



**Australian Government**  
**Productivity Commission**

How to Assess the  
Competitiveness and Efficiency  
of the Superannuation System

Productivity Commission  
Research Report

November 2016

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### **The Productivity Commission**

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website ([www.pc.gov.au](http://www.pc.gov.au)).

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# Foreword

Superannuation is an important, albeit often neglected, part of the lives of most adult Australians. Almost all working Australians contribute to superannuation and the superannuation system already accounts for about 20 per cent of household assets. The sheer size and compulsory nature of superannuation makes it paramount that the system is efficient and delivers good outcomes for members.

The Australian Government has stated that it will task the Commission to review the competitiveness and efficiency of the superannuation system after 1 July 2017. This study — in establishing the assessment approach — is the first step in that process. This report provides transparency to system participants, by formulating the system-level objectives, supporting assessment criteria and corresponding indicators (along with the anticipated data needs) for the future review.

There is little precedent (including internationally) for the work presented in this report, and for the ultimate assessment itself. The Commission, and thus the study, benefited from discussions and submissions from many participants from the superannuation industry, academia and government, as well as from the users of the system. We are grateful for the valuable contribution of all those who participated.

Karen Chester  
Deputy Chair

Angela MacRae  
Commissioner

November 2016

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# Terms of reference

## **EFFICIENCY AND COMPETITIVENESS OF THE SUPERANNUATION SYSTEM**

I, Scott Morrison, Treasurer, pursuant to Parts 2, 3 and 4 of the Productivity Commission Act 1998, hereby request that the Productivity Commission conduct: a study to develop criteria to assess the efficiency and competitiveness of the superannuation system; and an inquiry to develop alternative models for a formal competitive process for allocating default fund members to products.

### **Background**

An efficient superannuation system is critical to help Australia meet the economic and fiscal challenges of an ageing population. The superannuation system has accumulated over \$2 trillion in assets. Given the system's size and growth, the system is of central importance to funding the economy and delivering retirement incomes.

MySuper has been a strong step in the right direction but more needs to be done to reduce fees and improve after-fee returns for fund members. The Financial System Inquiry noted that fees have not fallen by as much as would be expected given the substantial increase in the scale of the superannuation system, a major reason for this being the absence of consumer-driven competition, particularly in the default fund market.

These Terms of Reference follow from the Government's response to Financial System Inquiry Recommendation 10 on efficiency in superannuation. The Government committed to tasking the Productivity Commission to develop and release criteria to assess the efficiency and competitiveness of the superannuation system, including the choice and default markets and to develop alternative models for allocating default fund members to products.

This work will inform a review of the efficiency and competitiveness of the superannuation system, which the Productivity Commission will be asked to undertake following the full implementation of the MySuper reforms (after 1 July 2017).

### **Process**

The Productivity Commission is to develop criteria to assess the efficiency and competitiveness of the superannuation system and release the criteria within nine months of receiving these Terms of Reference. The release of these criteria is intended to provide

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transparency and certainty to the superannuation industry about how it will be assessed ahead of the full implementation of MySuper.

The Productivity Commission is to develop alternative models for a formal competitive process for allocating default fund members to products. In developing alternative models, the Productivity Commission should be informed by the criteria it develops to assess the efficiency and competitiveness of the superannuation system. The Productivity Commission should report on alternative models within 18 months of receiving these Terms of Reference.

For both elements, the Productivity Commission should consult widely and undertake appropriate public consultation processes, including inviting public submissions and conducting industry roundtables. The Productivity Commission is to provide both draft and final reports and the reports will be published.

### **Scope of study: development of criteria to assess efficiency of super system**

The Productivity Commission should develop criteria to assess whether and the extent to which the superannuation system is efficient and competitive and delivers the best outcomes for members and retirees, including optimising risk-adjusted after fee returns. In determining the criteria to assess the efficiency and competitiveness of the superannuation system, the Productivity Commission may have regard to:

- operational efficiency, where products and services are delivered in a way that minimises costs and maximises value, which can be enhanced by competition and innovation from new entrants and incumbents;
- allocative efficiency, where the system allocates resources to the most productive use and optimally allocates risks;
- dynamic efficiency, including services to members, where the system induces the optimal balance between consumption and saving over time; and
- the extent to which the system encourages optimal behaviour on the part of consumers, including consideration of the learnings from behavioural finance.

The Productivity Commission should consider the nature of competition in the superannuation industry, the effect of government policy and regulation on the competitiveness and efficiency of the system and relevant international experience.

### **Scope of inquiry: development of alternative models**

The Productivity Commission is to examine alternative models for a formal competitive process for allocating default fund members in the superannuation system to products and to develop a workable model, or models, that could be implemented by Government if a

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new model for allocating default fund members to products is desirable. These model(s) would provide viable alternatives for the Government's consideration, depending on the outcomes of the review of the efficiency and competitiveness of the superannuation system, which the Productivity Commission will be asked to undertake following the full implementation of the MySuper reforms.

The developed model(s) should enhance efficiency in the superannuation system in order to improve retirement incomes, including through optimising long-term net returns to members, and build trust and confidence in funds regulated by the Australian Prudential Regulation Authority (APRA). The models developed should consider default fund selection across the superannuation system as a whole.

The Productivity Commission may consider auction, tender and other types of competitive processes. The Productivity Commission should consider the merits of different approaches, the metrics for conducting them and their frequency. This should include consideration of:

- the strengths and weaknesses of competitive processes used internationally, such as Chile, New Zealand and Sweden, as well as those used in large corporate tenders by the Northern Territory Government and in other jurisdictions;
- the costs and benefits of different mechanisms, including:
  - optimising long-term after fee returns;
  - the administrative, fiscal, individual and complexity costs;
- and in examining different processes, consider:
  - the robustness of the process, including against gaming and collusion;
  - whether the structure achieves efficient outcomes and facilitates ongoing innovation over the long run;
  - the effect on system stability and market concentration;
  - who should run the process; and
  - the extent to which the process promotes the interests of consumers.
- regulatory impediments to optimal competition under the preferred model(s).

Principles for designing a model for a competitive process should include:

- **Best interests:** ensure incentive compatibility with meeting the best interests of members, encourage long-term investing, and encourage a focus on expected after-fee returns based on asset allocation and investment strategy.
- **Competition:** drive pressure on funds to be innovative and efficient, diversify asset allocation and optimise long-term after-fee returns by rewarding best performers. Facilitate new superannuation fund entrants to the market.

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- **Feasibility:** ensure the process is low-cost and easy to administer and minimises regulatory costs on industry, including business and employers.
  - **Credibility and transparency:** make relevant information public; avoid room for gaming the process; and ensure metrics are clear, simple, difficult to dispute and difficult to manipulate.
  - **Regular assessment and accountability:** regularly conduct a repeat process that requires default funds to earn their right to receive new default members, and ensure funds are accountable for the outcomes they deliver members.
  - **Fiscal implications:** the extent to which the process can reduce reliance on the Age Pension and/or give rise to other risks or costs to Government.

The Productivity Commission should draw on expertise in the field of competitive models.

S. MORRISON  
Treasurer

**[Received 17 February 2016]**





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# Abbreviations

ABP	Account-based pension
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AFS	Australian financial services
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
ATO	Australian Taxation Office
CAPM	Capital asset pricing model
CFR	Council of Financial Regulators
CIPR	Comprehensive income product for retirement
CPI	Consumer price index
DAA	Dynamic asset allocation
DB	Defined benefit
DC	Defined contribution
DHS	Department of Human Services (Australian Government)
EPSSS	Exempt Public Sector Superannuation Scheme
FSI	Financial System Inquiry
FUM	Funds under management
GDP	Gross domestic product
GFC	Global financial crisis
HHI	Herfindahl-Hirschman index
IMF	International Monetary Fund
MC	Marginal cost
MMGPI	Melbourne Mercer Global Pension Index
NBNI	Non bank, non insurer (entity)
OECD	Organisation for Economic Co-operation and Development

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PAIRS	Probability and Impact Rating System
PC	Productivity Commission
PDS	Product disclosure statement
PSI	Pension Sustainability Index (Allianz)
RAVA	Risk-adjusted value added
RBA	Reserve Bank of Australia
RG	Regulatory guide
ROA	Return on assets
RSE	Registrable superannuation entity
SAA	Strategic asset allocation
SCT	Superannuation Complaints Tribunal
SG	Superannuation Guarantee
SIS Act	Superannuation Industry (Supervision) Act 1993 (Cwlth)
SMSF	Self-managed superannuation fund
SOARS	Supervisory Oversight and Response System
SPS	Superannuation Prudential Standard
SRM	Standard risk measure
SRS	Superannuation Reporting Standard
TPD	Total and permanent disability

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# Glossary

Account-based pension	A regular retirement income stream, purchased with money an individual has accumulated in their superannuation after they have reached the preservation age.
Alpha	The ‘excess’ return of a fund relative to a benchmark index, usually attributed to the performance of the individual fund manager.
Annuity	A retirement income product that provides a guaranteed stream of fixed payments made at regular intervals.
APRA-regulated fund	Any large or small superannuation fund regulated by the Australian Prudential Regulation Authority (APRA), also known as a Registrable Superannuation Entity.
APRA-regulated institutional fund	Any large (more than four members) superannuation fund regulated by APRA.
Asset allocation	The distribution of funds in an investment portfolio (for a fund or individual member) between different asset classes.
Asset class	A category of assets that a superannuation fund can invest in, such as cash, fixed interest, shares, property or unlisted infrastructure.
Beta	A measure of the volatility of an asset price or portfolio value relative to the market as a whole.
Bulk transfer	The process whereby multiple member accounts are transferred to a different superannuation fund without the member’s consent. This process follows ‘successor fund transfer’ rules set out in legislation.
Concessional contributions	Contributions drawn from an individual’s pre-tax income that are made into a superannuation fund.
Condition of release	A prescribed event (such as retirement) a person must satisfy to be able to access superannuation payments.
Corporate fund	A superannuation fund sponsored by a single employer or group of usually related employers for the benefit of company employees.

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Corporate tender	A tender for the right to become the default superannuation fund of a particular group of employees.
Default fund	A superannuation fund to which an employer's Superannuation Guarantee contributions are paid if the employee does not choose an alternative fund.
Deferred annuity	An annuity where payments commence after a nominated period.
Defined benefit fund	A superannuation fund where contributions are pooled rather than allocated to particular members, and where retirement benefits are determined by a formula based on factors such as salary and duration of employment.
Defined contribution fund	A superannuation fund where the value of the final retirement benefit payable is based on contributions made plus investment returns less any fees and taxes.
Exempt public sector superannuation scheme	A superannuation fund providing benefits for government employees, or schemes established by Commonwealth, State or Territory law, that are not directly subject to the <i>Superannuation Industry (Supervision) Act 1993</i> (Cwlth) and APRA regulation.
Industry fund	Funds originally formed to provide access to superannuation for employees working within a particular industry.
Investment risk	One of a number of risks to the value of an investment, including market, interest rate, inflation, credit, liquidity and asset-specific risk.
Legacy product	A superannuation product (held by some members) that is no longer available for issue to new members.
Lifetime annuity	An annuity payable over a recipient's remaining lifetime.
Longevity risk	The risk of a person outliving their savings.
Money-weighted return	A measure of the rate of return for an asset or portfolio of assets calculated using the rate of return that equates the present values of all cash flows and terminal values to the value of the initial investment (internal rate of return).
MySuper product	A default defined contribution superannuation product. Superannuation funds must meet requirements set by APRA to be permitted to offer a MySuper product. All default products must be MySuper products from 1 July 2017.

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Non-concessional contributions	Contributions drawn from an individual’s post-tax income that are made into a superannuation fund.
Outsourcing	The process whereby a superannuation fund trustee contracts another entity to provide services to the fund, such as administration or investment management.
Peer risk	The risk of an individual superannuation fund performing below the market average.
Pooled superannuation trust	A trust in which the assets of a number of superannuation funds, approved deposit funds or other pooled superannuation trusts are invested and managed by a professional manager.
Preservation age	The minimum age prescribed by law at which a member can withdraw their superannuation benefits from the superannuation system.
Product dashboard	Product and performance information (specified by APRA) regarding MySuper products that must be made available on superannuation fund websites.
Registrable superannuation entity	An APRA-regulated superannuation fund, an approved deposit fund or a pooled superannuation trust.
Retail fund	A superannuation fund that offers superannuation products on a commercial ‘for profit’ basis.
Retail level	The level of the superannuation market that provides services directly to members.
Self-managed superannuation fund	A superannuation fund with fewer than five members, all of whom are trustees or are directors of a corporate trustee.
Sequencing risk	The risk of experiencing poor investment returns just prior to drawing on funds in retirement.
Small APRA fund	Any APRA-regulated fund with fewer than five members.
Small fund	Any superannuation fund with fewer than five members.
Superannuation Guarantee	Compulsory superannuation contributions paid by employers on behalf of employees, and equal to a percentage (currently 9.5 per cent per annum) of each employee’s ordinary time earnings.



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Superannuation system	The collection of participants and activities involved in superannuation, including members, employers, funds, upstream suppliers, ancillary service providers (including insurers) and regulators.
SuperStream	An Australian Government package of measures designed to enhance administrative processes for superannuation, especially the way that Superannuation Guarantee payments are transferred from employers to funds.
Time-weighted return	A measure of the compound rate of growth in a portfolio. It is not directly influenced by contributions or withdrawals.
Trustee	A person or company holding property on behalf of another party with a fiduciary duty to the beneficiaries.
Unlisted asset	An asset for which there is no public exchange for listing, quotation or trading.
Wholesale level	The level of the superannuation market that involves the interaction between trustees/funds and other service providers.



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# Executive summary

The Australian superannuation system has grown rapidly since the introduction of the Superannuation Guarantee in 1992, both in terms of funds under management and coverage. Almost all employed Australians contribute to superannuation. Collectively, Australians have over \$2 trillion of assets in superannuation funds, comprising about 20 per cent of total household assets. In relation to the financial system as a whole, superannuation will continue to increase in relative importance as the system matures by the 2040s.

The sheer size of the superannuation system, combined with its compulsory and broad nature, makes the efficiency of the system paramount. Even small changes in efficiency can have significant impacts on the wealth and wellbeing of Australians. Competition is often a key way of promoting efficiency.

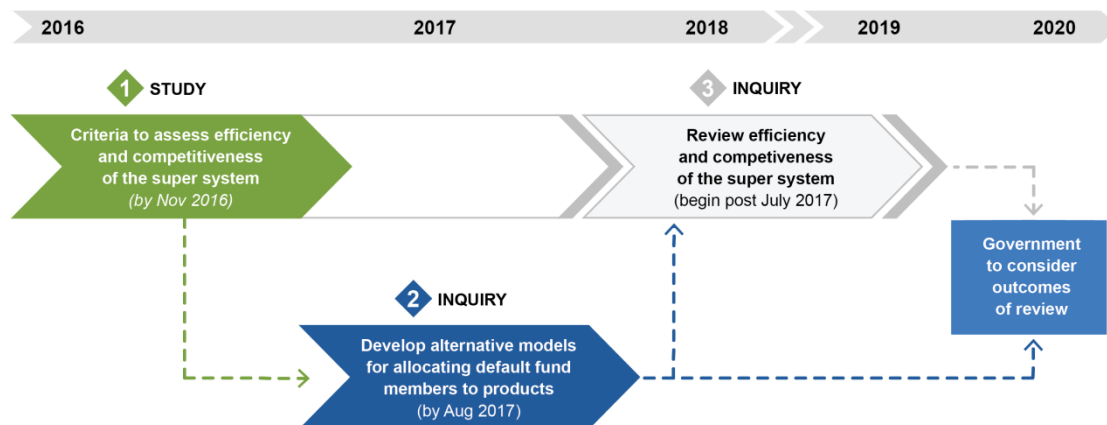
## About this report

In this report, the Commission has developed criteria to assess whether, and the extent to which, the superannuation system is efficient and competitive in delivering the best outcomes for members. The publication of these criteria is intended to provide transparency and certainty to the superannuation industry about how it will be assessed in the future review of the efficiency and competitiveness of the superannuation system. The Australian Government has stated that the Productivity Commission will be asked to undertake this system-wide review following the full implementation of the MySuper reforms (after 1 July 2017) (figure 1).

The Commission has developed assessment criteria and corresponding indicators for the superannuation *system*. The system is bigger than just the superannuation funds (the industry). It encompasses many horizontal and vertical relationships on the supply side, decisions of members and their intermediaries on the demand side, and actions of regulators on both the supply and demand sides.

There is little precedent (including internationally) for what this study has done, or for the ultimate assessment itself. The broader efficiency and system-wide perspectives are both unique and make this a challenging task. Importantly, they mean that the Commission will not be assessing the performance of individual products or funds. The Commission's analysis will, at times, examine the performance of various segments of the superannuation system — such as the default, self-managed superannuation fund (SMSF) and retirement segments — but only where this will meaningfully inform the system-wide assessment.

Figure 1 Three-stage superannuation review



## The Commission’s approach

The Commission’s approach in this stage 1 study involves three steps (figure 2):

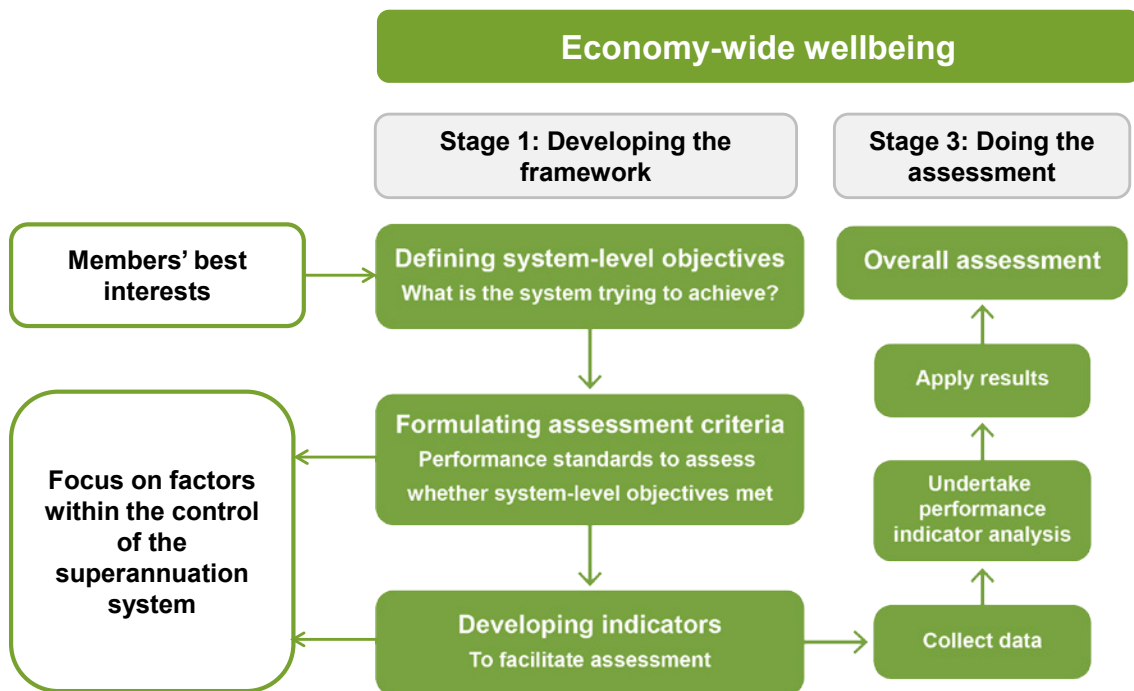
1. defining *system-level objectives* — what is the superannuation system trying to achieve?
2. formulating *assessment criteria* based on these objectives — that is, the performance standards by which to assess if the system-level objectives have been achieved
3. identifying corresponding *indicators* to facilitate the assessment.

### What are the objectives of the superannuation system?

What is efficient ultimately depends on what you are trying to achieve: the objectives of the superannuation system. The Australian Government has announced that the objective of superannuation is ‘to provide income in retirement to substitute or supplement the Age Pension’.

The Government’s policy objective is framed within the principles of fairness, adequacy and sustainability, and casts superannuation as only one part of the broader retirement income system. Retirement incomes are a function of many factors outside the influence of the superannuation system (such as government policy). The Commission has therefore developed system-level objectives that are *within the scope of influence* of the superannuation system and *specific to the principles of competitiveness and efficiency*, but link back to the overarching objective set by the Government (table 1). The Commission’s consultation with study participants has informed the refinement of these system-level objectives, along with the corresponding assessment criteria and indicators.

Figure 2 The Commission’s approach to assessment<sup>a</sup>



<sup>a</sup> The stage 2 work (figure 1) will also be informed by the criteria developed in stage 1, and stage 2 work itself will similarly inform the stage 3 review.

Broadly speaking, the system-level objectives target the best interests of members, in both the accumulation and retirement phases. Competition in the superannuation system is therefore not an end in itself, but an intermediate objective insofar as it drives more efficient outcomes for members.

The best interests of members also affords a direct focus on long-term net returns — which are a key driver of superannuation balances and therefore retirement incomes for members. The objectives also reflect the obligations and constraints on superannuation trustees, such as providing useful insurance to members while protecting their retirement balances.

### Developing the assessment criteria and indicators

Formulating assessment criteria involves identifying attributes that a competitive and efficient superannuation system would be expected to possess. As such, the assessment criteria are closely linked to the system-level objectives.

The Commission has taken current policy settings as given when developing the assessment criteria. This is done either by omission (the Commission is not proposing to assess the system on what is outside its influence, such as the overall adequacy of

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retirement incomes) or by recognising the influence of external factors when proposing criteria.

The Commission's assessment approach relies heavily on benchmarking. The term 'benchmarking' is used broadly. Performance will be benchmarked:

- against others (for example, investment costs by asset class can be benchmarked to other countries)
- against stipulated objectives (for example, net investment returns can be benchmarked to the net returns from a reference portfolio)
- over time (for example, trends in the number of lost accounts can be examined).

In some parts of the assessment, the Commission will complement its benchmarking with a 'negative test' — an examination of the barriers that may be impeding the efficiency and competitiveness of the superannuation system (such as barriers to entry).

The Commission will rely on a comprehensive suite of indicators to facilitate collective assessment, along with evidence-based interpretation and judgment. This will include input and process indicators, output indicators, behavioural indicators and outcome indicators. Some indicators will be quantitative while others will be qualitative.

Some of the proposed indicators are ambiguous and cannot be interpreted in isolation. Robust evidence and judgment will be required to interpret the meaning of each indicator. In some cases, this meaning may only surface in the presence of other indicators. The indicators therefore need to be considered and interpreted collectively to inform the assessment. It also means that a large indicator set is unavoidable for this kind of exercise, and the Commission has erred on the side of being comprehensive.

## **Summarising the assessment framework**

In response to feedback on the draft report, the Commission has consolidated and refined its assessment criteria and rationalised some of its indicators — namely those that have the least interpretive value or those most difficult to measure. In other areas, especially insurance and dynamic efficiency, the Commission has bolstered the number of indicators.

In summary, the Commission's assessment framework has 5 system-level objectives and 22 assessment criteria, supported by 89 unique indicators. There is unsurprisingly a significant overlap between the competition and efficiency indicators, as the two often go hand in hand. The criteria are summarised in table 1 below, while the full set of criteria and indicators can be found at the end of chapter 7.

Importantly, and as detailed further below, the lion's share of the indicators primarily rely on data that are already collected or can be constructed from existing information sources.

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## Criteria to assess competition

The Commission is proposing two complementary approaches to assess the nature and extent of competition in the superannuation system:

- a ‘structural’ assessment of the market, which evaluates whether the conditions within the market are conducive to competition
- an ‘outcomes’ assessment, which focuses on actual conduct and outcomes, and tests whether these are consistent with what is expected in a competitive market.

The second element in particular is necessary to keep the focus of competition on improving outcomes for members.

### Structural assessment of the market

The Commission will assess whether the current market structure is conducive to rivalry between incumbent providers of services. Measures of market concentration are often used to assess the degree of rivalry. However, such measures can be ambiguous (for example, high concentration can be a positive consequence of economies of scale realised due to competition, or a sign of potential market power). Therefore, indicators of market concentration need to be accompanied by robust empirical evidence on how outcomes have changed following changes in market concentration.

The Commission plans to assess the contestability of the market by looking at barriers to entry and exit. There are two main barriers to entry that can give rise to incumbency advantages in superannuation: default fund status and vertical/horizontal integration.

- Defaults are an important policy feature of the superannuation system, and will be taken as given. The relevant assessment therefore is whether the *process* of selecting defaults is contestable, competitive and undertaken by those who are best placed to make the decision in terms of expertise and incentives.
- Vertically and horizontally integrated entities often benefit from access to well-developed distribution channels and economies of scope. While being a barrier to entry, this may not necessarily be inefficient. Concerns would arise, however, if this integration led to anticompetitive behaviour.

The effectiveness of the regulatory regime in promoting competitive outcomes, and in ensuring that fund governance is aligned with this objective, will provide useful context for the assessment. Two issues in particular — the MySuper scale test and bulk transfer rules — are commonly cited as having an influence on the ease and extent of fund exit and consolidation.

Traditional assessments of competition tend to end here (the supply side). However, the Commission’s assessment will extend to the demand side (the member side, including their intermediaries). The Commission considers that some level of member engagement is

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required to signal preferences, and to ensure that the benefits of wholesale-level competition flow through to the member.

Several study participants contested the Commission's focus on member-driven competition. The Commission acknowledges that measures of member engagement need to be interpreted carefully, and in the context of actual outcomes for members. Informed engagement and high-quality decision making are the ultimate goals. The Commission has proposed criteria to assess whether there is informed member engagement and whether members (and their intermediaries) are exerting material competitive pressure. Informed by draft report consultation, the analysis will delve into the default and choice member segments (including SMSFs and retirement), in recognition of their different engagement dynamics.

## **Assessment of conduct and outcomes**

In a market where competition is facilitating efficiency, funds would compete on factors that are relevant to members, which are most often fees and returns. There would also be innovation and quality improvement over time, including in retirement products. In contrast, competition on irrelevant non-price (non-fee) aspects, product proliferation, high advertising expenditure and high search costs could be symptoms of unhealthy and wasteful competition.

The Commission plans to assess whether there is a high degree of competition on fees, and whether there is a decline in costs and subsequently fees charged to members over time. Several study participants cautioned the Commission against a strong focus on fees. The Commission acknowledges that fees need to be considered in tandem with other features that members value (such as returns and service quality). Nonetheless, examining *trends* in costs, fees and margins is an obvious and objective indicator of competitiveness. And in the long run, as other markets have consistently demonstrated, it is possible to achieve both lower prices (or in the case of superannuation, lower fees) and higher quality.

Economies of scale have been identified as a potential source of efficiency in the superannuation system, and competition is a key way to realise economies of scale. (Scale can also be achieved from exogenous growth in the system due to regulatory fiat.) The Commission will assess (in stage 3) the *magnitude of unrealised* scale economies and the *extent of pass-through* of the benefits of economies of scale to members.

## **Criteria to assess efficiency**

The Commission has developed criteria that span all three aspects of efficiency: operational, allocative and dynamic. They also cover the pre-retirement (accumulation) and retirement phases of superannuation. Standalone criteria have been developed for insurance within superannuation.



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## Net returns

Maximising net returns (after fees and taxes) is the most important way in which the superannuation system contributes to adequate and sustainable retirement incomes. The Commission will focus on assessing system-wide long-term net returns, and benchmark them to reference portfolios and CPI + X benchmarks. The assessment will also be applied to particular segments (for example, institutional superannuation funds, SMSFs, accumulation phase and retirement phase) where these can provide insights about system-wide performance. The Commission also intends to look at the distribution of net investment returns of default products over time, and the prevalence and extent of persistent underperformance. The Commission is focusing on default products because they provide a form of system safety net, because trustees make the investment decision and because they are relatively comparable products.

The emphasis on *system-wide long-term* net returns provides one straightforward approach the Commission will take to account for risk. Long-term net investment returns will collectively reflect the impact of diversification and average market volatility. In other words, this metric effectively captures the impact of most risk on returns such that the Commission considers it to be robust for a system-wide assessment. Other complementary approaches to considering risk include benchmarking net returns at the asset-class level and benchmarking the *variance* of system-wide net returns, including for balances in the retirement phase.

A related criterion is whether the system minimises costs and fees, since higher fees will reduce net returns, all else equal. The Commission also intends to assess whether there are any institutional or market impediments to investment in upstream capital markets (for example, is fund size or type an impediment to investing in certain asset classes?) that may be leading to higher costs and/or lower returns.

Taxes are the biggest item to detract from net returns and ultimately member balances. While taxation policy is outside the control of the superannuation system — and hence outside the scope of this study — the Commission will assess how effectively the system manages tax. This is relevant to all phases of a member's life cycle, including as they transition to retirement.

Finally, the Commission will examine trends in the more egregious leakages in the superannuation system, including unpaid Superannuation Guarantee contributions and lost accounts. These can have a material impact on member balances and particularly affect those with low incomes, irregular work patterns or low financial literacy.

## Member needs

Assessing whether the superannuation system achieves allocatively efficient outcomes is impossible, given the wide variation in individual members' circumstances and needs.

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However, the Commission will assess whether *inputs* and *behaviours* in the system are consistent with allocative efficiency.

Meeting member needs means providing them with the right information and products to help them make optimal decisions about risk and retirement incomes. This is an area where it will be important for the assessment to distinguish between the accumulation and retirement phases. For example, the former would benefit from product consolidation to aid comparability and decision making, whereas the latter would benefit from new products that help members (with disparate and changing needs in retirement) to manage sequencing and longevity risks.

Finally, in a system characterised by compulsion and high levels of disengagement, meeting member needs means minimising principal–agent problems. The Commission will assess this by examining data on governance practices (which are largely qualitative). The Commission will also examine the extent to which funds target short-term performance relative to their peers (such as by adopting similar investment strategies to minimise their ‘peer risk’), because this may run counter to trustees investing in their members’ best (long-term) interests.

## **Efficiency over time**

Dynamic efficiency — that is, improving efficiency over time — is an important foundation for improving long-term member outcomes. The Commission will consider changes in operational and allocative efficiency (using indicators geared towards these) over time to assess dynamic efficiency. The Commission will also consider how participants in the system overcome impediments to improving long-term outcomes — for example, how funds use the lessons from behavioural finance to improve information provision or product design, and the impact of regulatory impediments on product and service innovation. The assessment will rely significantly on qualitative and case study information.

In the long term, the stability of the superannuation system is also important. In that regard, the Commission intends to assess the extent of systemic risks in the superannuation system.

## **Insurance**

The cost of insurance held through superannuation detracts from members’ retirement balances and ultimately retirement incomes. Policy dictates that trustees provide a default level of life and total and permanent disability insurance in MySuper products on an opt-out basis, and that the cost of this insurance does not unduly erode member balances. These competing objectives mean that it is unrealistic for default insurance in superannuation to meet all member needs. The Commission has therefore set a lower

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hurdle in its assessment criteria: are funds offering value-for-money insurance products, and is the cost of insurance being minimised for the level and quality of cover?

## Data needs

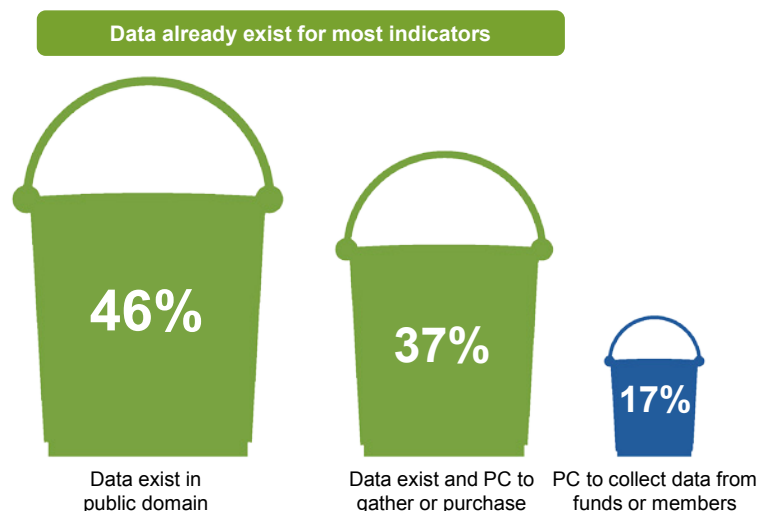
Assessing the efficiency and competitiveness of the superannuation system will be data intensive. This arises from the inherent complexity of the task — the need to consider and weigh up many factors — but also from data constraints. Issues of data availability, quality and comparability mean that the Commission may have to rely on multiple indicators and data sources, each of which only paints a partial picture, to form a considered view.

The Commission’s guiding principle for the ultimate assessment in stage 3 will be to draw on existing data as much as possible. This includes regulator data as well as data that can be obtained from the private sector. The Commission also intends to construct some data itself from published information (such as annual reports or product disclosure statements).

The Commission is mindful of not creating unnecessary burdens on system participants. Only a minor share of indicators will rely on new data collections, and these will be via surveys (of funds and members) and case studies. Participation will be voluntary. The Commission will also invite input from inquiry participants and draw on submissions and other relevant evidence in the stage 3 inquiry. Figure 3 summarises the status of the primary data sources the Commission intends to use for the proposed indicators.

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Figure 3 **Stage 3 data needs: primary sources for our indicators<sup>a</sup>**



<sup>a</sup> Some indicators draw on multiple sources of data. In this figure, each indicator has been classified into a single category representing the primary expected source of data.

**Table 1 Superannuation system-level objectives and criteria to assess efficiency and competitiveness**

<i>Assessment criteria</i>	<i>Number of indicators<sup>a</sup></i>
<b>The superannuation system contributes to retirement incomes by maximising long-term net returns on member contributions and balances over the member's lifetime, taking risk into account</b>	
• Are long-term net investment returns being maximised over members' lifetimes, taking account of risk?	4
• Are costs incurred by funds and fees charged to members being minimised, taking account of service features provided to members?	10
• Do all types of funds have opportunities to invest efficiently in upstream capital markets?	4
• Is the system effectively managing tax for members, including in transition?	3
• Are other leakages from members' accounts being minimised?	5
<b>The superannuation system meets member needs, in relation to information, products and risk management, over the member's lifetime</b>	
• Is the system providing high-quality information and intrafund financial advice to help members make decisions?	7
• Is the system providing products to help members manage risks over their life cycles and optimally consume their retirement incomes?	7
• Are principal-agent problems being minimised?	7
<b>The efficiency of the superannuation system improves over time</b>	
• Does the system overcome impediments to improving long-term outcomes for members?	6
• Are there material systemic risks in the superannuation system?	3
<b>The superannuation system provides value for money insurance cover without unduly eroding member balances</b>	
• Do funds offer value for money insurance products to members?	10
• Are the costs of insurance being minimised for the level and quality of cover?	7
<b>Competition in the superannuation system should drive efficient outcomes for members</b>	
<i>Market structure</i>	
• Is there informed member engagement?	8
• Are active members and member intermediaries able to exert material competitive pressure?	7
• Is the market structure conducive to rivalry?	2
• Is the market contestable at the retail level?	3
• Are there material anticompetitive effects of vertical and horizontal integration?	6
<i>Conduct and outcomes</i>	
• Do funds compete on costs/price?	6
• Are economies of scale realised and the benefits passed through to members?	5
• Do funds compete on member-relevant non-price dimensions?	5
• Is there innovation and quality improvement in the system?	3
• Are outcomes improving at the system level?	2

<sup>a</sup> Many indicators are used multiple times. In total there are 89 unique indicators.

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# 1 Introduction

## Key points

- Superannuation in Australia has a long history dating back to the mid-19<sup>th</sup> century. However, for much of its existence, superannuation was characterised by defined benefit schemes (with bundled insurance) and only covered a small number of professions. The much broader defined contribution system operating today has only taken shape over recent decades.
- Since the advent of compulsory superannuation via the introduction of the Superannuation Guarantee in 1992, the system has undergone rapid growth. This is expected to continue to at least 2030 when the first wave of workers to make contributions over their entire working lives retire.
- Currently, there is over \$2 trillion in funds under management held by over 250 institutional funds and over 577 000 self-managed superannuation funds.
- The average account balance per member was just under \$110 000 in 2013–14. But averages can be misleading, given the wide and uneven distribution of account balances; the median balance per member was about \$37 000.
- This study is stage 1 of a 3 stage process, and stems from the Australian Government's response to the 2014 Financial System Inquiry (FSI). Stage 1 involves developing criteria to assess the efficiency and competitiveness of the system.
- Many recent reviews, including the FSI, have made observations relating to perceived shortcomings in the superannuation system. The criteria developed in this study will provide a useful and enduring framework for any future assessment (including by regulators) and reforms.

## 1.1 Background to the study

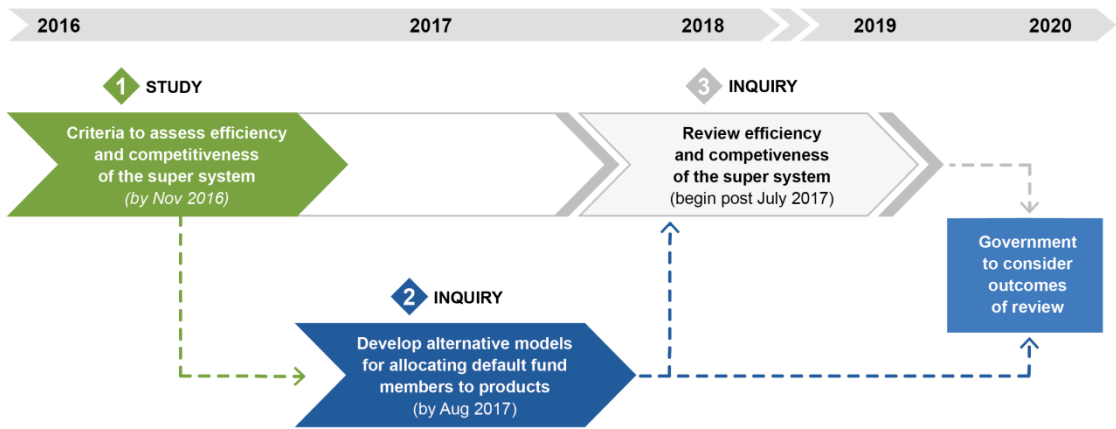
This study stems from the recommendations of the 2014 Financial System Inquiry (FSI), which considered some of the issues in the superannuation system as part of a broader review of the performance of the Australian financial system. The FSI recommended a Productivity Commission inquiry into the efficiency and competitiveness of the superannuation system should occur by 2020.

In response, the Government tasked the Commission to develop and release criteria to assess the efficiency and competitiveness of the superannuation system (stage 1). These criteria will then be used to inform a review of the system following the full implementation of the MySuper reforms by mid-2017 (stage 3). While aspects of the Australian superannuation system have been reviewed in the past, stage 3 will be the first

comprehensive review assessing the efficiency and competitiveness of the entire system. Nor has such a review been undertaken in any other jurisdiction.

The Commission has also been tasked with examining alternative models for a formal competitive process for allocating default fund members to products (stage 2). An issues paper for this stage 2 inquiry was released on 20 September 2016. Indicative timelines for the three stage process are outlined in figure 1.1.

**Figure 1.1 Indicative timelines for Commission superannuation projects**



**What has the Commission been asked to do?**

In this study, the Commission has been asked to develop criteria to assess whether, and the extent to which, the superannuation system is efficient and competitive and delivers the best outcomes for members. This includes assessing whether the system optimises risk-adjusted after-fee returns for members. In determining the criteria to assess the efficiency and competitiveness of the superannuation system, the Commission may have regard to:

- operational, allocative and dynamic efficiency
- the extent to which the system encourages optimal behaviour on the part of the consumer
- the nature of competition in the superannuation industry
- the effect of government policy and regulation on the competitiveness and efficiency of the system.

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## Scope of the study

As required by the terms of reference, the study focuses on assessment criteria for the superannuation ‘system’. The superannuation system is a broader concept than conventional definitions of the superannuation industry. It encompasses many horizontal and vertical relationships on the supply side, the decisions of members on the demand side, and actions of regulators on both the supply and demand sides (table 1.1). Chapter 2 provides a more detailed exposition of the superannuation system.

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**Table 1.1 The scope of the superannuation system**

✓	Members
	Employers
	Institutional funds
	SMSFs
	Intrafund financial advice
	Upstream suppliers (administration, investment, insurance etc.)
	Regulators
✗	Legislation and other policy settings
	Other financial advice

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The study has developed the framework to assess the competitiveness and efficiency of the superannuation system in stage 3 of the review process. The assessment is ultimately dependent on the objectives of the system. The Government has released draft legislation on the policy objective of superannuation:

... to provide income in retirement to substitute or supplement the Age Pension.  
(Commonwealth of Australia 2016)

This objective is framed within the principles of fairness, adequacy and sustainability, and acknowledges that superannuation is only one part of the retirement income system. The Commission has formulated more specific system-level objectives (chapter 4) and has used those to develop its assessment criteria and indicators. It has treated the broad policy settings that govern the superannuation system and other limbs of retirement income policy as given. In doing so, the Commission is seeking to assess the system against what it can reasonably be expected to achieve – by focussing on what is in its field of influence.

While the Commission has taken current policy settings as given when developing the assessment criteria, this does not preclude the Commission from assessing the effect of policy on competitiveness and efficiency of the system in the stage 3 review.

This study does not consider the defined benefit component of the superannuation system at great length. Defined benefit schemes are a small part of the system and are generally closed to new members. The efficiency considerations are different for these schemes. This is discussed further in chapter 4.

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## **The Commission's approach**

In keeping with the *Productivity Commission Act 1998* (Cwlth), the Commission has conducted this study using transparent and public processes, with an overarching concern for the wellbeing of the Australian community as a whole. The Commission published an issues paper in March 2016 and a draft report in August 2016. Throughout the process, the Commission conducted consultation through meetings and roundtables with a range of interested parties including industry bodies and specialists, academics, and government officials. The full list of the study participants that the Commission consulted with is detailed in appendix A. The Commission also received 46 pre-draft and 70 post-draft submissions. In developing the criteria, the Commission has given consideration to all submissions and considered the most relevant available evidence.

## **1.2 Evolution of the superannuation system**

### **A young system that is continuing to develop**

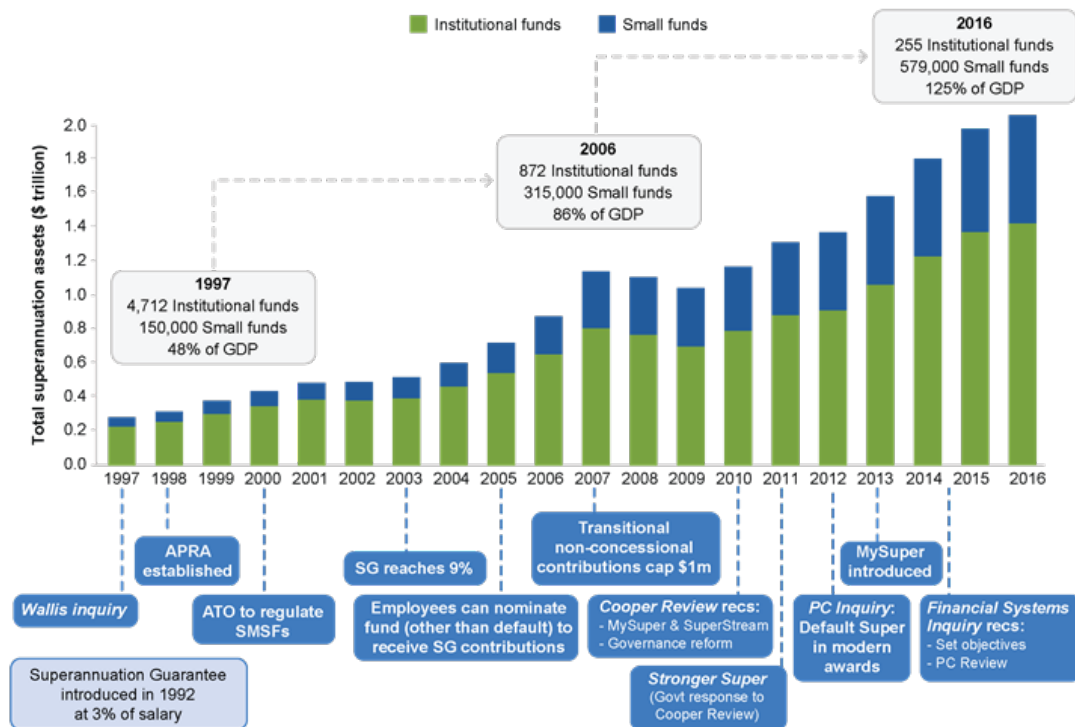
The history of superannuation spans more than 150 years. It began as a collection of defined benefit funds for professional workers until the introduction of 'award superannuation' in 1986. The mandated 3 per cent employer contribution led to the extension of superannuation coverage to most employees covered by awards. However, the modern system began with the introduction of the Superannuation Guarantee (SG) in 1992, which covered almost all employees (Liu 2013a; Swoboda 2014; Treasury 2001).

The SG was originally also set at 3 per cent and has increased gradually from its inception. It is currently set at 9.5 per cent, and is scheduled to rise to 12 per cent by 2026. At last count, about 70 per cent of individuals over the age of 15 and 90 per cent of employed persons are covered by the system (ABS 2014, 2016b).

The SG led to rapid growth of the superannuation system in both size (pool of funds) and coverage, as well as importance in the economic and policy landscape. Despite the system not yet reaching maturity, the pool of funds already represents the largest source of long-term savings in Australia, and the second largest form of wealth for many Australians after the family home (Treasury 2010). As at June 2016, there were over \$2 trillion worth of assets under management, up from \$321 billion in 1997 (figure 1.2), and amounting to over 100 per cent of Australia's GDP.



Figure 1.2 Key developments in the modern superannuation system<sup>a</sup>



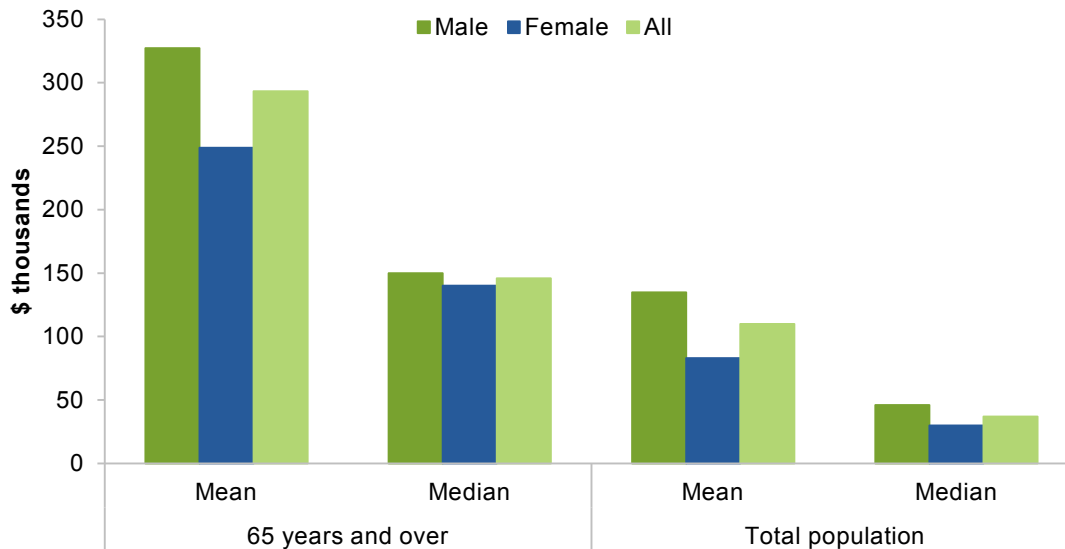
<sup>a</sup> 'Institutional funds' comprise corporate, industry, public sector and retail funds. 'Small funds' comprise small APRA funds, single-member approved deposit funds and SMSFs.

Data sources: ABS (*Australian National Accounts: National Income, Expenditure and Product, Australia, June 2016*, Cat. no. 5206.0); APRA (2007, 2014a, 2016e, 2016h).

From 1997 to 2015, the average account balance has increased in real terms from \$30 000 to \$67 500, in 2015 dollars. The strong growth from 2009 is attributable mainly to sustained contributions and account consolidation. The number of accounts peaked at almost 33 million in 2010, and is now down to just under 30 million (APRA 2014, 2016a).

However, data collected for the *ABS Survey of Household Income and Wealth* (2016b) suggest a higher average balance per member of \$109 900 after duplicate accounts are factored in (figure 1.3). The survey also found a median balance of \$37 000 — demonstrative of the high number of positive outliers — as well as substantial differences between males and females.

**Figure 1.3 Mean and median superannuation balances<sup>a</sup>**  
2013-14



<sup>a</sup> Only includes accounts with a balance above zero.

Data source: ABS (Survey of Household Income and Wealth, Australia, March 2016, Cat. no. 6523.0).

The large reduction in the number of institutional funds (figure 1.2) reflects the consolidation that has occurred, as well as the demise of non-public offer, defined benefit corporate funds that characterised the earlier (pre-SG) era of superannuation (chapter 2). In an accompanying trend, the growth in the number of small funds<sup>1</sup> has been driven by the increasing popularity of SMSFs. In 2001, there were about 210 000 SMSFs, but this had more than doubled to over 577 000 by June 2016.

### There have been several reviews and ongoing reform, but concerns remain

The growing importance and maturation of superannuation has meant the system has been subject to a high level of scrutiny, and concerns that the system has not performed to its full potential have lingered. This has led to a large number of reviews and policy changes over recent decades. The earlier reforms focused on enhancing demand-driven competition and reforming tax arrangements (box 1.1).

<sup>1</sup> SMSFs and small APRA-regulated funds combined. The latter are funds with less than five members that are regulated by APRA because the trustee is not a member. See chapter 2 for more details.

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## Box 1.1 Earlier superannuation reviews and reforms

### Wallis Financial System Inquiry

In 1997, the Wallis Financial System Inquiry found that there was scope to improve efficiency in the superannuation industry, arguing that:

‘Choice should be maximised in superannuation and other steps taken to increase competitive pressures, including by simplifying regulatory arrangements’. (Wallis 1997, p. 27)

Despite these recommendations being gradually implemented by government, concerns regarding competition remained. A common observation was that the potential for demand-driven competition in superannuation is limited due to compulsion, product complexity and behavioural biases. Some parties have suggested that the inquiry’s treatment of superannuation members as rational and informed consumers was misguided (Cooper et al. 2010a; ISA 2015). Other reforms initiated about this time included lifting the maximum age for contributions from 65 to 70, and increasing the preservation age from 55 to 60.

### Productivity Commission Legislation Inquiry

In 2001, the Commission completed an inquiry into legislation relevant to the superannuation industry. While the Commission found the *Superannuation Industry (Supervision) Act 1993* (Cwth) to be ‘voluminous, complex and in some respects overly prescriptive’, it found no major impediments to competition embedded within the Act (PC 2002).

### ‘Simpler Super’ reforms

In 2006, a raft of reforms called ‘Simpler Super’ was announced. The changes mainly related to tax, with the introduction of tax free status on the earnings of members over the age of 65 among the most important. Other reforms included the removal of taxes on lump sums and superannuation pensions, the abolition of reasonable benefit limits (caps on the amount of benefits receivable at concessional tax rates), and easier means of transferring balances between funds (Treasury 2006).

In 2009, as part of the *Future Tax System Inquiry* (widely known as the Henry tax review), the *Report on Strategic Issues for the Retirement Income System* was released. It concluded that the superannuation system did not manage longevity risk well, and the level of awareness and engagement by members remained suboptimal. It recommended maintaining the SG at 9 per cent (whereas the Government at the time made the decision to gradually increase the SG to 12 per cent). It also recommended not extending the SG to the self-employed, retaining the income contribution threshold of \$450 per month, and gradually aligning the preservation age to the Age Pension age (Treasury 2009).

In 2010, a review into the governance, efficiency, structure and operation of Australia’s superannuation system chaired by Jeremy Cooper was completed. It identified the recurring problems surrounding agency, information and efficiency. The review acknowledged that many members were disengaged, but argued that the system should produce quality outcomes for them regardless. The Government responded positively to recommendations for the creation of low-cost default products called ‘MySuper’ and improved administrative processes with the ‘SuperStream’ reforms. Other

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recommendations adopted included heightened trustee duties and the power for APRA to set prudential standards (Cooper et al. 2010a).

In 2012, the Commission was tasked with designing criteria for the selection and assessment of default superannuation funds in modern awards. The Commission found the arrangements could be improved to ensure selection was based on merit rather than precedent, and to encourage improved performance through competition (PC 2012). The then Government legislated some changes to the system for choosing default superannuation funds, but these changes are not fully implemented (Ross 2014).

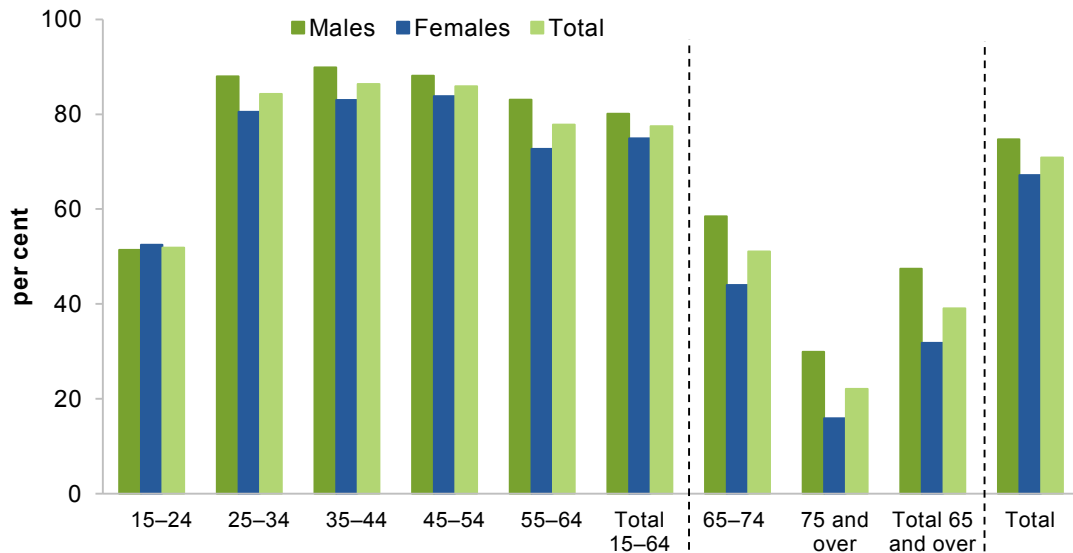
Most recently, and acting as the catalyst for this study, the FSI argued that the superannuation system is not operationally efficient due to a lack of price-based competition, symptomatic of weak demand drivers. Further, the FSI had reservations about the potential for MySuper to be effective in driving greater competition, and therefore contended that further measures needed to be taken to improve competition and ultimately outcomes for members (Murray et al. 2014a).

### Superannuation is still an evolving component of the retirement income system

Despite ongoing concerns regarding the system's ability to efficiently maximise retirement incomes for members, the outcomes for lifetime participants are yet to be seen. While there is a high level of participation for the current working age population, the relative youth of the system means that fewer than half of today's retirees are currently covered (figure 1.4).

For those current retirees who are covered by the system, the median income from superannuation is \$358 per week, but this is inflated by retirees who received defined benefit pensions. The figure drops to \$256 for the 70 per cent of superannuants receiving a typical account-based pension (ABS 2016b). Given the youth of the system, superannuation tends to make up a small portion of retirement income relative to other sources (figure 1.5).

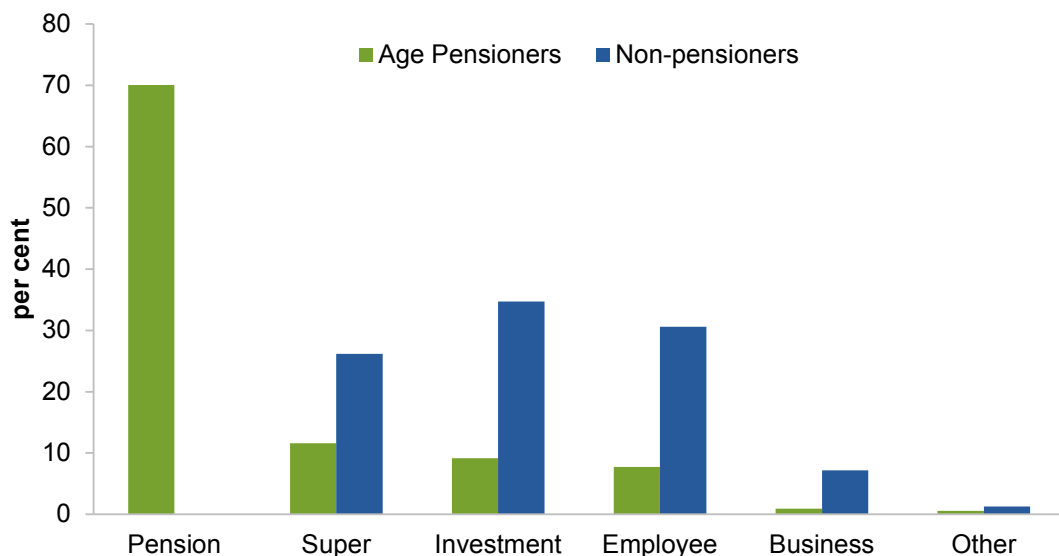
**Figure 1.4 Superannuation coverage<sup>a</sup>**  
By age group and gender, 2013-14



<sup>a</sup> Includes persons with a superannuation account balance above zero and/or receiving regular income from superannuation and/or who received a lump-sum superannuation payment in the past two years.

Data source: ABS (Survey of Household Income and Wealth, Australia, March 2016, Cat. no. 6523.0).

**Figure 1.5 Average income shares for older Australians<sup>a</sup>**  
For individuals aged over 65, 2011-12



<sup>a</sup> 'Age Pension' refers to any government pension, including both Age and Service Pensions. Those on a part pension are included in the Age Pensioners group.

Data source: PC (2015b).

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## The system will continue to evolve

Any shortcomings in the superannuation system will be amplified as the system matures and the population ages. This will manifest both in suboptimal financial outcomes for retirees and fiscal pressures for governments.

Over the coming years, there will be relatively fewer people working to support relatively more in retirement. The dependency ratio — the proportion of working age people to non-working age people — is projected to decrease from 4.5 to 2.7 between 2014-15 and 2054-55 with corresponding fiscal effects for the retirement income system as a whole (Treasury 2015b). Some of those pressures could be offset by the growth in the size and efficiency of the superannuation pillar of the retirement income system.

The substantial current size of the superannuation system and its projected growth also magnify the cost to members of any inefficiency or uncompetitiveness in the system. As discussed earlier, the system is not mature, with the first cohort to retire following a lifetime of compulsory contributions by about 2030. However, some participants have argued that the ‘true’ maturity of the system will not occur until at least 2050, when the first cohort of individuals to contribute at a rate of at least 9 per cent for their entire working lives will retire (AIST, sub. 30, p. 14).

The level of funds under management and average account balances should continue to increase at substantial pace over the next few decades. Most projections forecast continued strong growth until the mid-2030s with between \$5 trillion and \$6.3 trillion under management, representing between 130 to 180 per cent of GDP, depending on the assumptions employed (table 1.2).

The Cooper Review (2010a) also estimated that by 2035, the average *accumulation* balance of a superannuation account would grow from the then \$15 000, to \$180 000 in 2009 dollars. With regard to balances *at the point of retirement*, the Actuaries Institute (2015) estimated that the median balance at retirement (age 65) for a couple currently aged 30 will be \$817 400 (in 2015 dollars). Overall, the 2012-13 Commonwealth Budget estimated that by 2040 the *system-wide* real average account balance would be \$440 000.

