type, 2016

All members with balances as of 30 June

	Lifecycle	Diversified balanced	Self- directed
Percentage of members	83%	5%	12%
Asset allocation			
Fixed interest and cash			14%
Property			2
Diversified balanced fund		98%	64
Lifecycle	100%		2
Shares			17
DB/Pension reserve		2	1
Percentage growth assets	70%	65%	63%
Gender			
Female	46%	46%	41%
Male	54	54	59
Age			
<25	21%	8%	5%
25–34	30	24	29
35–44	21	21	27
45–54	17	20	20
55–64	9	18	13
65–69	1	6	4
70+	1	3	2
Median age	35	44	41
Fund tenure			
0–1	22%	5%	3%
2–3	17	10	4
4–6	16	17	13
7–9	13	23	22
10–13	13	27	36
14–19	12	10	15
20+	7	8	7
Median fund tenure	6	9	11
Account balance			
<10,000	55%	24%	21%
\$10,000–\$24,999	17	18	19
\$25,000–\$49,999	12	17	21
\$50,000–\$74,999	6	11	12
\$75,000–\$99,999	4	7	8
\$100,000+	6	23	19
Median account balance	\$7,622	\$35,282	\$35,118

Source: Vanguard using Sunsuper data, 2017

Fund investment options

Member investment decisions occur within the context of a menu of choices offered by the fund.

Options offered

The fund offers an array of investment options covering the major investment categories: cash, fixed interest, property, lifecycle, diversified balanced, Australian and international shares, and emerging markets shares (Figure 26). The default fund is a lifecycle fund. Members have access to 21 investment options for accumulation accounts, and under the fund's rules are able to select up to 10 of these to construct a self-directed portfolio.

Figure 26. Type of investment options used, 2016

All members as of 30 June

	Lifecycle	Diversified balanced	Self-directed
Cash			15%
Fixed interest			5%
Active			4
Index			2
Property			5%
Active			3
Index			3
Lifecycle	100%		8%
Diversified balanced		100%	85%
Active		98	85
Index		1	1
Socially responsible		1	1
Single asset class			33%
Shares			24%
Australian shares			9%
Active			7
Index			3
International shares			6%
Active hedged			2
Active unhedged			2
Index hedged			2
Index unhedged			2
Emerging markets shares			2%

Source: Vanguard using Sunsuper data, 2017

Options used

A total of 88% of members used a single option – 83% hold the lifecycle option and 5% hold a single diversified balanced option. Self-directed investors (who comprised 12% of members overall) were most likely to hold an actively-managed diversified option (e.g. growth, conservative) followed by Australian shares.

Self-directed members on average used 2.5 options in 2016 (Figure 27). Slightly more than one-third of these self-directed members held three or more options (Figure 28). Overall, 4% of all fund members held three or more options.

Figure 27. Number of investment options used, 2016

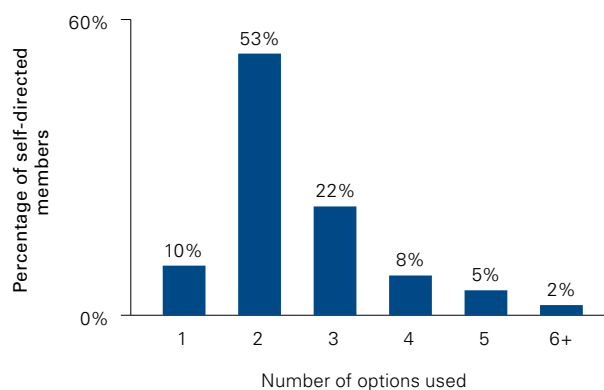
All members as of 30 June

	Lifecycle	Diversified balanced	Self-directed
Median	1.0	1.0	2.0
Average	1.0	1.0	2.5

Source: Vanguard using Sunsuper data, 2017

Figure 28. Distribution of investment options used, 2016

Self-directed members with balances as of 30 June



Source: Vanguard using Sunsuper data, 2017

Member growth allocations

Growth investments are the dominant asset class holding of most members. The fraction of growth options held is slightly more than 70% until age 55 when it begins to decline (Figure 29). In 2016, the growth allocation among members older than 70 was slightly more than half.

Few fund members hold extreme allocations (Figure 30). The fraction of members with no allocation to growth options was only 1%. At the other extreme, the fraction of members investing exclusively in growth options was also only 1%.

Figure 29. Growth allocation by age

All members as of 30 June

	2012	2013	2014	2015	2016
<25	71%	71%	71%	71%	71%
25–34	70	70	71	71	71
35–44	71	72	72	72	72
45–54	69	70	71	71	71
55–64	61	62	63	63	61
65–69	51	52	54	53	52
70+	47	50	51	51	51

Source: Vanguard using Sunsuper data, 2017

Figure 30. Growth asset allocation trend

All members as of 30 June

	2012	2013	2014	2015	2016	Percentage of contributions to growth assets, 2016
0%	1%	1%	1%	1%	1%	1%
1%–30%	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
31%–40%	2	2	2	2	1	1
41%–50%	1	1	1	1	1	1
51%–60%	2	1	2	2	5	6
61%–70%	2	2	9	9	7	6
71%–80%	86	87	79	79	79	80
81%–90%	4	4	4	4	4	4
91%–99%	1	1	1	1	1	<0.5
100%	1	1	1	1	1	1
Median growth assets member weighted	72%	72%	72%	72%	72%	72%
Average growth assets member weighted	71	71	70	70	70	70

Source: Vanguard using Sunsuper data, 2017

One of the benefits of lifecycle and diversified balanced options is that they eliminate extreme allocations. Self-directed members tend to hold greater extremes in growth exposure (Figure 31). A total of 12% of self-directed investors hold extreme portfolios (6% with no growth options, 6% with only growth options). Lifecycle and diversified balanced investors cannot hold extreme positions because these professionally managed options include both growth and defensive investment options and periodic rebalancing.

Advice

Many members may lack the financial investment skills, time, or interest to make appropriate investment decisions. To address members' need for assistance with investment decisions, all members have access to advice from the fund.

Only a small proportion of members utilise the advice services offered, although the large percentage of members holding the lifecycle or a single diversified balanced option are generally benefiting from the structure of these options relating to their asset allocation and portfolio rebalancing needs.