Despite the projected growth in absolute size, there is still some uncertainty about whether a mature system in the 2030s will actually provide adequate retirement incomes, although sometimes it can be difficult to distinguish substance from self interest in such claims.

The industry is expected to continue its trend of consolidation. The Cooper Review (2010a) forecast that by 2035 there will be approximately 75 institutional funds, compared with over 250 today. This means that, combined with sustained growth in contributions and the enhanced use of platform services, there will be significant growth in the scope to realise economies of scale.

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**Table 1.2 Projected size of the superannuation industry**

	<i>Base year</i>	<i>Base value (trillion)</i>	<i>End year</i>	<i>End value (trillion)</i>
KPMG	2014	\$1.85	2025	\$3.45
Actuaries Institute	2014	\$1.84	2029	\$3.7
Cooper Review	2009	\$1.1	2035	\$6.1
Deloitte <sup>a</sup>	2015	\$2.0	2035	\$6.3
Treasury	2011	\$1.3	2040	\$7.75
Rice Warner	2013	\$1.6	2043	\$5.1

<sup>a</sup> Deloitte final value deflated for expected CPI growth of 2.5% per year.

Sources: Actuaries Institute (2015); Commonwealth of Australia (2012), Cooper et al. (2010a), Deloitte (2015), KPMG (2015), Rice Warner (2014a).

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SMSF assets are expected to continue to grow albeit at a reduced rate, and the proportion of total assets held in SMSFs has been forecast to decrease slightly. Deloitte (2015) projected that the SMSF share of total superannuation assets will fall from 34 per cent today, to 30 per cent in 2035. It should be noted, though, that SMSFs are expected to have the largest share of *post-retirement* superannuation assets (compared to other fund types) by an increasingly large margin by 2035. This is primarily attributable to the fact that many members transfer their assets into an SMSF as they approach retirement.

Last, the effects of the reforms stemming from the Cooper Review (2010a) are yet to be fully realised. When devising recommendations, the review estimated that the reforms would increase retirement balances by about \$40 000 through improved efficiency. The final rollover of all pre-existing default products into MySuper products is due by July 2017.

### 1.3 A guide to the rest of the report

This report consists of an executive summary, seven chapters (including this one), and seven appendixes. Chapter 2 dissects the characteristics of the superannuation system that are pertinent to the assessment framework, and chapter 3 details the assessment framework guiding the study. Chapter 4 contains the system-level objectives that the Commission has used as a reference point by which to guide criteria and indicators. Chapters 5 and 6 contain the criteria and indicators the Commission has developed to assess the competitiveness and efficiency of the superannuation system. And chapter 7 summarises the evidence base that will be required to facilitate the eventual assessment in stage 3.

Appendix A contains material on submissions and consultation processes. Appendix B examines the literature on member decision making and Australians' superannuation knowledge and behaviour. Appendix C analyses corporate tendering for default superannuation contributions and what it can reveal about the competitiveness of the system. Appendix D assesses the state of the market for retirement income products.

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Appendix E considers the key lessons from international experiences and comparisons. Appendix F discusses the impact of the superannuation system on overall financial stability. Appendix G outlines how the trends in the SMSF sector will be factored into the Commission's assessment. Finally, appendix H describes the system's regulatory environment and how it may impact on competition and efficiency.



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## 2 Key characteristics of the superannuation system

### Key points

- Australia has a three-pillar retirement income system made up of a government-funded and means-tested Age Pension, compulsory superannuation and voluntary private savings (including voluntary superannuation contributions). Insurance, most commonly for life and disability, is bundled with superannuation for many members.
- The superannuation system incorporates three phases, each governed by specific policy settings, including concessional tax treatment at each stage.
  - Accumulation — compulsory contributions, preservation of benefits.
  - Transition — transitional arrangements as members approach retirement.
  - Retirement — withdrawal of benefits.
- The system involves many participants with diverse roles, including members, employers, superannuation funds, service providers, insurers and regulators.
- The system is not a standard market. It has many unique characteristics that have important implications for the development of criteria to assess the efficiency and competitiveness of the superannuation system.
  - Demand-side competition is muted as contributions are mandatory and member engagement is limited. The optimal level of member engagement is hard to determine and engagement itself is difficult to measure.
  - A diverse range of fund and product types increases complexity and requires a flexible approach to the development (and interpretation) of assessment criteria and indicators.
  - The complex integration of service providers requires that competitiveness criteria can be assessed throughout the value chain, rather than just at the retail level.
  - A highly-regulated landscape can reduce or remove market failures, but often comes at a cost, such as regulatory burden or other unintended consequences for competitiveness and efficiency. Assessment criteria should account for the impact of the system's regulations and regulators on market participants.
  - There are many principal-agent relationships in the superannuation system with potential for conflicts of interest. How well those potential problems are addressed has direct implications for competitiveness and efficiency.
- The system is large, dynamic and continues to evolve as it matures and policy settings change. Assessment criteria should be flexible to adapt to the changing nature of the system.

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The superannuation system is not a standard market. It has many unique characteristics that have important implications for the development of criteria and indicators to assess its efficiency and competitiveness.

This chapter provides an overview of the superannuation system, including its role in the broader retirement income system, through a market framework lens, and describes the unique characteristics that are particularly relevant to the development of assessment criteria and indicators in chapters 5 and 6.

## **2.1 What is the superannuation system?**

### **Three pillars of retirement income**

Australia has a three-pillar retirement income system made up of a government-funded and means-tested Age Pension, compulsory superannuation and voluntary private savings (including voluntary superannuation contributions) (Murray et al. 2014b). This last pillar also includes wealth stored in the family home (which some refer to as the fourth pillar), which is the largest asset for most households (PC 2015a). These pillars are strongly linked to one another through the tax and transfer system. This interconnectedness adds complexity as changes to one pillar are likely to affect the others. For many members, superannuation products are also bundled with life, total and permanent disability and (to a lesser extent) income protection insurance.

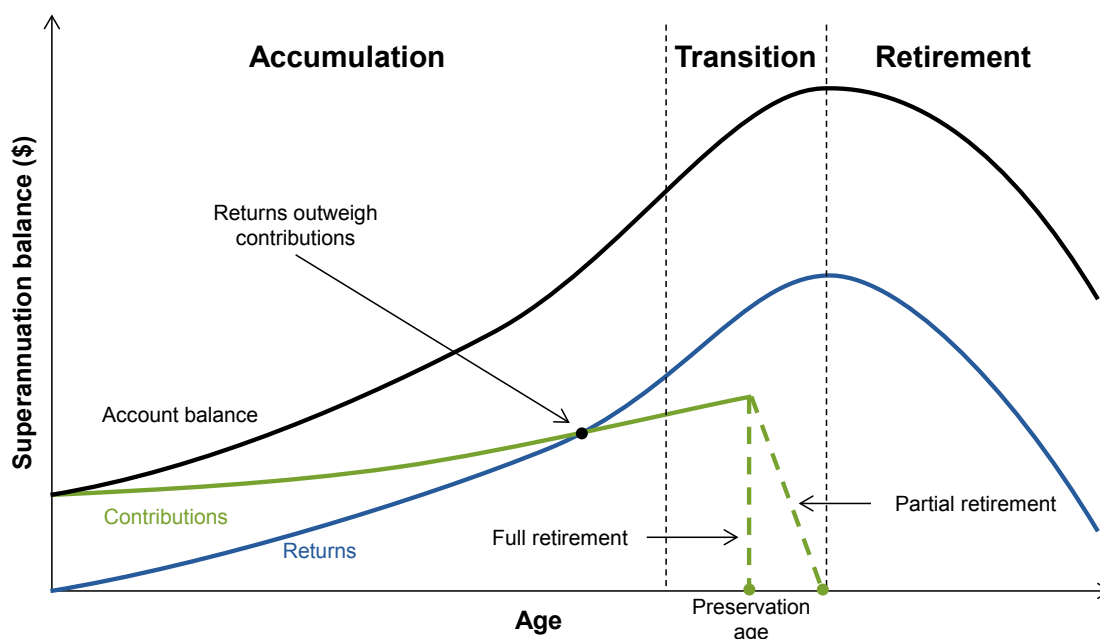
### **The system incorporates three phases**

Superannuation is a long-term investment that enables income and consumption smoothing over a person's lifetime. This encompasses three phases:

- accumulation
- transition
- retirement (figure 2.1).

These phases are in a sense arbitrary and arise because of distinct policy settings and management of specific risks. As the superannuation system matures, the phases may become less distinct, with the system focusing more on delivering life-time outcomes for members.

Figure 2.1 A simple schema of the three phases of superannuation



### Accumulation phase

The accumulation phase of the superannuation system generally spans the duration of a person's working life and is marked by several key features determined by government policy.

**Superannuation is compulsory** under the *Superannuation Guarantee (Administration) Act 1992* (Cwlth) (SG Act). The Superannuation Guarantee mandates the vast majority of employers to provide a minimum level of 'employer contributions' — currently 9.5 per cent of ordinary time earnings — to their employee's superannuation fund. Compulsion can reduce the potential for inadequate saving caused by myopic decision making and moral hazard associated with the Age Pension (Drew and Stanford 2004).

**Balances cannot be withdrawn** during the accumulation phase. Individuals are generally restricted from taking their superannuation benefits before reaching the 'preservation age', as set under the Superannuation Industry (Supervision) Regulations 1994 (Cwlth) (SIS Regs).<sup>2</sup> The preservation age is legislated to gradually increase from 55 years in 2015 to 60 years in 2025 (SIS Regs, r. 6.01(2)).

**Balances are concessionally taxed** within the superannuation system. The main reasons for this concessional tax treatment are to compensate for the loss of purchasing power (due to inflation) and for deferring consumption (Treasury 2009).

<sup>2</sup> Early access may be granted under exceptional circumstances, such as medical or financial hardship.

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**The system allocates employees who do not choose a fund.** While most employees are free to choose which superannuation fund receives their employer contributions, if they do not nominate a complying fund, the employer-nominated ‘default fund’ is used.

### Transition phase

The transition phase involves the period of time when members approach retirement. There is no distinct point at which a member enters this transition phase: the period will differ for each member.

As they approach and enter retirement and their investment time horizons fall and become more uncertain, **members face many risks** to their retirement balances and incomes, including longevity, investment and sequencing risk. In the transition phase, members have the opportunity to consider an individual approach to managing these risks using particular (or a combination of) products, investment strategies and withdrawal strategies. For example, members might construct their portfolio to incorporate separate buckets of assets to reflect various purposes for the funds (such as immediate expenditure needs and longer term income requirements) (appendix D).

Moving from the accumulation to retirement phase may not be sudden. **Individuals can transition to the retirement phase** if they choose to continue working in some capacity. Once an individual reaches the preservation age, they can receive regular payments — up to 10 per cent of their balance every year — from a ‘transition to retirement’ income stream, while still working (ATO 2015d).<sup>3</sup> On the other hand, the timing of the transition may be sudden or uncertain, particularly where retirement is involuntary — in 2011, almost half of all Australian retirees aged 45–70, retired involuntarily (PC 2015b).

### Retirement phase

The retirement phase of the superannuation system generally begins when an individual is eligible to withdraw funds from their superannuation balance.

**Balances may be withdrawn** when an individual meets certain conditions. Generally, individuals can access their superannuation balance when they reach the preservation age and retire, reach the preservation age and begin a transition to retirement income stream, or reach 65 years of age (ATO 2015a).

**Individuals can choose to withdraw their balances as a lump sum or an income stream** (or a combination of both) (appendix D). With an account-based pension, the member receives a regular income stream and the superannuation fund generally continues

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<sup>3</sup> Currently, earnings from superannuation balances held in a transition to retirement income stream are tax exempt. However, in 2016 the Australian Government released exposure draft legislation to remove this exemption, subjecting earnings to a 15 per cent tax rate (Treasury 2016c).

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to invest the remaining balance; the **investment returns are generally tax free**.<sup>4</sup> However, individuals taking an income stream are required to withdraw a minimum proportion of their account balance every year — between 4 and 14 per cent, depending on age. These **minimum withdrawal rates** were introduced to ensure superannuation balances provide an income stream in retirement and are eventually withdrawn from the concessional tax environment (Australian Government 2014c).

## Many participants with diverse roles

The superannuation system incorporates many participants with diverse roles and responsibilities. It is useful to view the superannuation system within a market framework to understand the roles of the participants and how they relate to each other.

Figure 2.2 provides an overview of the superannuation system using a market framework that provides a distinction between retail and wholesale levels. The retail level of the system is often viewed as the superannuation ‘industry’; however the system is much broader, extending to include service providers at the wholesale level.

## Members and employers

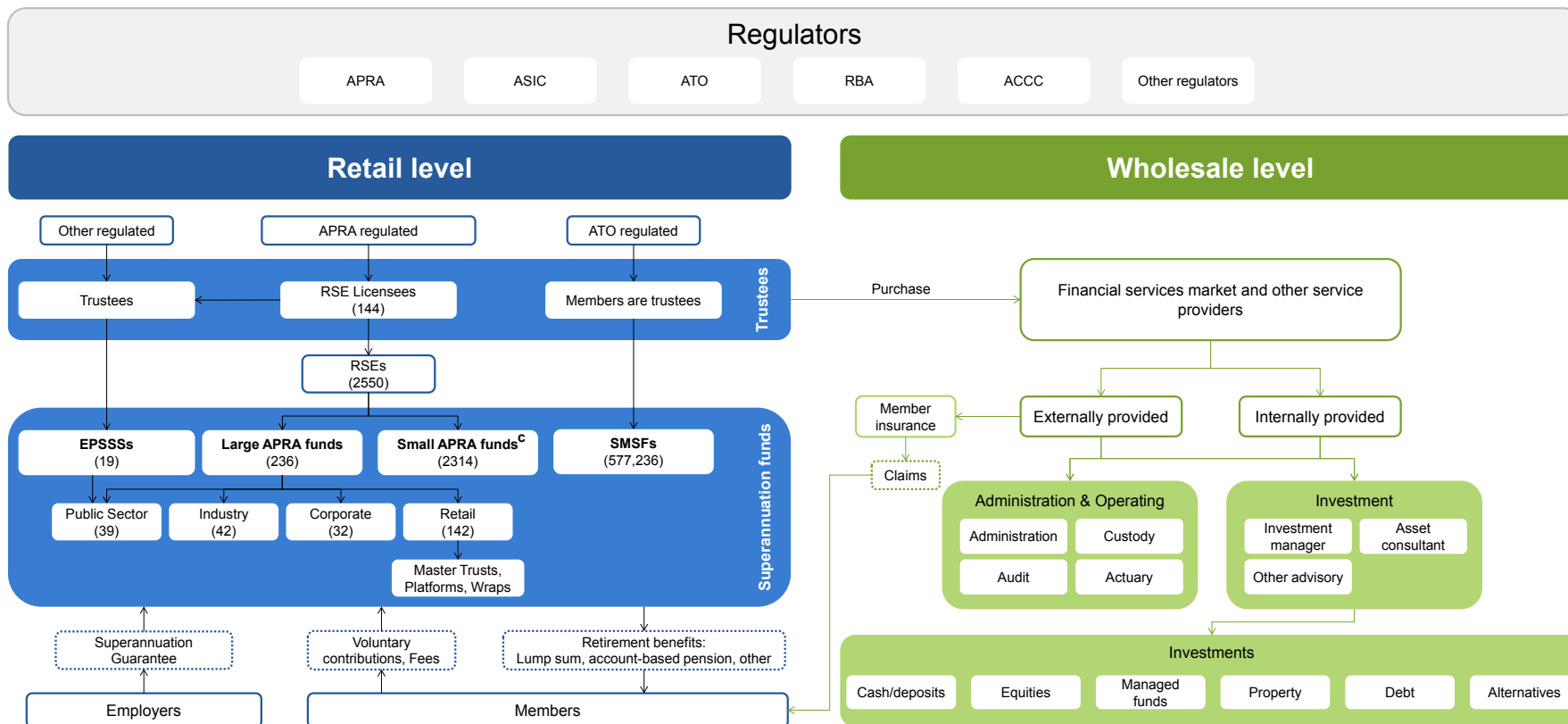
Superannuation fund members are the end consumers of superannuation services. Most members are, or have been, employees compelled to join the system.<sup>5</sup> A person ceases to be a member when they withdraw their entire balance. In 2013-14, about 75 per cent of males and 67 per cent of females over 15 years of age had a superannuation balance (chapter 1).

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<sup>4</sup> A non-account-based income stream, such as an annuity, involves an agreement with a superannuation fund to make regular payments over an agreed term, usually guaranteed for life.

<sup>5</sup> Self-employed people can also elect to become members by claiming a full deduction for contributions (ATO 2015b) and people outside the workforce can also do so under very limited circumstances.

Figure 2.2 An overview of the superannuation system<sup>a,b</sup>



<sup>a</sup> Numbers in brackets denote number of trustees or superannuation funds as reported by APRA as at June 2016. <sup>b</sup> RSEs are Registrable Superannuation Entities; EPSSSs are exempt public sector superannuation schemes; and SMSFs are self-managed superannuation funds. <sup>c</sup> Small APRA funds includes pooled superannuation trusts and single-member approved deposit funds for the purposes of this figure.

Data source: APRA (2016h).

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Study participants (for example, Rice Warner, sub. DR112) have suggested that the system, and its assessment, has four key segments of members.<sup>6</sup>

- Default — members who do not actively choose their own fund and are therefore allocated to the employer-nominated default.
- Choice — members who make an active choice of superannuation product; including those who actively choose a default product.
- SMSF — members who are responsible for managing their own superannuation.
- Retirement — members who are in the retirement phase of the system.

Employers have a unique role in the system, acting as an intermediary between members and superannuation funds. The relationship between members and employers is integral to the design of the system and historically superannuation has been intricately linked to the industrial relations system (chapter 1). Most employees in Australia have become members of superannuation funds as a requirement under the SG Act. In general, employers are required to make Superannuation Guarantee contributions for any employee paid at least \$450 per month and, if below 18 years of age, they must also be working over 30 hours per week (ATO 2015e). However, employment arrangements can vary widely and some employers are exempt from making superannuation contributions (ATO 2015e).

Employers also have the unique role of choosing a default fund that compulsory contributions are automatically paid into, unless members actively choose a different fund. While some employers can nominate any legally complying superannuation fund to be the default, employers under certain employment arrangements — such as some modern awards and agreements — are restricted in their choice (PC 2012).

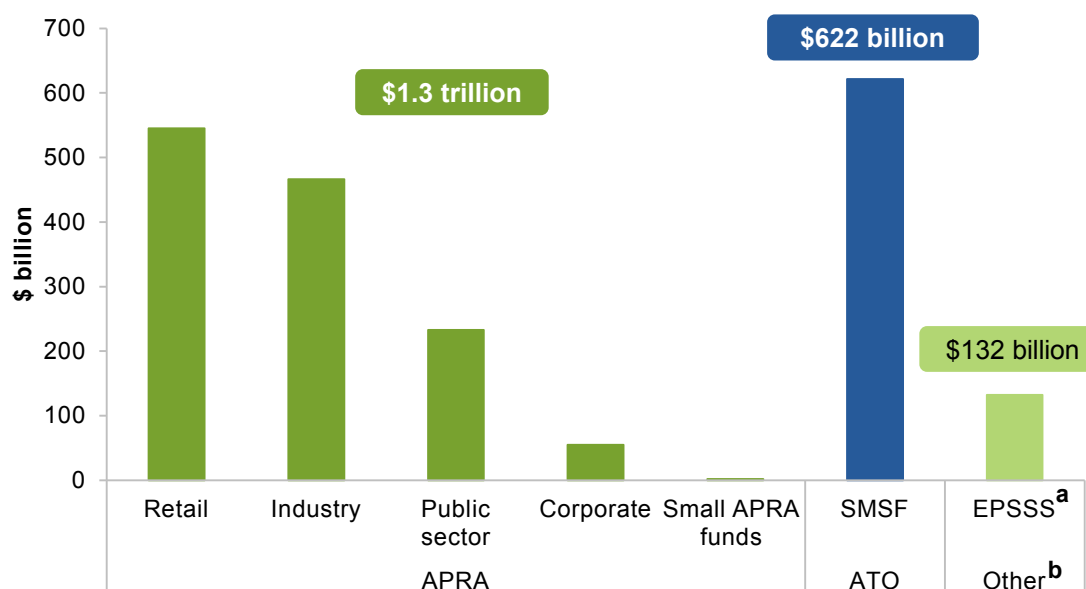
## Superannuation funds

A superannuation fund is any fund or scheme that is eligible to receive Superannuation Guarantee contributions. Superannuation funds typically take the legal form of a trust, empowering an entity to act as a trustee that owes an obligation to the fund's beneficiaries (members) (Donald et al. 2016). Funds are differentiated by regulation, depending on whether the trustees are also the members. In order to become a legally complying fund, a superannuation fund and its trustees must be regulated by the Australian Prudential Regulation Authority (APRA), the Australian Tax Office (ATO) or other government legislation. Across all regulatory spheres, superannuation funds hold over \$2 trillion in total assets (figure 2.3).

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<sup>6</sup> These segments are not mutually exclusive.

**Figure 2.3 Total assets by regulatory classification and fund type**  
As at June 2016



<sup>a</sup> Exempt public sector superannuation scheme. <sup>b</sup> There is also about \$55 billion held in balance of life office statutory funds, which are assets held for superannuation or retirement purposes in statutory funds of life insurance companies, excluding the assets held in life office statutory funds by superannuation entities. The balance of life office funds includes annuities and assets backing non-policyholder liabilities. These products are regulated under the *Life Insurance Act 1995* (Cwlth).

Data source: APRA (2016h).

An APRA-regulated fund must apply to be a Registrable Superannuation Entity (RSE) and its trustees must be RSE licensees as defined under the *Superannuation Industry (Supervision) Act 1993* (Cwlth) (SIS Act). APRA regulates the majority of large superannuation funds catering to more than four members (APRA-regulated institutional funds), as well as ‘small APRA funds’ involving four members or less. APRA-regulated institutional funds can be segmented in many ways (box 2.1), but are generally classified into four types.

- **Retail funds** operate under the trusteeship of a ‘for-profit’ RSE licensee with a corporate, industry or general membership base.
- **Industry funds** operate under the trusteeship of a ‘not-for-profit’ RSE licensee with either an industry or general membership base.
- **Public sector funds** operate under the trusteeship of a not-for-profit RSE licensee with a government membership base.
- **Corporate funds** operate under the trusteeship of a not-for-profit RSE licensee with a corporate membership base. (APRA 2016a)



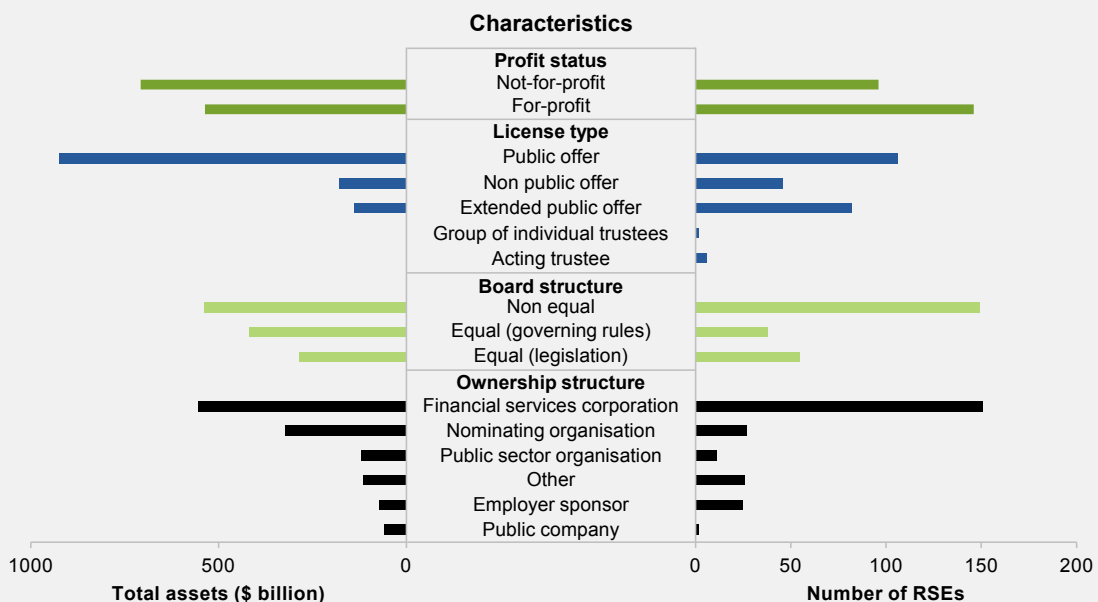
As at June 2016, APRA (2016h) reported 2550 RSEs operating under 144 RSE licensees (figure 2.2). Of these, just 236 RSEs were APRA-regulated institutional funds, but they made up the majority of all superannuation assets under management — about \$1.3 trillion (figure 2.3). Another 2233 RSEs were small APRA funds — with about \$2.1 billion of assets — used by members who choose to retain a small fund where the trustee is not the member. The balance of RSEs consisted of 45 pooled superannuation trusts and 36 single-member approved deposit funds.

### Box 2.1 Characteristics of APRA-regulated institutional funds

APRA-regulated institutional funds have a number of characteristics, in addition to fund type, that provide other methods of segmenting funds.

- **Profit status** represents whether a Registrable Superannuation Entity (RSE) licensee's operations are a source of financial gain to the licensee owners or its associates.
- **License type** represents whether the RSE licensee of a fund is allowed to offer its superannuation services to the public or not. An applicant should nominate for an 'extended public offer' license if they intend to operate one or more non-public-offer superannuation entities and a public offer superannuation entity.
- **Board structure** represents whether the RSE licensee has an equal representation of employer and member representatives on the trustee board.
- **Ownership structure** represents the owner of the RSE licensee.

#### Total assets and number of RSEs, by fund characteristics, as at June 2015



Source: APRA (2016e).

The ATO regulates self-managed superannuation funds (SMSF), which include up to four members, all of whom are trustees or directors of the corporate trustee (appendix G) (this differs from small APRA funds, where the trustees are still RSE licensees). SMSFs are

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exempt from prudential regulation on the basis that there is no divergence in interests between members and trustees (Treasury 2014). The number of SMSFs has grown significantly in the past few decades (chapter 1) — there were more than 577 000 SMSFs with about \$622 billion in assets as at June 2016 (APRA 2016b).

While the vast majority of superannuation funds are regulated by APRA or the ATO, a small number of exempt public sector superannuation schemes (**EPSSS**) — default funds for some public sector employees — are regulated under other government legislation. However, 19 of about 60 such funds voluntarily report statistical information to APRA (APRA 2016h; SIS Regs, r. 1AA(3)).

There were just under 30 million member accounts across all superannuation funds as at June 2015, down from a peak of almost 33 million accounts in 2010 (APRA 2016a). Of these, about 28 million belonged to APRA-regulated funds. Almost 3.5 million of these accounts belonged to ‘eligible rollover funds’ which typically accept balances of lost members from other funds.<sup>7</sup> As at 30 June 2016, there were just over 5.7 million lost and ATO-held accounts valued at almost \$15 billion (ATO 2016g).

Superannuation funds can offer a range of investment products to members in the accumulation phase, which are differentiated in many ways, such as risk, return or investment style. There are more than 40 000 investment options across the industry (APRA, sub. 32). Further, superannuation funds can also offer retirement income products for members in the retirement phase (appendix D).

This product proliferation (in the accumulation phase) exists despite the introduction of the MySuper reforms. All superannuation funds must use a MySuper product as their default from 1 October 2013 (Australian Government 2011). Further, all members under previous default arrangements must be transferred to a MySuper product by 1 July 2017. The default MySuper products are designed to have a simple set of product features. This ensures members do not pay fees for services they do not need or use and to facilitate greater comparability to better inform member choice.

Superannuation funds charge members fees to cover the costs of administering and investing their superannuation balances — in 2014-15, members paid about \$12 billion in fees to APRA-regulated funds (APRA 2016a). Members can be charged a range of fees, such as general administration, investment, insurance administration (not premiums), advice, exit and switching fees (figure 2.4). The amount paid in fees is very important in the context of superannuation balances. Superannuation funds may charge higher fees to compensate for a greater level of service quality or greater expected returns (above a passive investment benchmark). This may be warranted if the benefits from the added value or higher returns outweigh the additional cost of fees.

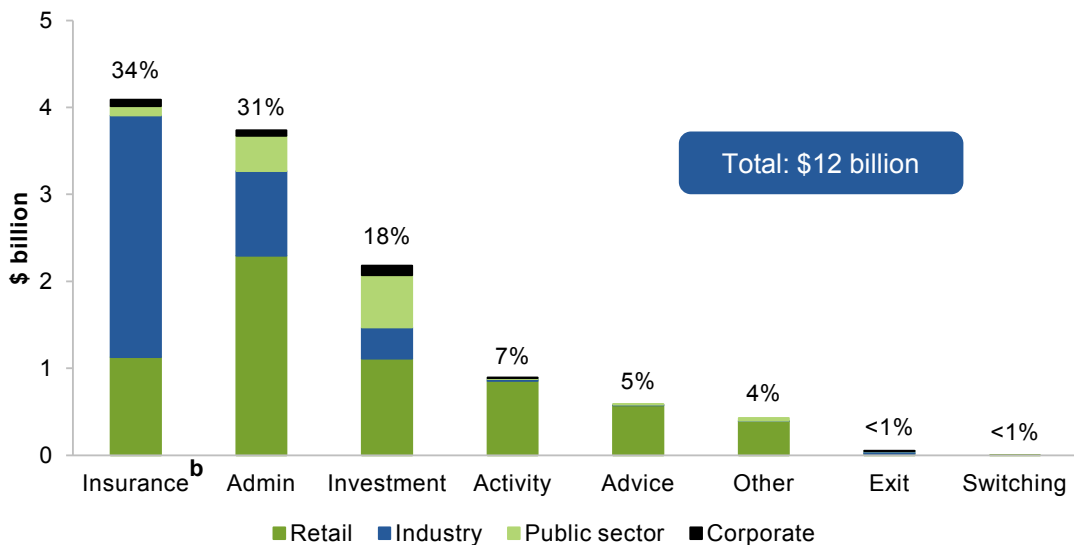
The vast majority of superannuation funds are defined contribution schemes (over 95 per cent of member accounts) (APRA 2016a). In 2013, just 15 funds were solely defined

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<sup>7</sup> Lost members are generally inactive and uncontactable.

benefit funds and 74 funds had a hybrid benefit structure (APRA 2014d). Most defined benefits funds today are legacy corporate or public sector funds that are closed to new members. Defined benefit funds have complex long-term liabilities that cannot easily be transferred to another fund or party.

**Figure 2.4 Total member fees<sup>a</sup> by fee type and fund type**  
Year end June 2015



<sup>a</sup> Represents where the fee charged to the member has been paid directly either as a deduction from the member's account, member's contributions or from the investment return before crediting the member's account balance. <sup>b</sup> Insurance fees may be overstated as they may include some misreported insurance premiums.

Data source: APRA (2016e).

### Service providers

The main role of superannuation trustees is to provide superannuation services to members of the superannuation fund. Trustees can choose to provide some of these services internally or they can be outsourced to external service providers. The provision of these services to trustees (both internal and external) makes up the 'wholesale level' of the superannuation system set out in figure 2.2.

These services cover a range of functions, some of which are required under superannuation law. APRA's reporting framework categorises service expenses by type, generally related to fees charged to members (table 2.1). There are many service providers in the system, however, there is evidence that the market is concentrated in particular service areas (figure 2.5). That said, an assessment of market concentration needs to take into account the extent of internally provided services. For example, the Association of Superannuation Funds of Australia (sub. DR98) noted several examples of superannuation

funds insourcing services in recent years, such as administration, investment management and insurance services.

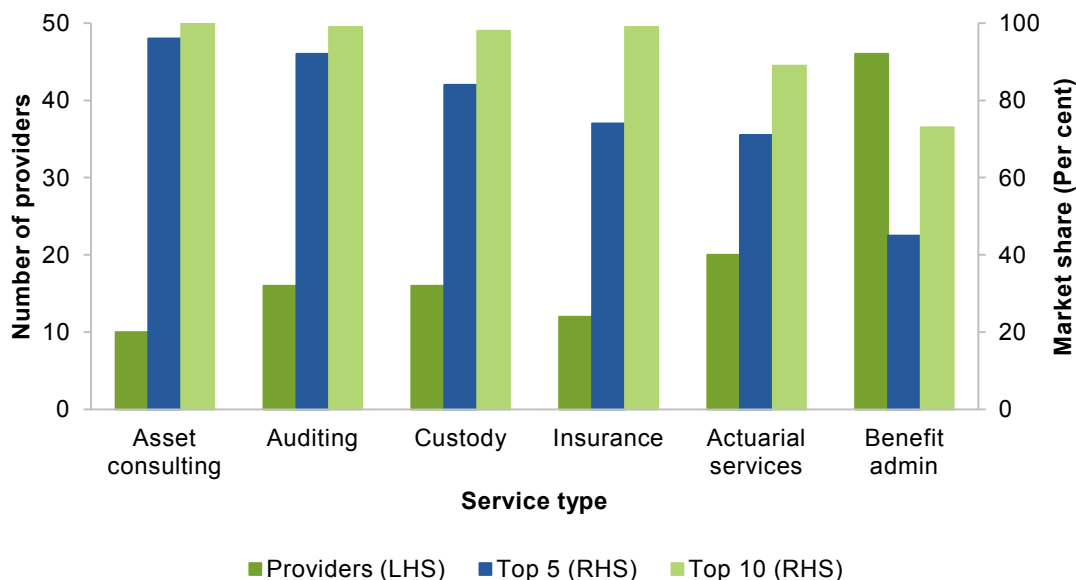
**Table 2.1 Services by expense type**

Expense type	Definition
Investment	Represents expenses that relate to the investment of the assets of the entity. Includes expenses for which investment fees are charged and expenses associated with generating income on investments.
Administration	Represents expenses that relate to the administration or operation of the fund. Includes administration expenses for which administration fees are charged.
Operating	Represents expenses that relate to the operation of the fund by the RSE licensee. Includes operating expenses for which administration fees are charged.
Advice	Represents expenses that relate to the provision of financial product advice to a member. Includes expenses for which activity fees relating to provision of financial products are charged.
Insurance administration <sup>a</sup>	Represents expense activities of a RSE licensee, life insurer, administrator or other service provider that relate to the administration or operation of acquired insurance or self-insurance arrangements to members.

<sup>a</sup> Not including insurance premiums.

Source: APRA (2015i).

**Figure 2.5 Market concentration of service providers**  
As at June 2012



Data source: Donald et al (2016).

In 2015, APRA-regulated institutional funds paid over \$9 billion to service providers (not including insurance premiums) (APRA 2016e). About 70 per cent of this related to

administration and operating expenses and about 30 per cent related to investment services. Further, just 15 per cent of these expenses were incurred internally, with the remainder incurred by associated (26 per cent) and non-associated (59 per cent) external providers. Similarly, the many SMSF trustees engage service providers to help manage their funds (Cooper et al. 2010b). These providers mainly include accountants, auditors, financial advisers and administrators.

## Insurance

Many superannuation funds provide life, total and permanent disability (TPD) and, in some cases, income protection insurance to members by default. In 2015, APRA-regulated institutional funds collected about \$8 billion in insurance premiums and about half of member accounts received life and/or TPD insurance cover through their superannuation fund (table 2.2).

**Table 2.2 Insurance claims and policies**

Year end June 2015

<i>Insurance type</i>	<i>Member accounts</i>		<i>Claims paid</i>	
	million	thousand	\$ billion (total)	\$ '000 per claim
Life	15.3	17.3	2.3	132.5
Total and permanent disability	13.2	15.7	1.4	92.1
Income protection	5.3	37.2	0.7	17.8
<b>Total</b>	<b>33.8</b>	<b>70.2</b>	<b>4.4</b>	

*Data source:* APRA (2016e).

Under the SIS Act, all MySuper products are required to provide life and TPD insurance to members, and may choose to provide income protection insurance, by default, as long as ‘... the cost of the insurance does not inappropriately erode the retirement income of beneficiaries’ (SIS Act, s. 52(7)(c)). Insurance provision through MySuper products was included to ‘... provide a safety net to members who are least likely to give consideration to their insurance needs’ (Treasury 2012, p. 23). MySuper members may elect to opt-out of the insurance cover.

Superannuation funds can either set up associated insurance companies to provide these services or outsource to an external provider. For example, QSuper (sub. DR96) recently launched a wholly-owned life insurance company. However, most outsource to an external provider. In 2012, 12 insurance providers serviced 200 of Australia’s largest superannuation funds (figure 2.5). Self-insurance of life and TPD cover has been restricted to defined benefit funds due to the risks involved (Actuaries Institute 2014).

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## Regulators

Australia's regulatory system is described as a 'twin peaks' model, where regulators focus on particular outcomes across the system, rather than particular sectors (Murray et al. 2014a) (appendix H). The twin peaks are made up of:

- APRA, which specialises in prudential regulation of financial institutions, such as superannuation, banking and insurance
- the Australian Securities and Investments Commission (ASIC), which has a broader conduct and integrity role as the corporate, markets and financial services regulator.

APRA and ASIC both play an important role in the superannuation system, along with the ATO, which is the regulator for self-managed superannuation funds (box 2.2).

### Box 2.2 Key regulators in the superannuation system

The Australian Prudential Regulation Authority (APRA) requires APRA-regulated funds and their trustees to act prudently in the interests of the funds' members. Under its mandate, APRA is explicitly required to balance objectives of financial safety with competition and efficiency. APRA has many legal powers and instruments it can use to fulfil its role, including registration and licensing of funds and trustees, reporting requirements, risk assessment and corrective response powers. Further, APRA provides prudential regulation to the life insurance industry.

The Australian Securities and Investments Commission (ASIC) regulates the conduct and disclosure obligations of financial service providers, including superannuation trustees and insurance providers. Like APRA, ASIC also has reference to efficiency under its mandate. However, as noted by the Financial System Inquiry, ASIC's mandate makes no explicit reference to competition — although the Australian Government expects to update its mandate by the end of 2016. ASIC's role with regard to superannuation primarily involves promoting financial literacy of members, regulating proper disclosure by funds and integrity of financial service providers. ASIC also regulates service providers for self-managed superannuation funds, such as financial advisers, accountants and administrators.

The Australian Taxation Office regulates employers, ensuring they make employer contributions, and regulates tax and legislative compliance of self-managed superannuation funds.

*Source:* Appendix H.

Several other regulators also have roles that influence the superannuation system. The Reserve Bank of Australia (RBA) is responsible for monetary policy and administering the monetary and payments system. The Australian Competition and Consumer Commission (ACCC) indirectly regulates participants of the superannuation system, ensuring that they comply with competition, fair trade and consumer protection laws. The Council of Financial Regulators — made up of APRA, ASIC, the RBA and the Treasury — is the coordinating body for Australia's main financial regulatory agencies. It operates as a high level forum for co-operation and collaboration among members. The Superannuation Complaints Tribunal is an independent dispute resolution body. It deals with complaints

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relating to the decisions and conduct of trustees, insurers and other decision makers within the superannuation system.

## **2.2 Superannuation is a unique market**

The superannuation system has some unique characteristics that (as a whole) may not be found in standard markets. The system is compulsory, complex, and members can disengage in the face of cognitive constraints, compulsion and restrictions on choice. This section discusses some of the key characteristics of the superannuation system and their implications for assessing efficiency and competitiveness.

### **Policy-driven demand**

The demand for superannuation services is, in large part, driven by government policy — chiefly compulsory superannuation and its concessional tax treatment.

Compulsory employer contributions mandate a minimum level of member savings for retirement. In the absence of compulsory saving, members would save according to their individual consumption and saving preferences. The compulsory minimum level of member savings means that some members are forced to save more than they would otherwise prefer. In contrast, other members who choose to save beyond this minimum level can either voluntarily contribute more to the superannuation system, or save outside of the system.

The concessional tax treatment and related contribution caps also influence the level of superannuation savings. It can encourage voluntary superannuation contributions. And to the extent that superannuation is taxed differently than other savings instruments, it distorts the choice of savings vehicle and investment strategy.

Policy-driven growth has important implications for the overall assessment of the competitiveness and efficiency of the superannuation system. On the demand side, compulsion and concessional tax treatment can distort the level and composition of savings, leading to allocative inefficiency. On the supply side, guaranteed demand can dull incentives for suppliers to be competitive, or lead to rent seeking.

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## Disengaged members

In a standard competitive market, well informed and highly engaged consumers make decisions in their own best interest, driving demand for goods or services they value. However, there are several reasons why members may disengage from the superannuation system, many of which may not be irrational or suboptimal (appendix B).

- The **compulsory nature of the system** means that most members contribute to their superannuation, regardless of their personal preferences.
- **Cognitive constraints and behavioural biases** may impede member engagement and optimal decision making. Examples include, lack of financial literacy, myopia, complexity of long-term decision making, loss aversion, reliance on mental shortcuts, a tendency to procrastinate and general apathy.
- The superannuation system uses a **default model** to address member disengagement, but it may also act to increase that disengagement. That is, reducing the penalty for disengagement may cause some members to disengage.
- Under some circumstances, members may be **constrained from making an active choice**. Regulations prevent about 20 per cent of the workforce — particularly employees under some modern awards and enterprise bargaining agreements — from choosing a superannuation fund other than the default (ASFA 2010; Treasury 2015a).

The nature and extent of member engagement can have important implications for the competitiveness and ultimately efficiency of the superannuation system. Hence measures of engagement are relevant in the development of assessment criteria and indicators. However, member engagement is not a guarantee of good outcomes for members and care is needed in both measurement and interpretation — more is not always necessarily better (chapter 5). For example, it is important to distinguish between member activity and member engagement — an absence of activity does not, in itself, necessarily represent a lack of member engagement.

## Risk management falls to members

The superannuation system is primarily made up of defined contribution schemes, giving members responsibility for managing risks, including investment, longevity, sequencing, inflation and interest rate risk.

The trade-off between risk and return is well established. Managing this trade-off becomes more complex where there are very long time horizons, significant uncertainty and where members may not have the capability to make optimal decisions. The extent to which the superannuation system helps members manage risk has implications for the competitiveness and efficiency of the system and the assessment criteria and indicators.

Sequencing risk is the risk of experiencing poor investment returns just prior to drawing on funds in retirement. Research suggests that sequencing risk increases in the lead up to



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retirement as investment returns begin to outweigh contributions (Basu, Doran and Drew 2012). This risk is likely to be more prevalent and concentrated for members taking lump-sum withdrawals, as they divest immediately and can no longer invest in the tax-concessional superannuation environment. Members can manage sequencing risk by diversifying their superannuation investment portfolio and choosing less risky investments as they approach retirement. However, this presents a trade-off between managing sequencing and longevity risks. Smart default products can also be used to gauge and manage sequencing risk (Fiduciarys Friend, sub. 7).

Members also face longevity risk — the risk of outliving their savings — and are responsible for managing this risk by choosing how much they save, their investment asset allocation and the rate at which they draw down on their wealth. Retirees risk exhausting their savings prematurely or drawing on their savings too conservatively, leading to a lower standard of living (Murray et al. 2014b). Longevity risk can be difficult to manage, although members can transfer some of this risk onto a third party through financial products (such as annuities) and the Age Pension ultimately acts as a safety net.

## **A diverse range of fund and product types**

As noted earlier, there are more than 40 000 investment products offered by superannuation funds. Some products, such as Master Trusts or Investment Wraps, also give members the ability to implement an individualised investment strategy. In addition, over one million members belonged to small APRA funds and SMSFs in 2015, adding to the diversity (APRA 2016a).

This diversity has important implications for the development of competitiveness and efficiency assessment criteria and related indicators. While diversity and choice can, all else equal, be desirable, it can lead to suboptimal outcomes in a complex market with constrained and costly decision making. For example, high search costs for members can make it difficult to identify the best product for their circumstances.

## **Complex integration of service providers**

Superannuation funds provide many different services to their members. Trustees may choose to provide services internally or through an associated external organisation to tailor the service to the membership base. Alternatively, the fund may outsource some services from an unrelated external organisation to take advantage of scale economies.

The market for service providers within the superannuation system is fairly concentrated within some functions, highly connected, dynamic and very complex (Donald et al. 2016). The interconnectedness and complexity of service providers reduces transparency, increasing the difficulty of both regulation and assessment of the system's performance. For example, fees may be disclosed differently, or not at all, depending on whether services are provided in-house or externally.

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This complexity has important implications for the development of criteria and indicators, which will be required to assess the competitiveness at various stages of the value chain, not just at the retail level.

## **Highly regulated landscape**

Regulation is ideally used to correct market failures by changing the incentives of the participants involved (appendix H). The unique characteristics of the superannuation system and myriad principal–agent relationships has led to most participants being subject to significant legislative and regulatory oversight. For example, most institutional funds and trustees are prudentially regulated and service providers are regulated to ensure consumer protection.

Superannuation funds face a different level of prudential regulation depending on whether the trustees of the fund are the members — for example, institutional funds compared with SMSFs. Further, there is regulated access to default status at both the fund (through listings in modern awards) and product (MySuper) level.

Financial service providers (generally regulated by ASIC) face governance standards, disclosure requirements, registration and penalties for regulatory infringement. In addition, APRA requires that RSEs enter into an ‘outsourcing agreement’ with service providers that addresses some minimum requirements, for example, giving APRA access to information from the service provider if required (APRA 2012b). This enables the RSE to pass through (contractually) some of the regulatory obligations that APRA require of them — essentially extending APRA’s prudential regulatory arm to service providers.

The high level of regulation in the superannuation system has important implications for efficiency and competitiveness. While regulations are usually applied to improve market efficiency and competitiveness, there is generally a cost involved. Too much regulation or poor regulator performance can be restrictive, burdensome and unnecessary, reducing competitiveness and efficiency. Further, regulation used to correct one market failure may have unintended consequences on other aspects of the system. Therefore, assessment criteria and indicators must take into account the impact of the system’s regulations and regulators.

## **Principal–agent relationships abound**

The design of the superannuation system and the number and diversity of participants have formed many principal–agent relationships that span both the demand and supply sides of the market. These relationships occur where one entity (an agent) is engaged to make decisions on behalf of another entity (the principal). Assuming that both the principal and agent are motivated to act in their own interests, problems can arise in cases where these interests are not aligned and the agent has the opportunity to exploit asymmetric

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information to act to the detriment of the principal. Key relationships in the superannuation system are outlined in box 2.3.

**Box 2.3 Key principal–agent relationships in the superannuation system**

**Employers and members**

Under the default superannuation system, employers are required to nominate a default fund for employees who do not make a choice. This means that some members mainly interact with their superannuation funds indirectly — obscuring the members' consumption and saving decisions.

In cases where an employer is free to choose from a number of default funds, there are several reasons why they might face an incentive to make a decision that is not in the best interests of their employees (PC 2012). For example, they may choose a fund on the basis of less onerous administrative requirements.

In addition, employers (rather than members) may be targeted by superannuation funds that wish to be the employer default. However, it is illegal for a superannuation fund to give an employer benefits as an incentive to use their fund as the workplace default (*Superannuation Industry (Supervision) Act 1993* (Cwlth), s. 68A). Some employers see their role in superannuation as a burden and are concerned they lack the expertise to make the decisions required (COSBOA, sub. 33).

**Trustees and members**

Superannuation fund trustees have a fiduciary responsibility for managing and investing the contributions of members. However, this does not make the relationship immune from conflict. For example, in circumstances where members may benefit from a fund merging or closing down, this may not be in the best interests of trustees who face the prospect of losing their role.

Trustees also have an obligation to act in the best interests of all members and can face conflicting member interests, which are difficult to manage. Further, for-profit superannuation funds are required to act in the best interests of members, even when doing so may conflict with shareholder interests.

**Trustees and service providers**

Trustees outsource many of their responsibilities to service providers. However, '... they cannot outsource their responsibility for the performance of these functions' (ASFA, sub. DR98, p. 23). Problems can arise where profit-maximising service providers are motivated to act in a way that is detrimental to the members' interests. For example, a fund manager may pursue a costly, active investment strategy that does not deliver equal or better net returns than a passive investment strategy. Flawed remuneration policies, such as reward for short-term targets, can exacerbate conflicts of interest (Neal and Warren 2015).

Principal–agent issues can be managed, either by the parties themselves (for example, via contracts) or via regulation. Effective management of principal–agent issues by both providers and regulators is a key ingredient of a competitive and efficient superannuation system, and the Commission has developed criteria and indicators to assess this (chapter 6).

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## **The system is large and dynamic**

The superannuation system has undergone significant growth and regulatory change over its history and will continue to evolve as it matures (chapter 1). This continual change has implications for the competitiveness and efficiency of the system. Assessment criteria should be flexible to adapt to the changing nature of the system.

The system's size and average member balances are expected to continue growing, meaning the system will have greater importance for overall financial market stability (appendix F). This may imply a trade-off between short-run static efficiency and longer-run dynamic efficiency. As the system grows, the scope to realise greater economies of scale will also increase. For example, there is an increasing ability for smaller funds, such as SMSFs, to access economies of scale using platforms and other services, with the potential to affect market power and competitive pressures within the system. In addition, the growing number of retirees is likely to increase the number and variety of retirement income products as funds develop new products to meet increasing demand (Rice Warner 2016b). Regulators will also have an important impact on the evolution of the system as regulatory instruments evolve and refine over time. Policy (and tax) changes are also frequently considered by government, increasing the likelihood that the system's design will continue to change.

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## 3 The Commission's assessment framework

### Key points

- The size and significance of the Australian superannuation system mean that its efficiency and competitiveness materially impacts the wellbeing of most Australians. Relatively small improvements in efficiency and competitiveness can have a large impact.
- The Commission's approach to assessing the efficiency and competitiveness of the superannuation system sequentially involves defining system-level objectives, formulating assessment criteria and identifying corresponding performance indicators for the criteria.
- Formulating assessment criteria involves identifying attributes that a competitive and efficient superannuation system would be expected to possess. As such, the assessment criteria are closely linked to the system-level objectives.
- The Commission has taken current policy settings as given when developing the assessment criteria. The aim is to develop criteria that are within the influence of the system.
- The assessment framework will extensively employ benchmarking, ranking the performance of the superannuation system against relevant performance benchmarks. The Commission will also consider barriers that potentially impede the efficiency and competitiveness of the superannuation system, and therefore its performance.
- The performance indicators chosen will vary significantly in their nature, with a mix of quantitative and qualitative indicators, with indicators variously based on inputs and processes, outputs, outcomes and behavioural factors. Indicators will only be included in the assessment framework where they are seen as providing value in interpreting and determining system performance.
- The assessment framework needs to be amenable to the consideration of multiple factors — there is no 'silver bullet' approach to assessment.

The size and significance of the Australian superannuation system, and its compulsory nature, mean that its efficiency and competitiveness have major impacts on the wealth and therefore wellbeing of Australians, particularly in retirement. The system has assets of over \$2 trillion, and represents about 20 per cent of household assets (RBA 2016d). Small improvements to the efficiency of the system can therefore have a large impact.

Put most simply, an efficient and competitive superannuation system means members have larger balances (for a given level of contribution) and higher living standards in retirement. An efficient superannuation system broadly means costs are minimised, returns maximised, members placed in the most appropriate investments and retirement products

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based on their needs, and that the system embraces innovation and technology to improve outcomes over time.

Competition is a means to an end. Competition — meaning rivalry among providers — is generally critical to promoting efficiency, as it provides incentives for funds to become more efficient in order to improve or maintain market share (by lowering prices and/or improving service offerings). Competition should also ‘weed out’ inefficient providers. The number of providers of itself is not always reflective of competitive dynamics, as further detailed in chapter 5.

### **3.1 The Commission’s approach to assessment**

Given the number of factors influencing the efficiency and competitiveness of the superannuation system, there is no ‘silver bullet’ approach to assessment. The Commission will draw on two complementary ways of assessing performance: benchmarking performance, and identifying and assessing barriers that impede performance.

#### **Benchmarking performance**

The Commission’s assessment approach relies heavily on benchmarking. The term ‘benchmarking’ is used broadly: performance can be benchmarked against others (for example, other funds or countries), against stipulated objectives (for example, a market benchmark) and over time. Benchmarking can vary from simple comparisons of particular indicators to more sophisticated modelling techniques able to incorporate multiple factors. It can also be ‘point of time’ in nature, such as ranking funds with the best governance arrangements at a particular date, or be longitudinal (that is, based on performance over time), such as highest net returns over a ten year period. Longitudinal assessments are particularly useful for highlighting trends (such as whether the sector has become more competitive over time).

Benchmarking has significant advantages in assessing performance. It can produce transparent results that are relatively straight-forward to interpret. Relatively complex benchmarking methods can help attribute causes of inefficiency or poor performance (or, conversely, good performance). The results of benchmarking can also be seen as more objective than other ways of measuring performance.

The Australian Council of Trade Unions (sub. 18, p. 10) saw a role for benchmarking in various areas, including operational efficiency:

The ACTU believes that the development of appropriate benchmarks [should involve constructing] an index based on a long term performance of a selected group of existing default funds. The ACTU does not rely on any international benchmarks in this regard.

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Benchmarking to measure the performance of superannuation funds has widespread international acceptance. Canada's CEM Benchmarking notes its benchmarking services have over 350 corporate and government clients around the world (CEM Benchmarking 2016).

However, there are a number of difficulties associated with benchmarking. Potential problems may stem from data availability, reliability or comparability. Moreover, some areas in which it is important to measure the industry's performance — such as the degree to which superannuation funds' services match the needs of members — do not lend themselves to measurement through numerical means.

The Financial Services Council (FSC) (sub. 29, p. 23) saw benchmarking as problematic where products were not directly comparable.

The FSC supports benchmarking of product performance based on 'like-for-like' comparisons as is currently undertaken by [the Australian Prudential Regulation Authority]. MySuper products can more readily be benchmarked as they are broadly designed for disengaged consumers. ... Benchmarking product performance between choice products, however, is more difficult ... there are a diverse range of choice products designed to cater to specific cohorts of members who may select that product as part of a comprehensive strategy for managing their financial affairs.

One approach to ensuring comparability is to collect data specifically for the benchmarking exercise, which is what private research and benchmarking organisations tend to do. Another is to confine benchmarking to those aspects where comparability can be achieved.

## **Assessing barriers to performance**

A complement to measuring performance against benchmarks is to identify barriers that potentially impede the efficiency and competitiveness of the superannuation system, and therefore its performance. Some barriers may be market-related (such as some barriers to entry), while others may be policy-related and outside the system's control. Where barriers exist, the Commission will seek to determine their materiality. Such exercises are likely to be qualitative in nature.

In responding to the Commission's proposal to assess barriers to performance, the Australian Institute of Superannuation Trustees (AIST) (sub. 30, p. 24) was supportive of this approach:

We first turn to a number of key barriers to effective competition ... improving fee disclosure and comparability ... the need for meaningful information, the impact of financial literacy, the management of conflicts of interest, and the offering of inducements to employers. These barriers are in addition to member disengagement and for-profit driven related party arrangements. ... AIST strongly supports the Productivity Commission's objective to identify current gaps and other issues with evidence regarding the superannuation system.

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However, the Australian Chamber of Commerce and Industry (sub. 24, p. 9) saw this approach as problematic:

The idea of using an assessment via market barriers to competition and efficient outcomes is more problematic. ... The Australian Chamber prefers an approach where performance indicators can be expressed as outcomes that are linked to the overall objectives of the system, with the main objective being that which prioritises the substituting or supplementing the age pension without overly burdening employers. That latter consideration must qualify the main objective.

The Commission considers assessment of barriers to efficient and competitive outcomes is of particular importance in determining whether or not observed performance is within the control of the system, and in providing insights into how performance can be improved. As such it is both essential for interpretation and therefore complementary to benchmarking.

### **The need to consider multiple criteria**

The Commission has sought to develop a balanced framework reflecting the various trade-offs implicit within the superannuation system. For example, fees must be weighed up against the services provided and against overall rates of return. The Centre for International Finance and Regulation (CIFR) (sub. 10, p. 6) highlighted the importance of considering trade-offs.

We would like to underline the importance of assessing the broad range of services provided to members; and encourage the [Commission] to call into question the perception that lower cost alternatives are necessarily superior. Superannuation funds have been expanding the scope and quality of the ancillary services they offer to members. While this has undoubtedly been a contributor to higher costs, the central issue is whether these services offer value for money.

Independent Fund Administrators and Advisers, QIEC Super and Club Super (sub. DR72, p. 3) made a similar point:

It is recognised that keeping fees competitive is important in acting in the best interests of members. However, the focus on fees should be balanced against net returns and the services received by members. Lowest cost does not necessarily deliver on either of these objectives and we consider that net outcomes and provision of quality services should be of equal or greater importance.

The Commission's assessment will be based on multiple criteria, ultimately weighted according to their significance and backed up by a range of performance indicators. This is often referred to as multi-criteria analysis and is used for decision making when there are a large number of criteria to be taken into account before a decision can appropriately be made, and particularly where there are conflicting objectives (Dodgson et al. 2009).



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Dodgson et al. (2009, p. 21) have noted multi-criteria analysis has a number of advantages over less formal approaches to decision making (some of which are less relevant to a one-off exercise such as the future stage 3 review of the superannuation system):

- it is open and explicit
- the choice of objectives and criteria that any decision making group may make are open to analysis and to change if they are felt to be inappropriate
- scores and weights, when used, are also explicit and are developed according to established techniques. They can also be cross-referenced to other sources of information on relative values, and amended if necessary
- performance measurement can be sub-contracted to experts, so need not necessarily be left in the hands of the decision making body itself
- it can provide an important means of communication, within the decision making body and sometimes, later, between that body and the wider community, and
- where scores and weights are used, it provides an audit trail.

Major stakeholders agreed there is a need to consider a wide range of criteria. For example, the Australian Prudential Regulation Authority (sub. 32, p. 2) stated:

Given the varying needs and retirement objectives of individual members, there is no single “best” outcome or approach that would be expected to deliver appropriate net retirement outcomes for all members across the superannuation system as a whole. An appropriately broad assessment therefore necessarily involves both qualitative and quantitative assessment approaches and measures ... APRA encourages the Productivity Commission to establish criteria that recognise the importance of optimising overall long-term outcomes across a wide range of factors and taking into account the broad spectrum of funds and members across the superannuation system.

The concept of using multiple criteria, weighted by significance, to measure performance is widely accepted in the superannuation sector. For example, when determining overall fund performance, superannuation fund ratings agencies typically apply varying weight to a number of categories including investment performance and process, the level and transparency of fees, administration, governance, the cost and level of insurance, and advice to members.

### Weighting the assessment criteria

Some participants sought clarity about how the various criteria will be collectively interpreted in stage 3 to reach an overall conclusion. CIFR (sub. DR57, p. 2) stated:

Noticeably absent from the draft report is any detailed discussion of how analysis ranging over multiple dimensions is to be combined to form an overall ‘system’ view. ... Perhaps the question of combining the findings was purposefully left out of the draft report, with the intent of addressing aggregation at a later stage. In any event, this important and difficult issue ultimately needs to be tackled; and a range of methods are possible.

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Similarly, a number of participants sought clarity on the weights to be placed on the various criteria in the Commission’s stage 3 assessment. For example, AIST (sub. DR102) noted that the Commission’s approach involved weighting criteria that could be measured objectively with others that had a subjective element, and suggested higher weighting should be placed on the former.

It is not possible to assign weights to criteria at this stage. The Commission will afford relative weightings during the course of the stage 3 review, collectively informed by the inquiry’s terms of reference and interpretive value of the evidence gathered and assessed by the Commission at that time. Intuitively though, criteria that are most directly related to the ultimate objectives of meeting members’ best interests and retirement incomes — such as net returns — would attract the highest weight.

### **A three-step process**

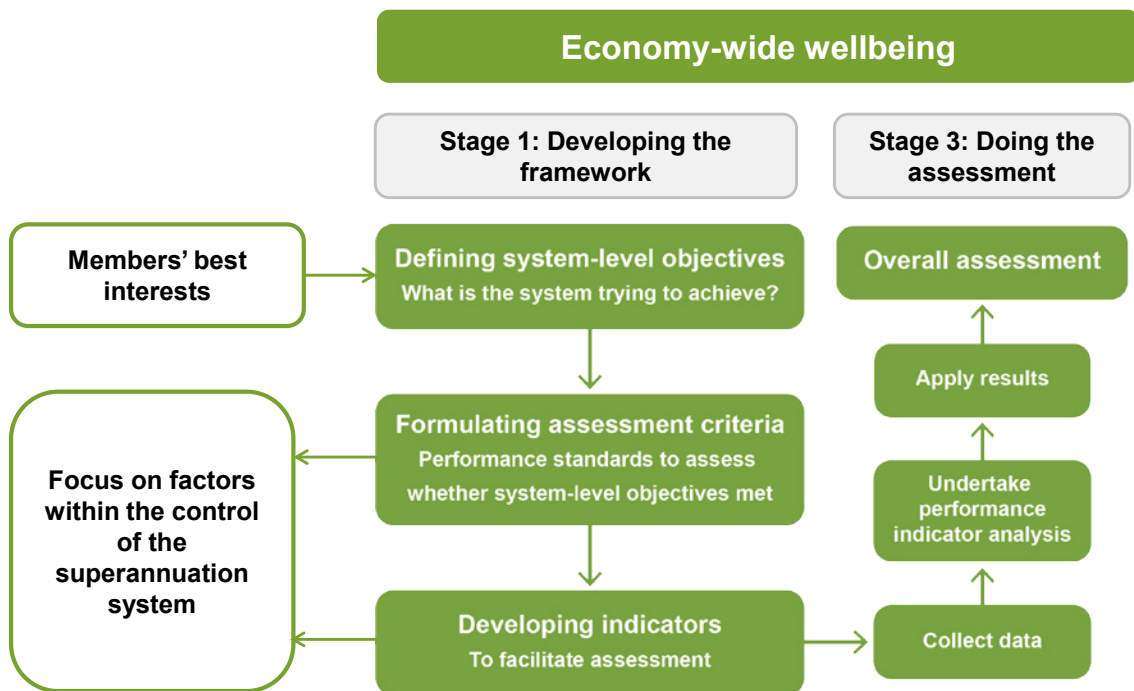
The Commission’s approach to assessment involves three steps:

1. defining system-level objectives (chapter 4) for the superannuation system — what is the system trying to achieve?
2. formulating assessment criteria based on these objectives — that is, the performance standards by which the Commission will assess if the system-level objectives have been achieved.
3. identifying indicators (chapters 5 and 6) to facilitate interpretation and ultimate assessment against the criteria in stage 3 (figure 3.1).

The Commission has taken **current policy settings as given** when developing the assessment criteria. The aim is to develop criteria that are **within the influence of the system**. This is done in two main ways: (i) **by omission** — the Commission is not proposing to assess the system on what is outside its influence (such as whether the overall level of saving is optimal); and (ii) **by recognising the influence of policy factors when proposing criteria in some areas**. However, this approach does not neatly apply (ex ante) to all criteria. Ultimately, the assessment in stage 3 will also need to consider whether policy settings are constraining the ability of the system to achieve certain objectives.

The assessment criteria are relatively high level and are phrased as questions relating to the system-level objectives. There may be multiple indicators attached to each criterion to guide measurement of overall performance.

Figure 3.1 The Commission’s approach to assessment<sup>a</sup>



<sup>a</sup> The stage 2 work will also be informed by the criteria developed in stage 1, and stage 2 work itself will similarly inform the stage 3 review.

Each criterion must be measurable (quantitatively or qualitatively) in that there must be some way of objectively assessing performance against it. However, some criteria might lend themselves to a simple ‘yes’ or ‘no’ answer about whether performance is satisfactory. In other cases, a score (such as a mark out of five) may be applied to determine the adequacy of performance. In some cases, directions of change (towards greater efficiency? lower fees?) might be of more interest than absolute levels of performance.

### 3.2 The choice of performance indicators

The choice of indicators to facilitate assessment is ultimately a stage 3 exercise, but the Commission has gone to great lengths in this study to identify likely indicators, and to flag where further data gathering may be required. There will be further opportunities to refine the indicators in the stage 3 review.

In identifying performance indicators, the Commission has concluded there is a need for differing approaches depending on what is being assessed and the level of information available. While some indicators will be more significant than others in assessing performance, no one indicator (or even a handful of indicators) will be determinative of overall performance. The relative importance of indicators can sometimes be uncovered by

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objective analytic techniques, like econometrics, while in other cases more judgment will be required. The Commission will consider the indicators as a whole.

The indicators chosen will vary significantly in their nature. Depending on the aspect of performance being measured, there will be a mixture of quantitative (that is, expressed numerically) and qualitative (that is, descriptive rather than specifically measured) indicators. In some cases, problems with data availability or comparability might mean only qualitative evidence is available where ideally quantitative answers would have been preferred. The quantitative indicators, being essentially historical data, provide an ex post assessment of efficiency or competitiveness. Qualitative indicators (such as those reflecting the quality of governance) can reflect past and present performance and also bear on likely performance into the future.

The Law Council of Australia (sub. 17, pp. 5–6) saw a combination of qualitative and quantitative indicators as appropriate:

To properly assess efficiency, both quantitative (i.e. investment returns over a set period) and qualitative measures (i.e. financial stability and governance) should be considered. For example, each member indirectly bears a portion of the cost of regulating the superannuation system which impacts on their investment returns. This cost, however, is offset to the extent it protects the member against losses caused by fraud or system failure, for which they may be unable to be adequately compensated.

Indicators will also be based on inputs and processes, outputs, outcomes and behavioural factors. There are typically trade-offs between the significance of some indicators and the degree of control that the superannuation system has over them (figure 3.2). Outcome indicators (such as ‘effect of the system on financial security in retirement’) are strongly aligned with system objectives, but they are subject to multiple influences, many of which are outside the control of the superannuation system.

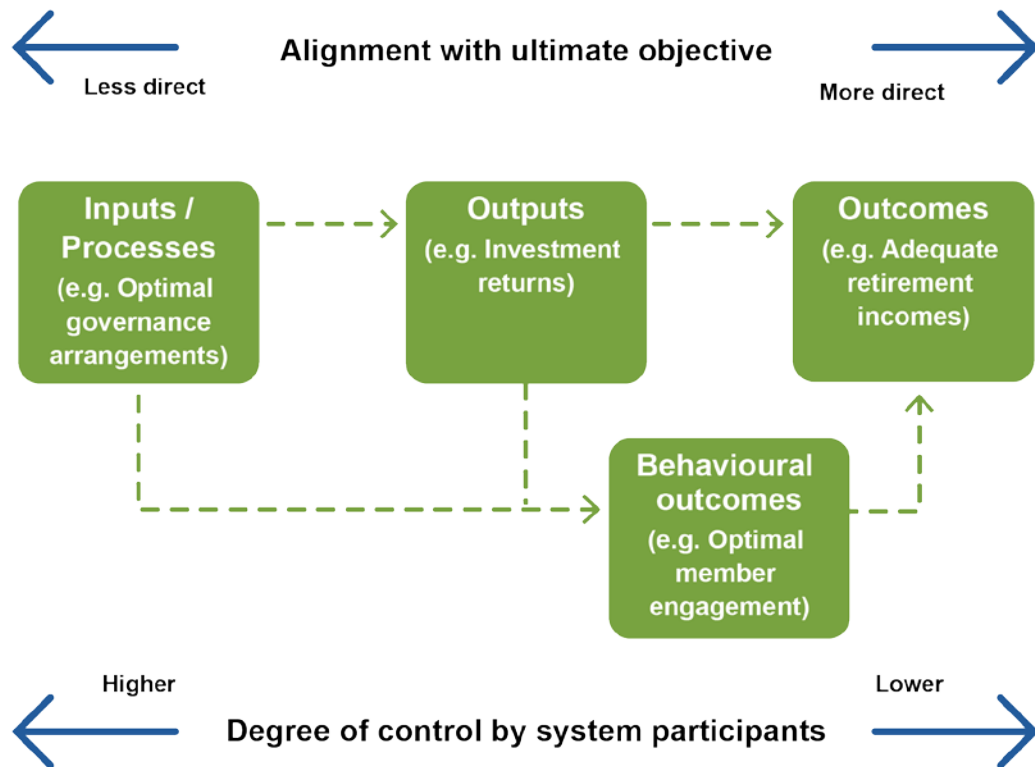
CPA Australia (sub. 14, p. 1) suggested outcome-based indicators should represent the predominant focus of the study:

We agree with the Commission drawing on a range of performance indicators, however we believe the focus should be on outcomes as the ultimate purpose of the superannuation system is to maximise retirement outcomes for retirees. Similarly, it is important to assess the barriers to meeting these outcomes.

Output measures such as net investment returns, while under greater influence of the system, can also be difficult to measure, particularly if attempts are made to isolate the impact of the superannuation system from broader market trends (chapter 6).

In some cases, indicators might be based on processes or inputs into the superannuation system (for example, rules and practices relating to fund governance). These indicators have the advantage of being straight-forward and generally easy to measure. They are also within the scope of what superannuation system participants can influence. However, input-based indicators are likely to be somewhat removed from the objectives of the superannuation system.

Figure 3.2 Trade-offs in the choice of assessment indicators



CIFR (sub. 10, p. 4) saw an important role for input-based indicators:

The default segment should be evaluated in a different manner to other choice-driven segments. Assessment should involve input-based measures aimed at evaluating the extent to which fiduciaries and agents who make choices on behalf of members are aligned with members and their needs. The assessment of competition in the default segment should focus on the mechanisms by which members are allocated to default fund providers.

The trade-offs between alignment of objectives and the degree of control by system participants can be highlighted in the Sparrow Tiered Performance Framework (Sparrow 2000). The framework consists of four tiers, with tier 1 containing key outcome indicators, which might be largely outside the control of the superannuation system. Tier 2 focuses on behavioural outcomes for participants in the superannuation system, including members. Tier 3 measures system activities and output, while tier 4 seeks to capture measures of the system's efficiency in using resources.

While the Sparrow framework was originally developed in the context of performance measurement for regulatory agencies, the principles underlying it also apply to measuring the performance of the superannuation system. An example of how the framework operates is shown in table 3.1 (with hypothetical indicators).

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### Table 3.1      **The Sparrow Tiered Performance Framework – Application to Superannuation**

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*Tier 1. Effects, impacts and outcomes*

Adequate retirement incomes

*Tier 2. Behavioural outcomes*

- a. Sufficient member engagement
- b. Informed member decisions (including decisions by intermediaries)
- c. Reduced contraventions of governance standards

*Tier 3. Activities and outputs*

- a. Investment returns
- b. Product innovation

*Tier 4. Resource efficiency*

- a. Cost minimisation
  - b. Governance arrangements
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*Source:* Adapted from Sparrow (2000).

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In undertaking this study, the Commission has drawn on the performance reporting framework used in the Steering Committee for the Review of Government Service Provision’s Report on Government Services, for which the Productivity Commission acts as the Secretariat. The framework is focused on outcomes, but is supplemented by performance information on outputs and inputs (SCRCSP 2016).

The Commission has also considered the usefulness of a number of existing composite indicators relating to superannuation performance, such as the Melbourne Mercer Global Pension Index and Allianz Pension Sustainability Index (appendix E). The Commission considers that these pre-existing indicators are of limited usefulness for this study, as they are predominantly measures of the adequacy and sustainability of retirement income systems, rather than being focused on efficiency and competitiveness of the superannuation system.

### **Participants’ views on the Commission’s approach**

In response to the draft report, participants provided mixed feedback on the Commission’s overall approach to assessment. While noting potential areas for improvement, some expressed support for the comprehensiveness of the Commission’s approach. For example, the Australian Prudential Regulatory Authority (sub. DR111, p. 1) stated:

APRA supports the comprehensive assessment approach proposed by the Commission, which incorporates a broad range of indicators and recognises that both qualitative and quantitative assessment approaches and measures are needed. The Commission’s proposed approach appropriately reflects that, given the varying needs and retirement objectives of individual members, there is no single ‘best’ outcome or approach that would be expected to deliver

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appropriate net retirement outcomes for all members across the superannuation system as a whole.

CIFR (sub. DR57, p. 2) said:

CIFR would like to congratulate the PC on what is an excellent and comprehensive piece of work. We largely agree with the broad thrust of what the PC is proposing. More importantly, the report conveys a strong impression that the PC is across the key issues, and reveals a deep appreciation for the difficulties that bedevil what is an extremely challenging task.

AIST (sub. DR102, p. 3) said:

Our overall assessment is that while the Commission has established a sensible approach to the assessment process, and proposed some useful and appropriate assessment criteria and indicators, there are key areas where the Commission should focus and clarify its approach.

PricewaterhouseCoopers (sub. DR69, p. 2) stated:

We commend the holistic, considered and comprehensive approach the Productivity Commission has taken to identifying the objectives, different methods and evidence sources which may assist in reaching meaningful conclusions.

### Too many indicators and variable quality of indicators

Some participants expressed concern about the number of indicators proposed in the draft report, and about how the Commission would reach overall conclusions (box 3.1).

Some participants also raised issues relating to the quality of some proposed indicators. For example, the Australian Council of Trade Unions (sub. DR78) questioned the usefulness and clarity of purpose of some indicators (without highlighting specific indicators of concern). Similarly, AIST (sub. DR102, p. 3) expressed concern about the inclusion of ambiguous indicators in the framework such as those relating to member awareness of key features of superannuation, and member account monitoring activity:

The Commission has proposed some indicators that are ambiguous, and subject to interpretation. The Commission must avoid using ambiguous indicators.

The Commission has revised its indicators in response to participant feedback and removed some indicators that are of limited value. However, a large indicator set is unavoidable, given the complexity of the task at hand.

Further, the Commission does not consider it necessary or desirable to avoid ambiguous indicators entirely. In fact, this would be difficult as many indicators could be seen as at least somewhat open to interpretation. Some indicators might provide relatively little value on their own, but become useful when considered alongside other indicators. Moreover, the indicators will be interpreted collectively. Leaving gaps in the performance framework where there is ambiguity could omit potentially useful information.

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**Box 3.1      A number of participants questioned the number of proposed indicators**

In response to the draft report, a number of participants questioned whether the Commission had proposed too many indicators and whether the overall approach proposed to assessing the competitiveness and efficiency of the system was too complex. A summary of comments is included below.

The Centre for International Finance and Regulation (sub. DR57, p. 2):

When it comes to the assessment criteria and the related indicators, CIFR holds concerns that the PC may be attempting to cover too much ground. The approach seems to aim at identifying all relevant aspects, with the intent of addressing each as comprehensively as possible. While this is laudable, we question whether a more targeted approach might be more 'efficient', especially given the sheer size of the task being undertaken.

The Association of Superannuation Funds of Australia (sub. DR98, p. 5):

ASFA has a number of broad concerns with the Commission's framework. Unless refined, the framework – in its current form – would make it difficult for the Commission to draw meaningful conclusions about the efficiency and competitiveness of the system ... there are too many criteria and indicators – some of which are not well specified ... the framework needs to be refocused on key measures of efficiency and competition.

The Australian Council of Trade Unions (sub. DR78, p. 8):

The ACTU is concerned about the complexity and utility of the approach the Commission has adopted in identifying such a significant number of indicators for consideration and with limited substance to how these Indicators might be effectively used to add value to the Commission's work. The very fact that so many indicators are being sought to be tested almost immediately challenges whether an uncomplicated view of the efficiency of major Indicators can be obtained.

The IQ Group (sub. DR67, p. 1):

We submit that the Commission may have cast the net too wide in terms of both the proposed criteria and subsequent indicators. In our view, the key criteria should be about the superannuation system and super funds pursuing net returns and cost minimisation, and that many of the other criteria have less impact to members.

Industry Super Australia (sub. DR106, p. 8):

A number of stakeholders have expressed concern regarding the complexity and granularity of the proposed approach, which will generate a significant quantity of data which will be challenging to collect, verify, contextualise and interpret. In our view, a more focused set of clear benchmarks to test the efficiency of the super system will be more effective in highlighting areas in which the system is performing more or less efficiently.

David Hartley (sub. DR82, p. 1):

There is a risk of getting lost in the detail if all measures are launched simultaneously. Indeed, clients of superannuation funds will not be better informed at all by being provided too much data. Furthermore, in a sea of data, funds in a competitive environment will be able to cherry-pick data in a way that adds to confusion.

The need to exercise evidence-based interpretation and judgment in assessing performance in the superannuation system is not unusual. For example, experts in the superannuation field routinely employ evidence-based interpretation and judgment when assessing the bidders in a corporate tender (appendix C), as would ratings agencies when determining awards such as 'Fund of the Year'.



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## Potential targeting of indicators by funds

Some participants questioned whether there was potential for funds to prioritise performance in areas covered by indicators in the report when these areas might otherwise be of lower priority. PricewaterhouseCoopers (sub. DR69, p. 3) said:

It is worthwhile considering any potential unintended impacts on individual operators' behaviours as a result of the formal review of the efficiency and competitiveness of the system and how this might ultimately feed into an assessment of the approach for allocating default members. For example, given the longer term consequences of potentially being considered as a default fund, could it be possible that some superannuation funds could misunderstand the system criteria and interpret them as being what they should focus on, which may not be to the interests of their particular members.

The Commission is cognisant of the possibility of individual funds misunderstanding the role of the performance measurement process, or of funds 'gaming' the performance measurement process by deliberately targeting areas covered by performance measures at the expense of other areas. These concerns are inherent in any performance assessment involving measurement through the use of individual indicators. However, these concerns are tempered in three ways:

- *the comprehensive approach taken by the Commission*: if one area of performance is prioritised at the expense of others, a comprehensive suite of indicators has the potential to highlight poorer performance in other areas. The approach therefore mitigates against 'gaming' strategies.
- *the system-wide approach*: this reduces the incentive for any one fund to change its behaviour in response to the performance measurement exercise. Funds are not being ranked directly against one another.
- *the one-off nature of the exercise*: some participants have suggested the stage 3 study into the competitiveness and efficiency of superannuation funds could be repeated regularly as an ongoing exercise (for example, AIST, sub. DR102). The Commission notes that under the Australian Government's *The Australian Guide to Regulation*, any future use of the Commission's assessment framework by Government or the regulator would consider signalling effects and regulatory burden. However, the Commission sees it as unlikely that a one-off exercise such as this review would materially change ongoing fund behaviour.

The Commission would also use the experience gained through the Report on Government Services, and other benchmarking exercises undertaken by the Commission in recent years, to ensure the framework minimised opportunities for misuse.

## The time dimension of indicators

The Commission's stage 3 assessment will be based on a mixture of past performance, present performance and, where appropriate, likely future performance. Some indicators,

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are inevitably backward-looking. For example, indicators relating to net returns require relatively long timeframes to be meaningful (such as the previous 5 or 10 years).

Other indicators, such as survey-based measures of member satisfaction, are inevitably ‘point in time’ reflecting current performance at the time of the survey. Other indicators, such as those looking at the quality of investment governance, can be considered future-focused to some degree as, by providing information on the quality of current decision making, they also provide insights into the likely future quality of investment decision making and thereby investment performance of the superannuation system.

The FSC (sub. DR110, p. 4) stated recent reforms meant using past performance data could be misleading in assessing the current competitiveness and efficiency of the superannuation system:

The [Financial System Inquiry] envisaged the review apply prospectively from the introduction of MySuper in 2013, and this necessitates the exclusion of historical data from prior to MySuper as it will cause a statistical break that would be methodologically unsound and undermine the credibility of the Commission’s analysis. The Commission should have regard to the considerable regulatory change currently underway in superannuation by undertaking a prospective approach to assessing the industry.

Some participants questioned whether it was too soon to draw conclusions about the competitiveness and efficiency of the superannuation system after recent major reforms (particularly the introduction of MySuper, and the Future of Financial Advice reforms). For example, AMP (sub. DR90, p. 3) stated:

Superannuation funds were given time to comply with the associated regulations (such as moving default balances to a MySuper product over time) and funds have moved at variable speeds in introducing MySuper products. As a result of the MySuper reforms, the superannuation system is continuing to evolve. It is in a state of flux, and has not yet reached the kind of ‘equilibrium’ needed to properly assess its efficiency and competitiveness.

Stage 3 of the Commission’s work is deliberately scheduled to begin following the full implementation of MySuper (that is, after all default members are legally required to be transferred to MySuper products by 1 July 2017). This timing acknowledges that the introduction of MySuper represents a significant change in the way the system deals with default members.

However, the Commission does not consider this means the competitiveness or efficiency of the system in previous years is irrelevant. Many default products have not changed significantly following the introduction of MySuper, and choice members and those with SMSFs are not significantly affected by MySuper’s introduction. For many indicators, such as those relating to net returns at a system-wide level, measuring performance over a long time period is important and the Commission considers net returns to be significant in its overall assessment of competitiveness and efficiency.

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## 4 What are the objectives of the superannuation system?

### Key points

- The purpose of this study is to design a framework for assessing the competitiveness and efficiency of the superannuation system. The system-level objectives provide a reference point against which the outcomes of the system can be assessed.
- The Australian Government has announced that the objective of superannuation is to provide income in retirement to substitute or supplement the Age Pension. The role of superannuation in providing retirement incomes is well accepted.
- Efficient outcomes are not solely about producing outputs at least cost (operational efficiency) but also include offering products and services that meet the needs and preferences of members (allocative efficiency). An efficient system will also improve in both of these areas over time (dynamic efficiency).
- Competition in the superannuation system is not an end in itself, but provides benefits to the community as a whole and members in particular when it promotes efficient outcomes.
- Five system-level objectives have been proposed, against which the assessment criteria have been developed, to ultimately guide the final assessment.
  - The superannuation system contributes to retirement incomes by maximising long-term net returns on member contributions and balances over the member's lifetime, taking risk into account.
  - The superannuation system meets member needs in relation to information, products and risk management, over the member's lifetime.
  - The efficiency of the superannuation system improves over time.
  - The superannuation system provides value for money insurance cover without unduly eroding member balances.
  - Competition in the superannuation system should drive efficient outcomes for members.

The Australian Government has pronounced the objective of superannuation as *providing income in retirement to substitute or supplement the Age Pension*. This objective has a clear adequacy and sustainability focus, and casts superannuation as only one part of the retirement income system.

This objective on its own is both too high level for the purposes of this study and (as articulated by the Government) framed within the principles of adequacy, sustainability and fairness. Retirement incomes are a function of many factors outside the influence of the superannuation system, such as government policy and the economic environment.

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This study has articulated objectives that are within the *scope of influence* of the superannuation system and *specific to the principles of competitiveness and efficiency*.

The role of this chapter is to define system-level objectives that support the Australian Government's overarching objective and maintain a focus on members' best interests, but are specific to competition and efficiency and can be used to frame the criteria and indicators set out in this study.

The first section of this chapter (4.1) explains the need for system-level competition and efficiency objectives, and the following section (4.2) discusses the Government's high-level objective for superannuation. Section 4.3 defines the concepts of competition and efficiency and explains how they relate specifically to the superannuation system. Finally, section 4.4 articulates the specific system-level objectives the Commission has developed as the starting point of the assessment framework. Chapters 5 and 6 develop assessment criteria and indicators based on these system-level objectives.

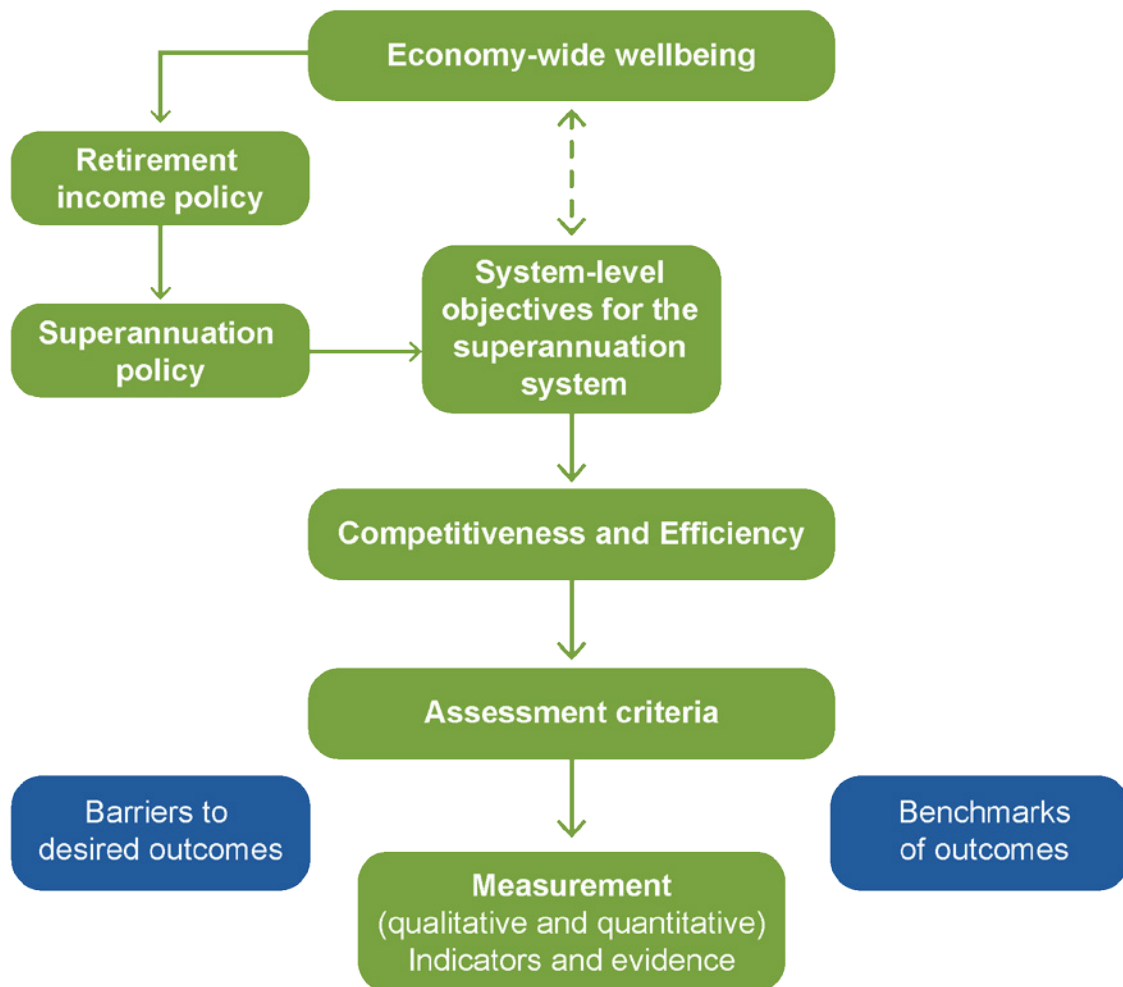
## **4.1 Why do we need to articulate objectives for this study?**

The first step to assessing the superannuation system is to articulate the objectives of that system against which outcomes can be measured. This is because determining what is efficient ultimately depends on the objectives being targeted.

The terms of reference for this study require the development of criteria to assess the *efficiency* and *competitiveness* of the superannuation system. As part of this assessment process, the study has articulated *system-level objectives* that (i) take current policy settings as a given, (ii) are specific to competition and efficiency, but (iii) link back to the overarching objective set by Government. This study has also considered the efficiency and competitiveness of insurance, which has some impact on the final outcomes of the system from a member perspective.

Overall, it is necessary to keep the focus of this framework on the best interests of members (figure 4.1). This distinguishes the system-level objectives in this report (designed to focus on member interests and factors under control of the system itself) from the Government superannuation objective. The Government's objective for superannuation is a policy objective and therefore considers issues that more broadly encompass retirement income policy, such as the interaction of superannuation with the Age Pension.

Figure 4.1 A broad schema of the Commission’s approach



## 4.2 The Government’s high-level objective for superannuation

Following the Financial System Inquiry recommendation that a clear objective be set for the superannuation system (Murray et al. 2014a, p. 95), the Australian Government consulted in 2016 on developing an overarching objective for superannuation in the context of the whole retirement income system from the perspective of being fair, adequate and sustainable. At a high level, stakeholders agreed that the primary objective of superannuation was to generate retirement incomes.

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Following the consultation process, the Government has released exposure draft legislation (the Superannuation (Objective) Bill 2016) to enshrine the overarching objective of superannuation:

To provide income in retirement to substitute or supplement the Age Pension. (Morrison and O'Dwyer 2016)

This objective does not address the question of what level of retirement income superannuation should generate. It focuses on the adequacy and sustainability of the retirement income system, reflecting the fact that superannuation is not the sole determinant of retirement incomes, but rather one of three retirement income pillars (chapter 2).

The Government has also identified five subsidiary objectives to support the primary objective of superannuation. The subsidiary objectives, which will not be legislated but are included in explanatory material to the Superannuation (Objective) Bill 2016, are for superannuation to:

- facilitate consumption smoothing over the course of an individual's life
- manage risks in retirement
- be invested in the best interests of superannuation fund members
- alleviate fiscal pressures on Government from the retirement income system
- be simple, efficient and provide safeguards (Australian Government 2016a).

The Superannuation (Objective) Bill 2016 also introduces a requirement for future legislative changes or regulations to prepare statements of compatibility with the primary objective of superannuation, and the subsidiary objectives provide a framework for assessing the compatibility of bills or regulations with the primary objective. Addressing the subsidiary objectives in statements of compatibility is to be considered best practice (Australian Government 2016b).

Study participants were hopeful that an overarching objective and accountability mechanism would bring coherence to the process of regulatory change in superannuation.

Many changes made since the inception of the system have been piecemeal and ad hoc. An overarching objective enshrined in legislation should help to remedy this unsatisfactory approach. (Australian Chamber of Commerce and Industry, sub. 24, p. 6)

A number of participants highlighted the importance of policy stability to ensure the effectiveness of the superannuation system as a long-term savings vehicle (the Association of Independent Retirees, sub. 6; the Financial Services Council, sub. 29; the Australian Institute of Superannuation Trustees, sub. 30). Policy changes, especially if they are seen to be frequent or to apply to income saved under previous arrangements, can undermine confidence in the system. Further, by requiring re-engineering of large and complex systems, they can reduce operational efficiency, and potentially dynamic efficiency if they stifle innovation.

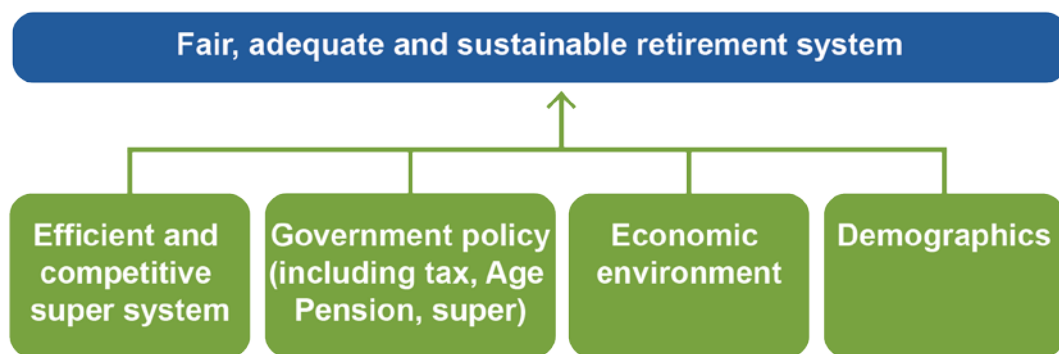
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### 4.3 How are efficiency and competition defined for this study?

Competition and efficiency are not merely academic concepts, but have tangible positive impacts on the economy and individual wellbeing. A system that is competitive and efficient will not necessarily satisfy the Government's overarching objective in itself, as retirement incomes are not solely reliant on the superannuation system. However, a system that is competitive and efficient is more likely to be fair, adequate and sustainable than one that is not (figure 4.2). For example, an efficient system will generate higher net investment returns over time and therefore deliver higher retirement incomes and decrease dependence on the Age Pension. Efficiency and competition are defined in box 4.1.

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Figure 4.2 **Contributors to a fair, adequate and sustainable retirement income system**



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#### Characteristics of a competitive and efficient superannuation system

While markets are rarely perfectly competitive or efficient, it is still beneficial to consider the characteristics one would expect to observe in an ideal superannuation system. As far as these characteristics can be observed and measured, a clearer picture emerges of sources of inefficiency, impediments to efficiency or competition, and of measures that may improve the overall operation of the system.

There are potentially unlimited ways to describe the characteristics of a competitive and efficient system, so the following list can be taken as indicative rather than exhaustive. A competitive and efficient superannuation system:

- maximises outputs for given inputs (however, it may not be straightforward to define inputs and outputs for the superannuation system, as discussed below)
- allows for the efficient entry and exit of funds and other service providers

- realises economies of scale and scope that may exist, without generating diseconomies
- takes behavioural biases into account in the design and conduct of the system, so that appropriate products are offered and superannuation funds act in the best interests of members, whether those members are meaningfully engaged or not
- effectively manages principal–agent problems either through well-designed governance, trust and contractual arrangements, and/or well-designed regulatory measures
- is sufficiently stable (in terms of prudential regulation and the role superannuation plays in the broader financial system) to allow long-term investment and innovation
- tax and policy settings do not distort efficiency and competition except where the benefits of doing so outweigh the costs.

The following sections elaborate on these characteristics of efficiency and competitiveness specifically in the context of the superannuation system.

#### Box 4.1      **The dimensions of efficiency and competition**

Economic efficiency is about maximising the aggregate or collective wellbeing of the members of the community. Economic efficiency requires satisfaction of three components.

- **Operational (or productive) efficiency** is achieved when output is produced at minimum cost. This occurs where no more output can be produced given the resources available.
- **Allocative efficiency** refers to the allocation of resources to their highest value uses. Ultimately, the objective is to align the services offered by the superannuation system with the preferences and needs of members (though, for reasons explained below, the Commission has focused on member needs rather than preferences in this study), and to maximise their wellbeing to the greatest extent possible — the best or ‘most efficient’ allocation uses resources in the way that contributes the most to community wellbeing.
- **Dynamic efficiency** involves improving operational and allocative efficiency over time. Whereas operational and allocative efficiency assume current technological and other constraints, dynamic efficiency occurs when innovation and technological change increase the overall benefits that could be achieved in a competitive and efficient system. This can mean finding better products and better ways of producing them.

**Competition** is closely linked to efficiency through competitive pressure which drives firms to be more efficient. Through this process, competition leads to reduced prices and improved service quality, and therefore enhanced community wellbeing.

*Source:* PC (2013, p. 3).



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## Operational efficiency in the superannuation system

Operational or productive efficiency refers to producing the maximum value of output for a given level of costs. Alternatively, it can be defined as minimising the costs of producing a given level of output. This requires an understanding of system inputs and outputs, which can be defined more or less narrowly and can change depending on whether a member is in the pre-retirement or retirement phase (David Hartley, sub. 12).

For example, in the *pre-retirement* phase, inputs into the system include the fees paid by members (reflective of costs incurred); while outputs include the return members earn on their contributions (taking into account the risks they take) and the level of service quality provided to members (such as call-centre services, web-based resources and education material) (CIFR sub. 10; Fiduciarys Friend, sub. 7; Mercer, sub. 31; Liu and Sy 2009, p. 27).

In the *retirement* phase, key inputs into the system continue to be fees paid by members. However, the focus of output shifts to the level of retirement income provided to members and the form in which it comes. In a defined contribution system this is inherently linked to the assets accrued during accumulation. Retirement income could take different forms in practice, such as a lump sum, account-based pension or different types of annuities, each with their own cost structures. Ongoing investment returns and ancillary services provided to members may also remain important to members depending on the nature of their retirement preferences and product choice.

Other inputs, such as governance arrangements, are less visible (and likely harder to quantify) but potentially no less important in their contribution to the nature and quality of outputs in the system.

## Allocative efficiency in the superannuation system

Allocative efficiency refers to the allocation of resources to their highest value uses. As such, members (or those making decisions on their behalf) would make decisions in the members' best interests and the superannuation system would maximise members' wellbeing to the greatest extent possible.

In principle, an assessment of allocative efficiency would require information about the needs and preferences of users of the system (or knowledge of what outcomes would maximise their wellbeing, if preferences are suboptimal). In practice, members' preferences about some of the key decisions are often unlikely to be revealed, such as their tolerance for investment risk at different stages of the life cycle, and the precise nature of their demand for ancillary services, such as financial advice and insurance. The compulsory nature of superannuation also means the capacity of members to reveal their preferences is constrained.

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Individuals also face various trade-offs in making choices about superannuation (box 4.2). There is significant heterogeneity of individual circumstances and preferences within the system (meaning a ‘median’ user will not necessarily reflect what is allocatively efficient for all or even most members). Further, there is debate about what optimal preferences and behaviour actually look like (chapter 6).

#### Box 4.2 Trade-offs in decisions about superannuation

- **Lifetime saving and years of work** — with everything else equal, a lower level of saving can mean that a person has to work longer and/or retire later to be able to achieve a target income in retirement. This trade-off involves finding the right balance between the benefits derived from consumption and the benefits of having more leisure time.
- **Current and future consumption** — for a given income, the greater a person’s level of consumption today, the lower the savings to fund consumption in the future. This trade-off involves maximising the benefit from consumption over a person’s life cycle. This consideration is important both during the pre-retirement phase of superannuation, when the decision is how much to contribute voluntarily, and in the retirement phase, when the question is how quickly to draw down the savings.
- **Risk and return** — there is a trade-off between the desire to achieve a high return and a desire to minimise risk, and the need to manage sequencing risk (and other risks, such as inflation risk) in the transition to (and during) retirement.
- **Consumption and longevity risk** — one of the issues in achieving the ‘right level’ of consumption in retirement is managing longevity risk. This trade-off involves balancing the level of consumption in retirement against the risk of outliving savings, or of consuming too little and leaving an unintended bequest.

A superannuation system that meets the needs of a diverse range of members must also consider members who do not have stable work patterns (who spend time out of paid work for various reasons), and low-income members, whose interests may not be best served by a system designed for the average worker. These equity issues have been raised by a number of stakeholders (for example, the Queensland Nurses’ Union, sub. 16 and Women in Super, sub. DR97). However, the occupational link that underpins the compulsory superannuation system is at the heart of many of these issues. As such, many of the concerns raised, while clearly legitimate, are not easily addressed through this study.

#### Dynamic efficiency in the superannuation system

Dynamic efficiency (improvements to operational and allocative efficiency over time) is particularly important in the superannuation system, where decisions and their consequences span long time horizons. Dynamic efficiency can manifest in various ways.

- For supply-side participants, dynamic efficiency can include innovation, cost reduction and improvements in the quality and appropriateness of products and services offered to members.

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- For members — who would be expected to gain from the innovation, cost reduction and quality improvements discussed above — it also suggests managing important trade-offs over the life cycle, such as between current and future consumption.
  - For the system as a whole, stability and a predictable policy and market environment are important to facilitate improvements in operational and allocative efficiency over time.

### Competition in the superannuation system

Competition in the superannuation system is not an end in itself. Competition is an intermediate objective insofar as it drives more efficient outcomes for consumers: lower prices, better products and improved choices.

Some stakeholders — for example, the Australian Council of Trade Unions (ACTU, sub. 18) — argued that competition was not necessary to deliver positive outcomes for members and that historically, greater levels of competition have not led to improved efficiency in the Australian superannuation system. Importantly, the number of providers is not necessarily reflective of the level of competition (chapter 5). Around the world, there are examples of private pension systems that rely on a central (typically government) provider (appendix E). However, member choice and competition are institutionally entrenched in Australia's superannuation system, and the issue as to whether existing settings should be replaced by a substantively different approach is not within the scope of this study.

In theory, a competitive environment in the superannuation system means that funds and other service providers within the system have appropriate incentives to deliver the products and services that members want at prices which reflect their costs of supply, and to continually innovate over time in order to attract and retain members.

On the supply side, a competitive and contestable market should lead to the realisation of economies of scale and downward pressure on fees over time. A competitive market does not necessarily mean that there will be a lot of firms. In fact, the presence of many firms and unrealised economies of scale could be evidence of a lack of competitive pressure to drive inefficient firms out of the market. Competition should mean that efficient providers not yet in the market will enter, efficient providers already in the market gain market share over time, and inefficient providers will face pressure to exit. Depending on the underlying economic cost structures in the system, these changes over time could lead to even greater concentration of superannuation funds and service providers.

Given these market features, there is a risk of misinterpreting the role (and degree) of competition in the superannuation system if competitiveness is assessed using relatively simple indicators, such as number of producers or market share. More nuanced assessment criteria and indicators have been developed in chapter 5.

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## There may be trade-offs between competition and efficiency

Participants have expressed various opinions on the role and usefulness of competition in the superannuation system. For example:

- the ACTU (sub. 18, p. 5) suggested that competition in superannuation may lead to lower living standards in retirement
- the Financial Planning Association of Australia (sub. 28) and Financial Services Council (sub. 29) asked whether optimal consolidation could increase competition
- Fiduciary's Friend suggested competition is 'best served by encouraging a larger number of smaller participants who can compete vigorously on price (cost), quality, product differentiation, service and innovation' (sub. 7, p. 7).

These issues are discussed in chapter 5.

While promoting competition often delivers more efficient outcomes, the relationship is not always straightforward, and there may be trade-offs in the superannuation system. For example, there is a complex interface between competition in financial markets and the stability of the financial system more broadly (appendix F) (Allen and Gale 2004; IMF 2013). Specifically in the context of superannuation, the Financial System Inquiry found that fund portability rules — which would be expected to facilitate greater member-driven competition — may distort asset allocation within the system in favour of greater than optimal levels of liquidity being needed in superannuation investment portfolios (Murray et al. 2014a).

On the demand side, if fund members are not well informed or engaged, or have limited influence on fund governance and direction, providers within the system could potentially compete on irrelevant product features that add little value to members (the Financial Planning Association of Australia, sub. 28). This is particularly a risk in superannuation due to behavioural biases, information asymmetries and institutional settings discussed in this study. For example, Rice Warner has highlighted the variation in fees offered by funds offering 'socially responsible investments', suggesting those funds with higher costs are 'selling an emotional decision without alerting potential members to the high cost of making these decisions (and with no consideration of likely investment outcomes)' (sub. DR112, p. 29).

The ways in which competition does and does not promote efficiency — and the implications this may have for the design and interpretation of criteria and indicators — are discussed further in chapters 5 and 6.

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## 4.4 System-level objectives

It has been necessary to express the objectives of the superannuation system at a more workable level and from the perspective of competition and efficiency to give substance to an assessment framework for this study. The following sections consider objectives of the superannuation system that are specific to competition and efficiency, take current policy settings as given, but link back to the overarching objective set by Government. The system-level objectives developed also maintain a focus on what is in the best interests of members.

Following the release of the Commission's draft report, participants provided feedback on the proposed objectives. A sample of comments provided is in box 4.3. Key themes included a desire to see income adequacy in retirement included as an objective, emphasis on net returns as a key objective (as well as the need to explicitly factor in risk), the difficulty of meeting both member needs and preferences, and concern about the proposed insurance objective contained in the draft report.

### Box 4.3 Selected comments on the Commission's proposed system-level objectives

The approach of specifying objectives to provide context and focus for the analysis is commendable. The stated objectives seem sensible, and fit for purpose. (CIFR, sub. DR57, p. 2)

AMP believes that these objectives confuse means and ends, and are at best intermediate objectives. We suggest instead that a simpler objective should be adopted. AMP considers that the aspirational objective of superannuation should be to lift Australians out of the welfare safety net of the age pension. That is, we should aspire for as many Australians as possible to have dignified self-funded retirements. (AMP, sub. DR90, p. 2)

We generally support the proposed system-level objectives and argue that the key and clear overriding objective should be that the superannuation system maximises net returns on member contributions and balances over the long term, in the context of workers defaulting into funds which best serve the system of universal coverage. (AustralianSuper, sub. DR84, p. 1)

The primary focus on cost may distract from the more important goal of delivering value to members. Value, rather than cost, is a higher standard and should have regard to member outcomes supported by financial advice and ancillary services that meet members' expectations and needs ... Linked to the above, QSuper contends that adopting net returns exclusively to assess competition in the system is sub-optimal. (QSuper, sub. DR96, p. 2)

The Commission's proposed objectives are subsidiary objectives that relate to, and would support [an overarching objective on retirement income adequacy]. The proposed subsidiary objectives require refinement – in particular the insurance objective should incorporate the broader social and economic benefits of insurance. (ASFA, sub. DR98, p. 3)

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## Developing system-level objectives for efficiency

### Maximises long-term net returns

Over the long term, net returns are a paramount driver of final account balances and therefore retirement incomes for members (the overarching Government objective). An assessment of the superannuation system should therefore include whether investment returns are being maximised over the long term and whether fees and costs are being minimised.

#### *Focus on net returns*

A number of participants supported a focus on net returns. For example, the ACTU (sub. DR78, p. 6) said:

The ACTU believes ... Net return to members over the long term is clearly the measure which has most impact on [key stakeholders] ... Essentially any other measure should be seen in a light as only being relevant to the extent that an explicit decision is made to dilute the maximising of balances because of fundamental public policy considerations.

Industry Super Australia (ISA) (sub. DR106, p. 9) said:

ISA agrees [net returns] is a key element of system efficiency and that it should be an area of focus in the Commission's Inquiry ... given the importance of maximising net returns, we are supportive of it remaining a standalone objective.

Dixon Advisory (sub. DR103, p. 14) thought the emphasis on net returns inappropriately prioritised past performance:

Dixon Advisory submits that the focus on historical returns as a measure of efficiency overly emphasises past performance, which is a significant conflict with the maxim: past performance is not an indicator of future performance.

The Commission shares the view that it is important to exercise caution when assessing past performance, particularly at the individual fund level. However, net returns to members are a key determinant of retirement incomes and therefore an important part of the Commission's assessment framework. Moreover, the Commission is focused on *long-term* net returns from a *system-wide* perspective. Therefore the performance of individual funds, particularly over short time frames, should not significantly affect the stage 3 assessment.

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### *Suggested focus on adequacy of retirement income*

A number of participants considered the objectives should have a greater focus on retirement income. For example, the Association of Superannuation Funds of Australia (sub. DR98, p. 8) said:

Superannuation ultimately is about delivering income which affords a comfortable standard of living in retirement. In this context, we consider that the objective of the system should be: “To provide an adequate income to ensure all Australians achieve a comfortable standard of living in retirement, supplementing or substituting the Age Pension”.

Other participants wanting an explicit reference to retirement income adequacy or standard of living in the objectives included the Australian Association of Gerontology (sub. DR75), AMP (sub. DR90), the Financial Planning Association of Australia (sub. DR91), and ISA (sub. DR106).

Achieving retirement income adequacy for all members is an aspirational objective, and as noted earlier, driven primarily by key policy settings (such as provision of the Age Pension, and the level of the Superannuation Guarantee) and the economic environment. The Commission is focussing on those matters *within* the system’s control, and therefore does not see an explicit reference to retirement income adequacy as appropriate for inclusion in the system-level objectives. That said, the Commission does consider it is appropriate to highlight that the purpose of superannuation is to contribute to retirement incomes, and has amended system-level objective 1 to reflect this (see below).

### *Explicit inclusion of risk*

A number of participants raised the issue of risk in the objective relating to net returns. While the reference to the long term in the draft report’s formulation of this objective was intended to cover risk, a number of participants saw this as inadequate. For example, PricewaterhouseCoopers (sub. DR69, p. 2) said:

In regards to the first objective around maximising net returns over the long term ... we understand that the use of the term “over the long term” is intended to encompass a consideration of risk, but in our view it would be preferable to specifically mention risk in this objective.

Rice Warner (sub. DR112, p. 8) stated:

There is an economic argument that risk and return are highly correlated. It would be worthwhile inserting a clause about taking on acceptable risk.

The Australian Centre for Financial Studies (sub. DR71, p. 2), along with a number of other participants, questioned the reference in the objective to ‘maximising’ net returns:

While this sounds sensible it ignores the fact that investment is (almost) inevitably risky, so that maximizing net returns amounts to maximizing the expected value of returns. Around that mean value there is inevitably a distribution of other outcomes which could well occur ... By

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setting the standard as being to maximize the average return, the PC runs the risk of increasing the spread of outcomes which might occur. What that means is that more people might have poor returns, and finish up on the Age Pension.

Some participants highlighted people in the retirement phase of superannuation faced different risks to those in the accumulation phase. For example, Challenger (sub. DR89, p. 1) stated:

The retirement or pension phase of superannuation is different to the accumulation phase. Not only is there a shift in emphasis from building retirees' account balances to providing sustainable retirement income but there is also a significant change in the nature of the risks faced by retirees. The principal additional retirement risks are longevity, sequencing and inflation risk ... Retirees tolerance for and capacity to recover from adverse events is substantially reduced compared to those investing in the accumulation phase.

The Commission considers an emphasis on maximising *long-term* net returns is a sufficient approach to take account of risk at a system-wide level. While it is arguably more appropriate during the pre-retirement phase, it also holds to some extent in the retirement phase, which can be a very long time for some members. However, it is acknowledged that in the retirement phases members become more focused on considerations such as longevity, sequencing and inflation risk.

#### *Net returns and defined benefit funds*

Some participants saw the net returns objective as problematic for defined benefit funds. For example, the Actuaries Institute (sub. DR109, p. 1) said:

The objective is framed in terms of defined-contribution accumulation plans where the member bears all investment risk. However, a substantial component of current liabilities relates to defined benefit funds.

The Commission acknowledges that system-level objective 1 is an imperfect fit for defined benefit funds. However, as discussed in chapter 1, the defined benefit sector is not a key focus of this study and is not expected to have a material impact on the stage 3 overall assessment of the competitiveness and efficiency of the superannuation system (box 4.4).

#### SYSTEM-LEVEL OBJECTIVE 1

The superannuation system contributes to retirement incomes by maximising long-term net returns on member contributions and balances over the member's lifetime, taking risk into account.



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#### **Box 4.4      Defined benefit schemes are not a key focus of the Commission's study**

As discussed briefly in chapter 1, defined benefit schemes are not a key focus of this study. First, investment risk associated with defined benefit funds resides not with members but rather with the employer responsible for each scheme. Second, many aspects of competitiveness do not apply to defined benefit funds and members because the accounts are not portable. And third, defined benefit schemes are a relatively small and declining part of the superannuation system, largely closed to new members. They can be considered legacy products and their efficiency has limited consequences for the overall future efficiency and competitiveness of the superannuation system.

Their presence in the private sector is particularly small and diminishing. There is \$51 billion in defined benefit member benefits outside public sector funds, and \$49 billion in net assets available to pay these benefits (in the context of a superannuation system with in excess of \$2 trillion in assets). These funds are subject to regulatory oversight to 'enable[s] fund liabilities to be met as they fall due and for the value of assets to be sufficient to cover vested benefits' (APRA 2013b, p. 4).

There is a much larger amount of defined benefits in public sector funds, and the key efficiency issue is the extent to which these liabilities are unfunded. According to ABS government finance statistics, Commonwealth unfunded superannuation liabilities (and other employee entitlements) were estimated to total \$265 billion in 2014-15 (Future Fund assets — \$123 billion at 30 June 2016 — are not counted against these liabilities, as they will only be available to service these liabilities from 2020). State-level unfunded liabilities totalled \$177 billion in 2014-15. These unfunded liabilities are primarily a function of government policy and therefore not a focus of this study.

That is not to say that the defined benefit members and funds are not covered at all by this study. Measures of engagement, member satisfaction and information provision, for example, will incorporate defined benefit funds and their members. Further, should there be evidence of insolvency or mismanagement of private sector defined benefit schemes, that would be of concern in stage 3. However, the regulatory structure around private sectors defined benefit funds and the reporting undertaken suggest this part of the system is not imposing any material inefficiencies at this time.

*Sources:* ABS (2016a); APRA (2013b).

#### **Meets member needs**

Superannuation is a compulsory system with broad coverage of the Australian population (chapter 1). Therefore the system needs to allow a very diverse range of members to achieve meaningful outcomes as they move through the different phases of their life cycle.

Given consumption and risk preferences, an allocatively efficient system should optimise (rather than maximise) retirement income given the various trade-offs people face in making decisions about their superannuation (box 4.2). This includes offering opportunities for lifetime consumption smoothing to maximise wellbeing. Clearly the extent to which the superannuation system can deliver such efficiency will be constrained by policy settings such as the level of compulsory saving required of employees.

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Life-cycle consumption smoothing in superannuation is driven by member decisions about the size and timing of superannuation savings and withdrawals to reflect their consumption preferences, future discount values and attitudes toward risks (including longevity and investment risks). The superannuation system should offer the tools and products that allow members to manage these risks, and should also collect sufficient information about preferences to help members make the necessary decisions.

Making these decisions is difficult even for financially literate and engaged members, meaning there is a high risk of suboptimal decision making (appendix B). The superannuation system addresses this in part by assigning certain member decisions to other parties (such as employers or trustees) considered better able to make those decisions. An efficient superannuation system would incentivise these other parties to act in the best interest of members. For example, trustees targeting short-term investment performance relative to their peers (such as by adopting similar investment strategies to minimise their ‘peer risk’), would be inefficient because this may mean that trustees are not investing in their members’ long-term interests.

### *Tensions between meeting member needs and preferences*

The original formulation of system-level objective 2 in the draft report referred to the system meeting the needs and preferences of members. Some participants questioned the tensions between member needs and preferences. For example, ISA (sub. DR106, p. 9) noted:

All individuals have idiosyncratic needs and preferences. Satisfying these is not, however, the economic or social policy basis for the superannuation system.

Rice Warner (sub. DR112, p. 8) highlighted member preferences were not really an issue for default members:

Default members have relatively homogenous needs – in the absence of them making choices, their preferences have no influence on how their super is managed.

The superannuation system exists to meet a certain need for retirement incomes. By its very (compulsory) nature, it is not able to meet all member preferences, and trying to achieve this would potentially come at significant cost to other more valuable features. Further, there is potential for member preferences to be suboptimal due to the complexity and uncertainty involved with financial decision making (appendix B). Reflecting these considerations, the wording of system-level objective 2 has therefore been amended to remove the reference to member preferences and to reflect only that the system meets member *needs*, in relation to information, products and risk management, over the member’s lifetime.

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## SYSTEM-LEVEL OBJECTIVE 2

The superannuation system meets member needs, in relation to information, products and risk management, over the member's lifetime.

### The system becomes more efficient over time

At its simplest level, dynamic efficiency involves improvements in (operational and allocative) efficiency over time. Dynamic efficiency can be assessed by observing how outcomes change over time, and by considering interactions over time between system participants.

In assessing dynamic efficiency, the Commission will also focus on potential impediments to long-term improvements in outcomes (such as market and regulatory barriers to innovation) (chapter 6). Improvements in operational and allocative efficiency are more likely to be facilitated when regulation is technologically neutral (that is, where the regulatory system does not discriminate against new and innovative ways to deliver better or lower-cost services) (the Australian Institute of Superannuation Trustees, sub. 30). Ensuring system rules allow regulators to respond flexibly to changes and developments in technology is one way to promote this.

The stability of the policy and regulatory environment may also have implications for dynamic efficiency. Policy and regulatory changes are a necessary part of the evolution of the superannuation system and can boost efficiency. However, they also have high transition costs and potentially become a source of uncertainty and instability that can stifle innovation and adversely affect longer-term system outcomes. Policy changes and their frequency are outside the control of the superannuation system.

The long-term stability of the superannuation system itself is particularly important given its growing size and importance to the financial system and economy, and the potential for systemic risks to move across the system. Furthermore, the superannuation system can play an important role in the overall stability of the Australian financial system and the economy, due to its size and the long-term nature of superannuation investments. Some experts are concerned about interconnectedness and the high levels of concentration in markets providing services to superannuation funds, such as asset custodians ('too connected to fail'). Some have expressed concern that the sheer size of superannuation can amplify asset price cycles. However, others see superannuation as *improving* financial stability due to its long-term focus and low leverage in investments. These issues are discussed in chapter 6 and appendix F.

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### SYSTEM-LEVEL OBJECTIVE 3

The efficiency of the superannuation system improves over time.

#### Provides value for money insurance

MySuper products are required under legislation to include default life and total and permanent disability (TPD) insurance coverage on an opt-out basis, and other superannuation products are also commonly bundled with insurance. The bundling of group insurance with superannuation is prima facie likely to lead to allocative inefficiency. Inefficiency could result from people being provided with insurance they do not need, or going without adequate insurance under the assumption that their level of cover within superannuation is sufficient. On the other hand, the provision of insurance in superannuation could mean some members are able to obtain insurance that they would not be able to otherwise.

Taking the default insurance arrangements within superannuation as given, an appropriate system-level objective is whether the system is providing useful, value for money insurance to members, while ensuring this does not unduly erode member balances. Determining whether this system-level objective is being met is not straightforward because insurance products can be difficult to compare on a like-for-like basis, with cover depending on specific wording in the terms and conditions. Nonetheless, relevant criteria and indicators for this objective may consider industry data such as loss ratios, and comparisons with non-bundled products. These issues are explored further in chapter 6.

#### *Participant feedback*

In the draft report, the insurance objective referred to *meeting members' needs at least cost*. A number of participants saw this formulation of the objective as problematic, concerned that the 'least cost' focus implied cheap insurance policies potentially of little benefit to members or unsustainable premiums, while the 'meeting members' needs' was seen as unrealistic given budget constraints and the need to protect member balances for retirement. For example, PricewaterhouseCoopers (sub. DR69, p. 2) said:

In regards to the ... objective around insurance ... in our view the objective would be clearer if it referred to appropriate insurance for sustainable cost. This is because "members' needs" could imply overly large levels of insurance that would inappropriately erode retirement benefits and "least cost" could encourage inappropriate policies and/or unsustainable costs.

AIA Australia (sub. DR88, p. 11) stated:

The default insurance cover provided by most superannuation funds is unlikely to meet the specific needs of all members, although it aims to meet the needs of most members. ... Most

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default insurance designs provide a safety net aimed at addressing minimum needs for most members.

Developing an objective for insurance is made difficult because the obligations placed on trustees are conflicting: they are to provide insurance on an opt-out basis to default customers, but are also obligated to ensure member's balances are not unduly eroded. It is therefore unreasonable and probably unrealistic to expect default insurance within superannuation to meet all members' needs given the policy imposed obligations. It is also probably unreasonable to expect insurance products would be priced efficiently given these constraints (and the information asymmetries inherent in group insurance).

A potentially more reasonable expectation is for trustees to provide beneficial (value for money) group insurance to members — including at a materially lower price and better cover than could be obtained outside of superannuation — without unduly eroding members superannuation balances. The Commission has accordingly re-worded system-level objective 4 to more accurately reflect the policy obligations and therefore constraints confronting trustees when making decisions about insurance.

Consideration was given to the appropriateness of incorporating the 'without unduly eroding member balances' constraint in system-level objective 4. This is effectively a constraint imposed by the *Superannuation Industry (Supervision) Act 1993* (Cwlth) — which has slightly different wording ('not inappropriately erode the retirement income of beneficiaries') — and therefore is, by definition, outside the system's control. However, the Commission concluded that not unduly eroding member balances would, regardless of legal obligations, represent an important commercial consideration that would be in the minds of trustees when considering what represents appropriate insurance cover for members. As such, it was considered an appropriate constraint to include in system-level objective 4.