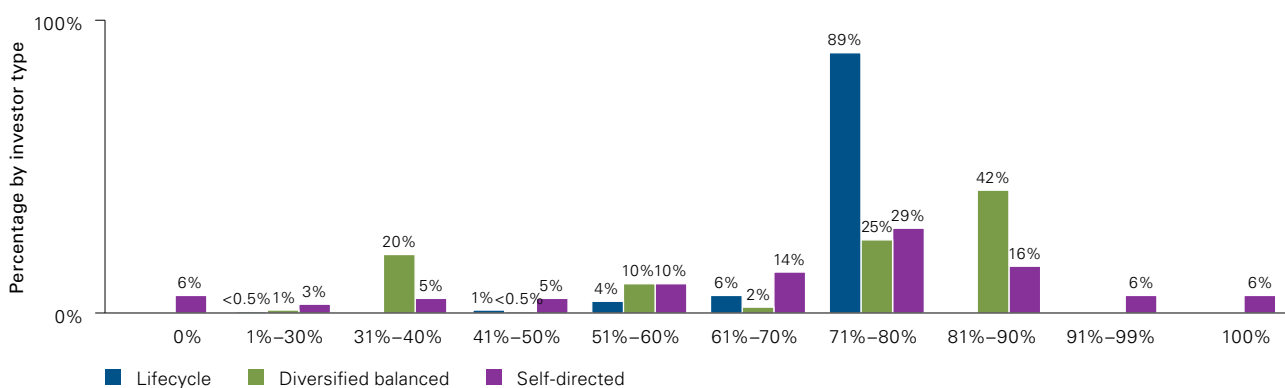
Diversified balanced members were somewhat more likely to access advice than all other members (Figure 32).

Sunsuper explanatory note. It should be noted that:

- 14% of Sunsuper members in receipt of retirement incomes are advised, which compares to 10% across the market.
- Nearly 2% of Sunsuper members have a third party authority on their account, that is, they use an external adviser.
- While the current percentage of members in the pension product is 1%, the percentage of members aged 50 and over is 21% and we therefore expect to see strong growth in both the number of pensioners and the proportion of advised members as this cohort moves closer to retirement.

Figure 31. Growth allocation by investor type, 2016

All members as of 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 32. Advice by investor type, 2016

All members fiscal year ended 30 June

Percentage of members accessing advice

Lifecycle	1%
Diversified balanced	6
Self-directed	4
All	2%

Source: Vanguard using Sunsuper data, 2017

Investment returns

Total rates of return reflect time-weighted investment performance and allow comparison of results to benchmark indices.

Estimated total rates of return

Estimated total rates of return were calculated by using the monthly unit price return of the investment and multiplying by the weight of the investment in the member's portfolio. These returns were summed to derive the member level monthly estimated total return. The estimated monthly returns were used to calculate the geometric mean for the 1, 3, and 5-year periods.

This estimation process assumes the investment allocation was the same for the entire month, ignoring any intra-month cash flows, but provides a close approximation of the member-level returns over time.

Median estimated total returns calculated on this basis for fund members as a whole were 3.1% for the 1-year period ended 30 June 2016 (Figure 33). Reflecting stronger equity markets in the 2012, 2013, 2014, and 2015 financial years, median estimated total returns for fund members were 8.8% for the 3-year period and 8.3% for the 5-year period ended 30 June 2016.

For reference purposes these member-level returns are compared against key asset class market indices and two composite reference portfolios at 50/50 and 70/30 growth/defensive asset allocations over the same 1, 3 and 5-year periods. It should be noted that these market index and composite portfolio returns are before tax and fees, whereas the member-level returns reported in Figure 33 are after taxes and fees.

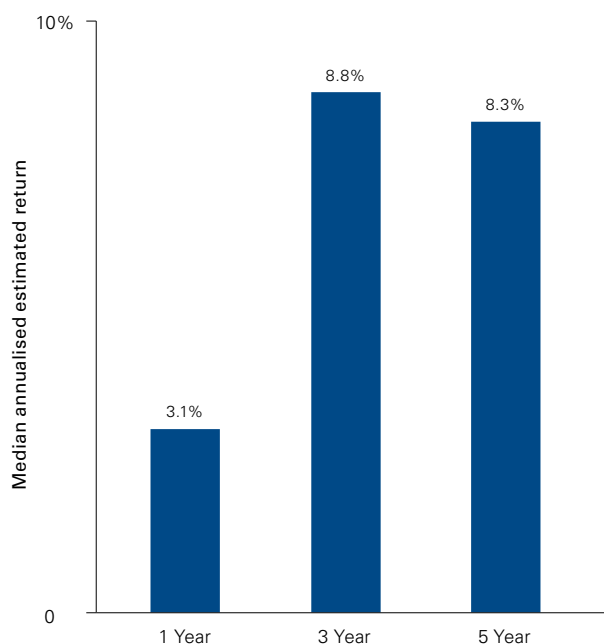
Investment market conditions

Investment returns experienced by members were of course driven by the investment market experience during the period under review, as well as by particular investor styles and product selections.

Despite experiencing bouts of volatility over the five years, global equities performed solidly on average and were further boosted in unhedged terms by the weakening of the Australian dollar.

The Australian equity market lagged its global peers on average, but was nonetheless supported by interest rate cuts by the central bank, the Reserve Bank of Australia (RBA).

Figure 33. Member estimated total rate of return rate, 30 June 2016



Annualised market returns 12 months ended 30 June 2016

	1 year	3 years	5 years
Bloomberg AusBond Composite 0+ Yr index (Fixed interest)	7.0%	6.2%	6.7%
S&P/ASX 300 Index (Australian shares)	0.9	7.7	7.2
MSCI World ex-Australia Index Net in \$A (International shares)	0.4	14.8	14.9
50/50 Diversified*	4.0	8.2	8.3
70/30 Diversified*	2.2	8.6	8.5

* Diversified composites based on MSCI Australia Index (50%) and MSCI All Country World ex-Australia Index (50%) for shares; and Bloomberg Barclays Australian Aggregate Bond Index (40%) and Bloomberg Barclays Global Aggregate ex-Australian Bond Index Hedged AS\$ (60%) for fixed income.

Past performance is not a reliable indication of future performance.
Source: Vanguard, and Vanguard using Sunsuper data, 2017

In fixed interest markets, global bond yields declined throughout most of the last five years as concerns around the economic outlook abounded and central banks remained accommodative. The fall in yields represents a rise in value of existing bonds which provided a boost to bond returns.

Given the significant fall in the RBA cash rate of 300 basis points over the 5-year period, annual returns for cash were muted.

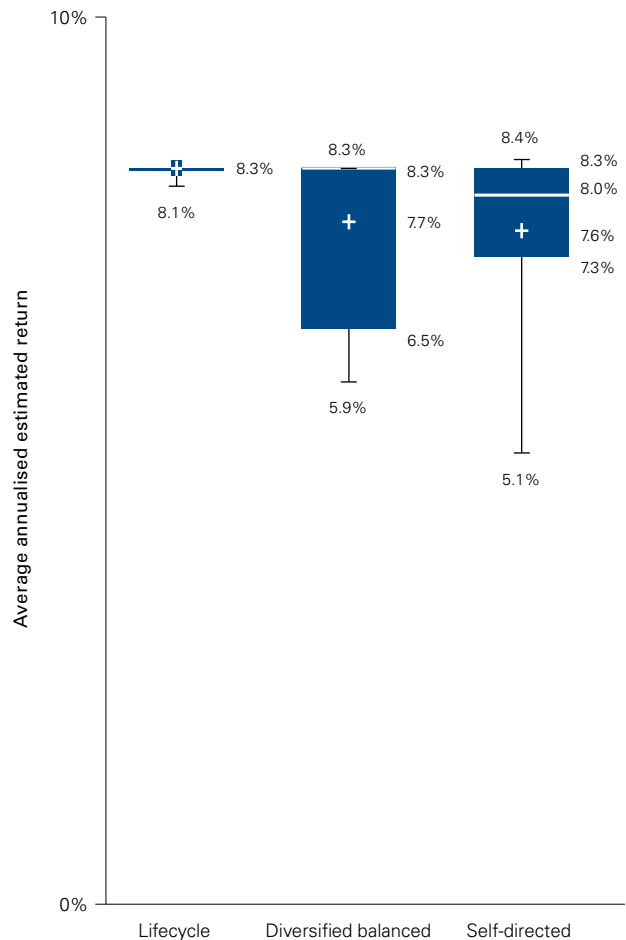
The listed property market continued a 5-year trend of strong performance, benefitting from a strong domestic property market, declining interest rates, and strong equity performance.