Finally, a number of study participants commented that one of the benefits of bundling insurance with default superannuation is to address underinsurance in the community (ASFA, subs. 42, 44; FSC, sub. 29; MLC, sub. DR115; Rice Warner, sub. DR112). This is not an explicit policy objective of insurance within superannuation — indeed the policy objective is unclear — and the Commission therefore considers issues relating to perceived underinsurance to be out of scope.

#### SYSTEM-LEVEL OBJECTIVE 4

The superannuation system provides value for money insurance cover without unduly eroding member balances.

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## Developing a system-level objective for competition

### Competition should drive efficient outcomes

In line with the discussion above, competition is desirable insofar as it promotes efficient outcomes. Competition that benefits members can be assessed using various criteria. For example, on the demand side, switching superannuation funds should be a relatively low-cost and simple exercise. This means that members need to have information that is relevant, easily available, easily understood and comparable, and members need to be engaged with their superannuation to some extent. Suppliers should compete on product attributes that add value for members.

Members are not the only decision makers in the superannuation system — employers, financial advisers, superannuation fund trustees and other stakeholders may also play a role in determining the level of competition. This suggests that an assessment of competition needs to take into account the complex member and supply chain intermediaries (chapter 2).

In terms of market structure, the height of barriers to entry and exit is an important determinant of contestability and competitive pressure. Barriers can include regulation, set-up costs and vertical and horizontal integration on the supply side. Economies of scale can be an efficient barrier to entry if they drive lower fees and better outcomes for members. However, the relationship between fund size and efficiency is not straightforward and requires examination. Chapter 5 discusses these issues further and develops assessment criteria and indicators that can be applied.

#### SYSTEM-LEVEL OBJECTIVE 5

Competition in the superannuation system should drive efficient outcomes for members through:

- a market structure and other supply and demand-side conditions that facilitate rivalry and contestability
- suppliers competing on aspects of value to members.

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## 5 Assessing competitiveness

### Key points

- The unique features of Australia's superannuation system require some customisation of commonly used frameworks for assessing competition. Nevertheless, the broad approach involves three steps:
  - (1) defining market boundaries, (2) undertaking a structural assessment of whether the market (including regulatory) conditions are conducive to competition, and (3) testing conduct and outcomes against expectations for a competitive market.
- The competition assessment will cover both the wholesale and retail parts of the value chain. Given the heterogeneity of the system, the key to specifying market boundaries involves identifying market segments that have distinct characteristics and examining their role within the broader market.
- A key aspect of assessing the underlying conditions for competition relates to concerns that disengaged and uninformed members are not generating competitive pressure on supply.
- Member engagement is a partial and (at times) misleading indicator of efficient competition. It should only be used in combination with complementary indicators, such as the availability of relevant information and financial literacy of members. In some cases, better outcomes could be achieved by delegating decisions to agents or by using defaults.
  - Activity-based measures, such as member switching and default rates, are not necessarily a reliable indicator of engagement.
- Measures of market concentration are an ambiguous indicator of competition, because they can mask efficiency-enhancing consolidation and ignore market contestability. They should be used in combination with assessing barriers to entry and realisation of economies of scale.
- Economies of scale are an important consideration. Unused scale economies can be a symptom of barriers to exit, while poor pass through of upstream scale benefits to members could indicate market power within the value chain.
- Assessing competitive outcomes should involve an analysis of trends in costs and prices, as well as examination of whether competition is aligned with member needs. The trade-offs between costs and quality should not be ignored.
- There are gaps in the evidence required for a comprehensive assessment of competition. In particular, survey evidence of member needs and motivations may be required to reach robust conclusions.

Chapter 4 outlined the potential benefits from competition in the superannuation system and some trade-offs that could arise between competition and efficiency. It explained that competition within the system was an important force for improved member outcomes, and that any assessment of competition had to be linked to the ultimate objective of efficiency.

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Consistent with this approach, the Commission formulated an overarching objective for a competitive system. Competition should drive efficient outcomes for members through:

- a market structure and other supply and demand-side conditions that facilitate rivalry and contestability
- suppliers competing on aspects of value to members.

This chapter identifies a set of assessment criteria and indicators to support this objective. Any assessment must be ‘fit for purpose’ and reflect the unique features of the superannuation system (chapter 2). To the Commission’s knowledge, an assessment of this nature has not been previously conducted in Australia or in any other country with a comparable system. Nevertheless, there are established frameworks for assessing the level and nature of competition in a market that the Commission will draw on. A necessary first step involves defining the market to set the scene for further analysis (section 5.1). Beyond that, there are two complementary approaches to assessing the nature and extent of competition in the market:

- a ‘structural’ assessment of the market to evaluate whether the conditions within the market are conducive to competition (sections 5.2 and 5.3)
- an ‘outcomes’ assessment, which focuses on actual conduct and outcomes, and tests whether they are consistent with what is expected in a competitive market (section 5.4).

## 5.1 Defining the market

Defining the market boundaries is an important first step in assessing competition. This task is enshrined in Australian competition law and is a common requirement in other countries’ competition regimes (OECD 2012a). It can assist in understanding the nature of competition in the market and also influence conclusions on the extent of competition. For example, specifying market boundaries too narrowly could lead to underestimated levels of competition, and vice versa.

This section outlines the Commission’s framework for defining market boundaries and provides some rough delineations for the stage 3 review. However, ultimately, the task of market definition will be a matter for the future review of the system following the full implementation of MySuper reforms.

### The Commission’s approach to defining market boundaries

The key concept in identifying market boundaries is supply and demand side substitutability (for example, section 4E of the *Competition and Consumer Act 2010* (Cwlth)). Where products or services are regarded as highly interchangeable by consumers they are generally treated as being in the same market. Similarly, where suppliers producing other products can easily switch to producing a particular product in question,



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they could be regarded as being part of the ‘field of rivalry’ that constitutes the market for that good.

Market definition is typically a challenging and imprecise task. However, in the context of the superannuation system, it is aided by the fact that the system is largely a product of policy — in particular the Superannuation Guarantee and the concessional tax treatment of contributions and withdrawals (chapter 2). Thus, the outer boundaries of the relevant markets can be presumed to roughly correspond to the boundaries of the superannuation system.

Beyond that, the Commission’s analysis (chapter 2), participant feedback and other research (AIST, sub. 30; FSC, sub. 29; Industry Super Australia, sub. 38; Mercer, sub. DR104) indicate that the key dimensions for delineating the markets within the system are the functional and the product dimensions. With respect to the former, the market can be split into two levels:

- a retail level that involves the interaction between the members and the funds and other entities that provide services directly to members<sup>8</sup>
- a wholesale level that involves the interaction between funds and other retail-level service providers, and upstream providers of various services.

Participants and other commentators have raised competition and efficiency concerns with respect to both the wholesale and the retail sides of the superannuation market. The Commission has used this classification when designing its assessment criteria and indicators.

With respect to the product dimension, the end product that reaches members comprises of a bundle of distinct administrative, investment and ancillary services. The Commission has used the wholesale supply and demand of each of those distinct services within the current system as a starting point for delineating wholesale market boundaries. At the retail end, the product dimension is more aggregated and comprises:

- core (investment and administration) services provided to members
- insurance (figure 5.1).<sup>9</sup>

Notwithstanding the above delineation of the superannuation market along functional and product lines, those boundaries are sometimes blurred. In some parts of the system there is considerable horizontal and/or vertical integration of providers. The market structure is also often fluid over time, in particular with respect to fund insourcing and outsourcing

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<sup>8</sup> Throughout this report, ‘retail level’ denotes a functional dimension of the superannuation market — a distinct concept from ‘retail superannuation funds’.

<sup>9</sup> In developing the criteria for competitiveness, the study has considered intrafund financial advice (an ancillary service provided by superannuation funds) as part of the core services provided to members. The broader market for financial advice is outside the scope of this review (chapter 1).

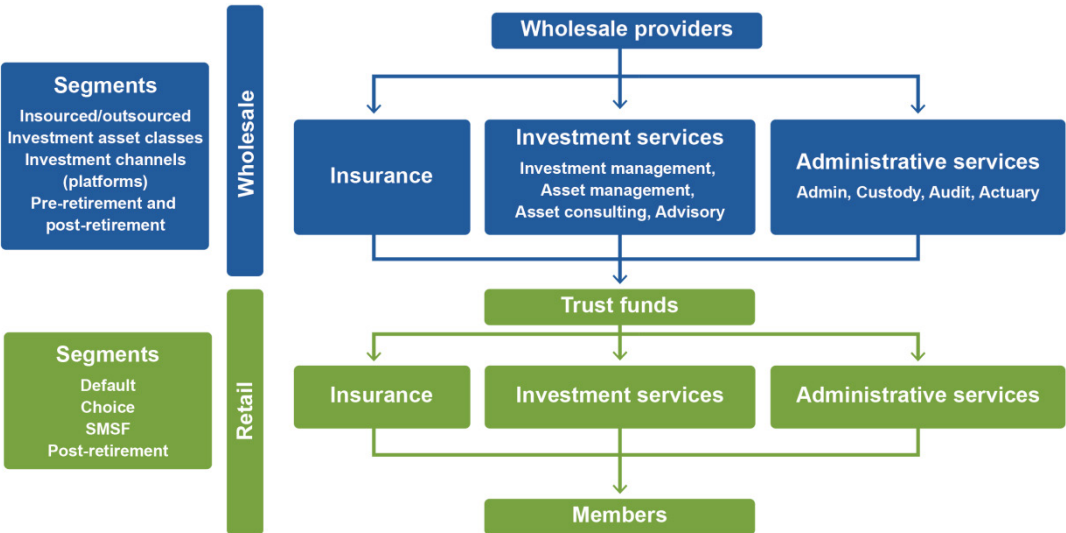
decisions. The implications of this market structure and dynamics are considered in the context of specific criteria and indicators.

**Market segmentation within the superannuation system**

Given the heterogeneity of the system, the key issue in market definition is the extent to which the market is segmented along product and/or consumer lines. If particular segments within the market are highly insulated from the rest of the market, then they would not be exerting or receiving competitive pressure from other parts of the market. Moreover, there may be a lack of competition within the segment due to being isolated from the external competitive pressures. Market segmentation is particularly important at the retail end of the market, where there are concerns about disengagement of large groups of members from their investment, retirement income and insurance outcomes, and the extent to which providers can exploit that.

A further important context for identifying distinct market segments relates to benchmarking of performance. Several participants (for example, Mercer, sub. DR104; MLC, sub. DR115) argued that to ensure a like-for-like comparison, benchmarks need to be specific to a particular segment, rather than apply across the entire system. While this is a valid argument, an excessive emphasis on particular segments might not reveal some anti-competitive outcomes. In other words, benchmarks are also needed to assess whether particular segments are underperforming vis-à-vis the broader system.

**Figure 5.1 Functional and product dimensions in superannuation**



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Participants (for example, Rice Warner, sub. DR112) have suggested that the system is segmented along four broad categories of members:

- default
- choice
- self-managed superannuation funds (SMSF)
- retirement.

The Commission will use these segments only where they are informative about system-level performance.

## **5.2 Demand-side conditions and barriers to competition**

In contrast to traditional assessments of competition, which often focus predominantly on the conditions and barriers on the supply side, the demand side (particularly at member level) plays a key role in shaping competition in the superannuation system. The existence of informed and rational decisions by members is important for the emergence of competition on service aspects that are relevant to members, and for the transfer of the benefits of competition to members (ISN 2010).

As discussed in chapter 2, several mutually-reinforcing aspects of the current system could impede or distort important demand-based signals to suppliers of superannuation services:

- passivity and disengagement of members — driven by the long horizons for most decisions, various behavioural and cognitive biases, transaction costs of active involvement, and institutional settings that discourage involvement
- challenges in making informed and rational decisions — driven by inherent complexity of the decisions and the lack of relevant and accessible information
- prevalence of principal–agent relationships that span the supply–demand interface — driven by the structure of the system and the information asymmetries arising from lack of transparency and the high costs for members to become informed.

Several participants in this study have contested the Commission’s view on the importance of demand-side pressure at the retail level (box 5.1). Importantly, these arguments are not inconsistent with the Commission’s approach outlined in this chapter. A degree of member-level pressure (which incorporates the role of intermediaries) is necessary to signal member needs and to ensure that the benefits of any wholesale-level competition are passed through to the member. The threat of switching providers (including establishing an SMSF) can act as a discipline on prices and service quality. However, demand-side pressure is only one part of the assessment of underlying market conditions, rather than a standalone, conclusive indicator. The Commission will also examine the competitiveness of the market structure and conduct at the wholesale level — an important, but not

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sufficient, condition for better member outcomes. And ultimately, the assessment of demand-side pressures will provide context for actual conduct of market participants and outcomes for members.

**Box 5.1      Participant and commentator views on demand-side pressure**

Several participants and other commentators have argued that demand-side pressure from members was neither a sufficient nor necessary condition for good member outcomes.

We contend that, while consumers (i.e. fund members) are not driving competition, the funds themselves and their service providers are. Every day, in the course of our business, we observe funds and providers competing fiercely, and we believe this ensures competitive pricing. (Chant West 2015, p. 1)

ASFA has concerns about the emphasis on strong member engagement as a driver of competition in the system ... Further, member engagement should not be looked at in isolation, as there are other factors which contribute to competition, including the role of employers, member associations and advisers in the selection process for products and funds. Indeed, it can be argued that strong member engagement is not essential for competition. (ASFA, sub. DR98, p. 14)

Both in Australia and internationally, insights from behavioural economic research have led to a rethinking of policy settings around retirement income frameworks and financial systems regulation. It has now been widely recognised that demand-side pressures are often insufficient to ensure sound consumer or system outcomes. (ISA, sub. DR106, p. 2)

## **Assessing demand-side competition at member level**

In assessing member engagement, the Commission will supplement a system-wide assessment with some segment-level analysis, in recognition of the heterogeneity of members and the fact that the issues may differ for different groups of members. The stage 3 assessment will distinguish between the choice and default parts of the system (subject to availability of data). For further context, the Commission will draw on other research that classifies members in accordance with their nature and level of engagement with the system.<sup>10</sup> However, what ultimately matters are outcomes at the system level, and all segment analysis will be performed in that context. Beyond that, there are several important caveats to using measures of engagement as a proxy for competitive pressure.

### **Informed engagement and high quality decision making are the ultimate goals**

As argued by several participants, the assessment of member engagement needs to go beyond simple measures of member activity and focus on evidence of informed and high

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<sup>10</sup> For example, the Industry Super Network (2010) classified members into three segments — passive members, active members relying on advice, and informed and independent members. Researchers from consumer group Choice, proposed three member segments — young adults, new mothers and pre-retirees (Souvlis et al. 2016). They further classified those groups by four levels of engagement — from those who are engaged and in control, to those who are unengaged and avoiding decisions.

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quality decision making. Member engagement will be examined in combination with measures of financial and superannuation literacy. The latter includes both the understanding by the member of their individual superannuation circumstances and options, and a functional understanding of the operation of the system and their rights and obligations within it. Cognitive capacity is a further important factor. In particular, cognitive decline in very old age can significantly affect the quality of financial decision making (Agarwal et al. 2009) and the Commission will draw on such evidence for context.

The quality of member engagement is also affected by the conditions and actions on the supply side. Availability of relevant, accessible and comparable information from fund trustees and other agents of the member is an essential prerequisite and this will be one of the key indicators of demand side competition. For interpretive context on this indicator, the Commission will draw on a growing body of behavioural finance research on effective forms of disclosure (appendix B, Bateman et al. 2016a). The Commission will also combine that indicator with one that evaluates the costs to members of becoming actively engaged, including the costs of time and learning, costs of monitoring the decisions of providers, and the costs of switching products or funds.

In assessing whether there is informed member engagement, the Commission is not setting a benchmark of perfectly informed members that make no mistakes in their decisions. This is a standard that is not achieved in any market, and one that is not necessary for effective competition in the superannuation system. Further, the optimal level of engagement would differ according to the particular circumstances of the member. For example, it may be greater for higher superannuation balances. It is also likely to vary with age and could be greater at particular stages in the life cycle, such as when the person is transitioning to retirement (ASIC, sub. 35; Clark, Fiaschetti and Tufano 2016; Mercer, sub. DR104).

Several participants (for example, David Hartley, sub. 12) commented that in some cases, better outcomes could be achieved by a ‘properly motivated’ agent, and that some level of member disengagement would be unavoidable. An important consideration in this context is the volume of decisions on default fund status undertaken by employers who are ill-equipped or unwilling to perform the task. The Commission agrees with participants who argued that this would be difficult to measure objectively (AIST, sub. DR102; ASFA, sub. DR98), notwithstanding an earlier survey (Colmar Brunton 2010) that tested some of the issues. The Commission has not, therefore, specified a formal indicator for the future review, but will use any relevant case study or survey evidence on employer capacity to perform the task as contextual information.

The Commission also recognises the importance of complementary policies such as the regulation of governance to address principal–agent problems (AIST, sub. DR102) and well-calibrated default arrangements (ASFA, sub. DR98; CIFR, sub. 10; Fiduciarys Friend, sub. 7). These issues are discussed further in chapter 6.

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## Is there material competitive pressure?

Ultimately, the test is whether the demand side is generating, or is likely to generate material competitive pressure on providers. An important consideration is the extent to which funds are able to segment the market into engaged and disengaged members and the capacity of the ‘engaged’ segment to influence outcomes. For example, large employers may be well placed to negotiate corporate fee discounts on behalf of their employees (appendix C). The Australian Institute of Superannuation Trustees (sub. DR102) argued that corporate fee discounts are an indication of effective market segmentation and an anticompetitive outcome for the majority of members that do not receive them. Conversely, where segmentation is not possible and the engaged group is sufficiently large, the passive members may be able to free ride on the actions and the implicit threat of switching from active members or their intermediaries.

It is impossible to specify *ex ante* a benchmark size for an ‘engaged’ group that would influence broader outcomes, nor is it easy to predict the effect of such engagement on the outcomes of other members. Some commentators argue that funds compete ‘at the margin’ and that the threat of switching from a very small group of engaged consumers drives better outcomes for all members.<sup>11</sup> Others contend that the evidence on the dispersion of fees and net returns proves that large groups of members are effectively insulated from competitive pressure generated by others (Minifie 2015). Moreover, even if the actions of the engaged group influence the fund’s provision of services to its entire member base, the change may not be an improvement for other members. Some commentators have argued that funds customising their services to retain members who threaten to switch to an SMSF are increasing costs for all members for services of questionable value to the majority (appendix G). An assessment of all of these dynamics would require evidence of actual practices of funds impacting on service and price dispersion within the fund.

## Indicators of member activity will be examined in context

Measures of actual member activity, such as fund or product switching and other account activity, are intuitively appealing and commonly used indicators of engagement. However, absent of context, those indicators can be ambiguous. For example, analysis of fund switching rates should account for other reasons for switching, such as changing jobs or the employer changing their default fund (appendix B). In this regard, switching rates to the SMSF segment might be a more robust indicator of engagement and a standalone indicator of competitive pressure. Analysis of switching rates to the SMSF segment can be complemented with survey evidence on motivations for switching to gauge the extent to which such behaviour could be a driver of, or be explained by, competition (appendix G).

Any measures of engagement should also recognise the potential ambiguity in interpreting the passive behaviour of members. High levels of default and low levels of switching could

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<sup>11</sup> For example, Officer (2014) argued that even if two-thirds of the members in a fund were completely disengaged, the remaining members would generate sufficient competitive pressure.

be both an indicator of disengagement, or of making an active choice and being satisfied with it (Butt et al. 2015). In this context, indicators of monitoring behaviour might be more instructive, though harder to measure (table 5.1).

‘Environmental’ factors, such as substantial changes in market conditions or policy, could also provide valuable context in assessing the level of member engagement. In a well-functioning market, member activity would be expected to rise at times of such changes (FPA, sub. DR91).

Beyond that, the causal relationship between indicators of active consumer engagement on the one side and competitive markets on the other, is not always simple. For example, if members perceive the market as being competitive they could make the assumption that competition has already resulted in relatively similar products and prices across funds and that there is little value in incurring the search and other costs of becoming engaged.

**Table 5.1 Demand-side characteristics: criteria and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is there informed member engagement?</b>		
• Financial literacy of members compared to an ‘adequate’ standard (input)	• Trend analysis	• Member surveys
• Member superannuation and insurance literacy <sup>#*</sup> (input)	• Qualitative	• Member surveys
• Member active account activity: <ul style="list-style-type: none"> <li>- voluntary contributions</li> <li>- uptake of intrafund advice</li> <li>- changes to investment/insurance options* (input, behaviour)</li> </ul>	• Trend analysis	• Member surveys; fund disclosures; case studies
• Member account monitoring activity: <ul style="list-style-type: none"> <li>- use of fund websites</li> <li>- use of online calculators</li> <li>- call centre enquiries* (input, behaviour)</li> </ul>	• Trend analysis	• Member surveys; fund disclosures; case studies
• Use of advisers by members and/or member intermediaries (input)	• Trend analysis	• Member surveys
• Fund expenditure on member education and engagement as a proportion of total marketing expenditure* (input)	• Trend analysis	• Research firms; fund disclosures; fund surveys
• Availability of meaningful and comparable information on fees, product features (including insurance) and risks <sup>#*</sup> (input)	• Qualitative	• Reviews by others; member surveys
• Fund and product switching costs for members (administrative, search and learning costs) and costs to opt out of insurance (input)	• Trend analysis; qualitative	• Member surveys; research firms

(continued next page)

Table 5.1 (continued)

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are active members and member intermediaries able to exert material competitive pressure?</b>		
• Defined contribution members that do not have choice of fund (input)	• Trend analysis	• Regulator data
• Size of the SMSF sector (funds and members) relative to institutional sector (output)	• Trend analysis	• Regulator data
• Changes in market shares of funds (output)	• Trend analysis	• Regulator data
• Switching rate between and within default and choice products and between institutional funds and SMSFs (behaviour)	• Trend analysis	• Member surveys; fund surveys; research firms
• Default rates for funds, accumulation products and insurance (behaviour)	• Trend analysis	• Regulator data; member surveys
• Fee dispersion* (output)	• Trend analysis	• Research firms; fund disclosures
• Corporate fee discounts (output)	• Trend analysis	• Regulator data

# Repeated indicator within competition. \* Indicator is common to both competition and efficiency.

## 5.3 Market structure and barriers to competition

As discussed in chapter 4, one part of the system-level objective for a competitive market in superannuation is that the market structure and other supply-side conditions facilitate competition and contestability.

Analysis of the market structure and conditions on the supply side is a standard part of most competition assessments. In the context of superannuation, three assessment criteria are particularly relevant:

- is the current market structure (proxied by market concentration) conducive to rivalry between incumbent providers of services?
- is the market contestable at the retail level?
- are there material anticompetitive effects arising from vertical and horizontal integration of providers?

### Market concentration and rivalry between incumbent providers

Analysis of market structure to gauge the scope for, and constraints on, rivalry within the market is one of the most commonly used approaches in Australia and internationally (ACCC 2008; US Department of Justice 2015). The key indicator is market concentration — the extent to which total supply of the product is dominated by a small number of large providers. This indicator has been used in the context of the general state of competition in the Australian financial system (Murray et al. 2014a) and the superannuation system more specifically (APRA 2015a).



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## Rationale for looking at market concentration and challenges in interpretation

The theory behind the market concentration indicator is that in markets with a larger number of smaller suppliers, each individual supplier has less influence over the market, and it is also more difficult for suppliers to engage in collusive behaviour (Bain 1968; Weiss 1979).<sup>12</sup> Liu and Arnold (2010a) found that for superannuation services that were characterised by highly concentrated markets (such as custodial services), firms with a high market share commanded higher prices than their smaller competitors.

However, as noted by several participants (for example, ASFA, sub. DR98; FSC, sub. DR110) a high level of market concentration is an ambiguous indicator of the degree of rivalry. In some circumstances, growing concentration may even be evidence of strong competition. For example, high market concentration can be a consequence of significant economies of scale that make it efficient to have a small number of providers, and of competitive pressures driving out inefficient providers (van Leuvensteijn et al. 2007).

The retail level of the market in the accumulation stage is a case where rising market concentration would generally be a desirable outcome. Most of the concerns on the retail side relate to the market being too fragmented with many heterogeneous funds, product proliferation and high search costs for members, which together exacerbate the consequences of disengagement on the demand side. Nevertheless, analysis of changing market concentration at the retail level would need to unbundle the growth in concentration attributable purely to the compulsory contributions under the Superannuation Guarantee. Even if there is no member switching or fund consolidation, large funds could grow their market share purely by virtue of their size, default status and compulsory contributions.

Market concentration might have a more traditional interpretation in the analysis of the wholesale side of the superannuation system. However, even here a high level of market concentration is a very partial indicator. It does not account for market contestability — the competitive pressures exerted by the threat of entry of new competitors, including pressures from insourcing options for major funds.

Thus, any analysis of the current market structure should be complemented by assessing the criterion of contestability (discussed below). It should also be accompanied by evidence on actual outcomes in the relevant market, following increases or reductions in concentration.

## Measuring market concentration

Market concentration is most commonly measured using market concentration ratios and the Herfindahl-Hirschman Index (HHI). Market concentration ratios indicate the collective market share of the largest firms in the industry. The number of firms used in the ratio can

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<sup>12</sup> A separate application of market concentration is in assessing the level of systemic risk (discussed in chapter 6).

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vary. For example, the Australian Prudential Regulation Authority (APRA) uses the collective market share for the 5, 10 and 20 largest funds (APRA 2016e). Key limitations of this indicator are that it relies on an arbitrarily chosen number of firms and that it does not reflect the relative market shares of individual firms (Shughart II 2008). The HHI addresses both of those shortcomings (box 5.2).

### Box 5.2 Herfindahl-Hirschman Index

The Herfindahl-Hirschman Index (HHI) is calculated by summing the squares of each firm's percentage market share, thereby giving greater weight to the market shares of larger firms. The HHI approaches zero when a market is occupied by a large number of firms of relatively equal size (an arithmetic consequence of its construction). It reaches its maximum of 10 000 when a market is controlled by a single firm. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

The HHI is used by government agencies as an input into their analysis of the level of competition in particular markets. For example, as part of its overall assessment of a merger, the Australian Competition and Consumer Commission (ACCC) takes into account the HHI as a preliminary indicator of likely competition effects. Generally, the ACCC will be less likely to identify horizontal competition concerns where the post-merger HHI would either:

- be less than 2000 or
- change by less than 100.

While there is no threshold HHI level that triggers competition concerns in Australian competition law, in the United States, government agencies generally consider markets in which the HHI is above 1800 to be highly concentrated.

Sources: ACCC (2008); US Department of Justice (2015).

However, examining market shares of providers — particularly their change over time — can also generate important insights into market dynamics. Thus, the Commission will examine both the market shares of particular providers and the HHI.

One issue in calculating market shares is what unit of analysis to use for measuring the size of the relevant market. In the case of the superannuation system, market analysts focus on the shares of inputs into the system, expressed in the form of funds under management, number of accounts and number of members. The Commission will assess concentration for all of those units.

There is merit in focusing the analysis of market concentration on parts of the market where previous research has demonstrated relatively high concentration. Recent estimates (based on the HHI) suggest that market concentration may have exceeded highly concentrated levels for custodial, asset consulting and auditing services (Donald et al. 2014). Market concentration was also approaching those levels for actuarial services and insurance, and had risen rapidly in benefit administration. On the latter, the ACCC (2016) recently estimated that a single provider accounted for 80 per cent of the *outsourced* administration market, with only two other major providers in the market.

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Market concentration may also need to be measured for particular market segments. For example, Liu (2013a) found moderate levels of market concentration for investment management in some asset classes, including Australian listed property and international fixed income. The ACCC previously blocked a merger between the National Australia Bank and AXA Asia-Pacific, finding that this would lead to a high concentration in the market for retail investment platforms (ACCC 2010).

When looking at concentration in each wholesale service, market shares need to be assigned both for the outsourced market and for the larger market that incorporates in-house and specialised wholesale providers of the service. Defining the market as comprising both in-house and specialised wholesale providers would often provide a more accurate reflection of the substitution possibilities available to the fund at the wholesale level. Nonetheless, the Commission recognises that some funds would not have the requisite size to undertake in-sourcing of certain services, such as administration.<sup>13</sup> In order to accurately reflect the nature of competition in each market when assigning market shares to entities, it would be important to aggregate the market shares of members of conglomerates operating in the same market (Liu 2013a).<sup>14</sup>

In examining concentration there is merit in distinguishing between accumulation and retirement phases. The latter involves some specialised service providers and the market for some products, such as annuities, is currently highly concentrated (appendix D).<sup>15</sup>

To be a useful proxy for competition, market concentration needs to be viewed in a dynamic context. As discussed in chapters 1 and 2, the system has been evolving rapidly, both as a consequence of natural growth and in response to various policy changes, and further changes are projected. Thus, the stage 3 assessment would examine changes to market shares and concentration over time. It should also be complemented by a time series analysis of exits and entries in the relevant markets. Finally, as discussed earlier, interpretation of this indicator will be contingent on the assessment of economies of scale and contestability in the relevant market.

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<sup>13</sup> For example, the ACCC (2016, p. 6) recently published a preliminary decision that the wholesale market for the supply of administration services (SAS) does not include in-house provision. The ACCC argued that ‘it is unlikely that funds which currently outsource their SAS could easily switch to insourcing, particularly for core components’ and further that ‘self-administered funds ... are unlikely to commence supplying SAS to third party funds in a way that would significantly constrain Link’.

<sup>14</sup> Incorporating in-house provision into the assessment of wholesale concentration and accounting for conglomerates are also important in gauging the level of systemic risk (chapter 6). A focus on the outsourced market in isolation might overstate the risks to the system from the failure of particular wholesale providers.

<sup>15</sup> Nevertheless, some retirement income products rely on pooling member risk, and a degree of market concentration in provision may be unavoidable and perhaps even desirable.

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## Contestability and barriers to entry and exit

The height of barriers to entry and exit are an important determinant of contestability and competitive pressure in a market. Where new providers can enter the market freely and at low cost, they can constrain the ability of incumbent providers to exercise any market power they might have. Barriers to exit are an important indicator in their own right — the ability of providers to leave the market or to consolidate with more efficient competitors is a key requirement for efficiency-enhancing competition. Exit barriers can also create a disincentive for entry.

The Commission has adopted the ACCC (2008) classification of barriers to entry and incumbency advantages:

- **legal or regulatory barriers**, which include licensing conditions and other restrictions on the ability of new entrants to service particular markets
- **structural or technological barriers**, which include substantial economies of scale and large sunk costs, as well as high customer switching costs or customer inertia to switching suppliers
- **strategic barriers**, which include actions by incumbent firms to deter new entry, such as creation of strategic customer switching costs through contracting, or via bundling of several products.

There is no universal methodology for assessing the height of barriers to entry and exit. The ACCC conducts such assessments as part of its merger reviews. These are customised to individual markets and draw on a combination of qualitative and quantitative evidence (box 5.3).

The Commission's assessment for the stage 3 review will depend on evidence on the existence of particular barriers to entry and exit at the time of that review. Several potential barriers have been raised in the literature and by participants in this study (for example, AIST, sub. DR102; ASFA, sub. DR98). The first relates to the effect of current default arrangements on market contestability at a fund level. Another potential source of entry barriers relates to the strategic barriers created by horizontal and vertical relationships (discussed under a separate heading below).<sup>16</sup> Participants and other commentators have also argued that some policy and institutional settings within the system are discouraging efficient exit of funds (also discussed below).

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<sup>16</sup> A separate issue discussed later in the chapter relates to the effect of various regulatory rules on the ability of funds to consolidate or exit the system.

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### Box 5.3 Measuring barriers to entry under ACCC Merger Guidelines

The ACCC (2008, p. 41) lists the evidence it may require for its assessment of the barriers to entry as part of its merger reviews:

- the ability of producers that are not current competitors to switch production to competing products or services
- the market conditions that may affect the ability of existing firms to expand
- the size and extent of any investment, particularly sunk investment, that producers would need to make to either enter the relevant market(s) or to expand production significantly in these market(s)
- the extent of brand loyalty in the relevant market(s)
- the existence and nature of any long-term supply contracts in the relevant market(s)
- any relevant 'switching costs' (such as product compatibility issues, product bundling, contract termination charges) that may prevent buyers in the relevant market(s) from changing suppliers or sellers in the relevant market(s) from changing buyers, in the short to medium term
- evidence of any growth or decline in the relevant market(s).

### Default arrangements and contestability

Under the *Superannuation Guarantee (Administration) Act 1992* (Cwlth), the system allocates members to a default fund selected by their employer if they do not actively choose a fund (chapter 2). Default status confers an advantage on the funds that have it, and constitutes a barrier to entry for competing funds. The height of the barrier ultimately depends on the extent to which members allocated to the default fund actively consider the substitution possibilities. Thus, it should be examined in combination with demand-side measures of member engagement.

However, defaults are also a necessary feature of the system, given the unwillingness of many members to make active choices about superannuation. As such, the more relevant consideration may be whether *the process of selecting defaults* is contestable and competitive and undertaken by those who are best placed to make the decision in terms of expertise and incentives.

#### *Default funds in modern awards*

Some employees derive their default superannuation product from a modern award. The funds that are currently listed in those awards have largely been grandfathered from earlier versions of awards. Several reviews (for example, PC 2012) argued that the costs and barriers for new entrants that wish to obtain listing are sufficiently high to reduce contestability and competition in the default segment of the market, as well as to adversely affect efficiency. Several types of evidence could be used concurrently to contextualise this

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barrier and examine its height. An analysis of market concentration of default funds within and across modern awards, and how it has changed over time, would provide initial context for the analysis.

Beyond that, the number of actual new listings over time, and new listings relative to attempts to be listed would be one type of evidence. This could be complemented by evidence on the actual or likely costs of entry that draws on the administrative and compliance costs faced by new entrants that previously attempted to be listed in the award. An important caveat is that those indicators might understate the true size of the barrier, if some funds are not even attempting to get listed, because of an inherently low chance of success.

### *The role of employers*

With few exceptions (detailed in chapter 2), the ultimate decision on the choice of default fund rests with the employer. The Commission will examine evidence on the magnitude of principal–agent problems in default fund selection, and the extent to which these are a barrier to entry. Industry Super Australia (sub. 38) contended that some retail funds were offering inducements to employers to secure default status for their fund. Section 68A of the *Superannuation Industry (Supervision) Act 1994* (Cwlth) (SIS Act) prohibits fund trustees from offering certain inducements to employers on the condition that their employees would join the fund. In its investigation into such behaviour, the Australian Securities and Investments Commission (ASIC) found no evidence of breaches of the provision, but noted that contraventions were difficult to prove (ASIC 2016a; Byres 2016).

Beyond those specific concerns, the Commission will examine features of the selection processes used by employers. It will look at whether there is sufficient competitive pressure, and focus on the extent of reliance on defaults specified in awards, the number of funds considered (either through tender or going to the market directly), the selection criteria, the duration of default status, and grounds for changing the default fund (appendix C). Ultimately, the assessment will need to cross-refer to outcomes for members, including reductions in fees and/or improvements in service quality.

## **Competition implications of vertical and horizontal relationships**

Much of the current system is characterised by vertical integration, with funds operating in parts of the wholesale, as well as the retail limb of the market. A number of funds, in particular those owned by banks, are also horizontally integrated, and offer various financial services outside of the system.

There are two competition-related concerns from this market structure — one relating to the implications of horizontal integration for retail-level competition, and one pertaining to the effect of vertical integration on competition in upstream wholesale markets.

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On the first issue, horizontal integration of some funds could enable them to leverage their competitive advantage, as well as market power in other markets to create barriers to competition from other funds. For example, there is some industry survey evidence indicating that retail funds are increasingly drawing on their banking relationships to market superannuation services directly to clients (Investment Trends 2015).

On the second issue, concerns would arise if a lack of demand-side competitive pressure at the retail level enabled a fund to stifle wholesale competition by outsourcing particular services to related parties ahead of more efficient (but unrelated) service providers.

### Assessing the effect of integration on retail-level competition between funds

The ability of some funds to use their horizontal connections to attract and retain members can be a barrier to entry, or otherwise commercially disadvantage other funds that do not have those connections. As with default arrangements, these relationships could represent a distribution channel that new entrants would not be able to access.

However, this market structure is not necessarily inefficient. There may be economies of scale and scope in the joint provision of banking and superannuation services to members. There may also be direct benefits for members due to the convenience of integrating their financial affairs with one provider.

The key question is not whether some retail funds have a competitive advantage over other funds, but of how it is used and the long-term consequences for members. Concerns would arise about:

- fund activities that contravene the legislative prohibitions on inducements to employers
- evidence that impediments to accessing distribution channels are leading to adverse outcomes for members.

The former would require evidence of ASIC enforcement activity and outcomes. On the latter, assessment would require a time series comparison of key indicators of performance — fees, net returns and service quality — of the funds that can access particular distribution channels and those that cannot. The analysis of the effects of horizontal integration will also be cross-referenced to the assessment of the realisation and pass-through of the benefits of economies of scale to members (discussed below).

### The effect of integration on wholesale-level competition and member outcomes

Some early research of fund outsourcing arrangements concluded that for-profit funds that outsourced administrative and insurance services<sup>17</sup> to related parties paid higher costs and charged higher member fees than those that outsourced to independent providers (Liu and

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<sup>17</sup> In the case of insurance, this finding only applied to funds that were bound by their trust deed to outsource to a specific provider.

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Arnold 2010a, 2010b, 2012). Those findings were strongly contested by several participants (for example, FSC, sub. DR110; Mercer, sub. DR104). Participants also argued that the analysis is now obsolete due to an amendment to the SIS Act to prohibit arrangements where a trust fund is required to outsource to specific providers (section 58A). Nevertheless, a broader concern that vertically integrated provision of services should not compromise member outcomes is still valid.

Assessing the effect of such integration on wholesale-level competition and member outcomes will draw on a combination of indicators. A simple structural indicator to gauge the magnitude of vertical integration will examine what proportions of the total value of specific upstream services are provided in-house, or outsourced to related parties. This indicator will be combined with behavioural and output indicators. Subject to data availability, the Commission will supplement the structural analysis with a more detailed examination of the propensity of vertically integrated funds to internalise service provision. This will be proxied by the value of the service outsourced to unrelated providers as a proportion of the total offered by the fund. For context, the Commission will also draw on case study evidence of the processes used by funds to decide on service provision, and benchmark those processes against APRA<sup>18</sup> and ASIC guidance on managing conflicts of interest. In the context of related-party outsourcing, ASIC (2016d, p. 13) specified the following factors for effective management of conflicts of interest:

- a service provider assessment on an objective set of criteria, including price
- arm's length engagement
- independent oversight to prevent abuse, such as extracting more fees.

Beyond that, the assessment will involve a comparison of service-specific costs and member fees of funds that outsource services to unrelated providers vis-à-vis those that outsource services to related providers or deliver them in-house (chapter 6). A complementary indicator will focus on the transparency of fee disclosure by funds and the alignment of those fees with the underlying costs (table 5.2). (The assessment criteria and indicators that focus on actual market conduct and outcomes are discussed in section 5.4.)

#### *In-house provision as a source of competitive pressure at the wholesale level*

Vertical integration could be motivated by many factors, some of which are consistent with member interests. In some circumstances, vertical integration may promote competition. Where a fund switches from an outsourced provider to in-house provision of particular services, this could apply competitive pressure on wholesale providers of the service. The Commission will examine the extent to which in-house provision improves contestability in associated wholesale markets. The assessment will focus on the trends in the switching between insourcing and outsourcing, the associated cost differences for funds and fee

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<sup>18</sup> APRA has recently signalled that it will be undertaking a review of funds' related-party arrangements to ensure that these arrangements are consistent with the interests of members (Byres 2016).



differences for members. In examining the dynamics, reasons for, and outcomes of the vertical structure of the relevant markets, the Commission will draw additional contextual information from ongoing research by others in the field, including, for example, CIFR (2016).

**Table 5.2 Supply-side characteristics: criteria and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is the market structure conducive to rivalry?</b>		
• Market concentration at wholesale and retail levels (Herfindahl-Hirschman Index and market shares of largest providers)* (output)	• Trend analysis	• Regulator data
• Number of institutional funds (input)	• Trend analysis	• Regulator data
<b>Is the market contestable at the retail level?</b>		
• Height of barriers to entry — effect of default rules on market entry (input)	• Qualitative	• Fund surveys; case studies; reviews by others
• Height of barriers to entry — market impediments to funds accessing distribution channels (input)	• Qualitative	• Fund surveys; case studies; reviews by others
• Entries, exits and consolidations of funds <sup>#</sup> (behaviour)	• Trend analysis	• Regulator data; fund disclosures
<b>Are there material anticompetitive effects of vertical and horizontal integration?</b>		
• Proportion of administrative and investment services provided in-house, outsourced to related parties and outsourced to unrelated parties (input)	• Trend analysis	• Regulator data; fund disclosures; fund surveys
• Proportion of insurance services outsourced to related parties (input)	• Trend analysis	• Regulator data; fund disclosures; fund surveys
• Switching between insourcing and outsourcing of wholesale functions by funds (behaviour)	• Trend analysis	• Fund disclosures; fund surveys
• Alignment in the structure of member fees and underlying costs <sup>#*</sup> (output)	• Econometrics; qualitative	• Regulator data; fund disclosures; research firms
• Cost and member fee differences from outsourcing services to related versus unrelated parties (output)	• Trend analysis	• Fund surveys; regulator data; fund disclosures
• Transparency and efficacy of fee disclosure by funds, including for distinct services <sup>#</sup> (behaviour)	• Qualitative	• Reviews by others

<sup>#</sup> Repeated indicator within competition. \* Indicator is common to both competition and efficiency.

## Effectiveness of regulatory regime in promoting competitive outcomes

As discussed in appendix H, various aspects of the superannuation system are regulated to address particular market failures, some of which have direct implications for competition.

Both the content of the regulations and how they are administered by the regulators are important. On the latter, APRA has a legislated mandate to balance its various prudential objectives with the objectives of competition and contestability (s. 8(2) of the *Australian*

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*Prudential Regulation Authority Act 1998*). However, balancing competition objectives with APRA's core functions is inherently challenging and there is a concern that the former receives less attention than the latter. The Financial System Inquiry (FSI) observed:

At present, regulator mandates adopt an inconsistent approach to competition ... APRA is required to consider competition and contestability in its decisions, although the industry frameworks do not adopt a consistent approach to this issue ... Furthermore, there is no current requirement for regulators to explain how they balance competition considerations with other regulatory objectives in reaching decisions. (Murray et al. 2014a, p. 255)

On the other hand, ASIC currently does not have an explicit competition mandate, although the Australian Government (2015a) committed to introduce this in its response to a recommendation from the FSI. Nonetheless, ASIC has a broader economic efficiency mandate under both its enabling legislation (appendix H) and statement of expectations from the Australian Government (2014a).

The effect of the current regulations and their administration on competition can be assessed using evidence from a variety of sources. These can include:

- analysis contained in relevant regulation impact statements (where those exist)
- post-implementation policy reviews
- self-assessment and performance reporting of the regulators
- external stakeholder feedback.

While the scope of the assessment will not be limited to particular regulations and will in part depend on the evidence presented in stage 3, one priority area which was identified in the course of this study relates to regulations that influence the exit and consolidation of funds.

### Regulatory settings affecting fund exit and consolidation

The Commission will undertake **contextual** analysis of several policies. One potential barrier raised by participants (APRA, sub. 32; ASFA, sub. DR98) relates to uncertainty about whether the capital gains exemption that applied to MySuper transfers until 1 July 2016 would be extended. ASFA (sub. DR98) argued that in volatile markets, mergers may be prevented, because they would either force a realisation of otherwise unrealised gains, or extinguish the benefit from carrying forward losses.

There has also been considerable debate in the industry about mergers not going ahead due to principal-agent problems. Several stakeholders have contended that some board directors (and their sponsoring bodies) have an incentive to avoid mergers that would force them to relinquish their position on the board. Those concerns were evident in the lead up to the unsuccessful proposed legislation that would have required a minimum of one-third of independent directors and an independent chair on the board of each fund (Rose 2015).

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There are currently two sets of regulatory rules that directly target principal-agent problems in the context of economies of scale:

- a requirement under section 29VN of the SIS Act (introduced in July 2013) that all trustees offering a MySuper product undertake an annual scale assessment to determine whether the size of the MySuper product and the fund overall disadvantage the members relative to members of other MySuper products
- a requirement on trustees of funds wishing to exit and transfer their membership via a ‘bulk transfer’ to ensure that the transfer is in the best interests of members and that all of the members will retain all of the benefits from the old fund, including insurance (regulation 1.03 of the SIS Regulations). This is combined with the general requirement under section 52 of the SIS Act that the trustees of both funds act in the best interests of members.

### *Scale test*

The scale test is still a relatively new regulatory requirement and there is little publicly available information on how it is applied by trustees and enforced by APRA (appendix H). To date, APRA has not published formal direction on how trustees should apply the scale test, noting that it has so far been observing industry practices to inform future guidance and ongoing prudential work (APRA, sub. DR111; appendix H). Some general principles have been articulated in a speech by APRA’s Deputy Chairman, as well as in APRA’s submission to this study.

- The assessment will involve quantitative and qualitative aspects.
- The test will have a broader focus on maximising member outcomes through various means and will not require funds to attain a particular efficient size.
- The test will go beyond assessing performance against peers and assess performance against internal benchmarks.
- The test will be forward looking and require trustees to assess the long-term sustainability of their business plan and strategy (Rowell 2015).

In principle, the broader approach flagged by APRA, where scale is only one of the relevant factors, is more consistent with competition and efficiency objectives than an exclusive focus on fund size. However, scale may still be the dominant barrier to efficiency for some funds. Thus, the effectiveness of the test would be enhanced if trustees were explicitly required to account for the costs and benefits of the current structure (including the balance of insourcing and outsourcing) and size of their fund.

APRA (sub. 32, p. 5) has further stated that:

... consistent with the underlying philosophy of the SIS Act, all RSE licensees should regularly assess the extent to which appropriate net outcomes for members are being achieved over the long term based on a broader set of qualitative and quantitative factors, regardless of whether or not they offer a MySuper product.

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While this approach would improve the coverage of the scale test, a potential residual issue is whether the test would cover the provision of services to members in the retirement stage. As discussed below, population ageing and growing system maturity would increase the relative importance and scope for economies of scale in this segment of the market. A flexible regulatory approach would accommodate these structural changes in the system.

Beyond that, the Commission will assess the degree to which the scale test affects consolidation decisions through two types of analysis:

- by examining the motivation for consolidation that has taken place and the degree to which APRA's enforcement of the scale test played a role
- by a qualitative assessment of APRA activity in ensuring that trustees have discharged their obligations under the scale test.

### *Bulk transfer rules*

For bulk transfers of members to a new fund, APRA (2001) requires trustees of both funds to undertake extensive checks that include scrutiny of the new fund's governing rules, various due diligence checks and legal advice. At a minimum these involve:

- estimates of the amount of the original fund members' withdrawal benefits
- circumstances for becoming entitled to benefits and the method of calculating benefits
- preservation status of the benefits
- the extent to which members bear investment risk and the investment choices they have
- the provision and conditions of insurance
- the basis of valuation of assets
- other rights, such as conditions of release and rights to be credited with reserves.

Of the above, bundled insurance policies are likely to pose complications, given that they are typically negotiated in bulk and the premiums and conditions may be specific to each fund (reflecting its size and membership profile) (ASFA, sub. 42). Establishing equivalence of benefits may also be challenging where a defined benefit fund is attempting to merge with a defined contribution fund.

APRA (sub. 32) further observed that current successor fund transfers may be impeded by uncertainty about the requirements on trustees for transfers of MySuper products with materially different features. APRA is developing prudential guidance on the latter issue. ASFA (sub. DR98) argued that legacy products, which are sometimes maintained by funds due to regulatory obligations, might also act as a barrier to mergers.

Mercer (sub. 31) argued that APRA's application of successor fund transfer rules restrict mergers that would have otherwise benefited members. It is difficult to assess whether, and to what extent, the bulk transfer rules are preventing consolidation that would have

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otherwise benefited members on the whole. The test is whether the requirement to protect all member interests in a fund is preventing a merger that would benefit the member group as a whole, while leaving some members worse off. This would require case study evidence of attempted fund mergers not proceeding because the trustees failed to meet the test — a data gap which would need to be addressed by the time of the stage 3 review.

## 5.4 Assessment of market conduct and outcomes

A key part of the system-level objective for competition is that superannuation industry players compete on aspects of value to members, such as fees, returns and service quality (chapter 4). The Commission has developed three inter-related assessment criteria to support this objective.

- Do funds compete on costs/price (member fees)?
- Are economies of scale realised and the benefits passed through to members?
- Do funds compete on member-relevant non-price dimensions?

### Competition as a driver of costs, prices and margins

In competitive markets, prices are assumed to converge on the underlying economic costs of providing a product or service. The intuition is that all of the economic profits are competed away and no provider could sustain an increase in their prices without losing market share to their competitors or new entrants into the market.

Undertaking such assessment comes with a caveat that focusing on prices alone can come at the expense of other relevant factors, such as quality of service and other aspects of value to the consumer. Several participants cautioned the Commission against a strong focus on member fees (for example, ASFA, sub. DR98; FSC, sub. DR110). However, while service quality is an important part of the assessment, there is little merit in the argument that the Commission should not separately examine *trends* in costs and fees, which are clear and objective indicators of competitive pressure in their own right.

A number of indicators have been developed to draw on the simple relationship between costs and prices to assess the extent of competition in the market. The most common indicators in the context of financial markets are the Lerner Index, the Panzar-Rosse H-Statistic and the Boone measure of competition. While there is a large and growing literature applying those indicators to competition in banking markets, their usefulness for assessing competition in the Australian superannuation system is at best limited (box 5.4).

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## Box 5.4 Indicators used to assess competition in banking

### Lerner Index

The Lerner index infers market power from a firm's ability to set a price (P) above its marginal cost (MC), which is the assumed benchmark price for a perfectly competitive market. The index is given by  $(P-MC)/P$ . A value of **0** corresponds to perfect competition. A value of **1** corresponds to a monopoly, where the firm has full influence over price. The Lerner index has been used internationally to measure competition in the banking sector. While the Lerner index is intuitively appealing, it is largely a theoretical tool that has limited usefulness for assessing competition in superannuation. First, it is a static measure that does not capture dynamic effects, such as technological change, innovation and learning by doing. Second, it overestimates market power in markets with substantial economies of scale, because in such markets marginal cost pricing is not an efficient long-term strategy to cover the costs of upfront investment. Third, the index is poorly suited to situations where there is significant bundling of products, or where there are complex upstream markets. Attribution of marginal costs and prices to particular inputs and products becomes very challenging.

### Panzar-Rosse H-statistic

The H-statistic measures the percentage change in total revenues of the provider in response to a 1 per cent change in input costs. The value of the measure can range from **less than 0 to 1**. Positive values of the H-statistic are associated with a more competitive system. The underlying logic behind the measure is that in a perfectly competitive environment, an increase in supplier costs would lead to an identical increase in consumer prices, with the market clearing via the exit of some providers. Following a rapid early expansion of research applying this measure, significant methodological and interpretation issues appear to have emerged. Recent research (Bikker, Shaffer and Spierdijk 2009; Spierdijk and Shaffer 2015) identified problems with how a large number of studies incorporated scale economies into the measure, concluding that this invalidated the results. They also found that the measure could not reliably support a finding of market power or strong competition.

### Boone measure

In competitive markets, more efficient providers would be expected over time to achieve higher profits and/or greater market share. The 'Boone' measure of competition tests the sensitivity of either the provider's profits or their market share to the level of their marginal costs. The lower the reward for efficiency, the less competitive the market. The Boone measure is intuitively appealing but has many challenges in application. Even if the data challenges could be overcome, the measure would struggle to account for several features of the current institutional and market structure including:

- the effect of compulsory contributions on the size of the system and individual funds
- the different incentives faced by profit and non-profit funds (the indicator assumes that all providers would pass through their efficiency gains to consumers in the same manner)
- the heterogeneity of services offered to members, including heterogeneity in bundled insurance products and differences in service quality
- the fluid nature of insourcing and outsourcing of wholesale functions, which would make it difficult to link operational efficiency to changing market shares for those services.

Sources: Bikker and Haaf (2002); Boone (2008); Elzinga and Mills (2011); Lerner (1934); Panzar and Rosse (1987); World Bank (nd).

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## Preferred approach to examining costs and prices

The relationship between the costs faced by funds in wholesale markets and the fees charged to members is important. The Commission favours a simpler approach than that embodied in the indicators outlined in box 5.4, but one that draws on a combination of evidence.

The first indicator involves examining the longer-term trends in fund costs and fees, with a declining trend being a proxy for competitive pressure. The analysis of costs would involve looking at system-wide averages (either per member, or per dollar of funds under management) for each service type. For fees, the analysis can be further decomposed by fund type.

The second indicator draws on a time series assessment of fund margins to test both the absolute size and whether prices track the changes in the costs of service provision. This approach would provide an indirect measure of the extent of competitive pressure and market power — in a competitive market, prices would track costs more closely, as downward pressure is exerted on margins. The analysis could focus on the system and segment levels — for example, the relationship between fees and costs could be tested for MySuper products and across all institutional funds. In a report for the FSI, Rice Warner (2014d) presented a time series analysis of costs and margins of the nature envisaged by the Commission.

The third indicator involves international benchmarking of costs and fees for particular services that are comparable internationally (and are often supplied by multinational providers competing in global markets). As discussed in appendix E, this would be most useful for investment management costs paid by funds and fees charged to members for specific asset classes.

The fourth type of indicator involves a bottom-up examination and comparison of the structure of fund costs and prices. In a competitive market the composition and basis for the price paid by the fund or member would align with the structure of the costs of the service provider and the basis on which those costs are incurred. A common concern about the way prices are constructed is that the investment management component is levied as a proportion of the assets under management (Cooper et al. 2010a), which does not reflect the transactional nature of the costs and economies of scale for the fund manager (economies of scale are discussed below).

Finally, an important input indicator is clarity and accuracy of information on prices paid by members for distinct components of the superannuation service. In this context, disclosure and accurate attribution of components of the fee to particular services is both necessary to assess whether costs and prices actually align, and an indirect indicator of competition in its own right (Mercer, sub. 31).

The Commission's preliminary analysis of the evidence currently disclosed by funds indicates significant data quality issues that might hinder such analysis. There are also

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problems with APRA system-level data, due to likely misattribution of costs and fees (for example, across administration and investment categories and within insurance) and inconsistent and missing data for some types of costs (for example, indirect costs and related-party costs). These problems might be teething issues, and data quality could improve over time. Nonetheless, for robustness, the Commission will draw on other sources of cost and fee data, where available (chapter 7).

## Economies of scale as an indicator of competition

Economies of scale are a reduction in the average unit costs of supplying a product or service arising from increases in the volume of output. Multiple commentators and reviews have identified scale economies as an important driver of outcomes for members (Cooper et al. 2010a; Minifie, Cameron and Savage 2014; Murray et al. 2014a; Wallis 1997). An assessment of economies of scale can also be used in the context of competition. Evidence of a fragmented market with significant unused economies of scale could be a symptom of barriers to exit or consolidation, or signal an actual lack of competition in the market (van Leuvensteijn et al. 2007). Further, where economies of scale are achieved in parts of the superannuation supply chain, but the gains do not reach members, this could signal that those gains are dissipated or captured in other parts of the chain, potentially due to lack of competition.

### Sources of economies of scale in superannuation

There are several potential drivers of scale economies in the superannuation supply chain, whose relative importance would vary depending on the type of service:

- the ability to spread fixed costs over a larger pool of funds under management, or over a greater number of members or accounts
- the ability to retain higher quality staff
- the ability to overcome particular operational barriers that are faced by smaller entities — for example, investing in particular asset classes that require large scale investments
- greater bargaining power with upstream providers of services (Cummings 2012).

A further source of cost reductions from growing size that does not fall within a conventional definition of scale economies are the benefits of risk pooling. These benefits are particularly important in the context of retirement income products that provide longevity insurance (appendix D).

Economies of scale would not always manifest in lower prices. In some cases, growing scale might deliver a higher *quality* of service for a given price. A further (related) benefit of size is *economies of scope* in service provision. These can extend beyond the bounds of the system (as in the case of integrated banking and superannuation services discussed



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earlier), or reside within it. For example, larger funds might be better placed to bring some previously outsourced functions in-house, placing competitive pressure on wholesale providers. A larger fund might also be able to provide a more diverse range of products and services to its members than a smaller counterpart.

However, the relationship between size and efficiency is not straightforward. For some functions, there are likely to be size limits beyond which the gains from increasing scale are no longer material. In some cases, diseconomies of scale may arise. Several researchers (cited by Cummings 2012) found that for particular types of investment, such as listed (domestic) equity securities, size can be a disadvantage due to market impact costs and delays in executing trades. Rice Warner (2014d) observed that trustees generally do not issue investment mandates greater than \$500 million to individual investment managers for risk management reasons (although it had limited data on mandates for offshore investments). Constraints on investment mandates that will be accepted by external active managers may also play a role (CIFR, sub. 10). There may also be smaller providers across the value chain that can achieve efficiencies through greater flexibility and innovation (ASFA, sub. 42).

Further, both the scope for, and the benefits of, scale need to be viewed in a dynamic context. For example, technological improvements might affect the optimal size of the fund or an upstream provider of services and invalidate past findings on optimal size. Growing system maturity and demographic change is likely to affect the scope for economies of scale across the accumulation and retirement stages. And growing scale could enable changes in business practices (such as investments in higher-cost assets potentially offering higher net returns), but the benefits might not manifest for some time (CIFR, sub. 10; Mercer, sub. 31).

A further complication is that growing fund size is not the only way to achieve all economies of scale. Scale can also be achieved through outsourcing to large upstream providers or by setting up or accessing specialised pooling vehicles such as pooled trusts and distribution channels such as investment platforms.

The analysis also needs to be able to distinguish the internal scale achieved because of competitiveness (securing greater market share) from exogenous growth resulting from the system getting bigger due to regulatory fiat. The latter cannot be attributed to competitive pressures. It can also weaken the incentive to find internal economies of scale for industry participants, even in a competitive environment, if the gains from greater scale diminish with size.

Finally, to be able to draw any conclusions about competition for the benefit of members, the analysis needs to link the evidence on growing economies of scale (irrespective of source) to improvements in member outcomes in the form of lower fees (for equivalent returns) or better service quality.

## Past research on economies of scale in superannuation

Several Australian researchers have attempted to measure economies of scale in superannuation, reaching somewhat different conclusions (table 5.3). Those studies examined the extent to which fund size and other characteristics, such as number of accounts and average balances, affected outcomes for members.

Two approaches have been employed. The first focuses on how the size and characteristics of a fund affect its costs (Higgs and Worthington 2012; Sy 2012) — the traditional approach to assessing economies of scale. The second involves an additional step of inferring the impact of economies of scale on gross and net risk-adjusted returns (for example, Cummings 2016).

The latter approach requires additional assumptions about the links between cost reductions for providers, and the fees and returns that reach members. However, even the traditional approach to assessing economies of scale is challenging due to incomplete and potentially unreliable cost data. Costs can be classified into direct expenses recorded by the fund, and indirect costs that affect net returns, but are not always identified separately. Examples include fees that an external investment manager embeds in the net returns on investment. In some cases, the direct cost data might also be unreliable. As discussed earlier, the funds that outsource functions to related parties might have transfer pricing arrangements that do not reflect underlying costs (Sy 2012).