Distribution of returns

As at 30 June 2016, 5-year estimated total annual returns were positive for nearly all fund members. There was significant variation in the dispersion of returns between different member types.

Members holding the lifecycle investment option had very little dispersion in estimated total returns. Total 5-year returns for lifecycle investors ranged from 8.1% per year for the 5th percentile to 8.3% for the 95th percentile, a difference of only 0.2 percentage points (Figure 34). For diversified balanced investors the estimated total returns at the 5th-to-95th percentile difference was 2.4 percentage points. For self-directed investors the estimated total returns at the 5th-to-95th percentile were more widely dispersed with a difference of 3.3 percentage points.

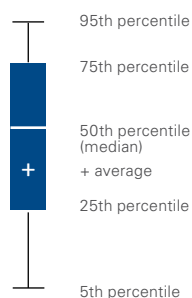
Figure 34. Distribution of 5-year estimated total returns by investor type, 30 June 2016



Past performance is not a reliable indication of future performance.

Note: Based on 466,000 observations for lifecycle, 93,000 observations for diversified balanced, and 57,000 observations for self-directed members.

Source: Vanguard using Sunsuper data, 2017



How to read a box and whisker chart:

This box and whisker chart shows the range of outcomes. Plot values represent the 95th, 75th, 50th, 25th, and 5th percentile values. The average value is represented by a white + and the median value by a white line. An example of how to interpret the data in Figure 34 is: for the self-directed members 5% of members had estimated total return rates (ETRR) greater than 8.4%; 25% had ETRRs greater than 8.3%; half had ETRRs greater than 8.0%; 75% had ETRRs greater than 7.3%; 95% had ETRRs greater than 5.1%; and 5% had ETRRs less than 5.1%. The average ETRR was 7.6%

Dispersion of outcomes

These differences are more apparent when examining both return and risk outcomes in scatter plots.

For ease in presentation, we created a random sample of 1,000 members for each of the three investor types, reporting the dispersion of their member-level annualised returns against those of three major asset class indices, for the 5-year period ended 30 June 2016. These samples were in turn divided into members of each investor type who were under age 55, and aged 55 and over (Figure 35).

The scatterplots each include about 1,000 observations, although in the case of lifecycle investors (Figure 35, panel A) there appear to be far fewer. The explanation is that while the numbers of observations in each sample are consistent, because the lifecycle members are invested in a homogeneous asset class mix the range of portfolio outcomes is naturally constrained. As members reach age 55, the lifecycle option begins the transitional period to a more conservative allocation.

Consequently, outcomes for lifecycle investors were tightly distributed in a small cluster between the major market indices, and slightly upward sloping reflecting a positive equity risk premium for younger members (below age 55) who share the same asset allocation. Older

members (represented by green dots and in nearer-dated portfolios) are to the left and lower on the vertical scale, reflecting their incremental shift to more conservative portfolios at different ages. These differences are more clearly displayed in the breakout box on the lifecycle member scatterplot.

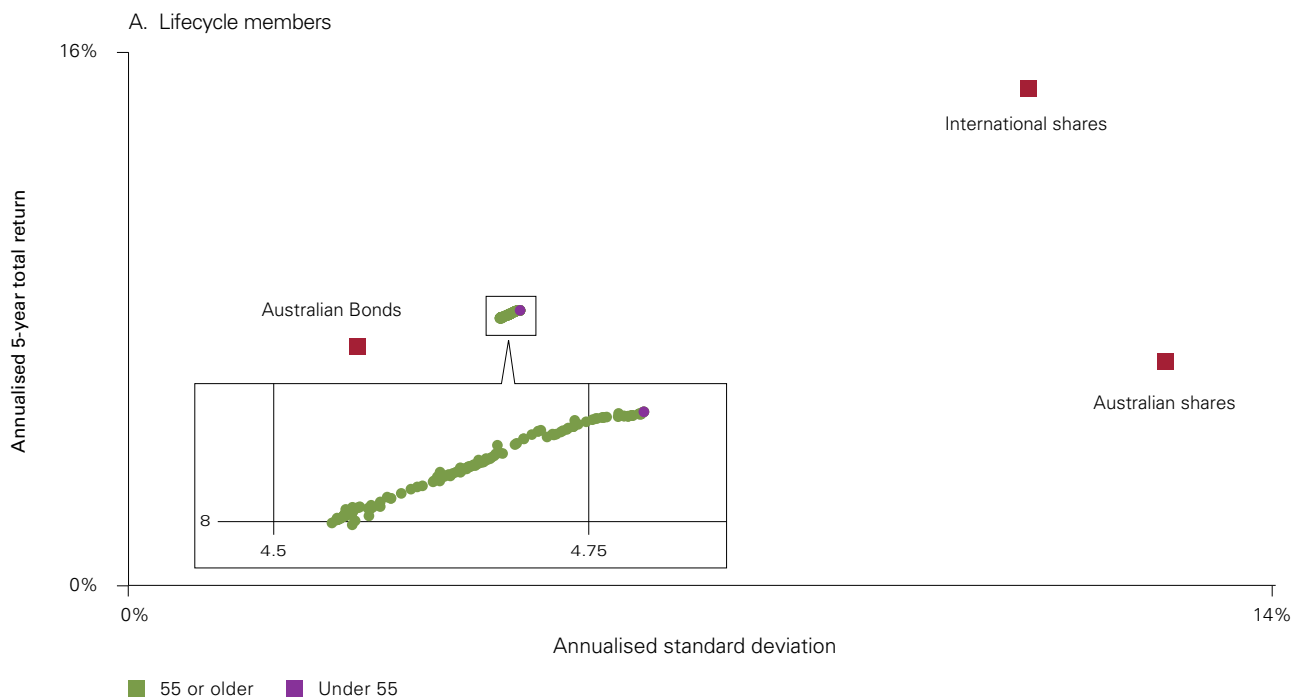
The results for diversified balanced investors are more broadly dispersed, reflecting the fact that different diversified options have quite distinct asset allocations (Figure 35, panel B).

The greatest dispersion of risk return outcomes is among self-directed members making their own investment choices (Figure 36, panel C). In some cases these members achieved higher annualised returns and/or lower volatility than lifecycle and diversified balanced members, but the more common result was lower annualised returns or higher volatility, and sometimes both.

Providing member investment choice is an important part of the superannuation system architecture to provide individual choice and to cater to members with specific investment needs and preferences. What the data shows is that successful long-term outcomes for the majority of members are more likely to be driven by carefully designed default and diversified options.

Figure 35. Risk and return characteristics, 2012-2016

For the five-year period ended 30 June 2016



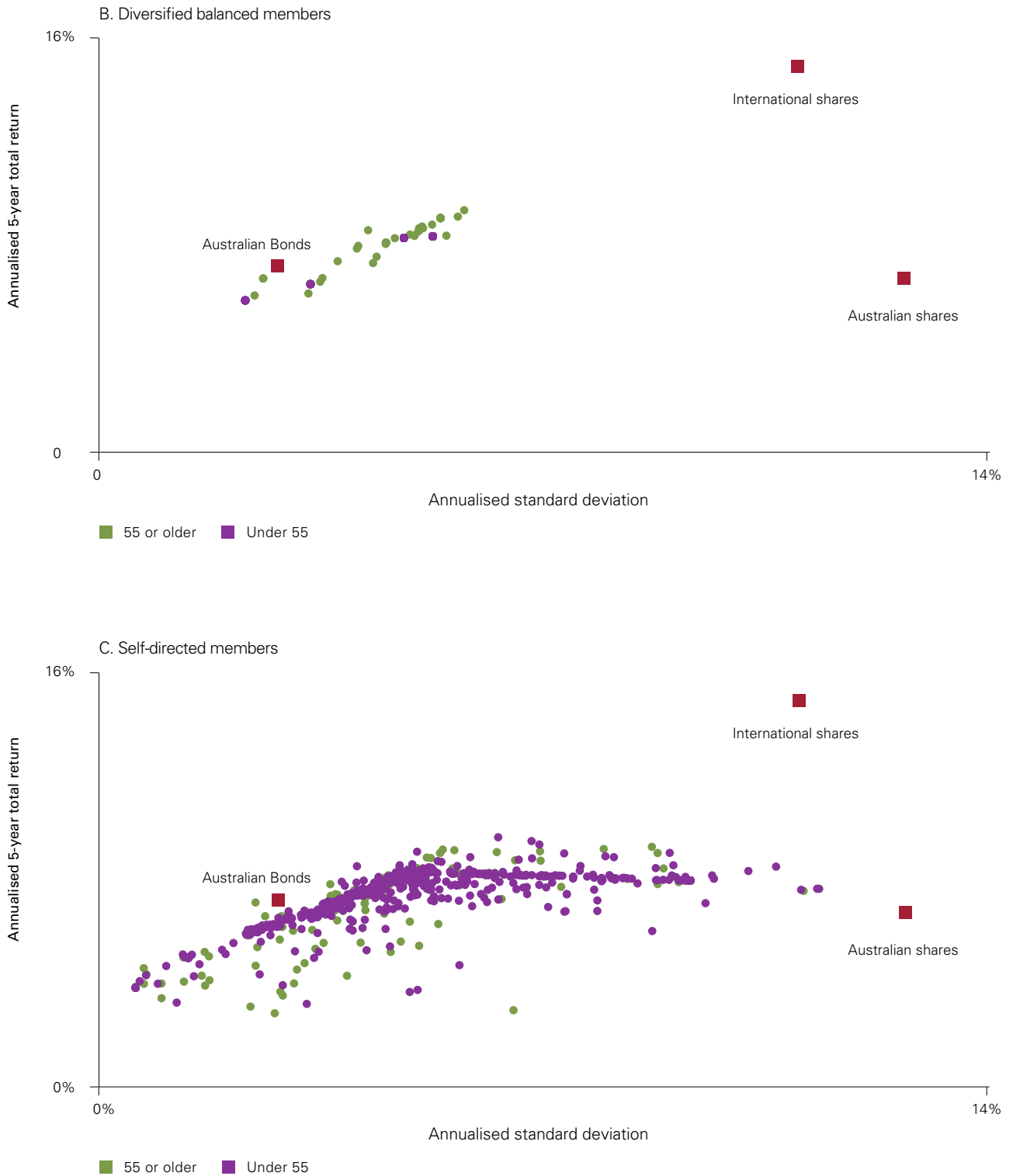
Past performance is not a reliable indication of future performance.

Note: Includes 1,000 random sample of member accounts drawn from respective samples. Excludes 0.5% top and 0.5% bottom outliers for both risk and return, for a net sample of 980 observations.

Source: Vanguard using Sunsuper data, 2017

Figure 35. Risk and return characteristics, 2012-2016 (continued)

For the five-year period ended 30 June 2016



Past performance is not a reliable indication of future performance.

Note: Includes 1,000 random sample of member accounts drawn from respective samples. Excludes 0.5% top and 0.5% bottom outliers for both risk and return, for a net sample of 980 observations.

Source: Vanguard using Sunsuper data, 2017

Switching activity

Member switching or trading activity is the movement of existing account assets from one fund investment option to another. Switching can signify a self-directed member seeking to adjust their market exposures as they grow older or when their account balance grows. It might also be an indicator of their propensity to change their portfolio in response to short-term market volatility. Members have the ability to make switches on a daily basis.

Volume of switches

Despite the ongoing market volatility in the financial year ended June 2016, only 1% of members made one or more portfolio switches or trades during the year (Figure 36). As in prior years, most members did not switch.

Another measure of switching is the volume of dollars traded. We measure dollar volume movements as a fraction of total fund assets in order to scale them to growth in assets and growth in the underlying business. In effect, the fraction of assets traded is a measure of portfolio turnover.

Figure 36. Member switching

All members fiscal year ended 30 June

	2012	2013	2014	2015	2016
Members					
Percentage of members with a switch	1%	1%	1%	1%	1%
Percentage of fund assets					
Percentage switched	6.6%	5.4%	5.2%	4.7%	3.7%
Percentage moved to growth (out of growth)	(1.6)	<0.05	0.3	(0.1)	(0.5)
Dollar flows (in millions)					
Dollars switched	\$1,250	\$1,263	\$1,487	\$1,546	\$1,327
Dollars moved to growth (out of growth)	(298)	(5)	85	(37)	(164)
S&P ASX 300 index volatility					
Percentage of days up or down 3% or more	2%	0%	0%	0%	1%
Percentage of days up or down 1% or more	40	14	14	19	37

Source: Vanguard using Sunsuper data, 2017

In the fiscal year ended June 2016, switching activity represented 3.7% of average fund assets. On a net basis, 0.5% of assets were shifted from growth to defensive options in 2016, compared with a 0.1% shift from growth to defensive options in 2015.

Diversified balanced and self-directed investors had higher switching rates than lifecycle investors. Seven percent of diversified balanced investors and 6% of self-directed investors made switches in the fiscal year ended June 2016 (Figure 37). Less than 0.5% of lifecycle investors made switches.