**Table 5.3 Recent studies on economies of scale in superannuation<sup>a</sup>**

	<i>Study details</i>	<i>Findings</i>
Cummings (2016)	Data from 280 funds, 2004–2010 Relationship between fund size and investment returns, investment and operating expenses	Economies of scale exist in operation and investment (through improved diversification) for non-profit funds Economies of scale exist for operation costs, but not investment costs for retail funds (due to platform structure of the funds)
Higgs and Worthington (2012)	Largest 200 funds in 2011 Relationship between fund size and operating and investment costs, and between fund size and scope economies from insourcing	Economies of scale exist in operation and investment up to at least 300 per cent of mean fund size Economies of scope are weak, only exist at extremely large fund size and only for operation — there are generally cost savings in contracting out.
Sy (2012)	Data from all APRA regulated funds between 2004–2011 Relationship between fund size and direct reported expenses	No economies of scale for retail funds (but there are data problems because of related-party transactions). No relationship between retail fund size and fees (due to dissipation of rent to upstream intermediaries). Weak economies of scale for non-profit funds (high extent of outsourcing reduces the fixed cost base from which fund level economies can arise). Natural asset growth is a much bigger source of scale than consolidation.

(continued next page)

**Table 5.3** (continued)

	<i>Study details</i>	<i>Findings</i>
Rice Warner (2014d)	Relationship between fund size and fees, based on APRA and own expenses data for selected funds	Economies of scale exist in operation (from growing number of members and average account balances) and in investment (from larger mandates). Limited benefits from scale in operation beyond 400 000 members; investment scale largely exhausted at \$10 billion of funds under management.
Minifie, Cameron and Savage (2015)	Relationship between fund size and administration fees	Fixed administration costs are one third of total fund costs and are the key source of scale. Consolidation of 50 largest funds into 25 funds would save one sixth of total costs (\$270 million).

<sup>a</sup> Most of the studies presented in this table classify superannuation fund costs into operational and investment expenses, but some use the terms 'operational' and 'administrative' interchangeably.

### Preferred approach for assessing economies of scale

The Commission's preferred approach to assessing economies of scale has the following elements:

- Focus on two types of indicator — the magnitude of unused economies of scale, and the extent to which growth in economies of scale over time reaches members in the form of reduced fees or service quality improvements.
- Examine economies of scale both at the fund level and for some wholesale services. The latter is required to account for alternative ways of capturing scale, as well as to test whether scale generated in upstream markets manifests in benefits for members. In looking at wholesale services, the focus would be on those that have a high fixed cost component such as administration and potentially, investment management.
- Assess economies of scale in the context of the cost of delivering particular services and member fees, and measure the cost both per member and per dollar value of funds under management. The latter reflects that for administrative services, the costs and fees would be linked more closely to the number of transactions and/or accounts, while for investment services costs and fees would be more closely connected to assets (either aggregate or average balances).
- Complement the analysis with an assessment of the policies that directly affect the incentives and scope for consolidation, including the APRA scale test for MySuper funds and the bulk transfer rules under the SIS Act (discussed above).

## Summary of criteria and indicators on cost and price-based competition

**Table 5.4 Cost and price-based competition: criteria and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Do funds compete on costs/price?</b>		
<ul style="list-style-type: none"> <li>• Costs relative to assets and number of accounts by service (investment, administration and insurance services) and by market segment (input)</li> <li>• Fees relative to assets and number of accounts by service (investment, administration and insurance services) and by market segment (output)</li> <li>• Fund margins (output)</li> <li>• Investment management costs and fees by asset class compared to other countries* (output)</li> <li>• Alignment in the structure of member fees and underlying costs<sup>#*</sup> (output)</li> <li>• Transparency and efficacy of fee disclosure by funds, including for distinct services<sup>#</sup> (behaviour)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Econometrics; qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms; fund disclosures</li> <li>• Regulator data; research firms; fund disclosures</li> <li>• Research firms</li> <li>• Research firms; fund disclosures</li> <li>• Regulator data; fund disclosures; research firms</li> <li>• Reviews by others</li> </ul>
<b>Are economies of scale realised and the benefits passed through to members?</b>		
<ul style="list-style-type: none"> <li>• Unused scale economies at fund level* (output)</li> <li>• Entries, exits and consolidations of funds<sup>#</sup> (output)</li> <li>• Pass through of benefits from scale economies (wholesale and retail) to members* (output)</li> <li>• Alignment in the structure of member fees and underlying costs<sup>#*</sup> (output)</li> <li>• Increased diversification due to growing scale (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics</li> <li>• Trend analysis</li> <li>• Econometrics</li> <li>• Econometrics; qualitative</li> <li>• Econometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> <li>• Regulator data; fund disclosures</li> <li>• Research firms; fund disclosures</li> <li>• Regulator data; fund disclosures; research firms</li> <li>• Regulator data; research firms</li> </ul>

<sup>#</sup> Repeated indicator within competition. \* Indicator is common to both competition and efficiency.

## Alignment of the focus of competition with demand

In a market where competition is facilitating efficiency, providers of a good or service compete on factors that are relevant to consumers. This is particularly relevant for the retail side of the superannuation market, given broad concerns about the lack of demand side pressure from members.

There is a variety of economic models (for example, Anderson and Renault 1999; Ellison and Wolitzky 2009; Kuksov and Villas-Boas 2005) that identify and explain scenarios where transaction costs (in particular, search costs) and information asymmetries can give rise to wasteful competition on factors that do not add value to the consumer. While the models differ in design and application, there are some common themes.

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In particular, in imperfectly competitive markets, firms have an incentive to differentiate their product to create a sub-market for their brand and benefit from their market power in that sub-market. In the context of superannuation, this can manifest in two key strategies:

- product differentiation on aspects other than price (for example, the emergence of ‘ethical funds’, as described by Rice Warner, sub. DR112)
- high advertising expenditure to generate recognition and loyalty to the ‘brand’.

The above strategies can be amplified, and the consequences of monopolistic competition distorted by the inherent features of the superannuation system. In particular, the disengagement, lack of financial literacy and behavioural characteristics of many members (appendix B) can encourage marketing and advertising that focuses on the brand or irrelevant or unverifiable outcomes, rather than specific aspects of the service. And a low level of engagement by incumbent default members might enable a fund to collect fees to spend on advertising that ultimately does not deliver a benefit to those members (Rice Warner, sub. DR112).

The complexity of the underlying decisions and information asymmetries for members create scope for superannuation funds to differentiate their products on multiple characteristics to further complicate the comparison of products across providers. One outcome could be a system-wide proliferation of products that might differ significantly on subjective or hard-to-measure factors, such as claimed quality of service and particular inputs (for example, active investment management). For example, APRA (sub. 32) noted that there are currently over 40 000 investment options in Australian superannuation. It argued that this generated substantial operational complexities and cumbersome and inefficient processes that would ultimately disadvantage members.

The Institute of Public Accountants (sub. 22, p. 6) argued:

Competition which leads to a greater number of profit-making entrants to the marketplace seeking to differentiate themselves through a greater offering of non-standardised products and spending significant sums on advertisement and promotion in order to attract new members is unlikely to lead to a more efficient system.

Insurance is another service where similar distortions arise — inconsistent disclosure of product terms, as well as poor comparability of the products themselves, are well documented. In a recent report on the private health insurance market, the ACCC (2014) found that such industry practices impeded consumer decision making.

The above concerns were paramount in the recommendations of the Cooper review to introduce a MySuper default product, which was supposed to have a degree of homogeneity (to facilitate comparability for members) and a focus on containing costs (Cooper et al. 2010a, pp. 5, 10).

However, there are caveats and challenges to applying these insights to an assessment of system outcomes. Any assessment of whether competition reflects the underlying needs of members is complex, requires substantial information about members and can be

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vulnerable to subjective judgement. Participants have also noted data deficiencies that would complicate the assessment. For example, Rice Warner (sub. DR112, p. 22) observed:

APRA has only recently started collecting advertising expenditure as part of its Superannuation Reporting Framework which means there is no longitudinal dataset. Further, there are deficiencies in the current reporting, many well-known funds with visible advertising campaigns have reported zero expenditure on the APRA forms.

There is also potential ambiguity in interpreting some outcomes. Extensive and growing product diversity and competition on non-price aspects can be either a symptom of strategic monopolistic behaviour or a reflection of the funds meeting heterogeneous preferences of members. For example, the emergence of ethical funds might reflect demand from some engaged members who knowingly trade off net returns and other product features they value. The latter is an allocatively and dynamically efficient outcome (chapter 6).

Similarly, as noted by several participants (for example, Mercer, sub. DR104), it is challenging to draw unambiguous conclusions from evidence on marketing and advertising. The economic evidence on the effect of non-price advertising on prices and outcomes for consumers is mixed (for example, Dukes 2008). The effect depends on a complex interplay of factors, including whether advertising is conveying socially valuable information (which is difficult to assess) and how consumers respond to it.

Another approach involves a positive test. That is, the question is not whether the funds are competing on *irrelevant* factors, but whether there is competition on factors that are unambiguously *relevant* to members.

In the context of marketing and product disclosure, this would involve examining whether necessary information is provided to the member. This can include considerations of whether that information is provided in a prominent manner. Anthony Asher (sub. 21, p. 14) argued that levels of transparency on aspects such as conflicts of interest and costs could be used as a measure of competition and that the Commission should assess:

... both clarity and quality [of disclosure]. Perhaps the Commission could develop a puffery index for annual reports and other communication. The ratio of pictures to tables would be a good start! Much greater detail of costs, and of the investment performance measures ... would obviously help to focus minds on relevant issues.

A further important area for assessment relates to the practices and arrangements within superannuation funds for collecting and maintaining information about their members to tailor their product to member needs and preferences. This could include basic member information, such as age, gender and account balance, but also extend to more detailed data collection on financial literacy, awareness and engagement with superannuation outcomes, and preferences on risk and investment.

In the context of desired outcomes, such as innovation and quality improvement, the Commission will look at both the development of new products and the introduction of services and modes of delivery that make it easier and more convenient for members to engage with the system. On the former, there will be a greater focus on the retirement stage, and the question would be whether the system is developing products that manage the key risks of members, including the life-cycle investment risks and longevity risks. On the latter, the Commission will be looking at evidence of the development and uptake of new online and digital capabilities and of tools to facilitate decision making by members (including tools provided by third parties).

In sum, an assessment of whether competition focuses on factors that are relevant to members should draw on evidence of what members value. Top down measures need to be supported by evidence of member preferences and of how those preferences are informing product and service development, and competition more broadly.

Ultimately, if competition in the superannuation system is delivering the outcomes that members want, this should manifest in outcome-based measures. Over time, improved service quality, reduced costs and higher net returns could be expected to lead to greater system-wide demand and higher voluntary consumption of core and ancillary superannuation services, holding all else equal. However, as noted by many participants, using this indicator would involve practical challenges in measurement and interpretation, in particular when determining an appropriate counterfactual. The changes in demand that relate to the performance of the system would need to be unbundled from other drivers of demand, such as economic growth, market performance and changes in broader retirement income policies. In this context, high and growing levels of member satisfaction and trust in the system is an indicator that would be both less challenging to measure and more directly linked to the objectives of competition in superannuation (table 5.5). However, even this indicator will require care in interpretation to unbundle external factors, such as market performance, from those that are within more direct control of system participants.

**Table 5.5      Aligning competition with demand: criteria and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Do funds compete on member-relevant non-price dimensions?</b>		
• Number of accumulation products (aggregate and per fund)* (output)	• Trend analysis	• Regulator data
• Fund marketing expenditure (share of operating expenditure) (input)	• Trend analysis	• Regulator data; fund disclosures
• Funds' use of member information to inform product design and pricing* (input)	• Qualitative	• Fund surveys; case studies
• Availability of meaningful and comparable information on fees, product features (including insurance) and risks** (input)	• Qualitative	• Reviews by others; member surveys
• Member superannuation and insurance literacy** (input)	• Qualitative	• Member surveys

(continued next page)

**Table 5.5** (continued)

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is there innovation and quality improvement in the system?</b>		
• Introduction of new retirement income products* (output)	• Trend analysis	• Fund surveys; fund disclosures; case studies
• Development and active take-up of tailored products and member services* (output)	• Trend analysis; qualitative	• Fund surveys; fund disclosures; case studies
• Introduction of new methods of service delivery* (output)	• Trend analysis; qualitative	• Fund surveys; fund disclosures; case studies
<b>Are outcomes improving at the system level?</b>		
• Growing voluntary consumption of superannuation services (investment, retirement products, advice and insurance) (output)	• Trend analysis	• Regulator data
• Member satisfaction and trust* (outcome)	• Trend analysis; qualitative	• Member surveys

# Repeated indicator within competition. \* Indicator is common to both competition and efficiency.



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## 6 Assessing efficiency

### Key points

- Assessing the efficiency of the Australian superannuation system — across the dimensions of operational, allocative, and dynamic efficiency — is a unique and challenging task for which there is little precedent. Most previous studies have focused on operational efficiency and matters (such as returns and fees) which lend themselves to measurement.
- Assessing the efficiency of the superannuation system requires considering how well it achieves the system-level objectives set out in chapter 4. This chapter does not assess efficiency in the superannuation system. Rather, it sets out the criteria and indicators that would guide the Commission’s future assessment (stage 3).
- Maximising net investment returns (post taxes and fees) is a key way the system contributes to adequate and sustainable retirement incomes. The criteria and indicators will focus on whether long-term net investment returns are being maximised taking account of risk, and costs and fees minimised taking account of service features.
  - At a system-level, average net returns over the long term should be reflective of the overall system’s diversification as well as market volatility.
  - Other approaches to account for risk include benchmarking the variance of system-wide net returns, benchmarking net investment returns at the asset class level and examining persistent underperformance of default products.
  - In retirement, members are not only interested in maximising net returns. The Commission will also examine how effectively the system provides members with information and products to help manage sequencing and longevity risks in retirement.
- Meeting the needs of members is another key objective of the system. However, assessing this at a system level is challenging due to the diversity of individual members circumstances. The criteria and indicators focus predominantly on observed fund and member behaviours and potential impediments to efficient outcomes.
- Ensuring the superannuation system becomes more efficient over time is also a relevant consideration. The criteria and indicators focus on whether there are material systemic risks in the system and its ability to overcome impediments to improving long-term outcomes.
- The majority of members are defaulted into insurance on an opt-out basis. Taking the default arrangements as a given, it is relevant to assess whether the insurance products provided offer value for money and whether the costs are being minimised for the level and quality of cover. A mix of quantitative and qualitative indicators will inform the assessment.

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This chapter outlines the assessment criteria and indicators that will be applied in assessing the system-level objectives that pertain to efficiency in the stage 3 review.

The system-level objectives for efficiency outlined in chapter 4 are loosely aligned with the three dimensions of efficiency: operational, allocative and dynamic. Dynamic efficiency includes improvements in operational and allocative efficiency over time. To minimise duplication, criteria for assessing dynamic efficiency will therefore rely mostly on the criteria and indicators (and changes over time) proposed in sections 6.1 and 6.2. Additional elements of dynamic efficiency are discussed in section 6.3. Standalone criteria for insurance that have regard to operational and allocative efficiency are in section 6.4.

Some of the criteria and indicators for competition in chapter 5 naturally go hand-in-hand with assessing efficiency, though in some cases there may be trade-offs between competition and efficiency (chapter 4). This chapter will highlight instances of competition and efficiency both reinforcing each other and working in opposing directions.

The criteria for assessing efficiency are framed at a system level. As far as possible, indicators are designed to provide insights on system-wide efficiency. That said, the Commission will also focus on specific segments of the system — such as the default, choice, institutional-fund, self-managed superannuation fund (SMSF), accumulation and retirement segments (chapter 2) — where it meaningfully informs the system-level assessment.

## **6.1 Maximising long-term net returns**

Maximising long-term net returns (after all fees and taxes) on a given account balance, including by taking account of the risks associated with investment, is the most important way in which the superannuation system contributes to adequate and sustainable retirement incomes. In a defined contribution world, this objective is equally relevant in the accumulation and retirement phases (albeit members face a more complex set of choices and risks in retirement when they can start to drawdown income). Assessment of this objective is closely aligned with operational and dynamic efficiency (chapter 4) and the competitiveness of the system (chapter 5).

Various factors contribute to net returns. The fees that funds charge their members are clearly an important part of the story as these detract from net returns. However, other factors could also bear on net returns, such as decisions on asset allocation, selection of specific assets, investment style and fund size. The existence of any market or regulatory impediments to investing member balances efficiently in upstream capital markets could further impact net returns, as could unpaid or delayed Superannuation Guarantee contributions to member accounts or how tax is managed. Consequently, an assessment of this objective will focus on a broader set of matters than just costs and fees.

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While a focus on net returns is clearly important, other system outputs, such as the quality of member services, are also relevant, albeit harder to measure.

Five criteria will be used to assess whether the system maximises long-term net returns on member balances and contributions.

- Are long-term net investment returns being maximised over members' lifetimes, taking account of risk?
- Are costs incurred by funds and fees charged to members being minimised, taking account of service features provided to members?
- Do all types of funds have opportunities to invest efficiently in upstream capital markets?
- Is the system effectively managing tax for members, including in transition?
- Are other leakages from members' accounts being minimised?

There are strong links between assessing operational efficiency and competitiveness. In an efficient system, competition would provide funds with incentives to minimise their costs, charge cost-reflective prices, and maximise net returns and service quality to members. As such, selected competition indicators from chapter 5 are also relevant to assessing the above criteria (this is highlighted where relevant in the indicator summary tables).

### **Are long-term net returns being maximised?**

Superannuation funds invest member balances to earn a gross rate of return and charge fees to members for investment and administrative services. Taxes are also levied on member returns. In this report, unless otherwise stated, 'net returns' is defined as the investment returns members actually earn on their balances minus the taxes and fees they pay, including administration and investment fees. As discussed later, in certain instances, investment returns will also be considered net of taxes and investment fees only. (Insurance is considered separately in section 6.4.)

Net returns are a key determinant of a member's retirement income. The Association of Superannuation Funds of Australia (ASFA, sub. 42, p. 4) indicated that for an individual on average earnings, with contributions made during a full working life, the 'net benefit' (net investment returns after all investment and administration fees, operational costs, indirect costs and taxes) delivered to a member will account for about 70 per cent of the value of their total amount at retirement.

There is widespread agreement among study participants that net returns over the *long term* (in the order of 10 years or longer) are a primary indicator of system performance (for example, AIST, subs. 30, DR102; ASFA, sub. 42; Energy Super, sub. 19). The main points of discussion among study participants focused on how they are best measured and meaningfully benchmarked to provide insights for system-level efficiency.

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## Measuring net returns

Where historical data are available, net returns are relatively straightforward to calculate retrospectively. The Australian Prudential Regulation Authority (APRA) and various research firms publish and compare net returns of superannuation funds and products over various time periods.

There are, however, recognised limitations in using historical net returns as an indicator of operational efficiency. For example, they are not necessarily a good indicator of future investment performance (Anthony Asher, sub. 21; CIFR, sub. 10; Dixon Advisory, sub. DR103; FSC, sub. DR110; Rice Warner, sub. DR112). They can be dominated by the performance of asset markets over which investment managers have little control (Anthony Asher, sub. 21; CIFR, sub. 10), even over long time periods (ACFS, sub. DR71). Further, net return measures typically do not account for the level of service quality provided to members in the form of ancillary services (APRA, sub. 32; CIFR, sub. 10).

Nevertheless, study participants acknowledged that some measure of historical net returns is a relevant focus in this study as one element of the efficiency assessment framework.

### *Methods for calculating net returns*

Study participants expressed different views on how net returns should be calculated. Some advocated calculating them net of investment fees, taxes *and* administration fees collectively, on the basis that this most closely reflects what a member receives (for example, ASFA, sub. DR98). Others favoured measuring net returns gross of administration fees on the basis that they reflect a separate bundle of services provided to members (for example CIFR, sub. DR57; Rice Warner, sub. DR112).

A further issue raised was the use of time- or money-weighted returns.<sup>19</sup> Much of the conventional industry and academic analysis of net returns in the superannuation system uses time-weighted return measures. However, study participants and others have noted such measures do not necessarily provide insights for the sequencing of *when* returns happen (and the size of the portfolio at the time). The use of money-weighted measures can overcome this limitation (Basu, Doran and Drew 2012; Bianchi et al. 2014; CIFR, sub. 10; Hartley, sub. 12).

The Commission recognises that there are advantages and disadvantages to using different methods for calculating net returns, and it does not need to restrict itself to one method. Where data are available, the Commission anticipates calculating time-weighted and money-weighted measures.

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<sup>19</sup> Time-weighted returns reflect the compound rate of growth in a portfolio over a specified period, while money-weighted returns reflect the rate of return that equates the discounted ending asset value to the sum of the initial assets under management and the present value of the capital flow realised over the life of the fund (Bianchi et al. 2014).

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When measuring the investment performance of the system as whole, net returns will be calculated net of all taxes, investment fees, *and* administration fees (on the basis that this is what the system delivers to members). Administration fees may be excluded when measuring the investment performance of a particular segment (such as the default segment), but only where it is meaningful to do so and data are available to enable this.

### *Risk adjustment of net returns*

Assets within a superannuation portfolio are subject to a range of risks. Diversification of investments (and ultimately of underlying risk and return drivers known as ‘factor risks’<sup>20</sup>) is a means of reducing market risks to the portfolio and maximising long-term net risk-adjusted returns. Diversification is more effective where assets in the portfolio are diversified across their relative exposure to the same factor risk (Podkaminer 2013). Understanding the risks associated with investment is important for assessing the relative investment performance of funds and products, both retrospectively and into the future. To hold riskier assets, investors expect to be compensated with higher returns.

There is extensive literature on how to adjust investment return data to account for the different types and level of risk that investors are taking (or have taken). However, there is no universal agreement on how best to make this adjustment (box 6.1). Most measures of risk-adjusted returns use volatility (the standard deviation of past returns) as a proxy for risk. While past volatility can be relatively straightforward to measure, it has limitations as a proxy for risk in the context of long-term investments such as superannuation (Dr Mike Gilligan and Dr Stuart Craig, sub. DR95; Keppler 1990; Leland 1999; SMSFOA, sub. 20). In particular, short- or even medium-term volatility is not necessarily indicative of the probability of members experiencing an adverse capital loss at the point of retirement.

The Standard Risk Measure is an industry-developed measure which requires funds to report (in their MySuper product dashboards and reporting to APRA) on the likely number of negative annual returns over a 20-year period. However, it does not convey to members the likely magnitude or path of negative returns, or their timing (Actuaries Institute 2016; Dr Mike Gilligan and Dr Stuart Craig, sub. DR95). APRA (sub. DR111) indicated that it has been encouraging the industry to develop other measures that may appropriately communicate different risk concepts to various stakeholders. A proposal from the Actuaries Institute (pers. comm, 31 October 2016) for industry to collaborate on developing a metric for long-term investment risk, for inclusion in future product dashboard reporting, is a positive development.

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<sup>20</sup> Factor risks may include those arising from exposures to inflation, interest rates, economic growth or currency movements (Podkaminer 2013).

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## Box 6.1 Risk adjustment in theory and practice

### Sharpe ratio

The **Sharpe ratio** is a widely known and used method to compare risk-adjusted investment performance of funds. It measures the average return received for incurring an additional unit of risk above the risk-free rate, and uses the standard deviation (or volatility) of past returns in the investment portfolio as a proxy for risk (Liu 2013b). Several academic studies have estimated risk-adjusted returns for Australian superannuation funds using the Sharpe ratio (or variants thereof) (for example, Coleman et al. (2003), Ellis et al. (2008) and Sy and Liu (2009)).

### Other ratios

Other ratios on investment performance discussed in the literature are distinct from the Sharpe Ratio, but similarly seek to measure risk-adjusted returns (Aragon and Ferson 2006; Liu 2013b).

- The **Treynor Ratio** measures the systematic risk of the portfolio (rather than its total risk).
- The **Sortino Ratio** adjusts the Sharpe Ratio to focus solely on downside volatility.
- **Jensen's Alpha** measures the average return on a portfolio over and above that predicted by the capital asset pricing model, given the portfolio's beta and the average market return.
- **Value at Risk** is an alternative risk indicator which measures the risk of a portfolio as the maximum loss that the portfolio can sustain for a given confidence level and assumptions about the distribution of future returns.

### Alternative methods to account for risk

Ratings and benchmarking bodies sometimes use alternative approaches to account for risk in ranking the investment performance of superannuation products. For example, Chant West and SuperRatings compare net investment returns for diversified products with similar asset allocation profiles (for example, those with similar percentage allocations to 'growth' assets) as a proxy for aligning investment product risk (Chant West 2016a; SuperRatings 2015).

CEM Benchmarking collects fund-level investment information (provided by participating funds) to benchmark the return of each asset class against a passive market return, in order to estimate a total fund-level (time-weighted) return (Beath 2015; CEM Benchmarking nd). The total 'net value added' is the gross value added over and above the 'policy return' (returns from a passive investible portfolio with similar risk characteristics, estimated by the breakdown of asset classes), less investment costs.

Moreover, many factors which could bear on forward-looking investment performance — such as the quality of investment governance — may be difficult to build into quantitative risk adjustment. Following the global financial crisis, there has been widespread criticism of conventional models of quantitative risk measurement (and management), especially in terms of assumptions about the correlation of risks across asset classes (Kay 2015).

Views differed among study participants on whether the Commission should adjust historical net returns using a volatility-based ratio. Several participants favoured the measurement of risk-adjusted net returns (for example, Corporate Superannuation Association, sub. DR92; FSC, sub. DR110; Willis Towers Watson, sub. DR81), however, there was little (if any) further elucidation on the specific measure that should be used at

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the system level.<sup>21</sup> Other participants supported the use of long-term historical net returns, without the need for volatility-based risk adjustment, provided there was focus on the *long term*. For example, ASFA (subs. 42; DR98) proposed that the primary indicator of net benefit to members should take the form of rolling average net returns (across MySuper products), with a period of at least 20 years. On this basis, ASFA (sub. 42, p. 26) submitted that:

Given that returns are being measured over a period of at least 20 years, there should be no need to adjust returns to reflect risk. Instead, real returns should be utilised.

Industry Super Australia (ISA) (sub. 38) suggested using historical long-term average returns of a cohort of funds with strong long-term net performance as a benchmark for optimal net returns in the superannuation system. ISA (sub. 38, p. 26) submitted that:

Over the long term, the periodic volatility should be reflected in the average [return]. It is therefore unnecessary to use a volatility adjusted ratio, or attempt to define which risks would be included.

When the focus is system-wide (as it is here) and over a long enough time horizon, system-wide average net investment returns will collectively reflect the impact of diversification and average market volatility over the measured period. In other words, this metric effectively captures the impact of risk on returns. While this may not perfectly reflect all risks over a given period, the Commission considers it to be robust for a system-level assessment. In addition, the Commission will take further steps to take into account risks, through the benchmarks and indicators it will apply (discussed below).

As noted by several study participants (for example ACFS, sub. DR71; Association of Independent Retirees, sub. DR63; ISA, sub. DR106), the retirement phase presents a more nuanced optimisation challenge for members. For example, in addition to investment risk, they also need to manage sequencing and longevity risks. Section 6.2 proposes criteria and indicators to assess how well the system provides information and products to members to help them manage such risks in the transition and retirement phases, and meets members' drawdown needs. Nonetheless, while maximising net returns may not be the primary goal of members in retirement, it is still an important consideration, given how long many members spend in retirement.

## Benchmarking net returns

Long-term net returns from the superannuation system could be compared to various benchmarks — for example, a CPI + X target, GDP growth, a reference portfolio of assets, a cohort of strong performing funds, or funds in other countries (ASFA, sub. 42; CIFR, sub. 10; FSC, sub. 29; ISA 2013, sub. 38; Rice Warner, sub. DR112). In comparing system-wide net returns to a simple benchmark, the Commission is implicitly assessing the

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<sup>21</sup> The Australian Centre for Financial Studies (sub. DR71) argued that even a 20-year period is insufficient to capture the risk implicit in different investment portfolios.

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system's investment nous in individual asset classes as well as its effectiveness in diversification.

### *CPI + X benchmarks*

CPI + X benchmarks are commonly used in the finance sector to target and assess investment performance. They are transparent, simple to implement and easy to interpret. They are also consistent with how investment return objectives are expressed by superannuation funds and the need to provide positive real returns on member balances (Carruthers 2015; Mercer, sub. DR104). A CPI + X benchmark is also a useful measure to track how well the system as a collective is delivering real returns above CPI or wages, thereby measuring the actual value the system provides for members.

Some study participants favoured CPI + X benchmarks for assessing system performance. For example, ASFA (subs. 42; DR98) indicated a CPI + 2.5 per cent benchmark may be appropriate for MySuper products, and Mercer (sub. DR104) suggested that CPI + 2.5 per cent to CPI + 4.5 per cent would be reasonable at the system level. Others favoured using an average of investment targets set by funds (for example, MLC, sub. DR115). Rice Warner (sub. DR112) suggested that funds could assess the probability of achieving a ten-year CPI + X target (using stochastic modelling), and disclose the analysis to members as a forward-looking performance measure.

While intuitive, CPI + X benchmarks also have limitations, especially at the system level, which include determining 'X' and linking this to a meaningful proxy for the efficiency and performance of the system (Mercer, sub. DR104). Put another way, you cannot invest in CPI + X. This measure would also not pick up movements in investment markets beyond funds' control, such as changes in share or property prices, and is more a reflection of system adequacy rather than efficiency (CIFR, sub. DR57; QSuper, sub. DR96).<sup>22</sup>

### *Reference portfolios*

An alternative benchmark is use of simulated net returns from a passive reference portfolio. This would incorporate many influences on investment markets which are beyond funds' control, while providing insights into the efficiency by which funds add value for members (CIFR, sub. 10). Specifically, reference portfolio comparisons can reflect the value the system provides through dynamic asset allocation, active investment management and investment in assets outside of the benchmark (CIFR, sub. DR57).

Broadly, there are two forms this could take: estimating some form of 'optimal' portfolio based on modern portfolio theory,<sup>23</sup> or constructing a simple reference portfolio (for

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<sup>22</sup> Benchmarks based more explicitly on a wages measure (such as average weekly ordinary time earnings) would similarly reflect system adequacy rather than efficiency.

<sup>23</sup> A framework for assembling a portfolio of assets such that the expected return is maximised for a given level of risk, defined as the variance of returns (Markowitz 1952).



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example, based on a generic low-cost strategy<sup>24</sup> or representative of the average asset allocation across the system or in particular market segments). There is a trade-off between theoretical accuracy and practicality between the two approaches. As noted by CIFR (sub. 10), the ‘optimal’ portfolio is theoretically superior but difficult to apply, while a simple reference portfolio is easier to construct but may not completely represent the optimal (efficient) alternative and is limited in scope.

A key issue in using a reference portfolio approach is determining the asset allocation.

- Making the reference portfolio reflect the aggregate asset allocation in the superannuation system is simple and transparent, but it only measures the efficiency of certain investment decisions. In other words, it does not assess whether the actual asset allocation in the system is efficient.
- Articulating an asset allocation for the reference portfolio (such as 70/30) is also simple and transparent, but the optimal allocation is contestable and its specification could create peer risk (whereby superannuation funds strive to mimic the reference portfolio, rather than pursuing the best outcomes for their members).

While several study participants saw merit in use of a reference portfolio approach, various limitations were also outlined. A particular concern was the ability to match the aggregate risk exposure of the system with that of any single static reference portfolio, including one reflecting the average asset allocation or a 70/30 portfolio (ASFA, sub. DR98; David Hartley, sub. DR82; Mercer, sub. DR104; MLC, sub. DR115; Rice Warner, sub. DR112). A further potential downside is that a static reference portfolio will not remain relevant as the composition of members changes over time (David Hartley, sub. DR82). Several participants reiterated concerns that use of a reference portfolio may exacerbate peer risk, particularly if applied to benchmark individual funds (for example, QSuper, sub. DR96).

If a reference portfolio approach is used, participants generally supported the use of multiple reference portfolios, while others emphasised accumulation and retirement should be considered separately (for example, Dixon, sub. DR103; Rice Warner, sub. DR112). In analysing segments of the market (such as the default segment), a reference portfolio could also be constructed based on an asset allocation in accordance with the long-term objectives for members in that segment (CIFR, sub. DR57). CIFR (sub. DR57) submitted that the analysis could take into account the riskiness of different product class portfolios by analysing the distribution of cumulative net returns over defined time periods (for example, 3, 5 and 10-year periods) compared to the reference portfolio.

International comparisons offer a further option to understand whether net returns achieved in the Australian system have been globally competitive. While intuitively appealing, this approach is challenging due to differences in policy, market structures and asset allocations

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<sup>24</sup> As an example, CIFR (sub. 10) noted that a reference portfolio containing 70 per cent growth and 30 per cent income assets could be used as a benchmark for net returns for MySuper *balanced* default funds, although disadvantages include it may not be optimal and accounting for risk is difficult.

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across countries (appendix E; ISA, sub. 38; FSC, sub. 29). There was limited feedback or support amongst study participants for this type of benchmark.

### *The Commission's preferred approach*

The Commission's preferred approach is to use both reference portfolio and CPI + X benchmarks in assessing long-term net investment returns.

The first set of benchmarks will compare system-wide net returns to the net returns from a set of passive, liquid reference portfolios. The Commission anticipates using a small number of reference portfolios with different asset allocations, including one based on average asset allocations across the system (for the historical period under examination) and those representative of typical multi-asset portfolios available in the market (such as 70/30). The reference portfolios are intended to inform the Commission's one-off analysis of historical returns only, and should not be misconstrued as an implied or implicit optimal investment strategy that individual funds should pursue.

The Commission will not be benchmarking the investment performance of individual funds or products. That said, the Commission will examine net returns in segments of the system (such as default, choice, institutional-fund, SMSF, accumulation and retirement segments), and compare them to reference portfolio benchmarks, where this can meaningfully inform the system-level analysis. This analysis will give consideration to the extent of similarity in asset allocation across products within market segments.

For greater robustness in drawing system-level insights, the analysis will be supplemented with comparisons of long-term net returns to various CPI + X benchmarks, at the system and segment level. This will allow overall investment performance to be assessed (including asset allocations) against the objective of maximising long-term net returns.

### **Asset-class benchmarking**

In principle, long-term net returns to specific asset classes in the superannuation system could be compared to relevant asset class benchmarks to provide insights on whether superannuation funds collectively have over- or under-performed other investors. By focusing on individual asset classes, this analysis would allow the Commission to abstract from differences in risk across asset classes and from external market factors (such as aggregate share market movements).

There are two elements to the analysis: the selection of appropriate benchmarks and the calculation of net returns to asset classes.

Various asset-class benchmark indexes have been cited in the literature and by study participants (table 6.1).<sup>25</sup> While it is relatively straightforward to select a benchmark for listed asset classes (such as equities), determining appropriate benchmarks for unlisted assets (such as unlisted property, infrastructure and private equity) is more challenging. Broadly, two approaches are possible: using an index of listed assets for equivalent types of unlisted assets, or constructing a target benchmark using modelling.

**Table 6.1 Some examples of asset-class benchmarks<sup>a</sup>**

<i>Asset class</i>	<i>Possible benchmarks</i>
Fixed interest	Australian Broad Investment-Grade Bond Index (AusBIG) S&P ASX Australian Fixed Interest Index Bloomberg AusBond Composite Bond Index All Maturities
Domestic equities	S&P/ASX 200 Accumulation Index S&P/ASX 300 Index
International equities	MSCI World ex-Australia Index S&P Developed ex-Australia LargeMidCap Index
Unlisted/listed property	S&P/ASX 200 A-REIT Total Return Index S&P/ASX 300 A-REIT Index (listed) Mercer/IPD Australian Pooled Property Fund Index (unlisted)
Unlisted/listed infrastructure	S&P Global Infrastructure Index (listed) MSCI IPD Australian Unlisted Infrastructure Index Thomson Reuters Global Infrastructure Total Return Index
Private equity	Australia Private Equity and Venture Capital Index ASX Small Ordinaries Index

<sup>a</sup> This table lists some asset-class benchmarks that have been cited in the literature or raised by study participants. They do not necessarily reflect the asset-class benchmarks the Commission will apply in stage 3. This is a matter that will be considered following further consultation as part of the stage 3 review.

Sources: Ainsworth et al. (2016); AMP Capital (2015); AVCAL (sub. DR93); Cummings (2012); IPD MSCI (2014); S&P Dow Jones Indices (2016a, 2016b, 2016c, 2016d).

A benchmark based on an index of listed assets would be straightforward to implement and have the advantage of representing a proxy for the next-best investable opportunity. However, interpreting the results would need to consider key differences between listed and unlisted asset classes (such as liquidity and factor-risk correlations). Using a modelling-based approach (such as by drawing on the capital asset pricing model) may be more conceptually appealing but challenging to do in practice and, as a theoretical benchmark, would not represent an alternative investment opportunity.

The Commission favours an approach where net returns from asset classes are benchmarked against an index of listed assets (for each asset class). Different indexes for each asset class can also be used to test the robustness of results. Conceptually, it is important that the benchmark is public and investable. This approach is straightforward,

<sup>25</sup> CIFR (sub. DR57) also noted that a set of passive index funds or exchange traded funds could be used as benchmarks for each asset class.

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transparent, and is similar to the approach used by CEM Benchmarking to estimate fund-level net returns (box 6.1). Practically, it is also important to take into account fees and taxes to enable like-for-like comparisons (ASFA, sub. DR98; Mercer, sub. DR104). To complement the analysis, the Commission may also seek information on the historical average discount rates applied in valuing unlisted assets.

The second element of the task will be calculating system-level net returns to specific asset classes. Study participants noted various challenges in this regard. Specifically:

- there are no publicly available data on returns to asset classes across the system or market segments (Mercer, sub. DR104)
- no single definition of asset classes is consistently used across the superannuation industry (APRA, sub. DR111)
- there may be significant variation within an asset class (such as gearing levels and investment structures) (Dixon Advisory, sub. DR103).

While the Commission accepts there will be practical difficulties in implementing this indicator, it sees merit in pursuing it, and will seek further assistance from the industry in stage 3, including for the collection and construction of datasets.

### Variance and distribution of net investment returns

In its draft report, the Commission proposed measuring the dispersion of net returns from like products (such as MySuper products) against a frontier of ‘best-performing’ products or funds through the use of data envelopment analysis. However, many participants submitted that this analysis would be too challenging given: limitations in the data; conceptual difficulties in defining inputs and outputs; and difficulties in interpretation (for example, AMP, sub. DR90; ASFA, sub. DR98; CIFR, sub. DR57; Mercer, sub. DR104). Past studies using data envelopment analysis to examine Australian superannuation funds have reached vastly different conclusions — one found most funds to be highly efficient (Qu 2014), while two others found that most are inefficient (Bui 2013; Sathye 2011).

After further consideration, the Commission has decided to adopt two simpler measures of how net investment returns vary across the system that will complement the indicators focusing on long-term net returns. The first is the variance of net returns *over defined time periods* for the system and segments (such as SMSFs, institutional-funds, accumulation and retirement segments). Variance is relatively straightforward to measure using time-series return data and would be compared to the variance of the relevant reference portfolios (discussed above). However, the analysis will also need to consider the skewness of returns, because high variation in returns on the upside is less damaging to member outcomes than high variation that is mostly on the downside.

The second measure is an indicator of how net returns are distributed *across products* in the system. In examining this, the Commission will focus on the default segment because it provides a form of safety net, because trustees make the investment decision and because it

comprises relatively comparable products. Specifically, the Commission will examine the extent to which default products persistently underperform (defined here as for 5 consecutive years or more) net investment returns from the relevant reference portfolio. This analysis will give consideration to the extent of similarity in asset allocation across default products.

Finally, it is also relevant to consider future returns, especially given uncertainty about future market conditions and changes in funds' investment practices over time. The Commission will assess factors that have a direct bearing on forward-looking investment performance in the system, such as governance practices (including investment committees) (section 6.2). In stage 3, the Commission will also consider using stochastic modelling to assess the probability of achieving CPI + X returns at a system-level.

**Table 6.2 Long-term net investment returns: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are long-term net investment returns being maximised over members' lifetimes, taking account of risk?</b>		
<ul style="list-style-type: none"> <li>• Long-term (5, 10 and 20 year) historical net investment returns from the system and market segments compared to benchmarks (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Long-term (5, 10 and 20 year) historical net investment returns to specific asset classes from the system and market segments compared to benchmarks (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; regulator data</li> </ul>
<ul style="list-style-type: none"> <li>• Variance of historical net investment returns (over 5, 10 and 20 years) from the system and market segments compared to benchmarks (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Proportion of default products that persistently underperform the benchmark (for 5 or more consecutive years) (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>

## Are costs and fees being minimised?

Maximising net returns also requires consideration of whether costs and fees are being minimised for *given service features* provided to members (outputs, either in the form of net returns, service quality, or both). In the context of this section, costs are those incurred by funds in providing services to members, while fees are in effect the prices funds charge to members. Fees (and costs) in the Australian superannuation system have received a lot of attention recently, including as a result of research undertaken by the Grattan Institute (Minifie, Cameron and Savage 2014, 2015), throughout the Financial System Inquiry (Murray et al. 2014a), and following new product dashboard reporting requirements which are intended to allow members to more easily compare fees (chapter 1).

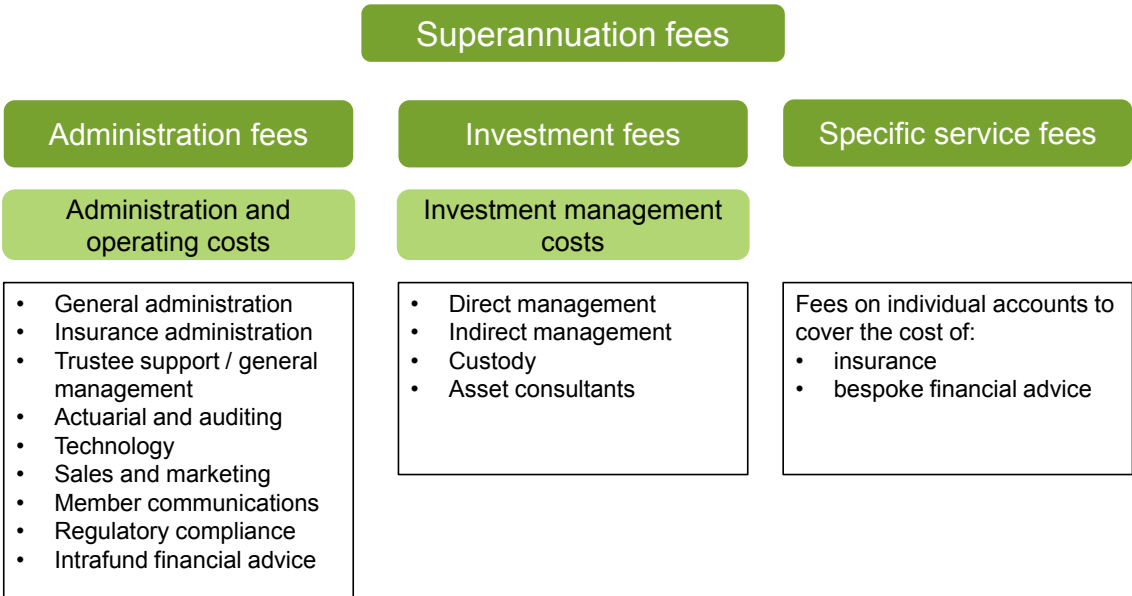
In an efficient and competitive superannuation system, funds would have an incentive to minimise their costs and to align their fees with the underlying economic costs. In this way, costs and fees would be proportionally related (chapter 5). There would also be

downward pressure on costs and fees over time, and evidence that realised cost savings are passed through to members in the form of lower fees. Where higher fees are evident, they would be associated with higher long-term net returns or better quality member services.

**Types of costs and fees**

The costs incurred by superannuation funds are diverse. Broadly, however, costs can be divided into two types: administration and operating costs (hereafter ‘administration costs’) and investment management costs (hereafter ‘investment costs’) (figure 6.1).

**Figure 6.1 Superannuation costs and fees, by type<sup>a</sup>**



<sup>a</sup> Costs and fees are not necessarily captured entirely or reported under these broad categories in practice. For example, APRA collects indirect cost ratios for investment, administration and advice costs, while some of the costs incurred by SMSFs, such as self-administration expenses, are not reported (appendix G).

Sources: Minifie, Cameron and Savage (2014, 2015); Rice Warner (2014d).

The fees charged by funds can be categorised along similar lines to costs: administration fees, investment fees, and specific service fees. Funds charge member fees in diverse ways, for example, investment fees are often charged as a percentage of total assets, while administration fees can be charged on the same basis, via a fixed annual or weekly fee, or a combination (Minifie, Cameron and Savage 2015). Analysis by Rice Warner (sub. DR112) indicates investment management fees are the largest component of total fees, followed by administration fees and those for financial advice.

In assessing this criterion, the Commission’s focus is on core investment and administrative services provided to members (whether in-house or outsourced), including

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intrafund financial advice (chapter 1). Sometimes, the Commission may need to analyse aggregate costs and fees because more detailed data are not as reliable. The key cost and fee data issues identified in this study include that:

- there is inconsistent reporting on investment costs across funds — for example, some funds may not report all of their ‘indirect’ investment costs (costs embedded in investment returns rather than reflected in explicit fees) (APRA, sub. 32; ASIC, sub. 35; SuperRatings 2015)
- there are more general concerns about inconsistent reporting practices by funds, such as in reporting across cost categories, and inconsistent and missing data (APRA, sub. 32; ASIC, sub. 35; SuperRatings 2015)
- there are different reporting practices and methods required by regulators in the SMSF and non-SMSF sectors (appendix G)
- APRA has only published product-level data for MySuper products from 2013, and not yet for choice products (APRA, sub. 32; ASIC, sub. 35; ISA subs. 38, DR106).

New reporting guidance from the Australian Securities and Investments Commission (appendix H) to take effect from 1 February 2017 (RG97) is intended to standardise and improve the way superannuation funds report fees and costs in their Product Disclosure Statements (PDSs) and periodic statements. However, some participants consider even more fundamental changes are required to improve reporting of fees and costs (for example, IQ Group, sub. DR67).

### Costs and fees are an important contributor to net returns

The fees charged by superannuation funds detract from the returns received by members (and ultimately, from their available retirement income). Over the long-term, even seemingly small differences in fees can significantly impact retirement income.<sup>26</sup>

Using costs and fees to assess the performance of the superannuation system has several advantages. They are more directly in the control of fund trustees than other factors which affect net returns. Fees are generally observable ex ante, and can be objectively measured. Further, extensive data on costs (and to a lesser extent fees) are reported by regulators (albeit subject to the limitations noted above) funds, and industry sources (chapter 7).

However, several study participants submitted that a focus on costs and fees in isolation without taking into account outcomes (in the form of net returns or service quality or both) would provide an incomplete (and potentially misleading) picture of efficiency, and could create perverse incentives for funds to not invest in the long-term interests of their

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<sup>26</sup> For example, Vanguard (nd) estimated that for a hypothetical portfolio with a starting value of \$100 000 which grows at 6 per cent annually over 30 years, investor fees of 0.25 per cent of assets every year (a low-cost scenario) versus 1.2 per cent of assets (a high cost scenario) result in a difference of \$130 000 at the end of 30 years.

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members (for example, APRA, subs. 32, DR111; Energy Super, sub. 19; FPAA, sub. 28; ISA, sub. DR106; Law Council of Australia, sub. 17; Peterson Research Institute, sub. DR70). Study participants also cautioned against comparing fees and costs in the Australian system with those in other countries, given the difficulties in adjusting results for policy differences and data reporting practices across countries (appendix E).

The Commission considers that assessing whether costs and fees are being minimised in the system, taking account of service features, is relevant for assessing whether the system is efficient. However, as a precursor to the design of indicators to assess this criterion, two issues raised by study participants warrant further consideration: the relationship between investment fees and net returns, and administration fees and service quality.

### Investment fees and net returns

Drawing on their own analysis and experiences, study participants noted that the investment fees charged by Australian superannuation funds are set in a highly competitive market and compare favourably to fees charged in other countries (for example, FSC, subs. 29, DR110; Mercer, subs. 31, 45). Where there is evidence of higher investment fees in Australia, study participants attribute this to Australian funds typically pursuing higher-cost investment strategies designed to deliver higher net returns to members over the long term (for example, ASFA, sub. 42; CIFR, sub. 10; FSC, sub. 29).

Higher-cost investment strategies could arise for two reasons: the pursuit of active (as opposed to passive)<sup>27</sup> investment strategies within an asset class (such as in listed equities), or through securing further diversification with investments in alternative asset classes (such as non-listed infrastructure).<sup>28</sup> Both strategies typically involve higher transaction and asset management costs. Other related factors may also influence investment costs, such as whether investment functions are managed in-house or outsourced (Gallagher, Gapes and Warren 2016).

There is considerable literature which explores whether fund managers can persistently ‘beat the market’ using active management strategies within a single asset class (usually listed equities). Jones and Wermers (2011) provide a useful summary. Some researchers have argued that in an efficient market it is not possible for actively managed funds to collectively outperform lower-fee passive funds. Various empirical studies support this view. Other studies indicate that while the average active manager may not outperform, a significant minority of active managers do add value, and that active management plays an important role in efficient capital allocation.

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<sup>27</sup> Active management is an investment strategy where the investment manager aims to outperform a targeted market benchmark, such as by gathering, analysing and acting on information (Jones and Wermers 2011). Passive management is an investment strategy that attempts to track a specific market index as closely as possible, after accounting for all expenses required to implement the strategy (Johnson and Juru 2015).

<sup>28</sup> Alternative asset classes can be defined as investments other than those in public equity, fixed income or cash. These can include real estate, commodities, hedge funds, private equity and private real assets.



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The merits of active management remain a source of ongoing debate. Study participants cautioned against extrapolating insights from the general literature on active management by institutional investors, such as superannuation funds (for example, CIFR, sub. 10). More specifically, the Peterson Research Institute (sub. DR70) argued that some studies which claim to explore the persistence of manager returns from active strategies (and find no consistent persistence) are really testing whether the market is static.

A separate issue is whether the higher costs of investing in alternative asset classes are justified by the diversification benefits within an investment portfolio, and improved risk-adjusted returns. Study participants and others have noted that a feature of the Australian system is that funds (in particular not-for-profit funds) tend to have a higher exposure to alternative assets (such as unlisted property and infrastructure) compared with pension funds in other countries (Ainsworth et al. 2016; ASFA, sub. 42; Cummings and Ellis 2011; ISA, sub. 38; FSC, sub. 29); the exception being private equity where Australian funds on average have a smaller exposure (AVCAL, sub. DR93).

Recent studies have explored the relationship between fees and net returns in Australia, and have reached different views on the value added from higher fees (box 6.2). Participants also noted that because the growth in Australian superannuation funds has been accompanied by increasing allocations to higher-cost alternative assets, this has restricted the scope for investment fee reductions (CIFR, sub. 10; Mercer, sub. 31).

### Administration fees and service quality

Several study participants submitted that the ancillary services provided by superannuation funds to members — such as online resources, call centres, account reporting, and intrafund financial advice — are an important dimension of system output that needs to be taken into account in the Commission’s analysis (for example AIST, sub. 30; ASFA, subs. 42, DR98; CIFR, sub. 10; FPAA, sub. DR91; ISA, sub. 38). There are indications that funds have been expanding the scope and quality of the ancillary services they offer to members in recent years, which may be a contributor to higher fees but can lead to additional benefits to members (CIFR, sub. 10).

This issue was examined in research undertaken by Minifie, Cameron and Savage (2015, p. 2), who concluded that there is ‘little evidence that funds that charge higher fees provide better member services’, though data to support this appear to be sparse.

Evaluating the value of ancillary services to members, and the relationship between administration fees and service quality on a quantitative basis, is challenging. While the Commission has been presented with arguments that higher administration fees (and spending by funds on member services) can lead to higher-quality member services, there is little systematic evidence (in the public domain) that can be drawn on. That said, several research firms benchmark fund performance by accounting for aspects of service quality provided to members (for example, Chant West 2016b; SuperRatings nd). Several participants also noted that the impact of regulatory compliance costs which are outside the

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control of funds directly should be factored into an analysis of administration costs (for example, Dixon Advisory, sub. DR103; PwC, sub. DR69).

### **Box 6.2 Recent studies of the fee–return relationship in Australia**

As part of a wider study, Grattan Institute researchers used econometric analysis to examine whether the average ‘high fee’ superannuation fund generated higher returns (after fees) than ‘low fee’ funds (Minifie, Cameron and Savage 2014). Using fund-level data, they found that funds which charged higher average fees generated lower average net returns over the period 2004–2012, without reducing risk. The research did find evidence of persistent outperformance among some funds; however, this was largely due to low fees. On this basis, the researchers concluded that fees are a more reliable indicator of future net returns than previous net returns.

In a submission to the Financial System Inquiry, Chant West (2014a) examined the relationship between fees, asset allocation and management style (passive versus active) for a sample of funds. This study applied a different methodology to the Grattan Institute analysis. Specifically, investment performance was assessed net of investment fees and gross of administration fees, and product- rather than fund-level data were used. Chant West (2014a, p. 1) analysis showed that ‘members of high-investment fee funds, where the fee budget has been spent wisely, have been rewarded with higher net investment returns.’ Further, Chant West observed that while numerous academic studies around the world have shown that, in general, retail investors that pay higher fees for active management receive very little excess return, Australian superannuation funds are in a very different situation because of their scale and negotiating power as wholesale investors.

Looking at portfolio investment more broadly, researchers at Vanguard (Johnson and Juru 2015) compared the efficacy of actively managed fund returns with those from unmanaged benchmarks in Australia. They found that after costs, the average actively managed fund has underperformed various benchmarks in most asset class categories over short and long time periods and through varying market environments. The performance of actively managed funds was also compared to passive (or indexed) funds. The researchers found that low-cost index funds were more likely to outperform higher-cost actively managed funds.

Researchers at the Centre for International Finance and Regulation (Ainsworth et al. 2016) undertook analysis to gain a better understanding of the factors that influence the fees Australian superannuation funds charge. Among other things, they examined the relationship between investment fees and fund performance. They found that the difference in after-fee abnormal performance was not significantly different between the group of funds with the highest and lowest fees.

### **The Commission’s preferred approach**

The Commission will apply quantitative and qualitative indicators to assess whether costs and fees are being minimised for given service features provided to members.

The costs associated with investment management and administration across the system and for particular market segments (measured relative to total assets and number of accounts) will be examined. The analysis will consider trends over time (such as whether costs are declining which would be expected in an efficient and competitive market) and

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whether there are any consistent patterns of difference — for example, by fund size, level of outsourcing, use of related service providers and investment in alternative asset classes — that may provide insights into system-level efficiency. In addition to system-level trends, the analysis will consider the following market segments.

- For investment management costs, the default, choice, SMSF and institutional-fund segments (noting the data comparability challenges outlined in appendix G).
- For administration costs, the default, choice and institutional-fund segments (excluding the SMSF sector). (The analysis will take into account other factors which may have a bearing on system-wide administration costs, such as trends in the number of duplicate accounts in the system and regulatory compliance costs imposed on funds).

The Commission will undertake similar analysis of fees charged to members for investment management and administration. To further supplement its analysis, the Commission will examine the extent to which there is alignment in the structure of member fees and underlying costs, and the level of variation (or fee dispersion) in the investment management and administration fees charged to members (in the institutional-fund, default and choice market segments).

The Commission will also consider the expected cost savings from SuperStream, a standard for electronically processing superannuation data and payments, with expectations of almost \$1 billion in savings annually (appendix H). To the extent that this has led (or will lead) to lower fund administration costs (as distinct from lower costs for employers), in an efficient system the cost savings would be expected to be passed through to members. While some study participants questioned the utility of this indicator, the Commission considers it a ‘low cost’ one given information is already being collected on the impact of SuperStream. The Commission will liaise with APRA on the information it is collecting (in SRS 711) on the number and cost of contributions transactions put through SuperStream or other methods, and with the Australian Taxation Office on the information it is reporting on its time-costs index for compliance (appendix H).

To supplement its analysis of investment management costs and fees, the Commission will utilise international benchmarking. Specifically, it will examine the costs and fees associated with investment management (scaled as a proportion of total assets) within the Australian superannuation system compared to pension funds in other countries and examined over time. This analysis will be most insightful for investment management costs and fees for specific asset classes. The Commission acknowledges the challenges involved in benchmarking costs and fees across countries, but these are not insurmountable (appendix E). The Commission will draw on best practice approaches to international benchmarking, such as the methodology developed by CEM Benchmarking in Canada (2016). Due regard will be had to actual costs incurred (not just published rates) and differences in taxation treatment (FSC, sub. DR110; Mercer, sub. DR104).

Further, the Commission acknowledges the potential for higher investment management or administration fees to be associated with improved outcomes for members (either in the

form of better net returns or service quality). Therefore, to balance the above analysis, the Commission will use econometric analysis to explore the nature and strength of the relationship between investment fees and net returns in the system. It will also explore whether there is a clear link between higher administration fees and service quality. Private industry data collected on the service quality offered by funds (and for specific types of products) could assist this analysis, as could surveys of members. Ultimately, an efficient system should be able to deliver both lower prices and higher quality products over time.

Finally, specific indicators developed to assess competition (chapter 5) will also be applied to an assessment of this criterion, including those relating to economies of scale (table 6.3).

**Table 6.3 Costs and fees: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are costs incurred by funds and fees charged to members being minimised, taking account of service features provided to members?</b>		
<ul style="list-style-type: none"> <li>• Costs relative to assets and number of accounts by service (investment and administration) and by market segment (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms; fund disclosures</li> </ul>
<ul style="list-style-type: none"> <li>• Fees relative to assets and number of accounts by service (investment and administration) and by market segment (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms; fund disclosures</li> </ul>
<ul style="list-style-type: none"> <li>• Alignment in the structure of member fees and underlying costs* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; fund disclosures; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Investment management costs and fees by asset class compared to other countries* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; fund disclosures</li> </ul>
<ul style="list-style-type: none"> <li>• Relationship between investment fees and returns at system level and for market segments (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Cost savings from SuperStream (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> </ul>
<ul style="list-style-type: none"> <li>• Relationship between level of administration fees and quality of member services (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; member surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Unused scale economies at fund level* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Pass through of benefits from scale economies (wholesale and retail) to members* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; fund disclosures</li> </ul>
<ul style="list-style-type: none"> <li>• Fee dispersion* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; fund disclosures</li> </ul>

\* Indicator is common to both competition and efficiency.

As noted in chapter 5, the quality of official system-level data might limit the analysis of costs and fees. Given the recent revisions to APRA’s reporting framework, some of these data quality problems may be resolved over time. Nonetheless, for robustness, in the stage 3 review the Commission would expect to draw on other sources of cost and fee data where they are available, such as product-level data collected by private research firms (chapter 7), and would take data quality issues into account in the interpretive narrative.

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## Do all types of funds have opportunities to invest efficiently?

A relevant issue in assessing whether long-term net returns are being maximised in the system is whether all types of funds can invest efficiently in upstream capital markets; or whether there are any regulatory or market impediments, especially for small funds.

Study participants generally did not consider that there were any major barriers to funds investing efficiently in upstream capital markets. The existence of various exchange traded funds and listed investment vehicles were cited as avenues available to funds of all types and sizes (including SMSFs) to gain exposure across most asset classes (AIST, sub. DR102; Dixon Advisory, sub. DR103). Nonetheless, some participants argued that aspects of the current regulatory regime (such as a disproportionate focus on fees and cost disclosures and three-day portability rules) can act as disincentives to investing in illiquid assets, such as private equity (for example, AVCAL, sub. DR93).