Figure 37. Member switching by investor type

All members fiscal year ended 30 June

	2012	2013	2014	2015	2016
Lifecycle			<0.5%	<0.5%	<0.5%
Diversified balanced	<0.5%	<0.5%	8	7	7
Self-directed	10	9	6	6	6

Source: Vanguard using Sunsuper data, 2017

Types of switching activity

Among members who made switches in their accounts, the types of switches made by members are varied.

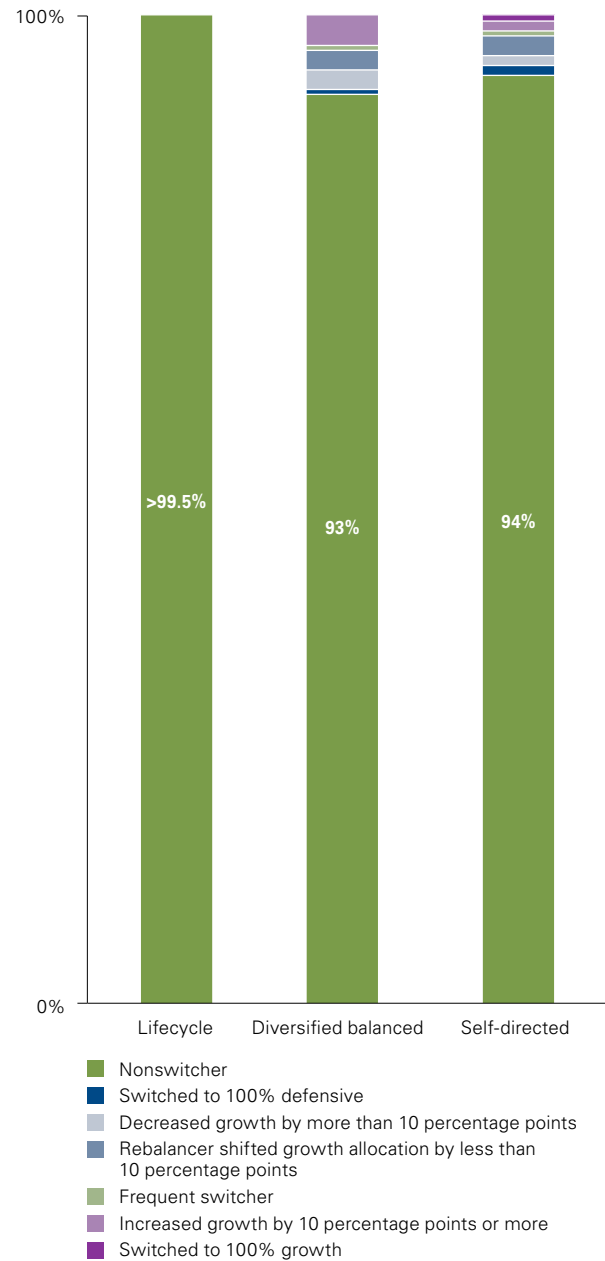
In the fiscal year ended June 2016, the most common switch made by diversified balanced investors was to increase exposure to growth assets (Figure 38).

Self-directed investors may be expected to engage in higher levels of switching activity – to rebalance their portfolios for example.


However even among self-directed investors most members do not switch. Among the small proportion (6%) of members in this group who did make switches, the most common reasons appear to be for portfolio rebalancing, and in some cases abandoning growth assets in response to market volatility.

Figure 38. Member switching decisions by investor type, 2016

All members fiscal year ended 30 June

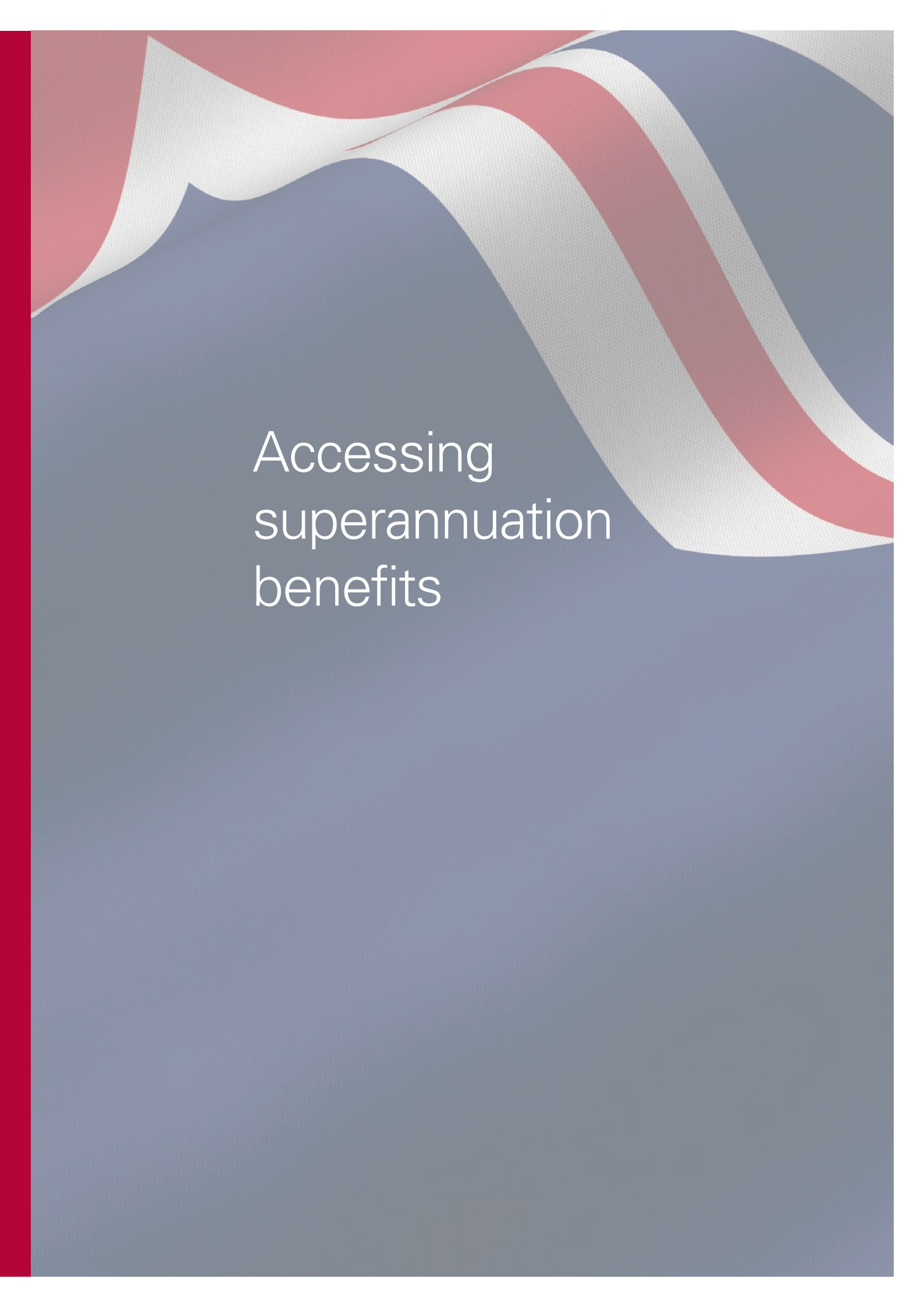


Source: Vanguard using Sunsuper data, 2017



Accessing superannuation benefits

Members have a variety of avenues to transfer their accounts within the superannuation system during their accumulation phase, and to draw down their savings upon reaching their preservation age or entering retirement.



Accessing superannuation benefits

Transfer and withdrawal channels

Under Australia's choice of fund rules, most members are able to select any public offer fund or their own self-managed superannuation fund (SMSF) as the destination for future employer SG contributions. Members also have the ability to rollout all or part of their existing balances in a given fund to another eligible fund of their choice, even if their ongoing contributions are still being paid into the original fund.

Since 1999, all superannuation contributions and earnings have been required to be retained in the superannuation system until the member reaches their "preservation age", other than in cases of death, financial hardship, permanent incapacity or terminal illness. Preservation age has historically been age 55 (for those born prior to 1 January 1960), rising in increments to age 60 for those born on or after 1 January 1964.

These rules in combination generate transfers of pre-retired members' monies between different funds, but with those members' assets still remaining within the superannuation system.

A second broad category of transactions is payments made to individuals who have reached their preservation age; i.e., members who are drawing down on their savings and entering the decumulation phase. These include both lump sum withdrawals and regular income stream and pension payments. As noted previously, these withdrawals have a number of different access rules and thresholds applying depending on the member's age.

Plan rollouts

In the financial year ended June 2016, 4% of members had a full rollout to another super fund and a further 1% had a partial rollout (Figure 39).

Members rolling benefits out tended to be younger and had smaller account balances. It is likely that many of the rollouts were undertaken by members who had accounts with two or more different funds, stemming from multiple employment relationships. Account consolidation in this situation is generally encouraged as a means of avoiding fragmentation of savings and payment of multiple sets of fees, and has now been streamlined across the industry with new payment standards known as SuperStream. These standards became mandatory for all employers to remit their employees' SG contributions on 1 July 2015.

Few members had rollouts to SMSFs – less than 0.5% of members. These members tended to be in their mid-40s and they had larger account balances.

Figure 39. Incidence of rollouts, 2016

Members with a balance during fiscal year ended 30 June

Rollout type	Percentage of members	Percentage of account balance as rollout	Median rollout	Median member age
Partial rollout to other super fund	1%	30%	\$2,503	40
Full rollout to other super fund	4	100	5,128	35
Partial rollout to self-managed super fund	<0.5%	82%	\$64,581	46
Full rollout to self-managed super fund	<0.5	100	33,292	46

Source: Vanguard using Sunsuper data, 2017

Withdrawals

As noted above, generally members cannot access their superannuation balances prior to reaching their preservation age.

Precise details of eligibility to make drawdowns were not available due to overlapping eligibility rules, the possibility of accounts being held in different funds, and the need for members to make positive elections to access benefits. We constructed three mutually exclusive categories of members eligible to withdraw from their accounts, as follows:

- **Pensioners.** Members who have reached their preservation age, formally retired, and commenced income stream payments from their account are categorised as pensioners. These members can make lump sum withdrawals in addition to receiving regular pension payments.
- **Retirement eligible.** Members who have reached their preservation age and are receiving no SG contributions, and those members over age 65, whether receiving SG contributions or not are categorised as retirement eligible.
- **Transition to retirement (TTR) eligible.** Members who have reached their preservation age, are under age 65, and are receiving SG contributions are categorised as TTR eligible. Members in this category have the option of establishing income streams to supplement their wages, with a maximum limit of 10% of the account being able to be drawn down in any year up to age 65.

Pensioner members comprised 1% of all members at 30 June 2016 (Figure 40). The typical pensioner was age 69. Another 6% of members appear to be retirement eligible, although some of these members may not be retirement eligible if they are under age 65 and receiving SG contributions into a different fund. The typical retirement eligible member was age 67. Finally, 5% of members were TTR eligible, having reached their preservation age and being in receipt of SG contributions. The typical transition to retirement eligible member was age 62.

Sunsuper explanatory note. It should be noted that the relatively low number of pension members currently with the Fund is a reflection of Sunsuper's young member base with a median age of 36. At present, the cohort of members aged between 50 and 65 who will move into the transition to retirement and pension phase in the next decade or so currently sits at around 210,000 members.

Pensioner members withdrew only 8% of aggregate available account balances in 2016 (Figure 41). In each of the last five years, more than 90% of pensioner account balances remained in the fund. The typical pensioner withdrew only 6% of their account balance in this fund.

Figure 40. Incidence of retirement account drawdowns, 2016

Members with a balance during fiscal year ended 30 June

Drawdown type	Percentage of all members	Percentage of eligible members using	Median percentage of member account balance withdrawn	Median withdrawal	Median member age
Pensioner	1%	98%	6%	\$14,796	69
Retirement eligible	6	18	86	10,000	67
Transition to retirement eligible	5	11	10	13,170	62

Source: Vanguard using Sunsuper data, 2017

Figure 41. Pensioner drawdown trend

Pensioner members with a balance during fiscal year ended 30 June

	2012	2013	2014	2015	2016
Percentage of pensioner members					
Remain in fund with no drawdowns	2%	2%	3%	2%	2%
Rollover	<0.5	<0.5	<0.5	0	<0.5
Full withdrawal	0	0	0	<0.5	0
Withdrawal and remain in fund	1	<0.5	<0.5	<0.5	<0.5
Retirement income stream	97	98	97	98	98
Percentage of pensioner assets					
Rollover	<0.5%	<0.5%	<0.5%	0%	<0.5%
Full withdrawal	0	0	0	<0.5	0
Withdrawal and remain in fund	<0.5	<0.5	<0.5	<0.5	<0.5
Retirement income stream	8	8	7	8	8
Total percentage withdrawn	8%	8%	7%	8%	8%
Percentage retained in fund	92%	92%	93%	92%	92%

Source: Vanguard using Sunsuper data, 2017

Similarly, retirement eligible members withdrew or rolled out 8% of aggregate available account balances in 2016 (Figure 42). The typical retirement eligible member choosing to make a withdrawal took out 18% of their account balance in this fund. In the case of members in this group below age 65 who made lump sum withdrawals, this will have required satisfaction of the condition of release that the member had permanently retired from the workforce, with the exception of some members who may have left their job and joined a new

employer after age 60. After reaching age 65 there is no requirement to permanently retire from the workforce to obtain access to superannuation benefits.

Over the past five years the percentage of retirement eligible members making a withdrawal or rollout has increased from 10% to 18%. However, the available assets retained in the fund has remained fairly stable with more than 90% of member balances retained in the fund.