The Commission considers that it is relevant to incorporate this criterion as part of its assessment framework, even if only to confirm the view that there are no significant regulatory or market barriers. The assessment will consider differences in investment costs for particular asset classes (across retail and wholesale products), minimum transaction values, the ability of small funds to gain exposure to various asset classes through intermediaries, and various products or platforms that facilitate investment pooling across investors. To provide context for the analysis, the Commission will also consider how investment strategies interact with current regulatory settings.

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**Table 6.4 Upstream investment: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Do all types of funds have opportunities to invest efficiently in upstream capital markets?</b>		
• Asset allocation in small funds compared to large institutional funds (input)	• Trend analysis	• Regulator data
• Retail investment management costs compared to wholesale (input)	• Trend analysis	• Research firms
• Minimum transaction values (input)	• Trend analysis	• Research firms
• Ability of small funds to access investments through intermediaries (input)	• Qualitative	• Reviews by others; member surveys

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## Is the system effectively managing tax?

Taxes are the biggest item to detract from net returns and ultimately member balances. While taxation policy is outside the control of the superannuation system — and hence outside the scope of this study — the way agents within the system respond to taxation rules is within scope. In other words, the Commission plans to assess whether the superannuation system effectively manages tax. This is relevant to all phases of a member’s life cycle, including as they transition to retirement.

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The Cooper Review (Cooper et al. 2010b) noted a wide variation in the extent to which superannuation funds had regard to tax consequences and identified the potential for leakage from suboptimal tax management. Subsequently, regulations have been amended and trustees must give regard to the expected tax consequences of their investment strategy (*Superannuation Industry (Supervision) Act 1993* (Cwlth) s. 52(6a)). It is reasonable to assume that funds have become better over time at managing tax consequences. Nonetheless, there is merit in looking at average effective tax rates across segments of the superannuation system to gain an insight into how well the system is managing tax. Research undertaken by Gordon Mackenzie (sub. DR73, attach) found managers of large public-offer superannuation funds focus mainly on capital gains tax and imputation credits, though there are potentially other ‘tax aware investment management’ strategies available.

The Commission also intends to examine take-up rates of co-contributions and tax offsets, as these can have a material impact, especially on smaller balances.

While the same taxation rules apply across different types of superannuation funds, there are typically differences in the way tax is managed in large institutional funds (at a group level) and by individuals in SMSFs. The complexity of superannuation taxation makes it difficult to evaluate these differences and the impact they have on member balances, but each type of fund is likely to have advantages and disadvantages. These differences (even when merely perceptual) may be influencing member behaviour, and the Commission will examine the extent to which greater tax flexibility is a motivator for setting up an SMSF.

One area in particular where differences arise between group-level and individual approaches to taxation is when members move into retirement (and go from paying some tax on fund earnings to zero tax). Typically, in an institutional fund, the benefit accruing from the decline in tax liabilities is spread across the entire membership base rather than targeting the benefit specifically to the retiring members. However, SMSFs, some ‘wrap’ choice products and some other products offered by institutional funds (for example SunSuper (nd) and QSuper (nd)) allow individual members to capture all or some of the resulting tax benefit (although there is diversity in the extent to which funds do this) (QSuper, sub. DR96; SMSFOA, sub. DR108).

The Commission will look at case study or survey evidence on whether funds target tax benefits to individual members moving to retirement (and the administration costs incurred in doing so), and evidence for the prevalence of such practices across funds and market segments. This could be a useful contextual indicator of how institutional funds are responding to the competitive pressures exerted by SMSFs, which may have implications for efficiency in the system more broadly.

**Table 6.5 Managing tax: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is the system effectively managing tax for members, including in transition?</b>		
<ul style="list-style-type: none"> <li>• Average effective tax rates across market segments (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> </ul>
<ul style="list-style-type: none"> <li>• Tax flexibility as a motivation for establishing SMSFs (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Take-up rates of co-contributions and offsets (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> </ul>

### Are other leakages being minimised?

There are some egregious inefficiencies in the superannuation system — such as unpaid or delayed Superannuation Guarantee (SG) contributions — that can have a material impact on member balances and ultimately income in retirement. Study participants (ASFA, sub. DR98; ISA sub. 38) noted research which indicates SG non-compliance by employers is significant and it is difficult for employees to recover unpaid SG contributions. These issues are more likely to impact members with low incomes, irregular work patterns, or low financial and superannuation literacy (ASFA, sub. DR98; Diversity Council Australia, sub. DR62; Queensland Nurses’ Union, sub. 16; Women in Super, sub. DR97).

The Australian Taxation Office (ATO) oversees if employers meet SG obligations, and can impose a range of penalties or charges for non-compliance. Regulators (as well as other system participants) also have processes to reunite members with their lost superannuation. The extent to which SG contributions are made, and in a timely way, is thus a clear indicator of system performance (ASFA, sub. DR98; ISA, sub. DR106). The Commission will also examine trends in lost member accounts (which will in turn provide some indication of lost accounts reunited with members) and unclaimed superannuation.<sup>29</sup>

A separate issue raised is that of grandfathered trailing commissions, such as those embedded in choice products, which detract from member balances (ISA, sub. DR106).

<sup>29</sup> For the purposes of this indicator, the Commission is interested in unclaimed superannuation (benefits that are eligible to be withdrawn but where the member cannot be contacted) for members aged 65 and over, non-member spouses and deceased members.

**Table 6.6 Minimising other leakages: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are other leakages from members' accounts being minimised?</b>		
• Unpaid Superannuation Guarantee contributions (input)	• Trend analysis	• Regulator data
• Delayed Superannuation Guarantee contributions (input)	• Trend analysis	• Regulator data
• Number and value of lost accounts (output)	• Trend analysis	• Regulator data
• Trailing adviser commissions embedded in choice products and insurance <sup>#</sup> (output)	• Trend analysis	• Fund surveys
• Unclaimed superannuation (output)	• Trend analysis	• Regulator data

<sup>#</sup> Repeated indicator within efficiency.

## 6.2 Meeting members' needs

A core objective of the superannuation system is that it meets member needs, in relation to information, products and risk management, over the member's lifetime (chapter 4). Assessment of this objective is closely aligned with allocative and dynamic efficiency. An efficient system would provide the products and services people most value and want, and members would make decisions in order to maximise their wellbeing. This objective is equally relevant across all life phases (although the inputs and outputs may change).

Undertaking this assessment from a system perspective is challenging in practice. The system is made up of millions of individual members, each with their own preferences and circumstances, and products and services are not homogenous (ACTU, sub. 18; ASFA, sub. 42; Dixon Advisory, sub. 23; Mercer, sub. 31). Indicators which focus on the 'median' or the 'average' user will not necessarily reflect what is optimal for all or even most members. And at times, member needs and preferences may diverge, including due to behavioural biases or low financial or superannuation literacy (appendix B). Adding to these complexities, the superannuation system interacts with other areas of policy, such as taxation and other regulatory arrangements, in a range of complex ways (Treasury 2014).

An assessment of this objective must therefore proceed flexibly. It is difficult, if not impossible, to assess whether *outcomes* are optimal. But the Commission can assess whether *inputs* and *behaviours* are consistent with allocative efficiency.

Inputs and behaviours on both the supply- and demand-side are potentially relevant. For example, supply-side behaviours pertain to funds and fund trustees, as well as other service providers who (directly or indirectly) provide services to members. Employers can also play an important role in the supply of products to members as an intermediary, while governments, regulators and information aggregators are a further source of information about products and services. Demand-side behaviours pertain to the activities of members and their intermediaries. Many of the criteria and indicators discussed in chapter 5 are,



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therefore, directly relevant to an assessment of allocative efficiency. A challenge in undertaking the assessment will be that while behaviours and inputs in the system can be observed, they are not necessarily measured in a systematic way.

In evaluating whether this system-level objective is being met, the Commission will apply three assessment criteria.

- Is the system providing high-quality information and intrafund financial advice to help members make decisions?
- Is the system providing products to help members manage risks over their life cycles and optimally consume their retirement incomes?
- Are principal–agent problems being minimised?

### **Is the system providing high-quality information and financial advice?**

The provision of high-quality, meaningful, easy-to-understand information to members about products, services and risks is a key input to better member outcomes. There are three channels through which the system provides information to members.

- *Direct from a superannuation fund* — such as through PDSs, annual reports, call centres, product dashboards, annual member statements, online calculators, member education services, product advertising and intrafund financial advice services.
- *Direct from a central information resource* — such as rating agencies, industry research firms, or independent online resources (for example, ASIC’s Retirement Income Planning sources or the financial advice line offered by National Seniors Australia (ASIC nd; NSA nd)).
- *Through a fee-for-service intermediary* — such as a financial adviser or accountant (the quality of these third-party services is out of scope in considering this criterion).

Certain information may become more or less important to members at different stages. For example, early in the accumulation phase, information on the set of product choices and associated risks and fees is particularly important. Approaching retirement, information about how different products trade off various risks and combine a member’s expected income needs with the need for continued investment growth becomes paramount (appendix D; Murray et al. 2014a; ISA, sub. 38; Queensland Nurses’ Union, sub. 16). At all stages, accessing information and resources (such as online calculators or education material) requires proactive member behaviour.

Study participants generally acknowledged there have been improvements in the quality of information provided to members in recent years, such as through shorter PDSs and product dashboards for MySuper products (for example, ASFA, subs. 42, DR98; ASIC, sub. 35; Mercer, sub. 31). However, several participants considered there is scope for further improvement in multiple areas, such as more consistent reporting on fees and returns across a wider range of products, more granular reporting of costs and fees, and

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other revisions to dashboard measures to make the information more meaningful for members (Actuaries Institute 2016, sub. DR109; AIST, sub. 30; ASIC, sub. 35; David Hartley, subs. 12, DR82; ISA, sub. 38; Third Horizon Consulting, sub. 3).

Most superannuation funds offer some level of intrafund financial advice to members, ranging from general product advice to limited forms of personal advice (ASFA, sub. 44). Participants submitted that the majority of members want access to simple, lower-cost advice (rather than comprehensive advice), and that funds are embracing new technologies (such as robo-advice) to deliver these services (for example, ASFA, sub. 42). However, there is limited information on the take-up and quality of intrafund advice, with most of the published survey-based research focusing on financial advice more generally (appendix B).

The Commission will assess the above criterion by applying indicators which focus on inputs to the system and observed member behaviour.

### System inputs

The availability of meaningful and comparable information on fees, product features and risks will be evaluated by drawing on reviews undertaken by others, such as regulators and consultants. Complementary indicators will focus on the level of fund expenditure on engagement and education services (such as online calculators or robo-advice) as a proportion of their total marketing costs (chapter 5).

In interpreting these indicators, the Commission will remain mindful that the quality of information provided to members is not a panacea for better member outcomes, and that providing additional information is not costless (ACFS, sub. DR71). As noted by ASIC (sub. 35), disclosure through PDSs, product dashboards, and improved fee and cost disclosure are useful, however, these mechanisms cannot deliver investor protection and effective competition on their own. As such, other information on member engagement and financial and superannuation literacy will also inform the interpretation (chapter 5). The Commission will also have regard to how existing regulations influence the information that can be provided to members, including the provision of intrafund advice (ASIC 2013b).

The Commission will also consider case study information on the extent to which funds are leaning against known behavioural biases by applying lessons and techniques informed by behavioural finance, such as through the information they provide to members and their own product design (appendix B). Research from behavioural finance offers insights about how even small changes to the framing of a decision, the reference point used, or the way information is provided (collectively known as ‘nudges’) can lead to disproportionately large behavioural changes (Thaler and Sunstein 2009).

Some funds use behavioural finance techniques to nudge members towards certain products or choices, such as by providing projected retirement balances or incomes on annual statements (rather than just current account balances). Study participants submitted

that there is scope for funds to make greater use of such techniques (Drew Walk and Co, sub. 26; Fiduciary's Friend, sub. 7; David Hartley, sub. 12; IPA, sub. 22). Further, the Financial System Inquiry (Murray et al. 2014a) recommended that funds publish retirement income projections on member statements using ASIC regulatory guidance. The Australian Government (2015a) agreed to implement this recommendation where practical and cost effective. Assessing this indicator will largely rely on case study evidence of what funds have done, the effectiveness of the intervention, and evidence of lessons being transmitted across the system more broadly. The Commission will also take into account regulatory or market impediments to the use of such practices.

### Observed member behaviour

Member account activity may also provide insights into how well information provided resonates with members. System-wide trends in voluntary contributions, uptake of intrafund financial advice and changes to investment options represent *active* decisions by members, and may be an indirect indicator of the effectiveness of information provided through the system. Declining trends in duplicate accumulation accounts may also result from improved information to members. A related, but separate, set of indicators will focus on member account *monitoring* activity (table 6.7).

**Table 6.7 High-quality information and advice: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is the system providing high-quality information and intrafund financial advice to help members make decisions?</b>		
<ul style="list-style-type: none"> <li>• Availability of meaningful and comparable information on fees, product features (including insurance) and risks* (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews by others; member surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Member active account activity:               <ul style="list-style-type: none"> <li>- voluntary contributions</li> <li>- uptake of intrafund advice</li> <li>- changes to investment/insurance options* (input, behaviour)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys; fund disclosures; case studies</li> </ul>
<ul style="list-style-type: none"> <li>• Member account monitoring activity:               <ul style="list-style-type: none"> <li>- use of fund websites</li> <li>- use of online calculators</li> <li>- call centre enquiries* (input, behaviour)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys; fund disclosures; case studies</li> </ul>
<ul style="list-style-type: none"> <li>• Fund expenditure on member education and engagement as a proportion of total marketing expenditure* (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; fund disclosures; fund surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Funds' application of the lessons from behavioural finance to improve information provision and product design<sup>#</sup> (behaviour, output)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Case studies</li> </ul>
<ul style="list-style-type: none"> <li>• Number of accumulation accounts and consolidations (behaviour, output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; member surveys</li> </ul>
<ul style="list-style-type: none"> <li>• Member superannuation and insurance literacy<sup>#*</sup> (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys</li> </ul>

<sup>#</sup> Repeated indicator within efficiency. \* Indicator is common to both competition and efficiency.

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Member *activity* is an imperfect measure of member engagement. For example, some members may remain in a default product because they believe it is the best product for them. As such, member monitoring and activity indicators need to be interpreted carefully and collectively with other relevant information (chapter 5).

## **Is the system providing products to help members manage risks and optimally consume their retirement incomes?**

The ultimate outcome of the superannuation system is retirement income for members. This is primarily determined by the extent to which long-term net returns are maximised, taking account of risk (section 6.1), which in turn relies on the system generating products that meet members' needs, and appropriately matching members to products.

In the early years, the selection of an accumulation product is the key decision. Later on, the selection of a retirement income product provides scope for a member to navigate a complex set of choices, risks and trade-offs — for example, minimising the chance of negative investment returns in the short term and as retirement balances reach their peak (sequencing risk), versus maximising net returns on invested balances to guard against outliving savings (longevity risk) (chapter 2).

The optimal investment strategy (and product to deliver it) in both the accumulation and retirement phase will be highly dependent on an individual member's risk preferences and personal circumstances. Hence, it is relevant to focus on whether the system is providing products to help members manage risks across their life cycle and to optimally consume their retirement income. To aid the discussion, it is useful to separate products in the accumulation and retirement phases, and to consider the extent to which funds collect and utilise member data to inform product design in both phases.

### **Accumulation products**

At the system level, it is impossible to define what optimal asset allocation looks like given the diversity of members' individual circumstances. However, it is relevant to consider how the system allocates investments over the course of a member's life cycle and how product design tries to address this.

There is significant diversity in the number and type of accumulation products offered in the system (chapter 2). Products are differentiated according to asset allocation (such as the proportion to 'growth' or 'defensive' assets), investment style (such as active or passive strategies), and ancillary services (such as the online resources and intrafund advice). Some members are allocated to products through default arrangements, while others play a more active role in selecting their investment strategy, such as through a choice product or an SMSF (chapter 2, appendix G). An understanding of the number of products, members and total assets in these categories, including through some of the indicators in chapter 5, will provide useful context for the analysis.

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A distinct category of products — life-cycle and target-date products — automatically shift members to a more conservative mix of investments as they age, with the aim of minimising sequencing risk. Study participants indicated that these products differ based on *when* and *how* aggressively they ‘de-risk’ the portfolio, and some also take into account member balance and projected income (ASFA, sub. DR98; QSuper, sub. DR96; Rice Warner, sub. DR112; Tailored Superannuation Solutions Ltd, sub. DR66). Most typically end at retirement (due to regulatory constraints) (appendix D; ASFA, sub. DR98).

The merits of life-cycle products are a source of ongoing debate in the literature. A particular concern expressed, including by study participants (for example, CPA Australia, sub. 14; Drew Walk and Co, sub. 26), is that in adopting a more conservative asset allocation based on age (in order to manage sequencing risk), members forgo higher investment returns, which may inhibit a member from effectively managing other risks, such as longevity risks. As such, several participants did not support an indicator based on tracking asset allocation differences by age (for example, AIST, sub. DR102; ISA, sub. DR 106). Different fee structures across life-cycle products may also make fee comparisons more difficult (Rice Warner 2014c; SuperRatings 2014).

Notwithstanding the above issues, member age is still a useful lens for looking at trends in asset allocation at the system level. The Commission will examine how the system is changing asset allocation as members get older, how significant differences in asset allocation are, and the consistency of these differences across fund types and similar types of products (such as in the default segment). In interpreting these indicators, the Commission will be mindful of key differences between the default, choice and SMSF segments. For example, fund trustees are more constrained in their asset allocation decisions with respect to choice products where members have made an active decision on the mix of investments compared to default products (where trustees make these decisions) (ASFA, sub. DR98; FSC, sub. DR110; IFAA, sub. DR72).

The Commission will also consider the proportion of MySuper products, members and total assets which are based on a life-cycle investment strategy. The Commission notes that the merits of life-cycle products are open to debate. A high proportion of life-cycle products, combined with a lack of product tailoring to members’ needs, could be a sign of inefficient product differentiation, and could suggest too many members are being defaulted into overly conservative investment strategies.

Indicators also cover the development and active take-up of tailored products and member services designed to offer greater levels of customisation in terms of investment choices and flexibility (which may indicate the system is moving to better align asset allocation with member risk preferences and needs).

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## Retirement income products and optimal consumption

At a system level, it is challenging to define what ‘optimal’ consumption of retirement income looks like, or the product that will achieve it. The needs of individuals are highly diverse and will be influenced by a range of factors, including retirement lifestyle expectations, the value placed on non-consumption activities (such as the ability to make bequests), personal circumstances (such as marital status), and other income sources (such as from assets outside superannuation) (ACTU, sub. 18; Dixon Advisory, sub. 23).

However, a well-functioning and efficient market would provide a suite of products that allow members to consume retirement income in a manner best suited to their needs, including to manage investment, sequencing and longevity risks.

Compared with accumulation products, there is much less choice (and higher concentration) in the market for retirement income products (chapter 5 and appendix D). Most members still derive retirement income from an account-based pension (which does not provide explicit protection for longevity or sequencing risk). The take-up of guaranteed income products is low. Concerns about an underdeveloped market for retirement income products in Australia have featured in several reviews of superannuation (for example, Cooper et al. 2010a, 2010b; Murray et al. 2014a). Most recently, a key recommendation of the Financial System Inquiry (Murray et al. 2014a) was the introduction of a default comprehensive income product for retirement to balance the objectives of flexibility, risk management and high income, and to address the inadequate use of risk pooling.

There is currently very limited provision and uptake of longevity insurance products, and a nascent market for post-retirement life-cycle products. On the available evidence, it is challenging to draw strong conclusions as to the reasons for this and the implications for efficiency. Individual circumstances and preferences play a role as does the availability of the Age Pension. Suboptimal outcomes may arise due to behavioural and cognitive constraints of members, or policy distortions or barriers to the supply and take-up of a more diverse range of retirement income products. However, the Australian Government (2015a) has committed to effectively remove those barriers by July 2017 (appendix D).

The level of product diversity and take-up of different types of retirement income products (and how this is changing over time, and compared with take-up in other countries) will provide important context for the analysis. However, low take-up of annuities is not necessarily reflective of inefficiency, it is challenging to account for differences in policy settings across countries, and evidence of product evolution and pricing at the firm-level will only provide partial insights into trends across the system. As such, the Commission will also focus on the introduction of new retirement income products. For example, there is some (albeit limited) evidence of product innovation, including products which separate member assets into ‘buckets’ to meet various needs (appendix D).

To provide further context, the Commission will consider the extent to which there are market and policy barriers to retirement income product development on the supply side (for example, a lack of competition or relevant member data (appendix D)) and the demand

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side (for example, cognitive constraints and behavioural biases). In its stage 3 review, the Commission will also take account of the progress and impact of measures taken by the Australian Government to address policy barriers to the provision and take-up of annuities.

The Commission will also examine drawdown rates in retirement. Once members reach preservation age, there are few limits in the way they can draw down their superannuation (aside from minimum drawdown requirements for account-based pensions). Of interest is evidence of how members choose to draw down their retirement income within each product category, and the proportion of balances converted into retirement income (Challenger, sub. DR89). Recent research on drawdown behaviour in the superannuation system suggests that retirees are very conservative in their behaviour, potentially to the detriment of their living standards (ACFS 2015a; PC 2015b).

Some context will be derived from a more granular analysis of specific products and patterns. For example, comparisons could be made between actual drawdown rates and minimum drawdown rates (for account-based pensions), whether drawdown rates change for higher age categories, between males and females (based on different life expectancy) and whether rates change substantially when the minimum rates are adjusted (potential evidence that people are still tracking the default rather than making active choices about their consumption of income). In interpreting drawdown patterns the Commission will be mindful that they do not necessarily equate to consumption and they may be influenced by many factors external to the industry and therefore not related to efficiency considerations (ASFA, sub. DR98; Mercer, sub. DR104).

### Use of member data to inform product design

In principle, the collection of relevant information from members is a key input for funds to design and refine their products and services. This is relevant to accumulation and retirement income products. All funds have basic information about their members, such as age, account balance and income (to the extent it can be inferred from employer contributions). The pertinent questions are: what additional member data would be relevant for designing products, are funds collecting it (and if so, are they using it effectively), and are any additional costs from collecting member data justified?

The most relevant additional member data would likely differ depending on a member's phase in their life cycle. For example, in the *accumulation* phase, additional member data of value may include a member's investment risk preferences and the ancillary member support and education services they place the most value on (Fiduciary's Friend, sub. 7). In the *retirement phase* matters such as assets outside of superannuation, marital status, and income needs and expectations (which could be influenced by health, life expectancy and household composition) may be of value (appendix D).

Several study participants were sceptical of indicators focused on funds collecting additional member data. The main concerns were that it is not output focused, there are limitations on what can be collected (due to privacy issues and a lack of engagement), and

soliciting more personal information would be costly and is not common practice in other sectors (ASFA, sub. DR98; AIST, sub. DR102; ISA, sub. DR106; Mercer, sub. DR104). Others indicated that a more relevant issue than ‘what’ is collected is how funds are using their available data to improve products and services (for example, ASFA, sub. DR98).

The Commission acknowledges there are barriers to funds collecting more member data (even where it may be relevant) which are outside their control. Moreover, the Commission agrees that the pertinent issue is how funds use the data they do have to inform and refine product design over time. Nonetheless, this is an area where there is likely to be significant scope for improvement in the system, albeit there are indications some funds are striving to find new ways to engage with members and collect additional data (combined with use of data analytics) to design more tailored default products, retirement income products and higher-quality member services (ASFA, sub. 42).

The Commission will examine ‘best practice’ behaviours employed by funds to gain more relevant information about their members and how they are using it in product design. This information can be gathered from surveys and case studies. The Commission will also examine any barriers to the collection of additional member data, including policy or regulatory barriers and market barriers (such as member disengagement) to provide relevant context for the analysis. An additional indicator will focus on member awareness of key features of their superannuation product (including how they manage different types of risks) via the level of member superannuation literacy. This can be measured using member surveys.

**Table 6.8 The provision of products: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Is the system providing products to help members manage risks over their life cycles and optimally consume their retirement incomes?</b>		
• Asset allocations by age cohort (across different market segments and products) (output)	• Trend analysis	• Research firms; regulator data
• Life-cycle MySuper products (number of products and members, and as a proportion of total assets under management) (output)	• Trend analysis	• Regulator data
• Development and active take-up of tailored products and member services <sup>#*</sup> (output)	• Trend analysis; qualitative	• Fund surveys; fund disclosures; case studies
• Introduction of new retirement income products <sup>#*</sup> (output)	• Trend analysis	• Fund surveys; fund disclosures; case studies
• Drawdown rates in transition and retirement (output)	• Trend analysis	• Regulator data
• Funds’ use of member information to inform product design and pricing <sup>#*</sup> (input)	• Qualitative	• Fund surveys; case studies
• Member superannuation and insurance literacy <sup>#*</sup> (input)	• Qualitative	• Member surveys

<sup>#</sup> Repeated indicator within efficiency. <sup>\*</sup> Indicator is common to both competition and efficiency.



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## Are principal–agent problems being minimised?

The superannuation system is characterised by various principal–agent relationships at different levels of the supply chain. In their review of the superannuation system, Cooper et al. (2010a) argued that improving governance practices and structures is key to improving member outcomes. A number of changes to governance arrangements in the system have been implemented since that review (chapter 1).

Based on the existing literature, there are two aspects of good governance that have a demonstrated impact on member outcomes (appendix H).

- Effective management of conflicts of interest — including the identification, mitigation and disclosure of conflicts.
- Adequate capacity of trustees to act in the best interests of members — including sufficient collective skills, expertise, experience, and appropriate processes for selection, renewal and performance assessment of trustees.

Agents within Australia’s superannuation system operate under a detailed set of regulatory arrangements — set out in legislation and prudential standards — designed to promote good governance. This includes with respect to managing conflicts of interest and ensuring that agents are qualified to act on behalf of members (appendix H).

While governance is widely acknowledged as a fundamental issue, study participants expressed mixed views on whether and how it should be incorporated into the Commission’s assessment framework. Some argued that it should not be a primary focus because it is already overseen by APRA (for example, Mercer, sub. DR104). Others supported a focus on governance, but questioned the utility of various indicators proposed in the Commission’s draft report. For example, while contraventions of governance standards may provide insights, the general view was that it would be difficult to get publicly available data on this (for example, AIST, sub. DR102). Similarly, while the level and skill and standard of trustee boards and investment committees was acknowledged as a relevant issue, some felt it would be too subjective as an indicator (AIST, sub. DR102; ASFA, sub. DR98; Mercer, sub. DR104). A further challenge identified by roundtable participants was that getting to the heart of potential conflicts that ‘really matter’ is not always straightforward and may be difficult to encapsulate in disclosure requirements.

There are several sources of information the Commission could draw on to inform its choice of governance indicators. For example, APRA’s and ASIC’s standards and guidelines outline what is expected from trustees on various elements of governance. APRA also regularly assesses the quality of governance in individual APRA-regulated institutional funds using its Probability and Impact Rating System. APRA updated its prudential standards for trustee governance arrangements (commencing in July 2017) and is progressing two governance-related thematic reviews due in 2017 (appendix H).

Governance standards have also been established by others, such as the Financial Services Council and the Australian Institute of Superannuation Trustees (appendix H), with the

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latter initiating a review of best-practice governance in the not-for-profit superannuation sector ('The Fraser Governance Review'). Several studies have also examined the quality of governance across systems and funds using a mix of qualitative and quantitative evidence (a summary of some of these studies is provided in appendix E).

Nonetheless, assessing the quality of governance at a system-wide level is a complex exercise. The Commission intends to assess this criterion by drawing on a range of indicators, including those which focus on trustee boards and investment committees (which report to trustee boards) (table 6.9). The Commission will seek to leverage existing processes and reviews — such as APRA's review of director appointments and board performance assessment processes — as much as possible in the stage 3 review. The Commission will also draw on participant input and case study evidence, and may also consider asking specific questions on governance as part of a survey of superannuation funds (chapter 7). The Commission is aware of the potential limitations of using self-reported survey data in this type of exercise, but these can be managed through survey design and validation of results against other information sources. Regardless of the data sources, the interpretation and ultimate assessment will inevitably require a significant degree of judgment. Output-focused indicators, such as the proportion of complaints to the Superannuation Complaints Tribunal that are successful, and measures of member satisfaction and trust will complement the assessment.

Excessive herding behaviour by funds in adopting similar investment strategies may also run counter to trustees investing in their members' best interests (appendix F). This would be a sign of allocative inefficiency, and if it persists, dynamic inefficiency, because it may not lead to long-term net returns being maximised for members.

The Commission will examine the extent to which funds attempt to limit the possibility of underperforming other funds in the short term by adopting similar investment strategies (to minimise their 'peer risk'), as suggested by several participants (for example, David Hartley, sub. DR82; FPAA, sub. DR91; Peterson Research Institute, sub. DR70). Specifically, the Commission will examine the proportion of superannuation funds that target performance relative to their peers and the degree of similarity in asset allocation within the default (MySuper) segment, even for funds with materially different member characteristics (such as average age and balance).

**Table 6.9 Principal-agent problems: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are principal-agent problems being minimised?</b>		
<ul style="list-style-type: none"> <li>Existing ratings of system-wide quality of governance (input)</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Reviews by others</li> </ul>
<ul style="list-style-type: none"> <li>Meaningful disclosure by trustee boards of:               <ul style="list-style-type: none"> <li>trustee directors' and investment committee members' qualifications and relevant skills/experience</li> <li>remuneration structures</li> <li>potential conflicts of interest due to related-party dealings and competing duties (behaviour)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Reviews by others</li> </ul>
<ul style="list-style-type: none"> <li>Quality of investment committee and investment governance processes, including use of performance attribution analysis and risk management (input)</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Reviews by others; fund surveys</li> </ul>
<ul style="list-style-type: none"> <li>Member satisfaction and trust* (outcome)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Member surveys</li> </ul>
<ul style="list-style-type: none"> <li>Proportion of complaints to the Superannuation Complaints Tribunal which are successful# (output)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data</li> </ul>
<ul style="list-style-type: none"> <li>Proportion of funds that target short-term performance relative to their peers (behaviour)</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative; trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Research firms; fund disclosures; fund surveys</li> </ul>
<ul style="list-style-type: none"> <li>Degree of similarity in asset allocation among default products with different member characteristics (average age and balance) (input)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data; research firms</li> </ul>

# Repeated indicator within efficiency. \* Indicator is common to both competition and efficiency.

### 6.3 Improving efficiency over time

Australia's superannuation system has over \$2 trillion in total assets, and accounts for a growing share of Australia's financial system. This continuing growth of the system under regulatory fiat (chapter 1) makes it imperative that the efficiency of the system improves over time to enable better outcomes for members. This is dynamic efficiency.

As noted at the start of this chapter, the Commission will consider changes in operational and allocative efficiency (and indicators geared towards this) over time to assess dynamic efficiency in the system. It is also relevant to consider whether the system — including its institutions and participants, and the interactions between them — is in any way impeding improvements to long-term outcomes for members, and *who* or *what* helps the system to overcome such impediments (such as market or regulatory barriers to innovation).

At the same time, stability of the system itself is a core objective (chapter 4), given its growing size and importance to the financial system and economy, and the potential for systemic risks to move across the system (appendix F).

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In evaluating whether this system-level objective is being met, the Commission will apply two assessment criteria.

- Does the system overcome impediments to improving long-term outcomes for members?
- Are there material systemic risks in the superannuation system?

## **Does the system overcome impediments to improving long-term outcomes for members?**

### Improvements in service offerings over time

The Commission will assess trends in the type and range of ancillary member services, accumulation products and retirement income products over time. This service offering assessment will draw heavily on the competition assessment of innovation and quality improvement in the system, with which it shares several indicators: changes in the number of accumulation and retirement income products; the development and take-up of tailored products; and the introduction of new methods of service delivery (chapter 5). In an efficient system, funds would innovate to introduce new products that better meet member needs but there would also be ‘creative destruction’. Products and ancillary services of low value to members would be phased out — an indicator for which is trends in the number of accumulation products (in aggregate and per fund).

In applying these indicators, the Commission will focus on whether members’ needs are being met in the long term. The assessment will be supplemented with the indicator on funds’ application of the lessons of behavioural finance to design products (section 6.2).

Several study participants suggested that regulation is a key constraint on dynamic efficiency. For example, AVCAL (sub. DR93) noted that the three-day portability rule for the transfer of member balances can discourage funds from investing in higher yielding alternative asset classes such as private equity or venture capital. Participants also noted that a disproportionate focus on the disclosure of fees can distort funds away from focusing on maximising long-term net returns for members (for example, AVCAL, sub. DR93; Peterson Research Institute, sub. DR70). More generally, regulatory compliance costs were identified as a drag on product and service-level innovation by funds (for example, ASFA, sub. DR98; Dixon Advisory, sub. DR103). AIST (sub. 30) emphasised the importance of technological neutrality and a regulatory system that does not discriminate against innovation and quality improvement.

Regulation can play a role in both creating and reducing barriers to innovation, and regulators are within the Commission’s definition of the system (chapter 2). The Commission will consider whether there are regulatory impediments to product and service innovation, and as an indicator, qualitative evidence of the impact of regulatory impediments on innovation over time.

**Table 6.10 Overcoming impediments: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Does the system overcome impediments to improving long-term outcomes for members?</b>		
<ul style="list-style-type: none"> <li>• Introduction of new retirement income products<sup>#*</sup> (output)</li> <li>• Development and active take-up of tailored products and member services<sup>#*</sup> (output)</li> <li>• Introduction of new methods of service delivery* (output)</li> <li>• Number of accumulation products (aggregate and per fund)* (output)</li> <li>• Funds' application of the lessons from behavioural finance to improve information provision and product design<sup>#</sup> (behaviour, output)</li> <li>• Impact of regulatory impediments on innovation (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis; qualitative</li> <li>• Trend analysis; qualitative</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Regulator data</li> <li>• Case studies</li> <li>• Case studies; fund surveys; reviews by others</li> </ul>
<sup>#</sup> Repeated indicator within efficiency. <sup>*</sup> Indicator is common to both competition and efficiency.		

## Are there material systemic risks in the superannuation system?

Study participants expressed views on various indicators to examine whether there are systemic risks in the superannuation system (for example, CPA Australia, sub. DR86; ISA, sub. DR106; FPAA, sub. DR91; FSC, sub. DR110), however, roundtable feedback suggested it is not a material issue nor a major inhibitor to efficiency in the system.

Nonetheless, the Commission considers that the exploration of this issue is low cost, and may yield useful insights even if that is to confirm that material systemic risks do not exist. The Commission will examine: market concentration in upstream service provider markets, market interconnectedness and leverage within the SMSF sector.

### Market concentration and interconnectedness

As noted in chapter 5, there are low levels of market concentration at the retail level of the superannuation system, as reflected by a large number of institutional funds. However, some stakeholders have expressed concern that the high level of concentration in some upstream service provider markets is a potential systemic risk within the system over the longer term (Donald et al. 2016) (chapter 5). This is because failure of an upstream firm that is highly interconnected to other suppliers or to superannuation funds could lead to disruption that propagates across the superannuation system, with the risk of adversely affecting member services or account balances, and broader confidence in the system.

However, three factors need to be considered when interpreting market concentration levels in upstream service provider markets over time. First, quantitative estimates of market concentration can be influenced by the market boundary definitions applied to these

markets, which would need to take account of insourcing and outsourcing practices (chapter 5). Second, high concentration in specific markets may be otherwise efficient given economies of scale, and could lead to lower costs than if the market was more fragmented. Third, while firm failure at the upstream level could lead to significant inconvenience for various funds, further analysis would be required to assess whether this has any long-term adverse impacts for members across the system, such as material unrecoverable losses or ongoing inability to draw down retirement incomes.

The degree of interconnectedness between upstream service providers and funds in the system would assist with interpreting indicators measuring market concentration (appendix F).

### Risk exposures in the SMSF sector

The growth of the SMSF sector is viewed by some as a potential source of systemic risk in the superannuation system; and an area of particular concern is that borrowing by SMSFs to fund property investments through limited-recourse borrowing arrangements (which are not available to institutional funds) could, at the margin, introduce new vulnerabilities in the financial system over time (appendix F). This issue was considered in the Financial System Inquiry (Murray et al. 2014a) with some participants (such as the RBA and APRA) favouring greater restrictions on SMSF borrowing, which the Murray Review (2014) also recommended. The Australian Government (2015a) commissioned the Council of Financial Regulators and the ATO to monitor this issue and to report back after three years. More recently, APRA (2016b) has released (for consultation) revised guidance and reporting requirements for authorised deposit-taking-institutions on residential mortgage lending, noting that loans provided to SMSFs give rise to unique risks that differ from those of a traditional mortgage, and that lending practices would be expected to reflect these risks.

The Commission will consider the level, prevalence and growth of direct leverage in SMSFs in its assessment. However, this will need to be supported by a qualitative assessment of the materiality of the risks and the quality of reported data to inform the regulators' ability to understand and monitor these risks over time.

**Table 6.11 Systemic risks: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are there material systemic risks in the superannuation system?</b>		
<ul style="list-style-type: none"> <li>Market concentration at wholesale and retail levels (Herfindahl- Hirschman Index and market shares of largest providers)* (output)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data</li> </ul>
<ul style="list-style-type: none"> <li>Degree of interconnectedness between upstream service providers and funds (input)</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data; research firms; reviews by others</li> </ul>
<ul style="list-style-type: none"> <li>Levels of leverage in SMSFs (input)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data</li> </ul>

\* Indicator is common to both competition and efficiency.

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## 6.4 Value for money insurance

Many Australians hold insurance through their superannuation. Funds are legally required to provide life and total and permanent disability (TPD) insurance with MySuper products on an opt-out basis (default insurance), as long as the cost of insurance does not inappropriately erode the retirement income of beneficiaries.<sup>30</sup> The provision of insurance through MySuper products is intended to provide a safety net level of cover, and members can amend their cover within superannuation if they wish (chapter 2). Choice superannuation products are also commonly bundled with insurance.

The conflicting objectives placed on trustees in the provision of insurance make it difficult to articulate a clear purpose for insurance in superannuation (chapter 4). Some participants queried the basis for bundling insurance in superannuation given it detracts from retirement income (for example, ACFS, sub. DR71; De Santis Management Agency, sub. DR60). Others questioned how well the arrangements operate in practice — for example, Choice (sub. DR113) argued that group insurance is not working well for consumers. More generally, insurance in superannuation was identified as a key area of angst and poor experiences by members (for example, Bombora, sub. DR105; Maurice Blackburn, sub. DR79), and is an area ripe for a future standalone inquiry. Recent examinations by ASIC (2016) and APRA (2016) on the provision of life insurance (including in superannuation) highlighted areas for improvement and ongoing regulatory focus (appendix H).

There are two types of bundling with respect to insurance in superannuation — the bundling of insurance with an accumulation (investment) product, and the bundling of different types of insurance together (such as life and TPD cover). *Prima facie*, both forms of bundling raise questions from an efficiency perspective and could lead to allocative inefficiency. For example, where it places people into products that do not meet their specific needs; leads people to assume their default cover is sufficient; prevents members from unbundling different types of cover; or limits members' choice of insurer.

However, bundling insurance with default superannuation is considered a reasonably low-cost and effective way of delivering default insurance. Indeed, group insurance could promote efficiency by providing members with access to cover they could otherwise not access or at lower premiums (FSC, sub. DR110; WSSA, sub. DR68; Willis Towers Watson, sub. DR81). Some study participants also noted that default insurance is an important mechanism for addressing underinsurance levels in society more broadly, thereby avoiding costs being passed on to governments and taxpayers (for example, ASFA, subs. 42, 44; Rice Warner, sub. DR112).<sup>31</sup> However, this is not an explicit policy objective of insurance within superannuation — indeed the policy objective is unclear — and the Commission therefore considers issues relating to perceived underinsurance to be out of scope (chapter 4).

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<sup>30</sup> Funds may also elect to offer income protection insurance on the same basis (Rice Warner, sub. DR112).

<sup>31</sup> Several studies have estimated 'underinsurance' in Australia (for example, Rice Warner 2014a, 2016).

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The costs of insurance from a members' perspective ultimately erodes retirement income. There are two components to these costs: the premiums charged by insurers, and funds' expenses in administering insurance (such as managing claims) (Mercer, sub. 31).

Given the majority of members hold life and TPD insurance through superannuation, two assessment criteria are relevant.

- Do funds offer value for money insurance products to members?
- Are the costs of insurance being minimised for the level and quality of cover?

### **Do funds offer value for money insurance products?**

There are in effect two forms of insurance offered within superannuation — group insurance, which is offered to members without individual underwriting on an opt-out basis (such as default insurance in MySuper products), and individually underwritten insurance.

There are challenges in assessing the extent to which the insurance provided (particularly under default) is value for money from a system perspective. Funds offer different levels of default insurance cover, even within MySuper products. Members have different insurance needs, such that 'mean' or 'median' measures do not necessarily reflect what is efficient for all or even most members (Mercer, sub. 31). And the quality of cover depends critically on the terms and conditions attached to it (which are not standardised across the industry and can change) combined with the varying efficiency of the claims process (Association of Financial Advisers, sub. DR74; Bombora, sub. DR105; Maurice Blackburn, sub. DR79).

To assess this criterion, the Commission will apply a mix of quantitative and qualitative indicators focused on member actions (mostly outputs) and fund activities (mostly inputs).

#### **Observed member actions**

Available data indicate that many people have the same type of insurance cover across multiple superannuation accounts (duplicate insurance). The persistence of duplicate insurance suggests that some people have more cover than they require and are unduly eroding their retirement balance (ASIC 2016f; Murray et al. 2014a). This risk is greater where there is member disengagement and/or a lack of knowledge about cover, including due to poor disclosure of information (ASIC, sub. 35). In an efficient system, the extent of duplicate insurance would be low and stable over time, or would decline as better information is provided to members and account consolidation becomes easier.

There is no clear regulator or industry dataset to examine the prevalence of duplicate insurance. Superannuation funds and insurers generally lack the data required to identify which members hold duplicate insurance (AIA, sub. DR88; Rice Warner, sub. DR112). APRA (2016e) reports data on the total number of superannuation accounts and the total



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number of insurance accounts, but these data cannot necessarily be linked to establish the extent of, and trends in, duplicate insurance (although proxy measures could be constructed). SMSF data are even more limited. Member surveys could provide insights on levels and trends of duplicate insurance in the system, though even these may be problematic as there is a possibility that members themselves are not aware of the insurance cover they may have by default (Choice, sub. DR113).<sup>32</sup> As such, an understanding of the level of superannuation literacy with respect to insurance within superannuation will aid the interpretation of this indicator (and others).

To provide a sense of the level of insurance cover provided for in superannuation, a separate indicator will also focus on the average level of cover provided for different types of insurance in the superannuation system, by age band and across market segments (Actuaries Institute, sub. DR109; AIA, sub. DR88; Mercer, sub. DR104).

The rate of insurance take-up in different types of products, such as default or choice products, could also be an insightful indicator. High rates of take-up in default products (combined with low opt-out rates) relative to choice products may indicate that when members exercise choice they choose less insurance. However, the results would need to be interpreted carefully and complemented with other indicators as higher take-up in default products could reflect occupational differences that result in higher insurance needs compared to the choice market segment. To complement the assessment, the Commission will consider the number of members who change or opt out of their default cover (AIA, sub. DR88; ASFA, sub. DR98; Mercer, sub. DR104), or nominate beneficiaries.

## Fund activities

As many members are defaulted into insurance, an important indicator is the ease with which members can amend their cover or choose to opt out. In a well-functioning and efficient system these processes could be expected to be simple for members to understand, easy and quick to progress, and low cost. Members would also be able to choose the insurance offerings that suit them (such as TPD without life insurance).

APRA-regulated institutional funds are required to have a process in place for members who choose to opt out of insurance in their superannuation (APRA 2012c).<sup>33</sup> However, study participants indicated that the process can be cumbersome and made difficult in practice, and also that insurers seek to minimise adverse selection by members which could otherwise lead to increased premiums, such as by not permitting members to opt out of life insurance while only retaining TPD cover (CALC et al., sub. DR114; Choice, sub. DR113, Stephen Duckett, sub. 37; Stephen Ingate, sub. DR58; Willis Towers Watson, sub. DR81).

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<sup>32</sup> Surveys have found that many members are unaware of whether they have insurance in superannuation, and even those that are aware tend to lack a good understanding of their cover (appendix B).

<sup>33</sup> Willis Towers Watson (sub. DR81) noted that opting out of insurance cover is not relevant for some members, such as those in defined benefit funds and members whose insurance premiums are paid by employers.

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Participants suggested that the Commission should also consider the ability and ease of members amending their cover or making claims (ASFA, sub. DR98; MLC, sub. DR115; QSuper, sub. DR96).

The Commission will examine how well the arrangements are working in practice, including any impediments imposed by the current rules and regulations or evidence of funds making it overly difficult for people to opt out or amend their cover. To complement the assessment, the Commission will consider evidence of the number of successful complaints made to the Superannuation Complaints Tribunal about insurance-related matters, including those concerning members dissatisfied with the processes for amending or opting out of cover.

In principle, member data collected by funds should form an important input into the insurance product(s) offered to members.<sup>34</sup> There may be scope for greater tailoring of default insurance products and pricing to meet members' needs — for example, by taking into account factors beyond age such as occupation, marital status and dependents (Chant West 2014b; Choice, sub. DR113; Rice Warner 2015, 2016a; SuperRatings 2016).

As such, the Commission will examine the nature of the member information collected by funds along with case studies of how funds use this information to tailor their insurance products (and how prevalent these practices are). Study participants indicated that some funds are already seeking to use member data to tailor their default insurance offering (for example, AIA, sub. DR88). This will be balanced against consideration of the additional costs funds incur in collecting more information and greater tailoring of insurance products (Dixon Advisory, sub. DR103), and the possibility some members would face higher premiums as a result. The difficulties of funds engaging with otherwise disengaged members also cannot be discounted.

The quality and comparability of information disclosed to members by funds about insurance is a complementary indicator for assessing whether the system provides value for money insurance (as is an understanding of the key terms and conditions and how they may change over time). Complex products and information are potential barriers to members making informed decisions and exerting competitive pressure (chapter 5). Several study participants agreed that there is scope for significant improvement in the quality of disclosure for insurance products given disclosure standards vary across funds and insurance is not currently part of the MySuper product dashboard (for example, AIST, sub. DR102; ASIC, sub. 35; CALC et al., sub. DR114; Choice, sub. DR113).

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<sup>34</sup> Member data are also an important input into appropriate pricing of insurance cover, hence this indicator can also provide contextual information for the second criterion.

**Table 6.12 Insurance products: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Do funds offer value for money insurance products to members?</b>		
• Duplicate insurance policies (output)	• Trend analysis	• Member surveys
• Rates of insurance take-up in choice products relative to default products (output)	• Trend analysis	• Regulator data; research firms
• Member superannuation and insurance literacy <sup>#*</sup> (input)	• Qualitative	• Member surveys
• Ease of members opting out of insurance, amending cover or making claims (input)	• Qualitative	• Member surveys; reviews by others
• Number of members changing or opting out of default insurance cover (input)	• Trend analysis	• Research firms
• Funds' use of member information to inform product design and pricing <sup>**</sup> (input)	• Qualitative	• Fund surveys; case studies
• Comparability of insurance product information disclosed by funds (input)	• Qualitative	• Reviews by others; research firms
• Average insurance cover by age band and market segment (output)	• Trend analysis	• Research firms
• Proportion of complaints to the Superannuation Complaints Tribunal which are successful <sup>#</sup> (output)	• Trend analysis	• Regulator data
• Number of members that nominate beneficiaries (input)	• Trend analysis	• Member surveys; fund surveys; research firms

<sup>#</sup> Repeated indicator within efficiency. <sup>\*</sup> Indicator is common to both competition and efficiency.

### **Are the costs of insurance being minimised for the level and quality of cover?**

As noted above, from 2012, trustees have been under an explicit obligation to not allow retirement outcomes for members to be inappropriately eroded by insurance premiums. To fulfil this obligation, trustees must demonstrate to APRA they have an appropriate insurance management framework in place (APRA 2012c, sub. 32; appendix H). It is relevant to consider whether trustees are managing the costs and provision of insurance so as to meet this obligation, and minimise costs for the level and quality of cover provided. In an efficient and competitive system, it could be expected that the costs of delivering a given level and quality of cover would be minimised as trustees seek the best deal for their members from competing insurance providers.

Default insurance cover in superannuation is typically provided for a flat weekly premium with the benefits reducing with age (Rice Warner, sub. DR112). Study participants and others have indicated that premiums are significantly lower than for comparable cover obtained outside superannuation due to multiple factors including: tax advantages; low-cost distribution; simple product design; little (or no) underwriting, and no commissions (for example, ASFA, sub. 44; ASIC 2016f; FSC, sub. 29; Rice Warner 2014b). Rice Warner (sub. DR112) provided an example where the difference is in

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the range of 20–60 per cent (based on an accountant with \$1 million sum insured for life and TPD cover).

That said, there is widespread acknowledgment that insurance premiums in superannuation have increased significantly in recent years, although there was considerable variation across different types of funds (box 6.3) (APRA, sub. 32; Chant West 2014b; SuperRatings 2016). These premium increases have been attributed to a market correction following a period of intense price competition between insurance providers competing for market share, poor underwriting practices, and increased member awareness of their rights to make claims (APRA 2015d, sub. DR111; Bombora, sub. DR105; FSC, sub. 29; Rice Warner 2014b). Several participants indicated that funds are now more focused on ensuring insurance premiums offered to members are sustainable over the long term (for example, APRA, sub. DR111; Willis Towers Watson, sub. DR81).

#### **Box 6.3      Recent study on insurance premiums in superannuation**

SuperRatings (2016) examined recent trends in insurance premiums (death and total and permanent disability or ‘TPD’ cover) within superannuation funds. It found that there had been a substantial rise in premiums over the 12 months to May 2016, with the median increase being approximately 50 per cent. However, there was variation between types of funds. For example, over the past four years, average premium increases ranged from 29–45 per cent for not-for-profit funds, compared to increases of 2–4 per cent for retail master trusts, while premiums decreased 4–6 per cent for corporate funds.

The Commission will assess whether the costs of insurance to members (which as noted above comprises both the premiums and administration costs) are being minimised for the level and quality of cover, and are sustainable, using indicators focused on member insurance costs and prices, and the loss ratio.

### **Member insurance costs and prices**

The extent to which insurance is cheaper within superannuation compared to that purchased outside superannuation (for equivalent levels and quality of cover) will be examined. In principle, the differential could be measured by comparing average premiums of life or TPD insurance purchased within superannuation for a notional set of members (for a given account balance and age) to the costs of an equivalent product on a retail basis. An understanding of how much any differential is explained by differences in taxation treatment (or other factors) will provide relevant attributional context when interpreting this indicator.

However, a challenge will be ensuring like-for-like comparisons of insurance products, which are often complex, have multiple conditions, and are subject to variable disclosure standards within PDSs (ASIC, sub. 35; Chant West 2014b). Study participants drew attention to the difficulty involved in comparing insurance products, especially where there

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are differences in definitions and exclusions (Bombora, sub. DR105; Choice, sub. DR113). Some comparative information on insurance products is available — for example, APRA publishes information on insurance within MySuper products (from 2013). However, it is likely that further information would need to be sourced from industry or through surveys.

A further challenge arises in interpretation — significantly lower premiums for insurance within superannuation (compared to that purchased outside superannuation) could indicate both that group insurance is relatively efficient *and* that retail insurance is relatively inefficient. This indicator will thus need to be interpreted alongside other indicators, as well as contextual evidence on pricing practices in each segment.

The Commission will also examine the (average annual) premiums paid by members as a percentage of annual SG contributions made by insured members, across the system and market segments (Actuaries Institute, sub. DR109; Mercer, sub. DR104), and the extent of any trailing commissions grandfathered in superannuation insurance products (ISA, sub. DR106). The former indicator will be complemented with contextual information on rules-of-thumb fund trustees use to determine whether insurance premiums are unduly eroding retirement incomes. The prevalence and frequency with which APRA-regulated institutional funds switch insurance providers may also provide insights into the extent to which funds are prepared to shop around for the best deal.

The expenses funds incur in *administering* insurance are also a relevant focus given they are more directly under trustees' control. A unique feature of insurance provided through superannuation is the role that trustees play in administering the arrangements (such as managing claims). In an efficient market, these expenses would decline over time as fund scale increases, or more efficient systems and technologies are used. In interpreting trends in insurance administration expenses, information on the incidence of claims, capital expenditure designed to realise future efficiencies, and the impact of insourcing and outsourcing administrative functions on reported expenses would need to be taken into account (AIA, sub. DR88; ASFA, sub. DR98; FSC, sub. DR110; Mercer, sub. DR104; QSuper, sub. DR96). APRA data on insurance expenses currently appear of poor quality (chapter 2), and further work is needed to clarify their suitability for the stage 3 review.

A further issue identified by study participants is that funds using related-party insurance providers may not be getting the best deal for their members (AIST, sub. 30; ISA, sub. 38). As noted above, under prudential regulations, funds must have an insurance management framework in place. Among other things, this requires funds to be able to demonstrate the selection process for an insurance provider was appropriate and the engagement was at arms length and in the best interests of members (APRA 2012c; FSC, sub. DR110).

Nonetheless, the Commission will examine the costs of insurance purchased by funds through related versus unrelated parties (noting that use of related insurance service providers is now a practice used by some retail and industry funds). Interpretation of the results would need to consider the quality of the available data and the extent to which funds face constraints in choosing their insurance provider. As noted above, there will also be practical challenges in aligning like-for-like insurance products.

## Loss ratio

A relatively simple way to measure the cost effectiveness of insurance within superannuation is comparing premiums paid to benefits received for the system as a whole (or for segments of the market). The ‘loss ratio’ is calculated as total claims divided by total premiums and indicates the proportion of premiums returned to members by way of claims (Mercer, sub. 31). It is also a quasi-measure of provider profitability. In an efficient insurance market, average premiums should be proportional to average claims over time (not necessarily equivalent given other costs of providing insurance). Mercer (sub. 31) submitted that over the longer term the loss ratio is typically in the order of 85 per cent for life and TPD cover and 80 per cent for income protection. APRA reports data on insurance premiums and claims at the system level and by fund type, which would allow loss ratios to be calculated.

Several participants expressed reservations about using loss ratios. In particular, measures in any one year are of little interpretive value as they will depend significantly on the pricing cycle, the timing of significant events and time lags between when claims are made and premiums paid out (ASFA, sub. 42; Mercer, sub. 31; FSC, sub. 29). Participants emphasised that if loss ratios are calculated it would need to be over a sufficiently long time period (such as 5 or 10 year periods at a minimum). The analysis would also need to take account of the percentage of claims incurred but not reported (for which it may be difficult to get robust data), and the scope and quality of data more generally (AIA, sub. DR88; ASFA, sub. 42; FSC, subs. 29, DR110; Mercer, sub. DR104). The Commission will be mindful of these factors but considers that focusing on loss ratios aggregated at the system level or across market segments may overcome some of these difficulties.

**Table 6.13 Costs of insurance: criterion and indicators**

<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Are the costs of insurance being minimised for the level and quality of cover?</b>		
• Insurance premiums inside compared to outside superannuation for like policies (output)	• Trend analysis	• Insurer disclosures; research firms
• Insurance expenses (incurred by funds) (input)	• Trend analysis	• Regulator data; fund surveys
• Insurance premiums paid by members as a percentage of Superannuation Guarantee contributions made by insured members (output)	• Trend analysis	• Regulator data
• Ratio of claims to premium revenue (loss ratio) within superannuation over 5 and 10 year periods (output)	• Trend analysis	• Regulator data
• Fee and premium differences from outsourcing insurance services to related versus unrelated parties (output)	• Trend analysis	• Fund surveys; regulator data; fund disclosures
• Proportion of APRA-regulated institutional funds switching their insurance provider (input)	• Trend analysis	• Fund disclosures
• Trailing adviser commissions embedded in choice products and insurance <sup>#</sup> (output)	• Trend analysis	• Fund surveys
<sup>#</sup> Repeated indicator within efficiency.		

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## 7 Building the evidence base

### Key points

- The 5 system-level objectives, 22 assessment criteria and 89 unique indicators developed in this study are designed to be collectively applied by the Commission in its future review of the efficiency and competitiveness of Australia's superannuation system.
- The future review will collectively require the synthesis of quantitative and qualitative evidence, as well as interpretation and considerable judgment. While some indicators will be more significant than others, no single indicator will be determinative of overall performance against a system-level objective.
- A broad evidence base is needed to afford collective and nuanced interpretation, but every effort will be made to minimise the additional collection burden for industry. The Commission intends to make full use of data that already exist (or will exist).
  - The Commission has refined the objectives, criteria and indicators since the draft report, and most of the indicators will not require additional data to be collected.
  - While some data may not be perfect, they will likely be good enough to inform a system-wide assessment.
  - No changes to reporting requirements are recommended in this report. Responding to any requests for new information will be voluntary.
- A range of data sources already exist and can be built on as part of the future review. Where new data are required, in most cases the Commission expects to gather data directly or purchase data from research firms.
  - Regulators already publish a large amount of administrative data on superannuation funds and accounts. The Commission will work with regulators to access data that are collected but not reported, in addition to seeking information from other sources.
  - Superannuation funds themselves already disclose significant amounts of information, which the Commission will use to construct its own datasets. The Commission may also purchase proprietary data from private research firms where these can usefully inform the assessment.
  - Surveys provide a rich source of information on members' behaviour and funds' activities. The Commission intends to draw on available survey evidence and expects to undertake its own surveys of members and funds. These surveys would be voluntary.
- The Commission intends to undertake the bulk of the analysis in the future review itself. On occasion, it may also seek out analyses conducted by other parties, such as academics, research firms and regulators.
- Inevitably, not all data and information issues can be identified in advance. The Commission will therefore need to revisit the state of the evidence base at the time of the future review, in consultation with relevant parties.

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In this study, the Commission has developed system-level objectives and corresponding criteria (with supporting indicators) to assess the efficiency and competitiveness of the superannuation system. These criteria are designed to be applied in a future review of efficiency and competitiveness of the system, to be conducted following the full implementation of MySuper (stage 3, as set out in chapter 1).

This study is also intended to flag to the superannuation system how it will be assessed in the future review. This will provide an opportunity for system participants and other interested parties to collect and analyse relevant evidence ahead of the ultimate assessment.

This concluding chapter sets out the evidence base that will be needed for the future review. It identifies where good data are currently available, where supplementary evidence may need to be sought, and where new data or research may be required ahead of (or as part of) the future review. Section 7.1 summarises the Commission's approach and the challenges that will be involved in applying assessment criteria and indicators. It also sets out what data are already available and what new data will need to be collected (section 7.2). It finishes with the overall assessment framework (section 7.3).

## **7.1 The Commission's approach**

### **Types of evidence required**

The 5 system-level objectives, 22 assessment criteria and 89 unique indicators that have been developed in this study are summarised in the two tables in section 7.3. These cover many aspects of competitiveness and efficiency. A majority of assessment criteria and indicators relate to superannuation products, their performance and how well they meet members' needs. Others cover member activity and engagement, upstream suppliers (such as administrators, asset managers and asset custodians) and insurance.

In crafting the indicators, the Commission has paid attention to the degree to which the indicators would likely reflect factors under the superannuation system's influence, as well as the availability of suitable evidence (chapter 3). The Commission has refined the indicators since the draft report, and most of the indicators will not require additional data to be collected. Overall, the indicators are intended to be specific, but flexible to changes in market structure, policy settings and the evidence base over time.