Figure 42. Retirement eligible withdrawal trend

Retirement eligible members with a balance during fiscal year ended 30 June

	2012	2013	2014	2015	2016
Percentage of retirement eligible members					
Remain in fund with no drawdowns	90%	85%	85%	83%	82%
Rollout and remain in fund	<0.5	<0.5	<0.5	1	1
Rollout	1	2	2	2	2
Full withdrawal	3	7	6	6	6
Withdrawal and remain in fund	6	6	7	8	9
Total percentage of members with a withdrawal or a rollout	10%	15%	15%	17%	18%
Percentage of retirement eligible assets					
Rollout and remain in fund	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%
Rollout	<0.5	<0.5	<0.5	<0.5	<0.5
Full withdrawal	1	3	2	2	2
Withdrawal and remain in fund	5	5	5	5	6
Total percentage withdrawn	6%	8%	7%	7%	8%
Percentage retained in fund	94%	92%	93%	93%	92%

Source: Vanguard using Sunsuper data, 2017

In the year ended 30 June 2016, 11% of members in the TTR eligible group availed themselves of the ability to draw down TTR income stream payments, an approximate doubling of the equivalent proportions in 2012 (Figure 43). However, the total percentage of assets withdrawn did not increase by a similar margin, rising from 2% in 2012 to 3% of TTR eligible account balances in 2016. Consequently, the available assets

retained in the fund has remained fairly stable with 97% to 98% of member balances retained in the fund. The typical TTR eligible member choosing to supplement their wages took out 10% of their account balance in this fund. These withdrawals included regular drawdowns from TTR pensions, and other payments such as non-preserved benefits accrued prior to 1 July 1999.

Figure 43. Transition to retirement withdrawal trend

Transition to retirement members with a balance during fiscal year ended 30 June

	2012	2013	2014	2015	2016
Percentage of TTR eligible members					
Remain in fund with no drawdowns	94%	93%	92%	91%	89%
Rollout and remain in fund	1	1	1	1	1
Withdrawal and remain in fund	2	3	3	3	4
Income stream payment	3	3	4	5	6
Total percentage of members with a withdrawal or a rollout	6%	7%	8%	9%	11%
Percentage of TTR eligible assets					
Rollout and remain in fund	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%
Withdrawal and remain in fund	1	1	1	1	2
Income stream payment	1	1	1	1	1
Total percentage withdrawn	2%	2%	2%	2%	3%
Percentage retained in fund	98%	98%	98%	98%	97%

Source: Vanguard using Sunsuper data, 2017

Access methods and the internet

Within superannuation funds, a variety of channels have evolved to foster member control over retirement savings and to facilitate savings, investment, and withdrawal decisions – including telephone, email, mail and internet access. Member access to superannuation accounts is quite varied, ranging from those who do not contact their provider at all in a given year to those who do so multiple times a month.

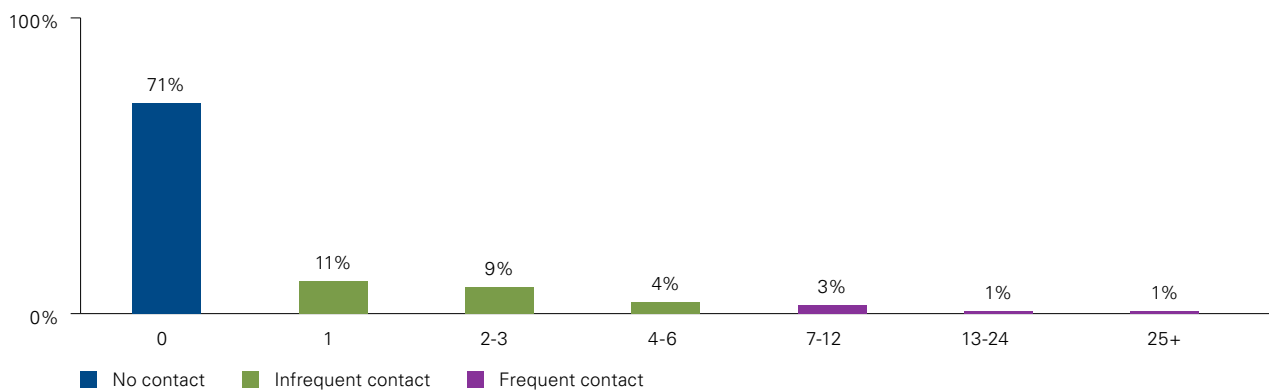
Frequency of account access

In the fiscal year ended June 2016, 71% of plan members never contacted the fund regarding their superannuation account (Figure 44).

Sunsuper explanatory note. In the fiscal year ended June 2016, 71% of plan members did not contact the fund regarding their superannuation account. However, during this period Sunsuper distributed more than 6 million member communications – around five to six outbound communications per member.

Figure 44. Member contact frequency, 2016

All members fiscal year ended 30 June



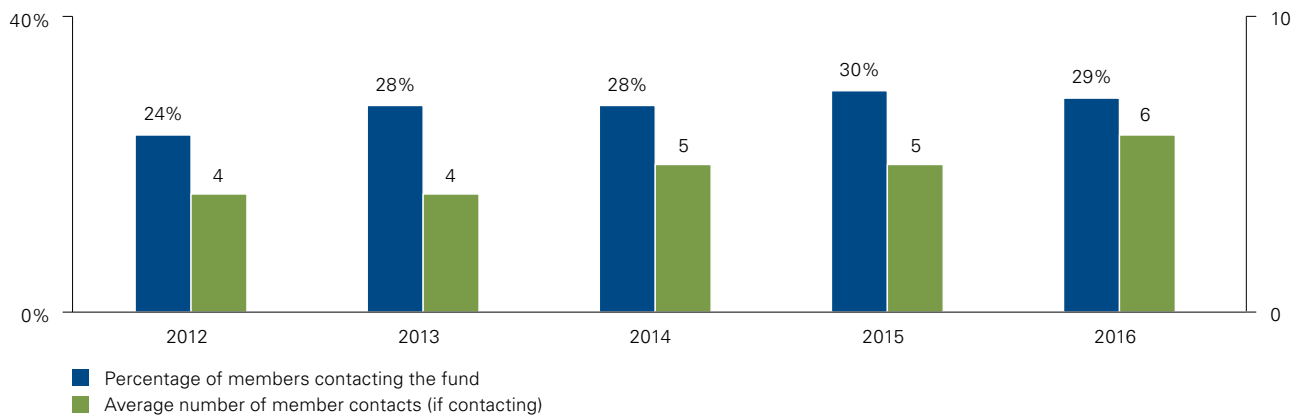
Source: Vanguard using Sunsuper data, 2017

The remaining 29% did contact the fund via one or more channels in the year ended June 2016. One-quarter of total members contacted the fund intermittently, with between one and six interactions over the course of the year through telephone, email, mail, or the internet.

A total of 5% of members contacted the fund frequently. This group, using all channels, contacted the fund at least monthly, if not two or three times a month or more. This level of contact may seem high. However, a brief logon to examine account balances constitutes a unique contact event for those using the internet. On average those members contacting the fund had six contacts in 2016 (Figure 45).

Figure 45. Member contact trend

All members fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Broken down by investor type, lifecycle members were least likely to contact the fund (Figure 46). Half of all diversified members did contact the fund in 2016 as did nearly half of self-directed members.

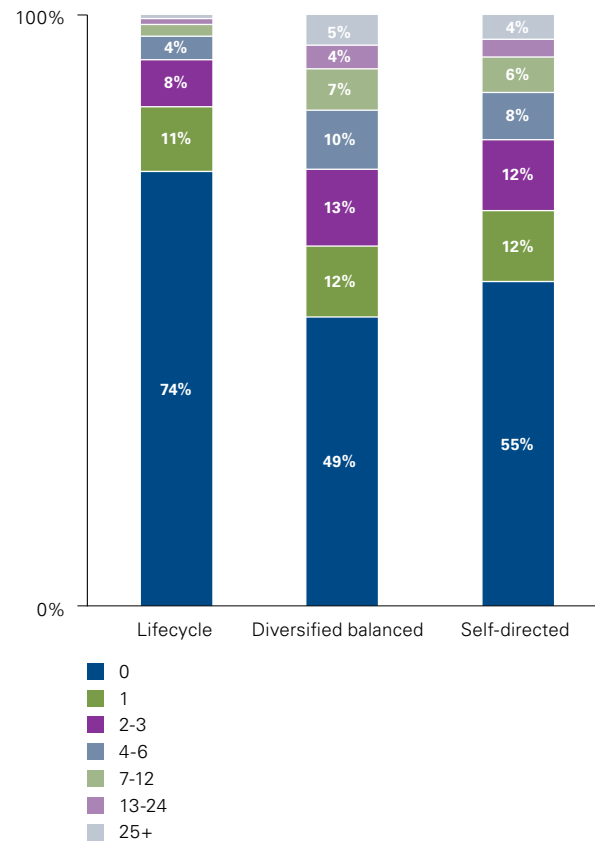
Types of account access

Members have four access channels at their disposal: toll-free phone calls, email, mail, and the internet. When measured in terms of total member use, telephone calls and the internet were the most widely used channels in 2016 – with 17% of members using each channel (Figure 47).

In terms of total contacts, the internet clearly dominates. Web interactions accounted for 76% of all member contacts in 2016. Members using this contact method averaged eight web interactions per year.

Figure 46. Member contact by investor type, 2016

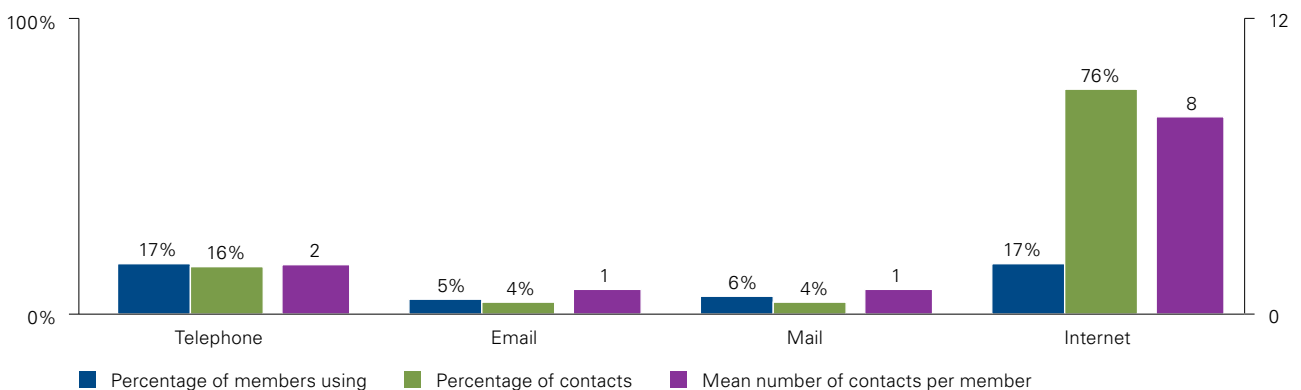
All members fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Figure 47. Account access methods, 2016

All members fiscal year ended 30 June



Source: Vanguard using Sunsuper data, 2017

Methodology

The anonymised member data used in this report was provided by Sunsuper. Sunsuper is a public offer super fund company based in Brisbane, Queensland, Australia. Established in 1987, Sunsuper is a multi-industry superannuation fund for all workers. Currency references are in Australian dollars unless otherwise indicated.

Fund members

This universe consists of about 1.1 million members as of 30 June 2016. A subset of these members, about 640,000, received SG contributions in 2016. Members with SG contributions are also referred to as “active” throughout this report.

Member salary

We derive salary by using the level of the mandatory SG contributions adjusted for the 15% tax.

Estimated total rates of return

Estimated total rates of return were calculated at the member level by using the monthly return of the investment and multiplying by the weight of the investment in the member’s portfolio. These returns were summed to derive the member level monthly estimated total return. The estimated monthly returns were used to calculate the geometric mean for the 1, 3, and 5-year periods. This estimation process assumes the investment allocation was the same for the entire month, and ignores any monthly cash flows.

Withdrawal eligible members

We constructed three categories of members eligible for withdrawals: pensioners, retirement eligible, and transition to retirement eligible. Pensioners are those members who have completed the attestations to declare themselves retired and have initiated income streams from their fund account. Members who have reached their preservation age with no SG contributions, and those members over age 65 with or without SG contributions, are categorised as retirement eligible. Finally, members with SG contributions who have reached their preservation age are categorised as transition to retirement eligible.

How America Saves

Initially published in 2000, *How America Saves* is Vanguard’s annual defined contribution (DC) benchmarking publication in the US. As the leading provider of DC investments for plan participants in the US, Vanguard has long recognised the value of such a publication for employer plan sponsors, consultants and policy makers. *How Australia Saves* is the first sister publication to be produced by Vanguard. This publication builds upon other Vanguard defined contribution research produced by the Vanguard Centre for Investor Research.

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Authors

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the 1990s, the number of people with health insurance rose from 70 to 80 percent. The number of people with private health insurance rose from 40 to 50 percent. The number of people with public health insurance rose from 30 to 30 percent. The number of people with no health insurance fell from 30 to 20 percent.

These changes are significant, but they do not mean that the United States has achieved universal health insurance. There are still 20 percent of the population who do not have health insurance. This is a significant number of people, and it is a number that has not changed in a long time. The United States still has a long way to go to achieve universal health insurance.

There are several reasons why the United States has not achieved universal health insurance. One reason is that the United States has a large and growing population. The United States has a population of over 300 million people, and this population is growing rapidly. This makes it difficult to provide health insurance to everyone.

Another reason is that the United States has a large and growing number of people who are not working. This is a significant number of people, and it is a number that has not changed in a long time. This makes it difficult to provide health insurance to everyone.

There are also several reasons why the United States has not achieved universal health insurance. One reason is that the United States has a large and growing population. The United States has a population of over 300 million people, and this population is growing rapidly. This makes it difficult to provide health insurance to everyone.

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