There are four main types of indicators: input and process indicators, output indicators, behaviour indicators and outcome indicators. The majority of indicators are based on inputs and outputs, driven to a large extent by what aspects of superannuation are relatively more straightforward to measure and assess.

There is a mix of quantitative and qualitative indicators. Relevant empirical data are available and can provide objective and specific evidence for some indicators (for example, long-term net returns). Quantitative indicators can be assessed by examining



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trends over time, or through more sophisticated econometric techniques. Such indicators can also be benchmarked (for example, against other countries or sectors).

In other cases, suitable data do not exist or quantitative measures may not reflect all relevant aspects of performance (for example, investment governance). Qualitative assessments — combined with judgment — will be essential for applying and interpreting these kinds of indicators.

Finally, there is an inevitable overlap between the assessment criteria and indicators set out for competition and efficiency. Competition and efficiency often go hand in hand: healthy competition is generally a good indicator of efficiency (chapter 4). As such, numerous indicators are common to both competition and efficiency. However, trade-offs can sometimes arise between competition and efficiency, and these will need to be taken into account in the ultimate assessment. To give one example, rising market concentration may be an outcome of competition, but may not be in the interests of long-term efficiency if it increases systemic risks.

## **Gathering evidence**

In undertaking the future review of Australia’s superannuation system, the Commission envisages relying predominantly on three types of evidence: its own analysis (based on currently available data), data obtained from other sources (including inquiry participants), and new data to be collected for the review.

This study has sought to establish the requisite evidence base to inform the future review, and in doing so identify any material issues in the efficacy of indicators, or in the ease of data collection. Accordingly, this study has highlighted any potentially useful additional data or research that would inform the future review, and outlined how new data will be gathered.

In building the evidence base, the Commission intends to make full use of data that already exist (or will exist). The guiding principle is to collect sufficient evidence to assess the competitiveness and efficiency of the superannuation system without creating unnecessary burdens on system participants. Where data have been collected by others but are not publicly reported, the Commission will seek access to such data (and take necessary measures to protect confidentiality). This could involve obtaining unpublished data from regulators or purchasing data from private research firms.

New data will be sought only where feasible to collect within the short to medium term (that is, within the timeframe of the future review) and where the benefits of collection are likely to exceed the costs. The Commission intends to gather some evidence itself, such as through drawing on published product disclosure statements (section 7.2). It may also survey members and superannuation funds, and seek case study information from funds. The Commission may also contract with other parties to collect data on its behalf.

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Participation in any of these processes will be voluntary for superannuation funds, members and other system participants. In this study, several participants raised concerns about being burdened by new reporting or disclosure requirements as part of the Commission's future review. The review is not intended to replicate or replace the data collection practices of regulators, which serve a different purpose. Nor is this study recommending changes to reporting requirements. Any data collected by the Commission will be used solely for the purposes of the future review.

## **Data quality**

Good evidence will be crucial. A large amount of data and research already exist on Australia's superannuation system. However, study participants pointed to areas where the available data may be incomplete, subject to measurement error or potentially misleading (for example, because figures can be influenced by factors external to the superannuation system, such as government policy or market movements). There may also be cases where data are dated, are not made publicly available, or are available only over a short time horizon.

The Commission intends to make full use of the available data in the future review, while taking account of any quality problems in data interpretation, as well as contextual information and input from participants. In many cases, the available evidence may not be perfect but will be good enough to inform a system-wide assessment. New data will be sought only where necessary and the benefits of collection exceed the cost.

In a number of instances, data from multiple sources may need to be combined to create a reasonably complete picture. Where multiple sources of data may exist, these can be used to cross-check data sources to gauge the robustness of the results (for example, regulators and private research firms both report on the fees and returns of specific superannuation products). Discrepancies would flag areas where further investigation is warranted.

Importantly, the full extent of data availability and quality will not become apparent until the time of the future review. There could also be changes in data quality or reporting practices in the meantime that affect the usefulness of data. It may become necessary to prioritise assessment against some criteria or indicators based on the availability of suitable evidence or the ease of gathering it (APRA, sub. DR111; CIFR, sub. DR57; PwC, sub. DR69). Ultimately, there may be some specific data gaps that cannot be overcome, meaning that other information needs to be drawn on to reach conclusions.

As a result, the Commission will reassess the state of the evidence base in the course of the future review. The data sources identified in the remainder of this chapter may be subject to refinement or change during the review itself.

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## Interpreting the evidence

Collectively, the assessment criteria and indicators developed in this report are intended to provide a detailed picture of the competitiveness and efficiency of the superannuation system. But applying the indicators to draw conclusions about the system overall will be challenging.

The indicators alone will not always paint a complete picture. Sometimes the correct interpretation will be ambiguous. To give one example, an indicator that shows declining long-term trends in costs could reflect strong competition in the superannuation system, but could also be consistent with funds focusing on more easily managed investments at the expense of long-term net returns (thereby compromising efficiency). In response to the draft report, study participants noted the potential for many of the Commission's indicators to be misinterpreted.

Supplementary evidence and judgment will therefore be needed. This will be especially important where an indicator could have multiple interpretations, there are data quality problems, or performance could be subject to factors outside the system's control. On occasion, a more 'in depth' examination of an indicator or criterion will be required — for example, by looking at a range of contextual evidence, or by applying the indicator for different member or market segments. In other cases, indicators may be contradictory, for example, where one indicator suggests an increase in efficiency but another implies a decrease. This highlights the importance of interpreting indicators collectively, rather than in isolation, and of exercising judgment in drawing conclusions.

Finally, the assessment criteria and indicators need to be considered as a whole. While some indicators will be more significant than others, no single indicator will be determinative of overall performance against a system-level objective. Further, the weighting attached to each criterion will be determined as part of the future assessment itself, though intuitively those that are most directly related to the ultimate objectives of meeting members' best interests and retirement incomes would attract the highest weight (chapter 3). Ultimately, drawing conclusions based on the suite of indicators will require the synthesis of both quantitative and qualitative evidence, as well as considerable judgment.

## 7.2 Data sources

In undertaking the future review, the Commission will draw on a range of data and research. The tables in section 7.3 set out the assessment methods and evidence sources that the Commission envisages using for each indicator.

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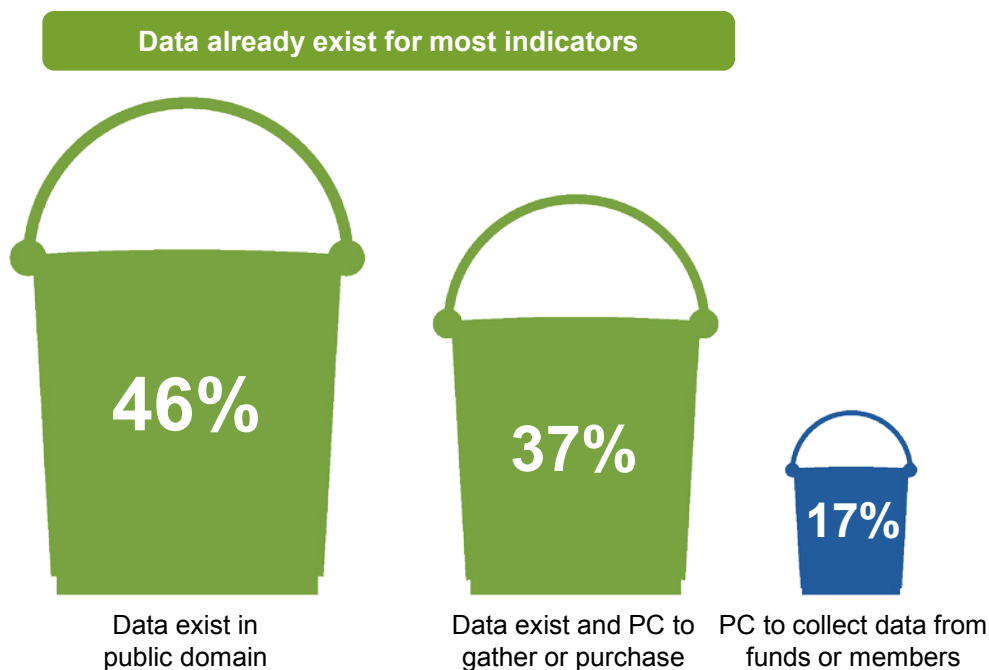
A considerable amount of data are already publicly available. These include:

- quantitative measures of fund performance — including fees, investment returns and insurance premiums
- qualitative evidence of fund behaviour — including governance arrangements, supplier relationships, market conduct, product development and tailoring, member engagement and information disclosure
- evidence of fund members' behaviour, knowledge and attitudes — including member engagement with superannuation, fund switching and consolidation, levels of insurance cover, use of information and financial literacy
- benchmark measures for comparison — including benchmark returns to specific asset classes and investment management fees in other countries.

The overwhelming majority of indicators are expected to primarily draw on existing data (figure 7.1). Less than a fifth are expected to rely mainly on collections of new data from superannuation funds or members. Table 7.1 provides further detail on key data gaps — where data are not currently available in the public domain or the extent or quality of non-public data is unclear — and the strategies the Commission expects to use to address these.

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Figure 7.1 **Stage 3 data needs: primary sources for our indicators<sup>a</sup>**



<sup>a</sup> Some indicators draw on multiple sources of data. In this figure, each indicator has been classified into a single category representing the primary expected source of data.

**Table 7.1 Main identified data gaps**

<i>Data required</i>	<i>Expected strategies</i>
<b>Investment returns</b>	
Long-term net returns by asset class and by market segment	Purchase data from private research firms; seek data from regulators
<b>Asset allocation</b>	
Actual asset allocation of choice segment	Purchase data from private research firms
Ability of small funds to access investments through intermediaries	Survey funds; draw on reviews by others
<b>Costs and fees</b>	
Data on product-level fees, fee dispersion, fund costs for specific services, fund margins, trailing adviser commissions and fund/product switching costs	Purchase data from private research firms; survey funds
Costs and fees associated with outsourcing to related/unrelated parties	Construct datasets from information already disclosed by funds; seek data from regulators
Fund expenditure on marketing, member retention and member engagement	Construct datasets from information already disclosed by funds; survey funds
Availability and quality of information on fees and investment risks	Draw on reviews by others
<b>Market share</b>	
Height of barriers to entry arising from default rules and market impediments to funds accessing distribution channels	Survey funds; request case study evidence from funds; draw on reviews by others
<b>Fund behaviour</b>	
Funds' use of member information and behavioural finance lessons in product design; development and take-up of tailored products, member services and retirement income products	Survey funds; draw on fund disclosures; request case study evidence from funds
<b>Governance and regulation</b>	
Trustee board disclosure, capability and investment governance	Draw on reviews by others; survey funds
<b>Insurance</b>	
Insurance cover by age band and market segment, and existence and consolidation of duplicate policies	Purchase data from private research firms; survey a sample of members
Ease and extent of members opting out of insurance, amending cover or making claims	Survey a sample of members; purchase data from private research firms; draw on reviews by others
Funds' use of member information to provide default insurance cover	Survey funds; request case study evidence from funds
<b>Member behaviour and knowledge</b>	
Member account activity and account monitoring	Survey a sample of members; draw on fund disclosures; request case study evidence from funds
Default and switching rates for funds, accumulation products and insurance	Seek data from regulators; survey a sample of members; purchase data from private research firms
Member knowledge and understanding, including superannuation and insurance literacy	Survey a sample of members

Table 7.2 summarises expected data sources across all indicators (including indicators with multiple data sources), and these sources are discussed further in the following sections.

**Table 7.2 Expected data sources for the system-wide review**

<i>Source</i>	<i>How accessed</i>	<i>Number of indicators<sup>a</sup></i>
<b>Existing data</b>		
Regulator data	PC to seek data directly from regulators	47
Research firms	PC to purchase data directly from research firms	33
Fund/insurer disclosures	PC to construct data from information already disclosed/published by superannuation funds or insurers	24
Reviews by others	PC to draw on reviews published by others	12
<b>Additional data<sup>b</sup></b>		
Case studies	PC to request case study evidence from individual funds	10
Member surveys	PC to survey a sample of superannuation members	17
Fund surveys	PC to survey superannuation funds	19

<sup>a</sup> Some indicators draw on multiple sources of data (section 7.3). <sup>b</sup> In many cases, additional data will be used to supplement existing data.

## Regulator data

Regulators already collect a large amount of administrative data on the superannuation system. Specifically, the Australian Prudential Regulation Authority (APRA) collects and reports detailed data on individual APRA-regulated institutional funds, including their assets, investments, returns, costs and number of members, among other things. These data are published in aggregate on a quarterly basis and for individual funds on an annual basis. APRA has also reported on individual MySuper products since September 2013, including more detailed information on fees and insurance. APRA regularly reviews and updates its reporting standards.

The Australian Taxation Office (ATO) collects and reports data on self-managed superannuation funds (SMSFs), including account balances, investment allocation and some member characteristics (such as age and gender). It also holds data on account consolidation and lost accounts. Further, the ATO publishes aggregate statistics on institutional funds and SMSFs annually (drawn from funds' tax returns), as well as a sample file of data from individual tax returns (covering 2 per cent of taxpayers).

Further sources of data from regulators (and government departments) are Regulatory Impact Statements, Post Implementation Reviews and performance reporting. These sources may contain useful evidence, especially on the impact of regulations on the performance of the superannuation system (chapter 5). In addition, the ATO publishes estimates of the cost savings from SuperStream, and the Superannuation Complaints Tribunal reports statistics on the complaints it handles.

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Datasets held by APRA and the ATO already cover many of the indicators set out in this report. However, further refinement may be necessary to address specific gaps or areas where there are problems with data quality. In some cases, data have only recently started to be reported and comparable figures for past periods are not published (APRA, sub. 32). In other cases, data may not be fully comparable across datasets (such as asset allocation figures for APRA-regulated institutional funds and SMSFs (appendix G)). There may also be instances of funds reporting data to APRA in an inconsistent way, or of missing data and cost misattribution in some APRA system-level datasets (chapter 5).

The Commission intends to work with APRA and the ATO in the course of the future review to clarify data definitions, understand how data could be made more comparable, and access data that are already collected but not publicly reported. This may include more disaggregated data on superannuation funds than are currently released, subject to legal requirements to protect confidentiality and privacy. The Commission will also seek to draw on APRA's thematic reviews of governance and related party arrangements, which are due to be completed in 2017 (APRA, sub. DR111).

Where there are key data gaps that cannot be addressed in these ways — such as specific aspects of fund performance or behaviour — the Commission intends to draw on data from other sources, as discussed below.

## **Data from funds**

Superannuation funds themselves produce, collect and report a substantial amount of data, including through marketing material, product disclosure statements and annual reports. While mostly disaggregated, these documents provide an especially rich source of information, including on investment performance and fees at the individual product level, and the development and sale of retirement income products.

As part of the future review, the Commission intends to construct its own datasets by collating data from product disclosure statements, annual reports and other fund disclosures (as well as disclosures from insurance companies, where relevant). However, such a task will be challenging, given the dispersed nature of these data and differences in reporting methods. For example, some funds report data about their products and performance in a more detailed and/or timely way than others.

The Commission also plans to seek evidence directly from individual funds on a strictly voluntary basis. This includes surveying funds (discussed below) and seeking relevant case studies to illustrate how parts of the superannuation system are performing, especially where indicators are qualitative in nature.

Overall, the Commission's preference is to use system-wide data (across multiple funds) to inform the future review, rather than member account data sourced from individual funds. On occasion, individual superannuation funds have made such data available to academic researchers on a confidential basis, which has allowed researchers to examine the

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behaviour of individual members over time and other phenomena that are not possible to investigate using regulator datasets. However, the conclusions drawn from these data can be germane to the individual fund's member base (which may not be representative of Australian superannuation members at large), and the results of the analysis may be hard for other parties to verify or reproduce, given the confidentiality of the data.

## **Research firm data**

Private research firms collect and analyse a large amount of data, drawing on fund disclosures, regulator datasets, their own proprietary surveys and other sources. The Commission sees merit in purchasing data from research firms, especially where more granular detail is available than in publicly available sources such as regulator datasets.

Research firm data are likely to be particularly useful in informing the Commission's assessment of investment returns, fees, costs and insurance products. These firms may also hold data relevant to indicators on upstream supply relationships, retirement income products, ancillary services and other aspects of the superannuation system. Some research firms (including those in other countries) may hold relevant data on fund investment performance and costs in other countries, which could prove useful for benchmarking.

There are several benefits to purchasing proprietary data. Many research firms hold large amounts of data covering long time periods (including data that are only partially included in regulator datasets). Much of the data have been drawn from industry surveys or individual fund disclosures, which would be difficult and time consuming to replicate (and likely impossible to do so retrospectively). Further, many private research firms have devoted considerable effort to cleaning up data to improve comparability across funds and over time (especially in terms of fees and returns).

Where appropriate, the Commission may also outsource some specific analysis to organisations that own proprietary data. This will mainly be considered where confidentiality restrictions mean that the Commission cannot directly analyse fund-level or product-level data itself.

## **Survey data**

Many aspects of the superannuation system are incompletely represented — or not captured at all — in regulator and industry datasets. This includes aspects for which the Commission has developed a number of indicators, including the behaviour and attitudes of fund members, members' insurance arrangements across different funds and insurers, the collection and use of member data by superannuation funds, and how people draw down their balances in retirement. Surveys are often the best available tool to glean insights into these kinds of topics.



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Surveys offer a large degree of flexibility to obtain evidence about member motivations and decisions, as well as about funds' activities. However, the results can be biased or misleading if a survey is poorly conducted. Study participants noted that survey results can be influenced by the sample size and design of a survey (ASFA, sub. DR98; Mercer, sub. DR104; PwC, sub. DR69), as well as by the degree to which only relatively engaged members or funds choose to participate (AIST, sub. DR102; AustralianSuper, sub. DR84).

In designing surveys, the Commission would draw on past surveys as well as best-practice methods identified in the literature and by expert survey practitioners. This includes asking clear, unambiguous questions without overburdening participants. It also includes piloting surveys to refine the material (PwC, sub. DR69). Any potential biases arising from survey design or sampling would be taken into account in analysing and interpreting results.

### Member surveys

Past surveys of superannuation members have collected many kinds of information that could directly inform some of the Commission's indicators. This includes member engagement, financial literacy, awareness of funds and products, investment behaviours, default and switching behaviour, and the take-up of specific retirement income products (appendix B). While some surveys have been periodic exercises (annual or biannual), others have been ad hoc and only provided results for a single point in time. Few longitudinal surveys have asked questions about superannuation.

The Commission will draw on evidence from surveys conducted by others. It also expects to conduct (or commission) its own survey of fund members (including SMSF members). This would provide an opportunity to collect evidence on member attitudes and behaviours in a consistent manner, and to gather evidence on specific topics that have not been widely covered in past surveys (such as fund service quality, insurance coverage and fund/investment switching costs). The results could be compared to past surveys as a validity check and to identify changes over time.

The final decision to conduct a new survey — and the questions to be asked — will not be made until the time of the future system-wide review. In the meantime, surveys conducted by others may cover specific indicators of interest to the Commission.

### Superannuation fund surveys

There may also be benefit in surveying superannuation funds. This would be a useful way to gather data on residual indicators that are not currently reported to regulators or collected by private research firms, and to collect evidence relevant to specific qualitative indicators in the Commission's assessment framework. In most cases this survey insight would supplement data from other sources.

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A fund survey would provide an opportunity to collect information on upstream supply relationships, product development, fund behaviour (such as the information funds gather on their members) and barriers to market entry. It would also provide scope to ask funds specific questions about their governance and risk management practices. Further, such a survey may prove a useful means to better understand how funds select insurance products and target these to individual members. A survey could potentially build on earlier surveys of funds by APRA, such as the surveys on historical investment performance and governance arrangements conducted in 2006 (Liu and Arnold 2010b).

While a new survey would inevitably impose costs on funds (for example, the time required to collate data and respond to the survey), it would be voluntary. The Commission would seek to minimise burdens on participating funds by following the processes set by the Australian Government's Statistical Clearing House (NSS 2016). The survey results could be de-identified in ways that protect the confidentiality of individual funds. As with a survey of members, any decision on whether to proceed with a survey of funds would be made as part of the future review.

## **Empirical and qualitative research**

Data do not provide conclusions on their own. Analysis is required to extract meaningful evidence through interpretation. The Commission intends to undertake the bulk of the analysis for the future review itself. However, on occasion it may also seek out empirical and qualitative analysis conducted by other parties, such as academics, research firms and regulators. This includes drawing on reviews conducted by others on topics such as governance, product disclosure and regulatory and compliance costs.

Much research on Australia's superannuation system has already been conducted — and continues to be conducted — by academics, regulators, private research firms and others. Recent examples from academia include an analysis of the supply relationships of 200 superannuation funds (Donald et al. 2016), a study of why people choose default funds and investment products (Butt et al. 2015), and research on the characteristics of people that choose to set up an SMSF (Bird et al. 2016). These and other research projects have been sponsored by research institutions that focus on superannuation, including the Centre for International Finance and Regulation, the Australian Centre for Financial Studies and the CSIRO–Monash Superannuation Research Cluster.

The Commission will draw on the existing body of research in gathering evidence for particular criteria and indicators, and in interpreting the evidence for other indicators. It will also undertake its own analysis using data and evidence gathered from the sources listed earlier (table 7.2). In some of these cases, specialist expertise or resources are likely to be required to undertake a detailed assessment, and such analyses may be sought from others.

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## **Participant input**

In keeping with its well-established consultation and evidence-gathering processes, the Commission will draw on information it receives from participants in the future review. This could include quantitative or qualitative evidence, as well as views on the performance of the superannuation system, assumptions to use in empirical work (such as econometric analysis) and ways to address specific data challenges.

At this stage, it is difficult to definitively and comprehensively state where existing evidence sources are likely to prove sufficient for the future review and where further evidence will need to be collected or purchased. Inevitably, not all data and information issues can be identified in advance of undertaking the actual review. As noted, the Commission will reassess the state of the evidence base at the time of the future review and consult with relevant parties.

## 7.3 Competitiveness and efficiency of the superannuation system: the assessment framework

### Competition: system-level objective, assessment criteria and indicators

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
<b>Objective 5: Competition in the superannuation system should drive efficient outcomes for members through:</b> <ul style="list-style-type: none"> <li>• a market structure and other supply and demand-side conditions that facilitate rivalry and contestability</li> <li>• suppliers competing on aspects of value to members</li> </ul>			
C1. Is there informed member engagement?	<ul style="list-style-type: none"> <li>• Financial literacy of members compared to an 'adequate' standard (input)</li> <li>• Member superannuation and insurance literacy<sup>#*</sup> (input)</li> <li>• Member active account activity:               <ul style="list-style-type: none"> <li>- voluntary contributions</li> <li>- uptake of intrafund advice</li> <li>- changes to investment/insurance options* (input, behaviour)</li> </ul> </li> <li>• Member account monitoring activity:               <ul style="list-style-type: none"> <li>- use of fund websites</li> <li>- use of online calculators</li> <li>- call centre enquiries* (input, behaviour)</li> </ul> </li> <li>• Use of advisers by members and/or member intermediaries (input)</li> <li>• Fund expenditure on member education and engagement as a proportion of total marketing expenditure* (input)</li> <li>• Availability of meaningful and comparable information on fees, product features (including insurance) and risks<sup>#*</sup> (input)</li> <li>• Fund and product switching costs for members (administrative, search and learning costs) and costs to opt out of insurance (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Trend analysis; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys</li> <li>• Member surveys</li> <li>• Member surveys; fund disclosures; case studies</li> <li>• Member surveys; fund disclosures; case studies</li> <li>• Member surveys</li> <li>• Research firms; fund disclosures; fund surveys</li> <li>• Reviews by others; member surveys</li> <li>• Member surveys; research firms</li> </ul>

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## Competition (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
C2. Are active members and member intermediaries able to exert material competitive pressure?	• Defined contribution members that do not have choice of fund (input)	• Trend analysis	• Regulator data
	• Size of the SMSF sector (funds and members) relative to institutional sector (output)	• Trend analysis	• Regulator data
	• Changes in market shares of funds (output)	• Trend analysis	• Regulator data
	• Switching rate between and within default and choice products and between institutional funds and SMSFs (behaviour)	• Trend analysis	• Member surveys; fund surveys; research firms
	• Default rates for funds, accumulation products and insurance (behaviour)	• Trend analysis	• Regulator data; member surveys
	• Fee dispersion* (output)	• Trend analysis	• Research firms; fund disclosures
	• Corporate fee discounts (output)	• Trend analysis	• Regulator data
C3. Is the market structure conducive to rivalry?	• Market concentration at wholesale and retail levels (Herfindahl-Hirschman Index and market shares of largest providers)* (output)	• Trend analysis	• Regulator data
	• Number of institutional funds (input)	• Trend analysis	• Regulator data
C4. Is the market contestable at the retail level?	• Height of barriers to entry — effect of default rules on market entry (input)	• Qualitative	• Fund surveys; case studies; reviews by others
	• Height of barriers to entry — market impediments to funds accessing distribution channels (input)	• Qualitative	• Fund surveys; case studies; reviews by others
	• Entries, exits and consolidations of funds <sup>#</sup> (behaviour)	• Trend analysis	• Regulator data; fund disclosures

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## Competition (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>	
C5. Are there material anticompetitive effects of vertical and horizontal integration?	<ul style="list-style-type: none"> <li>• Proportion of administration and investment services provided in-house, outsourced to related parties and outsourced to unrelated parties (input)</li> <li>• Proportion of insurance services outsourced to related parties (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; fund disclosures; fund surveys</li> <li>• Regulator data; fund disclosures; fund surveys</li> </ul>	
	<ul style="list-style-type: none"> <li>• Switching between insourcing and outsourcing of wholesale functions by funds (behaviour)</li> <li>• Alignment in the structure of member fees and underlying costs<sup>#*</sup> (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Econometrics; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Fund disclosures; fund surveys</li> <li>• Regulator data; fund disclosures; research firms</li> </ul>	
	<ul style="list-style-type: none"> <li>• Cost and member fee differences from outsourcing services to related versus unrelated parties (output)</li> <li>• Transparency and efficacy of fee disclosure by funds, including for distinct services<sup>#</sup> (behaviour)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Fund surveys; regulator data; fund disclosures</li> <li>• Reviews by others</li> </ul>	
	C6. Do funds compete on costs/price?	<ul style="list-style-type: none"> <li>• Costs relative to assets and number of accounts by service (investment, administration and insurance services) and by market segment (input)</li> <li>• Fees relative to assets and number of accounts by service (investment, administration and insurance services) and by market segment (output)</li> <li>• Fund margins (output)</li> <li>• Investment management costs and fees by asset class compared to other countries* (output)</li> <li>• Alignment in the structure of member fees and underlying costs<sup>#*</sup> (output)</li> <li>• Transparency and efficacy of fee disclosure by funds, including for distinct services<sup>#</sup> (behaviour)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Econometrics; qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms; fund disclosures</li> <li>• Regulator data; research firms; fund disclosures</li> <li>• Research firms</li> <li>• Research firms; fund disclosures</li> <li>• Regulator data; fund disclosures; research firms</li> <li>• Reviews by others</li> </ul>

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## Competition (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
C7. Are economies of scale realised and the benefits passed through to members?	<ul style="list-style-type: none"> <li>• Unused scale economies at fund level* (output)</li> <li>• Entries, exits and consolidations of funds<sup>#</sup> (output)</li> <li>• Pass through of benefits from scale economies (wholesale and retail) to members* (output)</li> <li>• Alignment in the structure of member fees and underlying costs<sup>#*</sup> (output)</li> <li>• Increased diversification due to growing scale (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Econometrics</li> <li>• Trend analysis</li> <li>• Econometrics</li> <li>• Econometrics; qualitative</li> <li>• Econometrics</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> <li>• Regulator data; fund disclosures</li> <li>• Research firms; fund disclosures</li> <li>• Regulator data; fund disclosures; research firms</li> <li>• Regulator data; research firms</li> </ul>
C8. Do funds compete on member-relevant non-price dimensions?	<ul style="list-style-type: none"> <li>• Number of accumulation products (aggregate and per fund)* (output)</li> <li>• Fund marketing expenditure (share of operating expenditure) (input)</li> <li>• Funds' use of member information to inform product design and pricing* (input)</li> <li>• Availability of meaningful and comparable information on fees, product features (including insurance) and risks<sup>#*</sup> (input)</li> <li>• Member superannuation and insurance literacy<sup>#*</sup> (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> <li>• Regulator data; fund disclosures</li> <li>• Fund surveys; case studies</li> <li>• Reviews by others; member surveys</li> <li>• Member surveys</li> </ul>
C9. Is there innovation and quality improvement in the system?	<ul style="list-style-type: none"> <li>• Introduction of new retirement income products* (output)</li> <li>• Development and active take-up of tailored products and member services* (output)</li> <li>• Introduction of new methods of service delivery* (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis; qualitative</li> <li>• Trend analysis; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Fund surveys; fund disclosures; case studies</li> </ul>
C10. Are outcomes improving at the system level?	<ul style="list-style-type: none"> <li>• Growing voluntary consumption of superannuation services (investment, retirement products, advice and insurance) (output)</li> <li>• Member satisfaction and trust* (outcome)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis; qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> <li>• Member surveys</li> </ul>

<sup>#</sup> Repeated indicator within competition. \* Indicator is common to both competition and efficiency.

## Efficiency: system-level objectives, assessment criteria and indicators

Assessment criteria	Indicators	Assessment methods	Expected data sources
<b>Objective 1: The superannuation system contributes to retirement incomes by maximising long-term net returns on member contributions and balances over the member's lifetime, taking risk into account</b>			
E1. Are long-term net investment returns being maximised over members' lifetimes, taking account of risk?	<ul style="list-style-type: none"> <li>Long-term (5, 10 and 20 year) historical net investment returns from the system and market segments compared to benchmarks (output)</li> <li>Long-term (5, 10 and 20 year) historical net investment returns to specific asset classes from the system and market segments compared to benchmarks (output)</li> <li>Variance of historical net investment returns (over 5, 10 and 20 years) from the system and market segments compared to benchmarks (output)</li> <li>Proportion of default products that persistently underperform the benchmark (for 5 or more consecutive years) (output)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> <li>Trend analysis</li> <li>Trend analysis</li> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data; research firms</li> <li>Research firms; regulator data</li> <li>Regulator data; research firms</li> <li>Regulator data; research firms</li> </ul>
E2. Are costs incurred by funds and fees charged to members being minimised, taking account of service features provided to members?	<ul style="list-style-type: none"> <li>Costs relative to assets and number of accounts by service (investment and administration) and by market segment (input)</li> <li>Fees relative to assets and number of accounts by service (investment and administration) and by market segment (output)</li> <li>Alignment in the structure of member fees and underlying costs* (output)</li> <li>Investment management costs and fees by asset class compared to other countries* (output)</li> <li>Relationship between investment fees and returns at system level and for market segments (output)</li> <li>Cost savings from SuperStream (output)</li> <li>Relationship between level of administration fees and quality of member services (output)</li> <li>Unused scale economies at fund level* (output)</li> <li>Pass through of benefits from scale economies (wholesale and retail) to members* (output)</li> <li>Fee dispersion* (output)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> <li>Trend analysis</li> <li>Econometrics; qualitative</li> <li>Trend analysis</li> <li>Econometrics</li> <li>Trend analysis</li> <li>Qualitative</li> <li>Econometrics</li> <li>Econometrics</li> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Regulator data; research firms; fund disclosures</li> <li>Regulator data; research firms; fund disclosures</li> <li>Regulator data; fund disclosures; research firms</li> <li>Research firms; fund disclosures</li> <li>Regulator data; research firms</li> <li>Regulator data</li> <li>Research firms; member surveys</li> <li>Regulator data; research firms</li> <li>Research firms; fund disclosures</li> <li>Research firms; fund disclosures</li> </ul>

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## Efficiency (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
E3. Do all types of funds have opportunities to invest efficiently in upstream capital markets?	<ul style="list-style-type: none"> <li>• Asset allocation in small funds compared to large institutional funds (input)</li> <li>• Retail investment management costs compared to wholesale (input)</li> <li>• Minimum transaction values (input)</li> <li>• Ability of small funds to access investments through intermediaries (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> <li>• Research firms</li> <li>• Research firms</li> <li>• Reviews by others; member surveys</li> </ul>
E4. Is the system effectively managing tax for members, including in transition?	<ul style="list-style-type: none"> <li>• Average effective tax rates across market segments (output)</li> <li>• Tax flexibility as a motivation for establishing SMSFs (input)</li> <li>• Take-up rates of co-contributions and offsets (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data; research firms</li> <li>• Member surveys</li> <li>• Regulator data</li> </ul>
E5. Are other leakages from members' accounts being minimised?	<ul style="list-style-type: none"> <li>• Unpaid Superannuation Guarantee contributions (input)</li> <li>• Delayed Superannuation Guarantee contributions (input)</li> <li>• Number and value of lost accounts (output)</li> <li>• Trailing adviser commissions embedded in choice products and insurance<sup>#</sup> (output)</li> <li>• Unclaimed superannuation (output)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> <li>• Regulator data</li> <li>• Regulator data</li> <li>• Fund surveys</li> <li>• Regulator data</li> </ul>

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## Efficiency (continued)

Assessment criteria	Indicators	Assessment methods	Expected data sources
<b>Objective 2: The superannuation system meets member needs, in relation to information, products and risk management, over the member's lifetime</b>			
E6. Is the system providing high-quality information and intrafund financial advice to help members make decisions?	<ul style="list-style-type: none"> <li>• Availability of meaningful and comparable information on fees, product features (including insurance) and risks* (input)</li> <li>• Member active account activity:               <ul style="list-style-type: none"> <li>- voluntary contributions</li> <li>- uptake of intrafund advice</li> <li>- changes to investment/insurance options* (input, behaviour)</li> </ul> </li> <li>• Member account monitoring activity:               <ul style="list-style-type: none"> <li>- use of fund websites</li> <li>- use of online calculators</li> <li>- call centre enquiries* (input, behaviour)</li> </ul> </li> <li>• Fund expenditure on member education and engagement as a proportion of total marketing expenditure* (input)</li> <li>• Funds' application of the lessons from behavioural finance to improve information provision and product design# (behaviour, output)</li> <li>• Number of accumulation accounts and consolidations (behaviour, output)</li> <li>• Member superannuation and insurance literacy## (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Trend analysis</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Reviews by others; member surveys</li> <li>• Member surveys; fund disclosures; case studies</li> <li>• Member surveys; fund disclosures; case studies</li> <li>• Research firms; fund disclosures; fund surveys</li> <li>• Case studies</li> <li>• Regulator data; member surveys</li> <li>• Member surveys</li> </ul>
E7. Is the system providing products to help members manage risks over their life cycles and optimally consume their retirement incomes?	<ul style="list-style-type: none"> <li>• Asset allocations by age cohort (across different market segments and products) (output)</li> <li>• Life-cycle MySuper products (number of products and members, and as a proportion of total assets under management) (output)</li> <li>• Development and active take-up of tailored products and member services## (output)</li> <li>• Introduction of new retirement income products## (output)</li> <li>• Drawdown rates in transition and retirement (output)</li> <li>• Funds' use of member information to inform product design and pricing## (input)</li> <li>• Member superannuation and insurance literacy## (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis; qualitative</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Research firms; regulator data</li> <li>• Regulator data</li> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Fund surveys; fund disclosures; case studies</li> <li>• Regulator data</li> <li>• Fund surveys; case studies</li> <li>• Member surveys</li> </ul>

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## Efficiency (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
E8. Are principal-agent problems being minimised?	<ul style="list-style-type: none"> <li>Existing ratings of system-wide quality of governance (input)</li> <li>Meaningful disclosure by trustee boards of:               <ul style="list-style-type: none"> <li>trustee directors' and investment committee members' qualifications and relevant skills/experience</li> <li>remuneration structures</li> <li>potential conflicts of interest due to related-party dealings and competing duties (behaviour)</li> </ul> </li> <li>Quality of investment committee and investment governance processes, including use of performance attribution analysis and risk management (input)</li> <li>Member satisfaction and trust* (outcome)</li> <li>Proportion of complaints to the Superannuation Complaints Tribunal which are successful<sup>#</sup> (output)</li> <li>Proportion of funds that target short-term performance relative to their peers (behaviour)</li> <li>Degree of similarity in asset allocation among default products with different member characteristics (average age and balance) (input)</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> <li>Qualitative</li> <li>Qualitative</li> <li>Trend analysis; qualitative</li> <li>Trend analysis</li> <li>Qualitative; trend analysis</li> <li>Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>Reviews by others</li> <li>Reviews by others</li> <li>Reviews by others; fund surveys</li> <li>Member surveys</li> <li>Regulator data</li> <li>Research firms; fund disclosures; fund surveys</li> <li>Regulator data; research firms</li> </ul>
<b>Objective 3: The efficiency of the superannuation system improves over time</b>			
E9. Does the system overcome impediments to improving long-term outcomes for members?	<ul style="list-style-type: none"> <li>Introduction of new retirement income products<sup>#*</sup> (output)</li> <li>Development and active take-up of tailored products and member services<sup>#*</sup> (output)</li> <li>Introduction of new methods of service delivery* (output)</li> <li>Number of accumulation products (aggregate and per fund)* (output)</li> <li>Funds' application of the lessons from behavioural finance to improve information provision and product design<sup>#</sup> (behaviour, output)</li> <li>Impact of regulatory impediments on innovation (input)</li> </ul>	<ul style="list-style-type: none"> <li>Trend analysis</li> <li>Trend analysis; qualitative</li> <li>Trend analysis; qualitative</li> <li>Trend analysis</li> <li>Qualitative</li> <li>Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>Fund surveys; fund disclosures; case studies</li> <li>Fund surveys; fund disclosures; case studies</li> <li>Fund surveys; fund disclosures; case studies</li> <li>Regulator data</li> <li>Case studies</li> <li>Case studies; fund surveys; reviews by others</li> </ul>

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## Efficiency (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
E10. Are there material systemic risks in the superannuation system?	<ul style="list-style-type: none"> <li>• Market concentration at wholesale and retail levels (Herfindahl- Hirschman Index and market shares of largest providers)* (output)</li> <li>• Degree of interconnectedness between upstream service providers and funds (input)</li> <li>• Levels of leverage in SMSFs (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Regulator data</li> <li>• Regulator data; research firms; reviews by others</li> <li>• Regulator data</li> </ul>
<b>Objective 4: The superannuation system provides value for money insurance cover without unduly eroding member balances</b>			
E11. Do funds offer value for money insurance products to members?	<ul style="list-style-type: none"> <li>• Duplicate insurance policies (output)</li> <li>• Rates of insurance take-up in choice products relative to default products (output)</li> <li>• Member superannuation and insurance literacy<sup>#</sup>* (input)</li> <li>• Ease of members opting out of insurance, amending cover or making claims (input)</li> <li>• Number of members changing or opting out of default insurance cover (input)</li> <li>• Funds' use of member information to inform product design and pricing<sup>#</sup>* (input)</li> <li>• Comparability of insurance product information disclosed by funds (input)</li> <li>• Average insurance cover by age band and market segment (output)</li> <li>• Proportion of complaints to the Superannuation Complaints Tribunal which are successful<sup>#</sup> (output)</li> <li>• Number of members that nominate beneficiaries (input)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Trend analysis</li> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Trend analysis</li> <li>• Trend analysis</li> <li>• Trend analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Member surveys</li> <li>• Regulator data; research firms</li> <li>• Member surveys</li> <li>• Member surveys; reviews by others</li> <li>• Research firms</li> <li>• Fund surveys; case studies</li> <li>• Reviews by others; research firms</li> <li>• Research firms</li> <li>• Regulator data</li> <li>• Member surveys; fund surveys; research firms</li> </ul>

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## Efficiency (continued)

<i>Assessment criteria</i>	<i>Indicators</i>	<i>Assessment methods</i>	<i>Expected data sources</i>
E12. Are the costs of insurance being minimised for the level and quality of cover?	• Insurance premiums inside compared to outside superannuation for like policies (output)	• Trend analysis	• Insurer disclosures; research firms
	• Insurance expenses (incurred by funds) (input)	• Trend analysis	• Regulator data; fund surveys
	• Insurance premiums paid by members as a percentage of Superannuation Guarantee contributions made by insured members (output)	• Trend analysis	• Regulator data
	• Ratio of claims to premium revenue (loss ratio) within superannuation over 5 and 10 year periods (output)	• Trend analysis	• Regulator data
	• Fee and premium differences from outsourcing insurance services to related versus unrelated parties (output)	• Trend analysis	• Fund surveys; regulator data; fund disclosures
	• Proportion of APRA-regulated institutional funds switching their insurance provider (input)	• Trend analysis	• Fund disclosures
	• Trailing adviser commissions embedded in choice products and insurance <sup>#</sup> (output)	• Trend analysis	• Fund surveys

<sup>#</sup> Repeated indicator within efficiency. <sup>\*</sup> Indicator is common to both competition and efficiency.



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## A Public consultation

In keeping with its standard practice, the Commission has actively encouraged public participation in this study.

- Following receipt of the terms of reference on 17 February 2016, an advertisement was placed in a national newspaper and a circular was sent to identified interested parties.
- An issues paper was released on 16 March 2016 to assist those wishing to make a written submission. Following the release of the issues paper a total of 46 submissions were received.
- A draft report was released on 2 August 2016 and 70 submissions were subsequently received.
- Table A.1 lists all public submissions received. DR before a number denotes that the submission was lodged subsequent to the release of the draft report.
- As detailed in table A.2, consultations were held with Australian Government departments and agencies, academics and superannuation system participants.
- A technical roundtable was held on 28 June 2016 in Melbourne. Following the release of the draft report further roundtables were held in Sydney on 31 August and 6 September 2016, and in Melbourne on 1 September 2016. Participants are listed in table A.3.

The Commission thanks all parties who have contributed to this study.

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**Table A.1 Public submissions<sup>a</sup>**

<i>Individual or organisation</i>	<i>Submission number</i>
Actuaries Institute	34, 46, DR109 #
AIA Australia	DR88
AMP	DR90
Asher, Anthony	21
Association of Financial Advisers	DR74
Association of Independent Retirees	6, DR63
Association of Superannuation Funds of Australia (ASFA)	42, 44, DR98 #
Ausfund	DR65
AustralianSuper	DR84
Australian Association of Gerontology (AAG)	DR75
Australian Centre for Financial Studies (ACFS)	DR71
Australian Chamber of Commerce and Industry (ACCI)	24
Australian Council of Trade Unions (ACTU)	18, DR78
Australian Institute of Superannuation Trustees (AIST)	30, DR102 #
Australian Manufacturing Workers' Union (AMWU)	DR76
Australian Private Equity and Venture Capital Association Limited (AVCAL)	DR93
Australian Prudential Regulation Authority (APRA)	32, DR111
Australian Securities and Investments Commission (ASIC)	35
Australian Services Union (ASU)	4, DR59
AXIS Financial Group	DR83
Behavioural Finance Australia	DR55
Bombora Advice	DR105
Burke, Maureen	DR61
Centre for International Finance and Regulation (CIFR)	10, DR57
Challenger	DR89 #
Chand, Satish	DR107
Chartered Accountants Australia and New Zealand (CAANZ)	27
Chessor, David	DR48
CHOICE	DR113
Consumer Action Law Centre (CALC), Berrill and Watson Lawyers and Chronic Illness Alliance	DR114
Corporate Superannuation Association (CSA)	8, DR92
Council of Small Business Organisations of Australia (COSBOA)	33
CPA Australia	14, DR86
De Santis Management Agency	DR60
Deloitte	DR85
Depository Trust and Clearing Corporation (DTCC)	15, DR77
Diversity Council Australia	DR62
Dixon Advisory	23, DR103
Drew Walk and Co	26
Duckett, Stephen	37
Energy Super	19

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**Table A.1** (continued)

<i>Individual or organisation</i>	<i>Submission number</i>
Fiduciarys Friend Pty Ltd	7 #
Financial Planning Association of Australia (FPAA)	28, DR91
Financial Services Council (FSC)	29, DR110 #
Finch, Alex	2, 43
Gilligan, Mike and Craig, Stuart	DR95 #
Hall, Peter	1 #
Hartley, David	12, DR82
Independent Contractors Australia (ICA)	40
Independent Fund Administrators and Advisers Pty Ltd (IFAA)	DR72
Industry Super Australia (ISA)	38, DR106
Ingate, Stephen	DR58 #
Institute of Public Accountants (IPA)	22
IQ Group	DR67
Knight, Michael	25
Law Council of Australia	17
Mackenzie, Gordon	DR73 #
Mair, Peter	DR47
Maurice Blackburn	DR79
McCahon, James	DR49
Mercer	31, 45, DR104
MLC	DR115
Mushalik, Matt	DR80
(Name withheld)	DR64
Pemberton, Michael	41
Peterson Research Institute	DR70 #
PricewaterhouseCoopers (PwC)	11, DR69
QSuper	DR96
Queensland Nurses' Union	16
Reynolds, Peter	DR56
Rice Warner	DR112
Smith, Luke	5
SMSF Owners' Alliance (SMSFOA)	20, DR108
Super Simplr	DR87
Sweeney, Phillip	DR51, DR54
Tailored Superannuation Solutions Ltd	DR66
Tait, Bradley	DR52
Taylor, Sue and Asher, Anthony	9
Third Horizon Consulting	3
Willis Towers Watson	DR81
Wilson, Bruce	13
Women in Super	DR97
Workplace Super Specialists Australia (WSSA)	DR68

<sup>a</sup> DR before a number denotes that the submission was lodged subsequent to the release of the draft report. A hash (#) indicates that the submission includes attachments.

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## Table A.2 Consultations

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### *Individual or organisation*

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Actuaries Institute  
Ambachtsheer, Keith  
Association of Superannuation Funds of Australia  
Australian Competition and Consumer Commission  
Australian Institute of Superannuation Trustees  
Australian Private Equity and Venture Capital Association Limited  
Australian Prudential Regulation Authority  
Australian Securities and Investments Commission  
Australian Taxation Office  
BT Financial Group  
CEM Benchmarking  
Centre for Efficiency and Productivity Analysis (University of Queensland)  
Centre for International Finance and Regulation  
Centre for Market Design (University of Melbourne)  
Chant West  
Cooper, Jeremy  
Corporate Superannuation Australia  
Costello, Paul  
Council on the Ageing  
Deloitte  
Donald, Scott (University of New South Wales)  
Drew Walk and Co  
Empirics  
Faff, Robert; Gray, Stephen and Benson, Karen (University of Queensland)  
Financial Conduct Authority (UK)  
Financial Services Council  
Frontier Advisors  
Grattan Institute  
Industry Super Australia  
Link Group  
Mercer  
NAB/MLC  
National Seniors Australia  
Officer, Bob  
PricewaterhouseCoopers  
QSuper  
Rainmaker Group  
Ralston, Deborah (Monash University/Australian Centre for Financial Studies)  
Ramwell, Roslyn  
Reeson, Andrew (Commonwealth Scientific and Industrial Research Organisation)  
Reserve Bank of Australia  
Rice Warner

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**Table A.2** (continued)

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*Individual or organisation*

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Ralston, Deborah (Monash University/Australian Centre for Financial Studies)  
Ramwell, Roslyn  
Reeson, Andrew (Commonwealth Scientific and Industrial Research Organisation)  
Reserve Bank of Australia  
Rice Warner  
SMSF Owners' Alliance  
SunSuper  
SuperRatings  
TAL Life  
Thorp, Susan and Foster, Douglas (University of Sydney)  
Treasury  
Trowbridge, John  
Vanguard

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**Table A.3 Roundtables**

<i>Individual</i>	<i>Organisation</i>
<b>Melbourne (28 June 2016)</b>	
Bonarius, Nathan	Rice Warner
Bowater, Kim	Frontier Advisors
Chant, Warren	Chant West
Donald, Scott	University of New South Wales
Galbraith, Fiona	Association of Superannuation Funds of Australia
Gee, Adam	SuperRatings
Hartley, David	
Holzberger, Brad	QSuper
Minifie, Jim	Grattan Institute
Nance, Catherine	PricewaterhouseCoopers
Sirault, Penny	Treasury
Stevens, Alun	Rice Warner
Thorp, Susan	University of Sydney
Warren, Geoff	Centre for International Finance and Regulation
<b>Sydney (31 August 2016)</b>	
Asher, Anthony	University of New South Wales
Cooper, Jeremy	Challenger
Dunnin, Alex	Rainmaker Group
Fryer, Ian	Chant West
Hartley, Scott	SunSuper
Holden, Suzanne	Link Group
Hartley, David	
Krncevic, Jesse	Financial Services Council
Levy, Michelle	Law Council of Australia
Mason, Russell	Deloitte
Negline, Tony	Chartered Accountants Australia and New Zealand
Nicholls, Rob	University of New South Wales
Oliver, Jenny	TAL Life
Petrou, Robyn	Energy Super
Rice, Michael	Rice Warner

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**Table A.3** (continued)

<i>Individual</i>	<i>Organisation</i>
<b>Melbourne (1 September 2016)</b>	
Boal, Andrew	Actuaries Institute
Bowater, Kim	Frontier Advisors
Brady, Helen	MLC
Campo, Robbie	Industry Super Australia
Daley, Brian	Australian Council of Trade Unions
Drum, Paul	CPA Australia
Goddard, Liz	Corporate Superannuation Association
Haynes, David	Australian Institute of Superannuation Trustees
Knox, David	Mercer
Ludowyke, Darrell	Empirics
Maddock, Eliana	Australian Centre for Financial Studies
Minifie, Jim	Grattan Institute
Nance, Catherine	PricewaterhouseCoopers
Officer, Bob	University of Melbourne
Picot, Joe	Vanguard
<b>Sydney (6 September 2016)</b>	
Bucknell, Douglas	Fiduciarys Friend Pty Ltd
Cole, Nerida	Dixon Advisory
Fairweather, Duncan	SMSF Owners' Alliance
Galbraith, Fiona	Association of Superannuation Funds of Australia
George, Jordan	SMSF Association
Gordon, Tom	AIA
Howes, Melinda	BT Financial Group
Krncevic, Jesse	Financial Services Council
Liu, Kevin	University of New South Wales
Phyland, Lisa	AMP
Tse, Wendy	SuperRatings
Warren, Geoff	Centre for International Finance and Regulation

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## B Member decision making

### Key points

- Planning for retirement involves a number of financial decisions, including how much to save, which superannuation fund and investment strategy to use, when to retire and how to draw down account balances.
- These decisions can be subject to considerable complexity and uncertainty. Even individuals that are rational, financially literate and willing to invest time and effort in retirement planning can find decision making to be very difficult.
  - Information is sometimes incomplete or confusing, making it difficult to compare options.
  - Research has found that a significant minority of Australians have low financial literacy, with levels lower on average for females, the young and people with lower incomes.
  - People are subject to behavioural biases, including a reluctance to make active decisions when the benefits are distant, sensitivity to how choices are framed, and a strong aversion to realising short-term losses.
- Most evidence on superannuation decision making is derived from surveys. It suggests that:
  - many people put off planning for retirement until they are close to the retirement age
  - less than a third of Australians have actively chosen their superannuation fund, and a similar proportion have changed the investment strategy within their fund
  - the overwhelming majority of young people do not exercise any decision making about superannuation, compared to about half of members approaching retirement
  - of the 45 per cent of members holding multiple accounts, many intend to consolidate their accounts but have not yet done so
  - many members are unaware whether they have insurance through their superannuation; even those that are aware tend to lack a good understanding of their cover
  - most retirees draw down their wealth slowly, with many self-insuring for longevity risk.
- Member decisions are subject to a wide range of influences. Based on the available evidence, it is generally not possible to determine whether individuals are making good decisions. However, the collective evidence seems to suggest that people get engaged when it matters — when they are older and/or have larger balances — with default arrangements possibly playing an important role for disengaged younger people.
- It is also difficult to link specific decisions to member outcomes. While some members appear disengaged with superannuation, they may still attain reasonable outcomes; conversely, active engagement does not always lead to better outcomes.
- There are some key gaps in the evidence on member decisions, especially in terms of individuals' behaviour over the life cycle and the long-term outcomes of member engagement with superannuation.

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There is considerable diversity in how people make decisions about superannuation. These decisions directly and indirectly bear on competition and efficiency in the superannuation system, as outlined in chapters 5 and 6. This appendix examines some of the challenges many people face when dealing with superannuation and retirement. It reviews the literature on factors that shape decision making (section B.1) and summarises the evidence on Australians' superannuation knowledge and behaviour (section B.2). It also sets out limitations and gaps in the available evidence (section B.3).

## **B.1 Superannuation is challenging for many Australians**

Planning for retirement involves a significant number of financial decisions. These include:

- what proportion of income to save (beyond the Superannuation Guarantee)
- whether to save in an institutional fund or manage investments directly through a self-managed superannuation fund (SMSF)
- selecting a fund (or funds) and investment product within the fund
- the intended age of retirement and any transition path
- the desired standard of living in retirement (for example, dollars per year)
- how to draw down balances in retirement (for example, account-based income stream, annuity product or lump sum)
- how to structure other investments and tax affairs that interact with superannuation
- whether to take out insurance through a superannuation fund and, if so, what type and level of cover.

While some decisions are made only at specific points in the life cycle (for example, how to draw down a balance in retirement), many need to be made or updated — or at least considered — well in advance of retirement. In some cases, decisions are constrained (for example, not all employees can choose which fund their Superannuation Guarantee contributions are directed to) and, in others, defaults within the system mean that people who do not make an active decision are allocated to particular funds or products. Nevertheless, retirement planning is difficult for many Australians. Several reasons for this are explored further below.

### **Retirement planning is complex**

Many mainstream economic theories assume people make rational and foresighted decisions about their retirement. These theories are premised on individuals or households accumulating and then decumulating assets to maximise their lifetime wellbeing (or utility) (Benartzi and Thaler 2007). In doing so, they calculate their expected longevity, future



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earnings and investment returns; seek out the best risk–return trade-offs in their investment strategies; and calculate the optimal way to draw down their savings in retirement (Clark et al. 2013).

In the real world, however, this is no mean feat. People typically need to take account of very long time spans and considerable uncertainties — for example, in relation to the timing of retirement (and death); future income, expenses and health; and the circumstances and needs of other household members. Individual circumstances matter greatly. What is optimal for one person may look very different to what is best for another (Butt et al. 2015).

Decision making can be further complicated by other factors, including:

- difficulty finding the investment and retirement income products that best match individual risk preferences and discount rates
- long delays between making an investment decision and experiencing its impact, meaning there is little scope to learn from experience
- high transaction and search costs, including the time, money and effort involved in researching complex products and switching between funds
- difficulty obtaining reliable and comparable information on funds and products
- reliance on decisions made by fund trustees (such as how assets are invested) or employers (choice of superannuation fund), which may be hard for members to assess against their individual circumstances and needs (Butt et al. 2015; Cooper et al. 2010a; ISA, sub. 38; PC 2012, 2015b).

Further complexity arises from a wide range of regulatory and policy arrangements, which play a key role in shaping the economic incentives and constraints within which people make decisions. The most influential measures include the Superannuation Guarantee, default fund arrangements, taxation rules and the asset and income tests that govern access to the Age Pension. There is also a range of regulatory measures that apply to superannuation products, including information disclosure requirements, constraints on fees and investment strategies for MySuper products, and the prudential regulation of funds. In general, more policy constraints apply to the accumulation than to the retirement phase (chapter 2).

Several such regulations are designed to protect members and improve how markets function. While some may reduce complexity in particular areas, in general they increase the range of factors that members need to take into account when making decisions about retirement saving.

With all this complexity, it is hardly surprising that there is widespread evidence that many people experience considerable difficulty in making decisions about superannuation and retirement, and that some make poor choices (Benartzi and Thaler 2007; Clark et al. 2013; Cooper et al. 2010a; Murray et al. 2014a). Even individuals that are rational, financially literate and willing to invest time and effort in retirement planning may fail to make

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optimal decisions given the difficulty of doing so. Indeed, a large amount of complexity may be leading to many people failing to engage with superannuation at all (ACCI, sub. 24; AIST, sub. 30).

While estimates vary, most research has found that only about a third of working-age Australians have undertaken any active form of retirement planning; most put off such decision making until they are close to their retirement age (box B.1).

### **Box B.1 Many Australians put off planning for retirement**

A number of recent surveys have found that about one third of Australians have actively planned for their retirement. In one survey, 32 per cent of respondents (who were not retired) had attempted to work out how much they needed to save, and these people tended to have higher levels of financial literacy on average (Agnew, Bateman and Thorp 2013). In another survey, only 29 per cent of respondents said they had planned enough to be financially secure in the future, and 27 per cent felt that retirement was too far away for them to plan for now (Roy Morgan Research 2015b).

People have also been asked whether they have estimated how much savings or income they will need for retirement. Findings vary. For example, Colmar Brunton (2010) estimated that just over half of respondents have thought through how much superannuation they will need when they retire. Mercer (2013) found that only 18 per cent of its survey respondents reported having made preparations for retirement, up from just 11 per cent in a similar survey in 2011.

However, surveys have also found that a higher proportion of people who are closer to retirement age have planned for their retirement. Agnew, Bateman and Thorp (2013) found that the likelihood of planning for retirement increases significantly among people aged 40 and older. ANZ (2015) found that over half of respondents aged 55–64 had identified a target income for retirement, compared to 28 per cent across the full sample. It also found that people aged 45 or older were much more likely to have used a financial planner or adviser (22 per cent) compared to younger age groups.

Surveys have also asked respondents if they make voluntary contributions to their superannuation (in addition to compulsory contributions from their employer). ANZ (2015) reported that 27 per cent of respondents had made voluntary contributions, down from 35 per cent in 2011, whereas ASIC (2016c) reported that 13 per cent of its respondents had done so, with similar figures in earlier years. One recent survey found a clear age effect, with 31 per cent of people under age 30 reporting that they are saving for their retirement outside of compulsory super compared to 61 per cent of 50–64 year olds (ANU College of Arts & Social Sciences 2016). A more detailed (but preliminary) analysis of individual members of a single fund over a 10-year period found that men were more likely to make voluntary contributions than women (Feng, Gerrans and Clark 2014).

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## Useful information is not always available

Information is an essential input to decision making. To successfully compare superannuation products and select the one that best meets their individual needs, members need reliable information on fees, risks and long-term expected returns, among other things. Good information about the product attributes that matter can support competition and efficiency in the superannuation system.

Useful information is often lacking when people need to make retirement planning decisions. This can be because it is not collected or disclosed, is costly to access (for example, personal financial advice), is presented in an inconsistent or confusing manner, is untrustworthy or highly uncertain, or is simply irrelevant.

The state of information in Australia's superannuation system has long been criticised. While funds disclose a large volume of information about fees and returns, many study participants argued that — despite the MySuper reforms — this information is not being disclosed in a consistent way (and some is not being disclosed at all), which makes it difficult for members to meaningfully compare products (ACTU, sub. 18; AIST, subs. 30, DR102; APRA, subs. 32, DR111; David Hartley, sub. 12; IPA, sub. 22; ISA, sub. DR106; Rice Warner, sub. DR112; Super Simplr, sub. DR87; Third Horizon Consulting, sub. 3). In one survey, two thirds of respondents stated that superannuation funds, their fees and the way they work are not transparent enough (FSC 2013a). While a number of ratings websites allow members to compare products, they typically draw on the information that individual funds disclose. Members can face significant search costs when researching superannuation products.

Sometimes information does not exist because it is not known (such as future investment returns) or because the costs of collecting and reporting it exceed the benefits. But in other cases, markets fail to provide good information because those in a position to do so do not have an incentive to collect or disclose it. And sometimes information is available, but members lack the means to verify its accuracy or to understand it.

In these cases, government intervention can be justified where the benefits to the community (such as better ability to compare products) outweigh the costs (such as compliance burdens on superannuation funds). This is especially likely to be the case where there is a high degree of complexity or where impartiality is important (such as information on the detail of government policies or on housing and aged care options during older age (PC 2015a)).

Both the Australian Prudential Regulation Authority (APRA) and Australian Securities and Investments Commission (ASIC) set requirements for what information superannuation funds must disclose and how. Recent regulatory changes include the introduction of product dashboards for MySuper products, which are intended to help members compare products. However, there are widespread concerns that these dashboards omit some information that would be of value to members, and that the fee structures that funds report are often complex and lack transparency, especially for choice products (AIST, sub. 30;

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ASIC, sub. 35; ISA, sub. 38). Information disclosure is discussed in more detail in chapter 6 and appendix H.

## Levels of financial literacy vary

Even when clear and reliable information is available, people may find it difficult to understand and act on. As noted above, the sheer complexity of retirement planning can mean that people find decision making highly challenging, even when they have a good understanding of financial concepts and access to relevant information. These problems are amplified for the significant proportion of Australians who do not have high levels of financial literacy.

Financial literacy is a broad concept encompassing many aspects of financial decision making. There is no single unit of measurement. Essentially, it is the ability and willingness to make good financial decisions. ASIC (2014d, p. 6) has defined it as:

... a combination of financial knowledge, skills, attitudes and behaviours necessary to make sound financial decisions, based on personal circumstances, to improve financial wellbeing.

A number of surveys and academic studies have investigated Australians' financial literacy over the past 15 years. While the evidence suggests that financial literacy is high overall and improving, a significant proportion of people lack understanding of basic concepts — especially in relation to superannuation. In addition, financial literacy tends to be lower *on average* for certain groups, especially females, younger people, Indigenous Australians and those with lower levels of income or wealth (box B.2).

A large number of policy initiatives and programs has been deployed to improve financial literacy in Australia. A recent stocktake by ASIC found over 100 financial literacy programs, though the effectiveness of these programs has not been systematically evaluated (PC 2015b).

Some study participants emphasised the importance of members understanding superannuation concepts and the options available to them (for example, AIST, sub. DR102; Super Simplifier, sub. DR87). Several surveys have focused specifically on attitudes and behaviours in relation to superannuation. Collectively, they provide evidence that a considerable number of people have low engagement with, and awareness of, their own superannuation affairs (box B.3) (although, as discussed in section B.3, these attitudes and behaviours have typically not been linked to the outcomes that members attain). These results align with qualitative research on member engagement undertaken by CHOICE, which found that members sit on a spectrum of engagement and some of the more disengaged members '... don't know what they don't know about superannuation' (CHOICE, sub. DR113, p. 7).

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## Box B.2 Financial literacy in Australia

A large number of surveys have been undertaken to gauge Australians' level of financial literacy. Most have found that while many Australians have a good grasp of financial concepts and are capable of making informed decisions, a large number encounter difficulties.

### Some basic concepts are poorly understood

Among respondents to various surveys:

- only 42 per cent of males and 23 per cent of females said they had heard of and understood the concept of a risk–return trade-off (ASIC 2016c)
- over a quarter did not consider diversification of investments to be 'very' or 'quite' important (ANZ 2015) and, in another survey, only 41 per cent said they even understood the principle of diversification (though 88 per cent correctly identified the concept from an example) (ASIC 2016c)
- 29 per cent rated themselves as having no or minimal understanding of how share market movements can affect their superannuation balance (Mercer 2013)
- 29 per cent said they had no or minimal knowledge about superannuation (Mercer 2013).

One study found that Australians' financial literacy in regards to superannuation is, on average, no better — and in some respects worse — than in selected other developed countries, many of which do not have compulsory defined contribution systems (Bateman et al. 2012).

### Certain groups have lower financial literacy, on average

Some studies have found that financial literacy is lower, *on average*, for some groups in the population (PC 2015b). A consistent finding is that women tend to have lower financial literacy and lower levels of knowledge about superannuation than men, and are more likely to report that they find dealing with money to be stressful (ANZ 2015; Mercer 2013).

Such studies have also found that young people tend to have less knowledge of the superannuation system. For example, Ali et al. (2014) found that knowledge of basic facts about superannuation (such as the age at which funds can be accessed) was generally low among 25–34 year olds. Worthington (2008) found that persons aged 60–69 were over four times more likely to have 'adequate' knowledge of the fees and charges on superannuation compared to persons aged 25–29. However, there is evidence that financial knowledge and capabilities tend to decline in older age (Earl et al. 2015; Finke, Howe and Huston 2016).

Australian studies have also found that financial literacy tends to be higher among people who have higher levels of education, are employed, or have higher levels of income or wealth (Agnew, Bateman and Thorp 2013; ANZ 2015; Bateman et al. 2012). Other studies have found that Indigenous Australians have relatively low levels of financial literacy on average (Agnew, Bateman and Thorp 2013).

A recent study found that SMSF members tend to have greater confidence in their own financial skills than non-SMSF members, while SMSF members performed slightly worse on questions of financial literacy and numeracy (Bird et al. 2016). By contrast, an earlier study found evidence that SMSF members have above-average levels of financial literacy (ANZ 2015). Researchers have also found a positive link between cognitive ability and financial literacy among older trustees of SMSFs (Earl et al. 2015).

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### **Box B.3      Disengagement with superannuation**

There is widespread evidence that a considerable number of Australians are disengaged with superannuation and even have low levels of awareness of their own financial situation.

#### **One in four members do not know their balance**

In a recent survey, 26 per cent of respondents did not know the value of their main superannuation fund (excluding respondents in SMSFs), and a further 42 per cent only had a rough idea (ASIC 2016c). The proportion of people who did not know their balance even roughly was higher among females (34 per cent) and people aged under 35 (40 per cent). Two earlier surveys found that about a quarter of people did not know their balance even approximately (ASFA and Suncorp 2012; FSC 2013a).

#### **Well over half do not read statements in detail**

Several surveys have found evidence that many respondents do not read the statements sent to them from their superannuation fund. One found that while about half of respondents ‘flicked through’ their annual statement, only a third read it thoroughly and 7 per cent did not read it at all (Colmar Brunton 2010). Others found that as many as one in five people receive statements but do not read them (ANZ 2015) and, among people aged 25–34, only a third read most or all of their statements (Ali et al. 2014).

Surveys have also found that many people find their statements difficult to understand. About a third of respondents in two separate surveys said that they found the information they receive from their fund difficult to understand (ANZ 2015; ASFA and Suncorp 2012). In one, 40 per cent said that the information they receive from their fund is too long and complicated (ASFA and Suncorp 2012).

#### **Many pay little attention to fees**

One survey found that half of respondents were unaware of how much they were charged in fees on their superannuation, even approximately (FSC 2013a). Another found that 70 per cent of respondents who knew the investment returns on their superannuation (over the past year) had not compared the fees and charges against other funds (Colmar Brunton 2010). When asked why, one in five said they did not care.

#### **Many do not engage**

In one survey, 43 per cent of people reported feeling inadequate when it comes to superannuation, and 41 per cent said they do not like to think about superannuation after they have set it up (ASFA and Suncorp 2012). In another, only 38 per cent rated their level of interest in superannuation as 7 or greater out of 10 (Colmar Brunton 2010). Among 25–34 year olds in a further survey, only a third agreed that they paid a sufficient amount of attention to superannuation, with most regarding it as not being a major priority at their current stage in life (Ali et al. 2014). Rice Warner (sub. DR112) cited evidence that just under 90 per cent of members aged under 24 do not exercise any decision making about superannuation, compared to 47 per cent of members approaching retirement.

#### **One in ten cannot name their fund**

Two surveys asked respondents if they knew the name of their superannuation fund. In one, 8 per cent said they did not (FSC 2013a); in the other, it was 12 per cent (ASFA and Suncorp 2012).

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## People are subject to behavioural biases

When people face considerable complexity, such as that involved in retirement planning, they can resort to mental rules of thumb — commonly termed heuristics — to simplify problems and make decisions. Heuristics can be rational when they reduce the transaction costs of decision making. Indeed, in many cases people exercise ‘bounded rationality’ by making decisions that are reasoned and logical given their time constraints, available information and cognitive abilities. However, heuristics can also introduce systematic biases to decision making.

Internationally, there is a large and growing body of experimental evidence on the heuristics people use to make retirement savings decisions and the biases these can introduce (box B.4). These biases can lead to people failing to appropriately take account of all relevant and available information, or failing to make an active decision at all. As a result, people may act in ways that are not in their own best long-term interests. Even professional investors can be subject to behavioural biases they may not be aware of (Behavioural Finance Australia, sub. DR55). While much of the research has been conducted in the United States, where superannuation contributions are voluntary, many of the conclusions are likely to hold in Australia too.

### Box B.4 Behavioural biases

#### Status quo bias

Researchers have observed that many people display procrastination (delaying decisions) and inertia (failing to revise decisions) when it comes to retirement saving. This can be exacerbated by the very long time lags between saving today and receiving benefits in retirement.

Studies have found that automatically enrolling people in a retirement savings scheme and allowing them to opt-out — a form of default — leads to substantially higher enrolment rates than schemes where people need to actively decide to participate in the first place by opting in (Choi et al. 2001; Madrian and Shea 2001). In the United States, researchers have also found that the majority of people tend to stick with the default contribution rate and investment product, even where these may be changing over time (Beshears et al. 2009; Choi et al. 2001; Thaler and Benartzi 2004).

A bias towards the status quo can also arise due to choice overload. There is evidence that when people are presented with a greater menu of superannuation investment options to select from they are less likely to participate in a retirement savings plan (Iyengar, Huberman and Jiang 2004 cited in Benartzi and Thaler 2007). In other words, when decisions appear to become too complex, people may defer making a choice or not make one at all.

#### Framing biases

Experiments have shown that the way a menu of investment options (such as shares, bonds or cash) is presented has a strong effect on the investment portfolio that people choose — even though traditional economic theories imply that the framing of options should have no bearing on preferences or choices (Benartzi and Thaler 2007).

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## Box B.4 (continued)

Several kinds of framing effects have been detected. People sometimes focus on salient but irrelevant features when making a decision, or neglect relevant information that is not immediately to hand (Kahneman 2011). Sometimes they appear willing to accept a greater level of risk when presented with investment returns aggregated over a longer period (Clark et al. 2013). Graphical representations of risk tend to resonate better with people of lower financial literacy than numerical measures (Bateman, Lai and Stevens 2012).

Further, when presented with a number of investment options, people tend to allocate their assets evenly among them regardless of what those options are — a naïve form of diversification known as the 1/N strategy (Benartzi and Thaler 2001) — or tend to cluster their choices around a pre-selected mix (the default) (Bateman et al. 2016b). Indeed, in one study participants preferred investment options with evenly weighted asset allocations, but once asset allocation information was removed, they preferred options with higher risk-adjusted returns (Bateman et al. 2016a).

### **Loss aversion and risk preferences**

People tend to be more sensitive to financial losses than gains of the same amount, relative to a given starting point. Experiments suggest that people are more willing to take risks to avoid realising losses already incurred than they are to realise gains of an even greater magnitude — in other words, many people are risk averse in respect of gains but risk loving in respect of losses (Kahneman 2011). In addition, researchers have observed that people are generally reluctant to accept short-term risks with their retirement savings, even where there can be considerable (and less risky) gains over the long term (Benartzi and Thaler 2007).

These effects may explain observations (mainly in other countries) that many people hold too much of their retirement savings in safe assets such as bonds, and too little in higher-return assets such as shares, relative to what economic models would predict is optimal (Clark et al. 2013). Such effects might also be one explanation for why people are more likely to move retirement savings into shares during a market boom and out of shares following a market crash (Benartzi and Thaler 2007).

### **Present bias**

People appear to focus on near-term consumption to the detriment of longer-term consumption to a greater degree than conventional economic theories predict, and thus may be undervaluing future benefits when making saving decisions (Goda et al. 2015; Kahneman 2011; Mitchell and Utkus 2004). This could in part explain why some people struggle to voluntarily set aside money for retirement.

### **Salience and familiarity biases**

People may be less aware of their retirement savings contributions (and less sensitive to fees) because they are generally not paid for 'out of pocket' and will only be accessed after a long time period (Cooper et al. 2010a; PC 2012). There is also evidence that individuals tend to favour certain investments they are familiar with — such as term deposits, 'blue chip' shares or shares in their employer — because they believe them to be less risky, even though they present greater risk over time than a more diversified portfolio (ASFA, sub. 42; Clark et al. 2013).



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Australia's superannuation system already accommodates behavioural biases, including by compelling employees to contribute to superannuation and by selecting default funds for members who do not actively choose a fund themselves. However, more generally, discerning the impact of behavioural biases in the real world can be difficult. For example, evidence suggestive of irrational behaviour could simply reflect changes in an individual's preferences or circumstances over time (leading to seemingly inconsistent behaviour) or an optimal response to complex tax or policy settings (for example, acting to minimise tax burdens).

The implication is that intervention to counteract biases must proceed carefully, as it can potentially lead to worse outcomes, especially where members' choices are constrained or there is diversity in individual circumstances. For example, the use of 'soft' default options can lead to poor outcomes where individuals do not seek out better options because they do not feel they have the skill to make their own decision, or because they perceive the default as an explicit endorsement of a particular action. In other words, there is a risk the soft default could end up being 'too effective' — by resulting in greater take up of the soft default but that rate of take up not being optimal for member outcomes (PC 2015b).

## **B.2 What decisions do Australians make?**

Australians make a wide range of decisions when it comes to superannuation. Most surveys and research to date have looked at behaviour in terms of choosing superannuation funds and investments. Other areas have received less focus, such as decisions about life insurance within superannuation and how members draw down balances in retirement, though some recent evidence sheds light in these areas.

### **Some members choose their superannuation fund, but many do not**

While estimates vary, the available evidence indicates that most Australian employees do not actively choose a superannuation fund, with up to two thirds using the default fund selected by their employer (box B.5). The evidence also suggests that very few people switch funds in any given year, with less than 2 per cent likely to be doing so voluntarily. (Switching from institutional funds to SMSFs is discussed further below.) This evidence is drawn mostly from surveys, since there are almost no official system-level data on fund switching behaviour.

A handful of studies have looked in greater detail at what informs members' choice of superannuation fund. In one survey, 16 per cent of respondents said they chose their fund based on recommendations from others (financial planners, friends, family or colleagues); 2 per cent cited advertising and only 5 per cent cited detailed research (FSC 2013a).

A more recent survey found that many people who switch do not consider more than one option: just over half of respondents who said they had chosen their own fund had made

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comparisons between options (with 42 per cent considering funds from different companies and 12 per cent considering different funds offered by the same company) (ANZ 2015). Another survey found that about 70 per cent of people who switched funds sought some form of advice when doing so (Roy Morgan Research 2016).

Also drawing on survey data, researchers have found that a quarter of members who were in a default fund deliberately chose to remain in that fund (Butt et al. 2015). Many indicated that they trusted their fund and the way the superannuation system is regulated. Respondents were more likely to actively choose a fund or investment option if they had a higher level of financial knowledge and skill or if they regarded the default fund as unsuitable for them.

### **Box B.5      How many members choose their superannuation fund?**

#### **Default rates are high**

Regulator data show that, as of June 2015, about 51 per cent of all superannuation accounts were in MySuper (default) products — equivalent to 21 per cent of assets in the superannuation system (APRA 2016e, 2016i). It is not clear from these data how many *people* are in a default fund, since many people have more than one account and funds do not have to move existing default members to MySuper products until 30 June 2017.

Several surveys have found that about two thirds of employees are in a default fund. In a recent survey, 58 per cent of respondents said they were in the default fund chosen by their employer (Butt et al. 2015). This result is somewhat lower than the 68 to 74 per cent of respondents who indicated as such in three earlier surveys (Colmar Brunton 2010; FSC 2013a; PC 2012).

However, these figures are likely to be overestimates of how many people do not choose their superannuation fund. Butt et al. (2015) found that 26 per cent of respondents who were in a default fund said they had actively chosen to remain in that fund, suggesting that only 43 per cent of respondents (across all funds) did not make an active choice of fund.

#### **Switching rates are low**

Other evidence shows that only a small proportion of members switch funds. In the three years to November 2015, an average of 3.2 per cent of superannuation products were switched annually (including switches to SMSFs), according to Roy Morgan Research (2016). A 2012 survey found that 7 per cent of respondents changed superannuation providers in the preceding year (ASFA and Suncorp 2012), and a 2010 survey put the rate at 9 per cent (Colmar Brunton 2010).

However, not all switches may be voluntary. There is evidence that of the 3–4 per cent of people who switched funds in 2008, up to half may have done so because they changed employer or their employer changed default funds (Fear and Pace 2008). A survey in 2010 found that about 80 per cent of people who switched did so because they changed jobs or their employer changed the default fund (Roy Morgan cited in Cooper et al. 2010a). Using this latter statistic, the Grattan Institute estimated that at most 2 per cent of people switched funds in 2013 for reasons other than these (Minifie, Cameron and Savage 2015).

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## Not all members change their investment options

Estimates of the proportion of people who switch their investment options within their superannuation fund vary, though most suggest that it is less than a third. There is evidence that men are more likely than women to actively choose their investment options within their fund, and that older members are more likely to do so than younger members (box B.6).

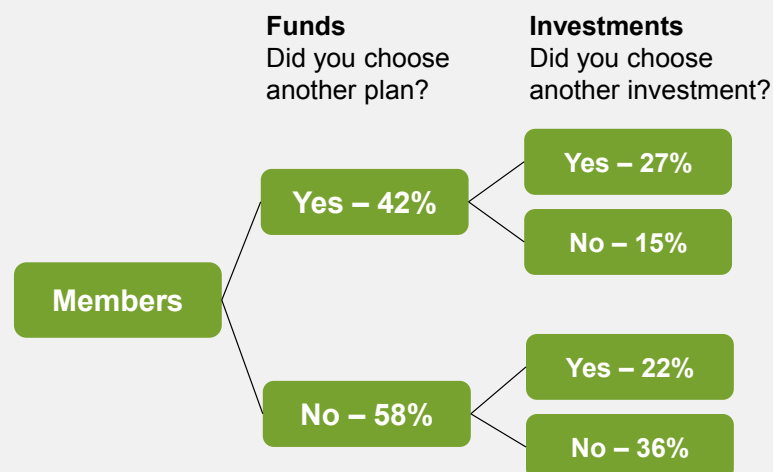
### Box B.6 How many members change their investment options?

#### Less than half of members switch investment options, but estimates vary

Estimates of how many members have selected investment options other than the default vary. An early survey put the figure at 54 per cent (ASFA 2010). Others have found much lower rates. Drawing on several sources, Cooper et al. (2010a) estimated that about 80 per cent of people in a default fund are in the default investment option and thus have not switched investment options. The Financial Services Council (2013a) reported that 33 per cent of survey participants had at some time changed their investment options (while 27 per cent did not know they could do this). Suncorp and the Association of Superannuation Funds of Australia (2012) reported that 15 per cent of survey respondents had changed investment options in the past year (while 5 per cent did not know they could do this), while Colmar Brunton (2010) reported 10 per cent.

Two recent studies have looked at investment switching in greater detail. Gerrans et al. (2015) found that only 19 per cent of members of a retail fund had changed their investment options over a ten year period. This is a much lower figure than that reported by Butt et al. (2015), who found that 49 per cent of survey respondents had switched investment options in their current superannuation fund, with a further 5 per cent having actively chosen the default option. The latter study also found that members who switched funds were also more likely to switch investment options.

#### Member fund and investment switching



Source: Butt et al. (2015).

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**Box B.6** (continued)**Some members are more likely to switch than others**

Several studies have found that, on average, men are more likely than women to make changes to their superannuation investments (Clark et al. 2013; Gerrans et al. 2015). There is also evidence that women tend to select lower-risk investments (Gerrans and Clark-Murphy 2004) and that members with higher balances or contributions are more likely to change investment options (Gerrans et al. 2015). Other studies have found age-related effects, with older members more likely to make changes to their investment options (Clark et al. 2013).

These findings are supported by a recent study, which found that people relying on defaults for their investment option were likely to be younger and have lower incomes, but performed only slightly worse than others on tests of financial literacy and numeracy (Butt et al. 2015). The study also found that people in the default investment option tended to have significantly lower risk tolerance, and this was not related to age. Older, more knowledgeable and higher-income respondents were more likely to switch their investment options.

Some researchers have also looked at whether members who switch investment options are relatively more engaged with superannuation. One study compared the actions taken by members of a large industry fund with their self-reported levels of involvement and interest in superannuation (Bateman et al. 2014). It found that while those expressing a high level of interest in superannuation were more likely to register for online services, they were not significantly different to less-engaged members in terms of choosing non-default investment options or purchasing additional insurance.

Few studies have examined how members in Australia switch investment options in response to external events. Gerrans (2012) found that only about 6 per cent of members (from a sample of five funds) changed their investment options between 2006 and 2009, with the proportion peaking around the time of the global financial crisis. Older and wealthier members were more likely to change their investment options, with a tendency to reduce exposure to shares as the market reached a low point, thereby crystallising losses. This aligns with anecdotal evidence that members tend to move their savings towards lower-risk investments at times of market volatility, despite the long-term nature of superannuation (AIST, sub. DR102; Women in Super, sub. DR97).

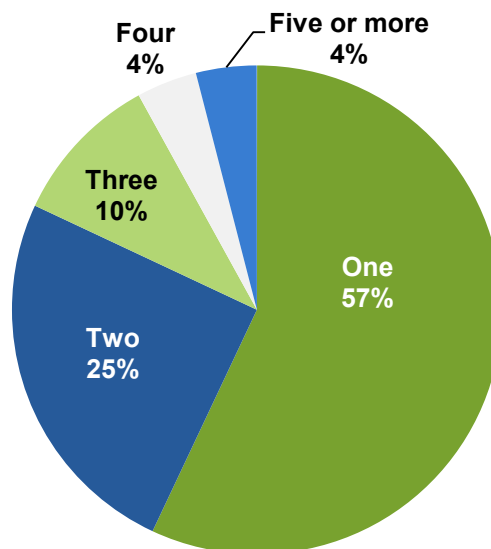
**Many members hold multiple accounts**

A significant number of Australians have more than one superannuation account. The Australian Taxation Office (ATO) has reported that, of approximately 14.8 million people with superannuation, about 43 per cent have more than one account (figure B.1) — a figure that has not changed materially over recent years. The proportion of people with multiple accounts is fairly even across genders and age groups, though the rate is much lower for people aged under 25 and over 60 (ATO 2016g).

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Figure B.1 **Number of superannuation accounts held**

Percentage of fund members, 30 June 2016



*Data source: ATO (2016g).*

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While some people may hold multiple accounts for good reasons (such as restrictions on choice of fund or to maintain insurance cover), others may be unnecessarily paying multiple sets of fees (and insurance premiums), which can erode balances over time. Survey evidence suggests that many people do not intend to hold multiple accounts. In one survey, few respondents reported having made a conscious choice to hold multiple superannuation accounts; most were in this situation because they had changed jobs (FSC 2013a). In another, almost a quarter of respondents with multiple accounts said they could not be bothered merging their accounts or that they felt it was not worth doing so (Colmar Brunton 2010). A further quarter said they did not have time or had not gotten around to merging their accounts, and 7 per cent said they did not know how to.

However, members can and do consolidate multiple accounts. In 2015-16, about 530 000 superannuation accounts (with an average balance of about \$4800) were consolidated online through the ATO (ATO 2016b). These comprised just under 2 per cent of all accounts at the start of that year. However, this figure does not include accounts consolidated through other channels (such as directly with funds). It is considerably lower than reported in two earlier surveys: one found that 17 per cent of respondents had consolidated their superannuation accounts in the past year (ASFA and Suncorp 2012), and the other found that 12 per cent had done so (Colmar Brunton 2010).

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## **Sources of advice are varied**

The available evidence indicates that members often draw on advice from others when making decisions about their superannuation. A recent survey found that 72 per cent of people who had switched funds in the past year had sought some kind of advice (Roy Morgan Research 2015a). Thirty-five per cent of the total used a financial professional (planner, adviser or accountant), with members holding higher account balances more likely to do so. Others drew on advice from employers (19 per cent), friends or family (12 per cent) and financial institutions (9 per cent). An earlier survey found that only 24 per cent of respondents had sought advice regarding their superannuation over the previous year, with two-thirds having relied on professional sources (Colmar Brunton 2010).

Recent research has looked in greater detail at the financial advice members seek from their superannuation funds. In examining members of a single retail fund over a 10-year period, Gerrans, Fiaschetti and Clark (2014) found that members who were female, older or had higher account balances were more likely than others to seek advice by telephone (although the gender and age differences were smaller for website-based advice). Related research found that members aged under 40 mostly sought advice on administrative matters, whereas those aged over 55 most commonly sought advice on retirement planning (Clark, Fiaschetti and Tufano 2016).

Other surveys have looked at the use of financial advice more broadly. For example, ANZ (2015) reported that 39 per cent of respondents had ever consulted a financial planner or adviser, with young people and those with lower incomes or savings significantly less likely to have done so. This survey also found that, of respondents using a planner or adviser, 29 per cent had selected them based on a recommendation from a friend or family member, and 57 per cent did not consider other planners from the same or different companies. Thirty-four per cent said they did not consider whether their planner had any conflicts of interest.

## **Over one million members are in self-managed superannuation funds**

While a large portion of Australians are members of institutional superannuation funds, a significant minority have elected to manage their own superannuation by setting up an SMSF (sometimes with professional assistance). As of June 2016, approximately 7 per cent of Australians with a superannuation account were in an SMSF, with 1.09 million members in 577 000 SMSFs (an SMSF can have up to four members). In the preceding year, about 30 000 new SMSFs were established (ATO 2016c).

Researchers have investigated why some people choose to establish SMSFs. Commonly cited reasons are to have greater control over investments, to choose specific investments and to reduce tax burdens (ASFA, sub. DR98; ASIC 2014a; Bird et al. 2016; Rice Warner 2012; SMSFOA, sub. DR108). Control and the ability to select specific investments tend to be stronger motivators for men compared to women (Women in Super,

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sub. DR97). SMSFs also allow members more flexibility to structure their superannuation in a way that takes account of non-superannuation assets and meets changing household needs (Dixon Advisory, sub. DR103; SMSFOA, sub. DR108). While there are indications that over half of SMSF members decided to self-manage their superannuation following advice from an accountant or financial adviser, there is also evidence that SMSF members do not have more financial skill than non-SMSF members (Bird et al. 2016). Appendix G explores the motivations for self-managing superannuation in greater detail.

### **Some members are unaware they hold insurance**

Insurance policies — covering life, total and permanent disability (TPD) and income protection — are often bundled with superannuation. Default funds are required to offer life and TPD cover to their members, who retain the ability to opt out (chapter 2). As of June 2015, 15.3 million accounts in APRA-regulated institutional funds had life insurance (53 per cent of all accounts), with 13.2 million (46 per cent) having TPD cover and 5.3 million (18 per cent) having income protection insurance (APRA 2016e).

Estimates vary on how many members (rather than accounts) have insurance cover through their superannuation. In one survey, 52 per cent of respondents indicated that they held life insurance through superannuation, and 6 per cent were unsure (Zurich Australia 2014). In another, 57 per cent indicated that their fund included a life insurance policy (FSC 2013a), though it is not clear how many of these respondents held such insurance themselves. In the same survey, nearly a quarter of respondents did not know whether their fund included a life insurance policy.

While various other estimates are available for how many people hold life, TPD or income protection insurance, most do not indicate whether people hold these policies through superannuation funds. By some estimates, about two-thirds of life insurance is held through superannuation (CALC et al., sub. DR114; FSC, sub. DR110). A survey found that just under half of respondents held life insurance through superannuation by default, and that 20 to 25 per cent of insurance policies within superannuation had been actively sought by members (MetLife and Financial Services Council 2014).

There are also few data on how many people with insurance via superannuation have chosen to modify their cover or opt out (chapter 6). Similarly, there is very little (if any) evidence on the prevalence of duplicate policies, where members hold insurance through multiple superannuation accounts, or both inside and outside of superannuation (AIA Australia, sub. DR88; ASFA, sub. DR98).

There is also little evidence on how well members understand their insurance policies. In one survey, about four-fifths of respondents said they had never analysed the type and amount of insurance that suits their own circumstances (Zurich Australia 2014). Another survey found that two-thirds of policy holders did not know how much they were covered for (MetLife and Financial Services Council 2014).

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## **Most retirees draw down their wealth slowly**

An emerging body of research has examined how people choose to draw down their superannuation balances in the retirement phase. Recently, the Commission found that the majority of retirees use income stream products (mainly account-based income streams), with only 16 per cent of benefits taken as lump sums (PC 2015b). Evidence suggests that less than 5 per cent of balances are converted into guaranteed income products such as lifetime annuities (appendix D).

The evidence points to retirees drawing down their balances slowly, often at or near to the minimum rates required by law (PC 2015b; Wu et al. 2015) — though drawdown rates vary considerably across individuals (Reeson et al. 2016). This likely reflects that retirees are highly risk-averse and are effectively self-insuring against longevity risk and other uncertain future expenditures (such as health or aged care costs) (appendix D). Low drawdown rates could also reflect an excessive level of precautionary savings (PC 2015a) or behavioural biases, such as ‘anchoring’ to the minimum drawdown rates as a way of coping with the complexity involved (Reeson et al. 2016).

Some research has examined how people choose between different retirement income products. In a survey by ANZ (2015), only 28 per cent of respondents with a retirement income product said that they had considered several products offered by different companies. About half said they did not consider any products other than the one that they chose. This may indicate that many retirees may simply opt for the product offered to them by their superannuation fund without carefully examining the alternatives.

Other evidence indicates reluctance to invest in guaranteed income products that offer longevity risk protection. There are many potential reasons for this, such as an underdeveloped market, tax disincentives and access to other sources of income or wealth (including the Age Pension) (appendix D). Behavioural and cognitive explanations have also been put forward, including difficulty weighing up the long-term costs and benefits of different retirement income products, a perception that annuity products are a gamble on longevity, and a failure to fully take account of the long-term benefits of such products relative to more salient upfront costs.

## **B.3 Limitations in the evidence base**

The evidence presented above indicates that there is no typical superannuation member: decisions and preferences vary considerably. While some Australians are highly engaged in selecting funds, investment options and retirement products (or even self-managing their superannuation), others are relatively disengaged and rely on defaults.

In many cases, the drivers of member behaviour are difficult to observe. For example, low rates of switching between funds could indicate member inertia, high satisfaction with current funds, low employment turnover, high switching costs, or any combination of these



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factors. Disentangling the causes is important for understanding whether people are making good decisions given their circumstances, and for assessing how efficiently the system is meeting members' needs using the factors under its influence (chapters 5 and 6).

There are also limitations and gaps in the evidence base that make it difficult to assess the impact of member decisions on the long-term outcomes members attain from the superannuation system.

Sometimes the evidence provides a strong indication that people may be making poor decisions. For example, members who fail to consolidate accounts in three or more funds or who are simply unaware of whether they have (and are paying for) insurance through their superannuation are unlikely to be acting in their own best interest: their retirement incomes will be lower than otherwise.

But beyond these extreme cases, it is much harder to link decisions to potential or actual outcomes. This may be so for several reasons.

- There is wide variation in individual circumstances. What may be a good decision for one member (such as increasing the share of low-risk assets in their portfolio as they approach retirement) may lead to poor outcomes for others.
- Parts of the superannuation system are designed to help members achieve better outcomes. These include protections such as default arrangements (for funds and investment options) and the legal obligation for trustees to act in members' best interests. Members can also be assisted by information disclosure requirements, financial advice and other services (table B.1).
- Members in default funds or investments are not necessarily disengaged: some actively choose the default option after careful consideration of the alternatives (section B.2).
- Disengagement may not always lead to bad outcomes. Some members trust their fund to make decisions in their best interests, which can be sensible for members who lack the skills to make good investment decisions themselves, or who are young and thus many years from retirement. Indeed, the collective evidence seems to suggest that people get engaged with their superannuation when it matters (when they are older and/or have larger balances).
- Conversely, there is evidence that member engagement does not always lead to better outcomes — for example, where members make investment choices that unnecessarily reduce their superannuation balances — especially when members lack access to relevant information or have poor financial literacy (Behavioural Finance Australia, sub. DR55; CIFR, sub. 10; Gerrans 2012).

## Further evidence is needed

While there is a large amount of evidence available on how Australians make decisions about their superannuation, most is derived from ad hoc surveys or administrative data (for example, the transaction records of a single superannuation fund). Some experimental economic evidence (where people make decisions in a simulated setting in a laboratory) is also available.

These sources have strengths and weaknesses. While surveys offer considerable flexibility in the kinds of questions that can be asked, they may not always elicit reliable responses and have generally not been conducted in a way that allows longitudinal analysis (box B.7). To date, most have been cross-sectional. Administrative datasets are generally more objective and sometimes allow individual members to be tracked over time, but can be difficult to access (due to confidentiality) and generally only contain information on the outputs of decision making (rather than the reasons why someone made a particular decision). Experiments allow researchers to investigate specific behaviours in highly controlled conditions, yet they are costly to run and — for practical and sometimes legal reasons — generally need to be conducted in a simulated environment.

**Table B.1 What can help members to make better decisions?**

<i>Reason for difficulty</i>	<i>Potential sources of assistance</i>
Complexity	Default arrangements (funds and investment options) Advice (formal or informal) MySuper product dashboards
Lack of useful information	Product disclosure statements MySuper product dashboards Information and reviews provided by superannuation fund rating companies Advice (formal or informal) Government-provided information, including on retirement incomes, aged-care options and healthcare costs
Low financial literacy	Educational materials and financial literacy schemes Government-provided information (such as websites) Default arrangements (funds and investment options) Advice (formal or informal)
Behavioural biases	Default arrangements (funds and investment options) Tailored default investment options ('smart' defaults) Careful design and presentation of options Advice (formal or informal)

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Further evidence is needed to better understand how Australians make decisions about superannuation and to link these decisions to specific outcomes (such as accumulation balances, retirement incomes or insurance cover). Key gaps in the evidence base include:

- how decisions and behaviour vary by age, gender, income levels, occupations and migration status
- changes in behaviour and risk preferences over the course of an individual or household's life cycle
- how members change their behaviour in response to new information, policy changes or external events (such as movements in share markets)
- the relationship between long-term outcomes (such as balances at retirement) and decisions made much earlier in life (such as investment decisions or whether to move away from default options)
- how people make decisions about insurance cover in superannuation, including how many have overlapping insurance policies both inside and outside of their superannuation
- how people decide to draw down superannuation balances in retirement, including the choice of account-based and annuity products
- the effectiveness of communication by funds in improving members' engagement and decision making in relation to superannuation
- the effectiveness of specific financial literacy programs.

In many cases, expanding the evidence base will involve collecting new data, but in some cases data may already be collected but have not yet been analysed. For example, while several recent studies have examined member behaviour using econometric techniques, the vast majority of survey data are simply reported via descriptive summaries. There is scope for more robust analysis of survey data using econometrics to distil the influence of specific factors on decisions and outcomes.

Chapters 5 and 6 further explore the evidence base in relation to specific indicators that can be used to assess the competitiveness and efficiency of the superannuation system. This includes discussion of evidence that system participants (including funds and regulators) can draw on to improve member engagement or to better tailor products to members. Chapter 7 provides further detail on what new evidence may be required to support the competitiveness and efficiency assessment.

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### Box B.7      **Superannuation surveys can be subject to biases**

A number of large surveys have been conducted in Australia in relation to superannuation. Some of these have been specifically about superannuation, whereas others have inquired into financial knowledge and behaviours more broadly.

All surveys referred to in this appendix have been based on large samples (typically over 1000 respondents), with researchers taking steps to target a representative snapshot of the population in terms of age, income, gender and other demographic characteristics. Most have been conducted online, though some have been based on telephone interviews.

While these surveys provide a wealth of information on Australians' financial literacy and some aspects of superannuation, at times the results can be difficult to interpret. The way that questions are phrased is highly variable, making it hard to interpret responses (if some participants interpreted the question differently to others) and to compare the results from one survey to another.

Indeed, the questions in some surveys have been criticised for drawing on self-reported behaviour or perceptions, rather than asking objective questions that are linked to the ability to make good financial decisions (Worthington 2013). Researchers that have compared self-reported capabilities with objective questions of financial knowledge have often found that many people overstate their ability (for example, Bird et al. 2016; Finke, Howe and Huston 2016). Recently, Australian academics have investigated how to ask financial literacy questions in a more rigorous way, drawing on the views of many experts (Louviere et al. 2016).

Nevertheless, the validity of survey results can also be compromised by biases arising from participant fatigue (respondents may not answer all questions carefully in a very long survey) and erroneous responses (participants may not have information on the details of their financial affairs to hand). Self-selection is likely to be a major source of bias in the results, since the types of people most likely to participate in financial surveys may be those who have higher financial literacy or are relatively more engaged with superannuation (AustralianSuper, sub. DR84). While biases in surveys can be minimised, they are difficult to eliminate.

Finally, most surveys to date have been ad hoc exercises that only provide a single 'snapshot'. Those that have been conducted at multiple points in time appear to draw new samples on each occasion (ANZ 2015; ASIC 2016c). While this means that the responses are directly comparable, they are not longitudinal: it is not possible to assess how *individual* members' decisions or outcomes may be changing over time.

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# C Corporate tenders

## Key points

- Corporate tenders are a method of selecting a default superannuation fund where an employer (or an agent of the employer) invites superannuation funds to compete for the right to provide default services to their employees. In the tender process, funds compete on product features such as fees, investment governance and member services.
- Where tenders are well-run, they can apply competitive pressure on funds to reduce fees, offer better services and improve investment governance. However, data are not available on whether these competitive benefits flow through to the broader market.
- Evidence that corporate tenders achieve consistently lower fees could be evidence of the benefits of corporate tenders to the employees involved, or evidence that the broader market for default superannuation is not competitive (or both).

This appendix considers how corporate tenders are run, the criteria that may be used to decide between competing bids, and what outcomes are achieved for members. At one level, these corporate tender processes may provide useful lessons for *developing appropriate criteria and indicators* to assess the efficiency and competitiveness of the superannuation system as a whole. At another level, corporate tender *outcomes* themselves may also tell us something about the nature of competition and efficiency in the system.

## C.1 What are corporate tenders?

There are two primary motivations for corporate tenders in superannuation. First, where an employer is choosing a default fund for their workforce, and second, where a corporate superannuation fund trustee is merging with a public-offer fund (also known as corporate outsourcing).

Employers are required to select a default superannuation fund for those employees who do not exercise their own choice. Most employers choose default funds from those available under awards or generally available in the market. However, rather than just choosing from among publicly available offers, large employers can invite superannuation funds to make better offers, including in the form of competitive tenders, and then choose the offer that best suits their employees.

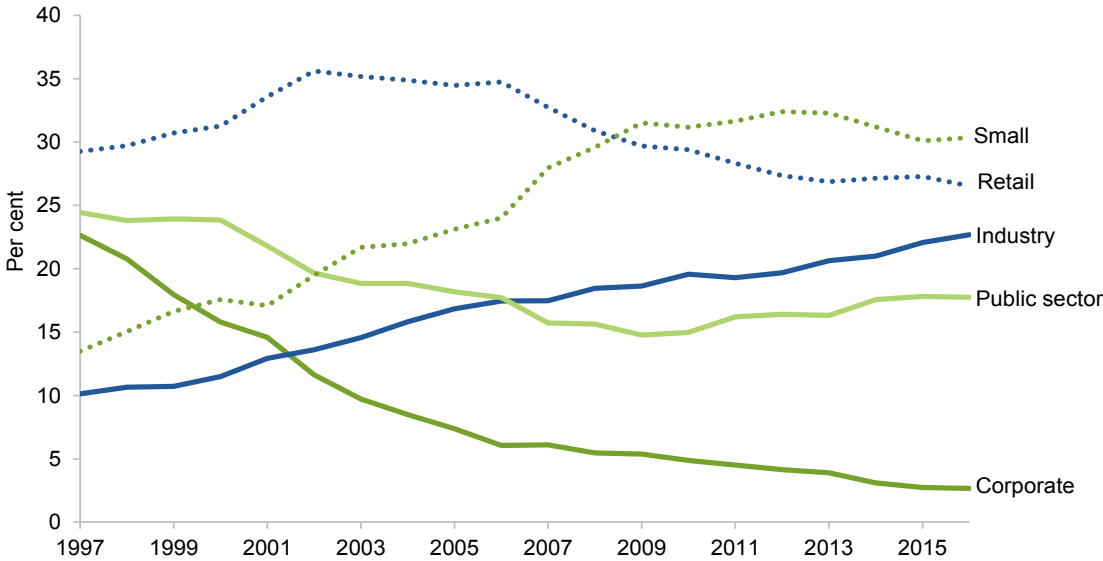
Corporate tenders appear to be more commonly run by very large companies where the number of employees (and therefore the size of the funds under management) is large enough to encourage funds to compete for the right to be the default provider. For

example, Australian Super (sub. DR84) submitted that the small number of their employers that tender for superannuation services (0.05 per cent of their 220 000 employers) are almost all large firms. Employer size is also relevant for the ability of the company to invest resources and develop in-house expertise (or outsource expertise) to be able to design a tender and analyse the offers. Corporate funds are declining in popularity in line with the growth of industry and other funds (figure C.1), from over 4000 funds and \$60 billion under management in 1997 to 32 funds and \$55 billion under management in 2016 (APRA 2014a, 2016h).

The process of rolling up a corporate fund and transferring members to a public-offer fund is similar to running a corporate tender, whereby offers are made by other funds, and trustees of the corporate fund assess those offers on the basis of the best interests of members. There are various reasons why an employer may choose not to continue sponsoring a corporate fund, leading to a tender process to transfer members to another fund. Reasons include:

- administrative inefficiencies
- the growing complexity of running a fund
- closure of defined benefit schemes to new members
- company mergers or other restructures
- a desire for a greater range of services than can be offered by a small corporate fund (such as the ability to report daily balances).

**Figure C.1 Percentage of superannuation assets by fund type**



Data sources: APRA (2014a, 2016e, 2016h).

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## C.2 The corporate tender process

There is no set format for a corporate tender, and the process can vary significantly. The main steps are set out in figure C.2. Tenders can be run by professional firms (for example, some accounting and consulting firms offer this service) or by the company itself. Where a corporate fund is no longer being supported by an employer, a similar tender process can be run by the fund trustee, with possible input from the employer and/or a professional firm assisting the tender. The Commission is not aware of any public data on the size of the corporate tender market.

The design of each tender, as well as the process by which a successful tender is chosen, can be different in every case, as companies place different weight on various aspects of the tender.

Tenders can be designed in multiple rounds, with only the funds shortlisted in earlier rounds invited to make formal tenders. Contracts may be of several years' duration, and arrangements may remain in place even longer, in order to outweigh the fixed costs of running a tender and transfer costs for all parties.

### Regulatory hurdles for transferring members between funds

'Successor fund transfer' is the process whereby a member is transferred, without the member's direct consent:

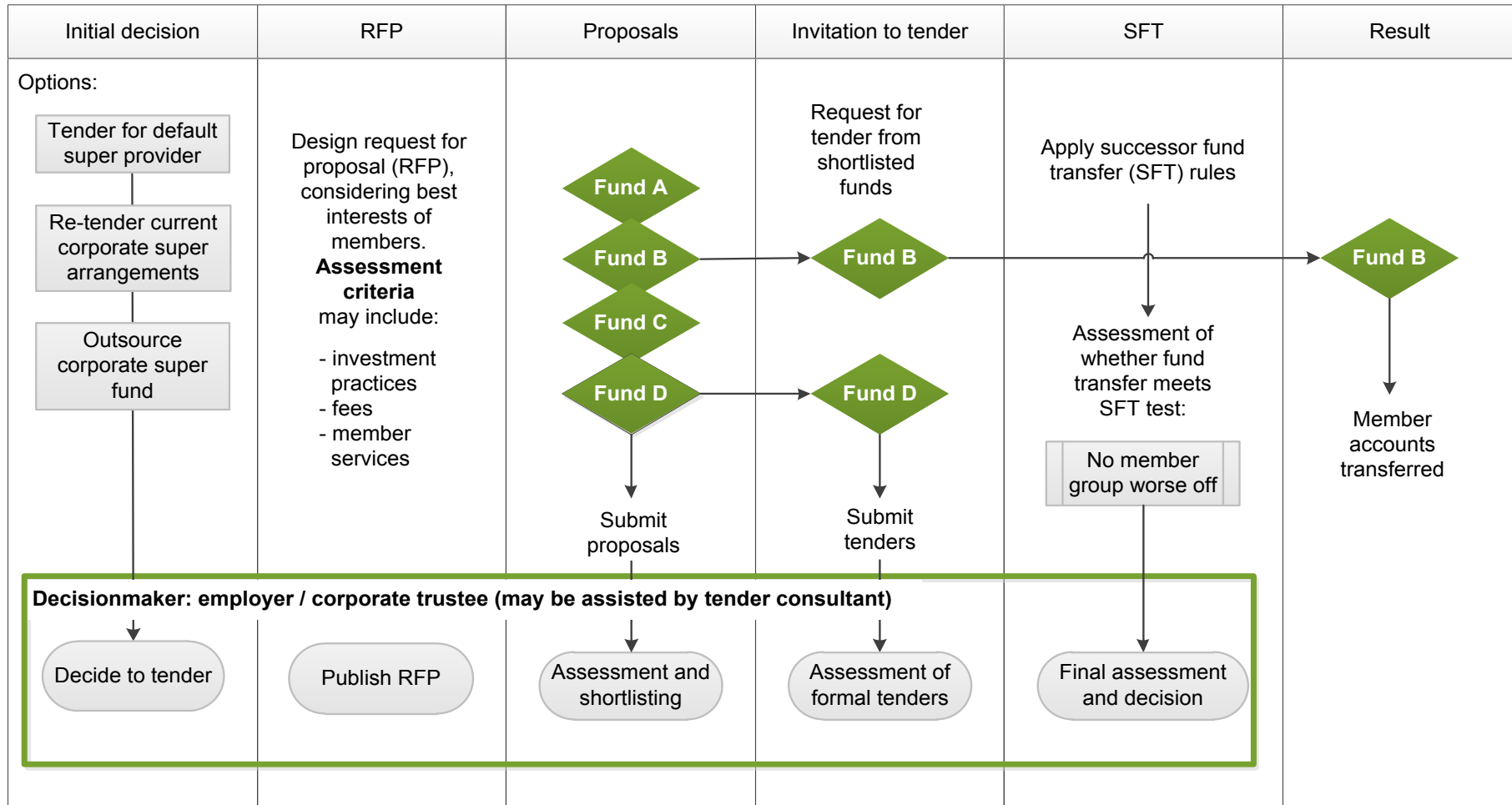
- to a different superannuation fund by the trustee of the fund being wound up (in the case of corporate outsourcing)
- from one default fund to another (in the case of a corporate tender where a different default provider is selected).

When members are being transferred without consent, the trustee of the new fund must agree with the trustee of the original fund that it will confer equal rights on the member. That is, 'the member's rights (in respect of benefits) in the new fund should be equivalent in value, measure, force and effect to their rights (in respect of benefits) in the original fund' (APRA 2001, p. 5).

Overall, the test for approving successor fund transfers is one of the more material hurdles for an employer considering a corporate tender. Mercer (sub. 31, p. 33) suggested that:

The current application of these requirements is that it discourages some potential successor fund transfers which, in turn, restrict fund mergers which could otherwise provide a better outcome to members.

Figure C.2 **Stylised sample of a corporate tender process**





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For example, providing ‘equivalent rights’ in a successor fund includes equivalent provision and conditions of insurance and method of calculating insurance benefits. The difficulty in comparing insurance products (and thus, the difficulty of satisfying the successor fund transfer rule) often results in insurance being excluded from a corporate tender, and members not transferring to the insurance provider of the new fund but keeping their previous insurance arrangements.

### What factors are considered in a tender?

In principle, a simple tender might focus on the fees and historic returns that each tenderer can demonstrate, as well as requiring trustees to compare the basic rights and benefits for members in the original and successor funds. More complex tenders might rank funds by a mix of hard metrics and qualitative evaluations.

Well-run tenders typically focus mainly on performance and fees, as well as insurance, investment strategy, administration and services to members and employers. Particular employers may also require funds to address other issues, for example corporate governance. (ISA, sub. 38, p. 37)

Past investment returns do not guarantee future returns, so investment capability, philosophy and governance will be important as a means of understanding future expected performance. Asset allocation is another key driver of investment returns. A more sophisticated assessment will typically consider issues such as the asset allocation strategy, the quality of underlying assets within each category, the asset diversification strategy as a means of improving risk-adjusted returns over time, and how adjustments to the strategy may be made over time. Box C.1 contains some sample assessment criteria.

A number of corporate funds have legacy defined benefit schemes — 9 per cent of all corporate fund member accounts are defined benefit accounts (APRA 2016e). These can complicate a corporate tender. For example, a tender might be a good deal for defined contribution members but not for defined benefit members. All member classes have to be better off in the new superannuation fund in order to pass the successor fund transfer test (above).

Weighting various aspects of a bid is difficult, however if done well, it can reflect the specific needs and wishes of a particular workforce.

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### Box C.1 Corporate tender assessment criteria

Based on Mercer's experience with large corporate tenders, the following are the key decision-making criteria, in order of importance.

- **Investment arrangements and expected investment returns** — such as the design and quality of the default (MySuper) investment option, and how life stages and sequencing risks are managed. The range and quality of options available to members who wish to exercise investment choice is also a key consideration.
- **Quality of member services** — such as helpline services, including availability of limited advice at no additional fee, and website and online resources, including retirement income calculators and member education material and services. For example, webinars (noting that the use of these services can increase fees relative to other funds).
- **Fees** — evaluated against breadth and quality of services, including investment arrangements.
- **Insurance premium rates and terms and conditions** — customised to suit the makeup of the employer's workforce, as these rates and conditions can vary considerably.
- **Administrative capability** — track record of delivery and depth of resources.
- **Governance quality** — this includes trustee and policy committee arrangements.

Mercer concluded that ultimately, these criteria are all about generating the best possible outcomes for members, not just minimising fees.

*Source:* Mercer (sub. 31).

## C.3 Outcomes of corporate tenders

The Commission heard many examples of successful corporate tender outcomes where high quality products were identified through a careful tender process and a high level of competition resulted in lower fees or better services for members. However, without further data, it is difficult to make broad conclusions about benefits for members.

There is some anecdotal and empirical evidence of corporate tenders delivering lower fees (box C.2), but given corporate tenders occur irregularly and in varying formats, data are often ad hoc and incomplete. Australian Prudential Regulation Authority (APRA) provides statistics on fee rebates and discounts for MySuper products, such as a discount of 85 per cent (on total fees that would otherwise be paid) offered by AMP Superannuation (the default fund for Woolworths' employees) to 415 000 members. However, across the 84 funds reporting to APRA on discounts, the median discount was only 2 per cent (APRA 2016d). APRA (2016e) has recommended caution when using these fee data, saying that the data collection is relatively new and, 'It will therefore take time for the information reported to APRA to reach an appropriate level of quality and consistency'.

The Actuaries Institute (sub. DR109) noted the outsourcing process is indeed highly competitive and discounts are obtained, but the landscape has changed rapidly and there is a tendency for corporate plans to involve some degree of subsidisation by the employer.

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These factors make it difficult to extrapolate findings to the broader superannuation system.

It has also been argued that it may not be in the interest of funds to report corporate tender outcomes, as it can make their standard default products look less attractive. Industry Super Australia (ISA) (sub. 38, p. 37) has voiced concerns about the lack of transparency and regulatory oversight of corporate tenders:

While corporate tenders have the potential to increase competition, problems including cost, lack of transparency, conflicts of interest and flipping<sup>35</sup> need to be addressed. There is no effective regulatory oversight of corporate tenders.

### **Box C.2      The tender process by large employers can reduce fees**

There is evidence that the tender process used by some large employers can reduce fees charged by superannuation funds. The Association of Superannuation Funds in Australia (2014, p. 39) noted that:

Fee-based competition has always been strong in the tender processes for default funds that have been undertaken by large employers.

The Grattan Institute (Minifie, Cameron and Savage 2015, p. 24) added that:

Large corporate tenders also pay relatively low investment fees, averaging 0.45 per cent ... Fees are often significantly below the fees of equivalent products offered to smaller customers. For example, one large corporate product has an investment fee of 0.45 per cent. It and a MySuper product with an investment fee of 0.61 per cent per year are managed by the same fund invested identically.

Murray et al. (2014a, p. 115) noted that some large corporations and governments within and outside of Australia already run successful tender processes for retirement income products:

Large corporate funds successfully run tenders. A number of other jurisdictions use competitive tendering in pension funds; for example, New Zealand, Chile, and Sweden. Governments around Australia run successful tenders, including the Future Fund, and the Northern Territory Government for its public sector superannuation scheme.

Industry Super Australia (sub. 38, p. 20) cited two sources of benefits for members:

A well-run tender can result in an employer replacing their default fund with a new fund which performs better for members. Secondly, the process results in the retention of the incumbent fund, but the employer extracts a better offering from that fund, particularly in relation to fees.

Lower fees for corporate clients could be the result of scale economies or ease of administration. Large corporations tend to have more sophisticated payroll systems, and corporate funds (which may deal with only one employer) have cleaner and cheaper contribution collection systems, making them relatively more efficient than other fund types. By comparison, industry funds often deal with a large number of very small employers, some with paper-based accounting systems. However, there are insufficient data available to make conclusions about the size of companies that run corporate tenders. ISA (sub. 38) gave an example of a corporate tender run by an employer with fewer than 80 employees, and one with over 6000 employees.

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<sup>35</sup> Flipping is described below.

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More detailed data on fees and costs are needed to determine where the cost savings are coming from. Under MySuper rules, cross-subsidies are not permitted, and any fee discounts must be offered only in relation to administrative fees, while investment fees must be uniform across all MySuper members in a particular fund (*Superannuation Industry (Supervision) Act 1993* (Cwlth)).

Another area where corporate tenders can achieve benefits for members is by overcoming behavioural biases such as inertia (appendix B). Corporate tenders may improve outcomes for members by comparing products at a level of detail that would be too costly for an individual member to engage in. This overcomes inertia by taking the decision out of the hands of individual members and pooling the effort and decision-making process, and can also result in allocative efficiencies where a product is tailored to meet the specific needs and preferences of a particular workforce.

However, there are costs and possible disadvantages associated with corporate tenders. The tender process itself can be costly for employers and superannuation funds. For example, employers can face ‘significant cost if a third party consultant is engaged’ (ISA, sub. 38, p. 26) and submitting tenders can also be costly: ‘one large Industry SuperFund reports having to submit tender documents that run to 140 pages’ (ISA, sub. 38, p. 55).

Further, due to the presence of principal–agent relationships — whereby the employer is making decisions on behalf of the employee — there is a risk that the corporate tender could consider features that are valuable to the employer but not members (such as compatibility with payroll systems). ISA (sub. 38, p. 55) has also suggested that employers can face conflicts of interest:

In some cases, following a corporate tender process, the employer selects a fund with which they have an association. For example, the fund is part of a corporate group which is also a key client of the employer or provides banking services to the employer.

Another practice that can disadvantage members is ‘flipping’, where members are transferred without their knowledge from a discount product into a full-fee product after leaving a particular employer.

... anecdotal evidence suggests that the practice of retail funds offering fee discounts as part of a corporate tender on the expectation that members will cease employment with the employer, enabling the fund to flip the member into a higher-fee fund without their informed consent continues to occur. (ISA, sub. 38, p. 20)

## **C.4 What lessons can be applied from corporate tenders?**

One of the key lessons from the corporate tender process is that, even where outcomes can be clearly articulated and understood (corporate tenders are generally run by one employer for a specific set of employees), it is very difficult for tender consultants to make comparisons and determine which provider is the most ‘efficient’. Significant judgment is

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required to balance competing considerations. These issues are proportionally more difficult to overcome for a system-wide analysis.

Corporate tenders can be difficult to design and adjudicate because they involve trade-offs between costs, quality of service, financial sustainability, and other characteristics of the service providers and their offers. This may be more difficult where tenderers try to mask particular costs and the bids are very heterogeneous and difficult to compare.

However, where corporate tenders appear to achieve better results for members, these results seem to be driven by features unique to large and highly-motivated corporations that typically have:

- a large number of employees (and a stable workforce)
- employees with larger account balances
- accounts that are more efficient to administer
- motivated employees who are able to tailor a product that suits their workforce
- employers with in-house expertise — or who are prepared to spend the money on outsourcing — and who can conduct the complicated process of designing a tender and comparing quantitative and qualitative measures to make the best decision.

In summary, the *process* of running corporate tenders provides some useful lessons for developing criteria and indicators to assess the efficiency and competitiveness of the superannuation system as a whole. The expertise and judgement needed to develop criteria and to evaluate the quality of the information (indicators) underpinning any assessment are similar for a specific tender and a systemic review.

Furthermore, the *outcomes* of corporate tenders themselves may be useful for assessing competitiveness and efficiency. If there is evidence that corporate tenders can consistently achieve lower fees, it could be an indicator of competitiveness, or an indicator that default members who do not have the benefit of a corporate sponsor are not benefitting from competition, or both. However, greater cost and fee transparency is required to properly assess the *source* of efficiency and cost savings in corporate tenders.

The draft report proposed ‘corporate fee discounts’ as an indicator in the competitiveness assessment. This received a mixed response from participants. While Mercer (sub. DR104) offered clear support, AIST (sub. DR102, p. 32) expressed reservations:

[We are] Concerned that this is an ambiguous indicator that is subject to gaming. The presence of a corporate fee discount is not an indicator of system competitiveness. An example of rate gaming occurs in the hotel sector where ‘rack rates’ are commonly significantly higher than the rate that hotel guests are charged. The rationale for high rack rates can be to capture marginal pricing benefits, but there may also be behavioural elements, which is that hotel guests feel good about discounts.

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We note that discounts are only available to large employer MySuper plans. This system relies on information asymmetries and members of these plans and others administered as part of the same fund or funds would benefit from full transparency.

We also note that small employers are unable to offer their employees these benefits, which may be an example of anti-competitiveness against small business. We question whether members of superannuation funds who work for the 90% of employers who are small businesses have a countervailing power. The presence of discounts can actually be a measure of uninformed customers.

The Commission acknowledges the interpretation challenges that accompany corporate tender outcomes. Interpretation of this indicator will therefore need to factor in whether a discount is coming from an artificially high base, and thus whether genuine countervailing power is being exercised. The Commission has also noted that corporate fee discounts could be an indicator of a lack of competition in the broader superannuation system (to the extent that such favourable outcomes do not spill over to other members).

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## D Retirement income products

### Key points

- Concerns about an underdeveloped market for retirement income products and low uptake of private longevity insurance have featured in several reviews of the Australian superannuation system.
- While there is currently very limited provision and uptake of longevity insurance products and only a nascent market for customised post-retirement investment products, it is challenging to draw strong conclusions from this evidence. Many factors are at play.
- Individual preferences and circumstances matter. Where people do not attach a great value to longevity risk protection in addition to the Age Pension, have a desire for flexibility, or a strong bequest motive, low uptake of longevity insurance is not symptomatic of a problem.
- Some policy distortions that lead to inefficient outcomes arise outside of the superannuation system, and could not be resolved within it. They include the availability and size of the Age Pension and the exemption of the family home from means tests for social security support.
- Some policy distortions within the system — in particular the non-neutral treatment of account-based and some longevity-protected income streams — may be a barrier to competition and dynamic efficiency. However, the Australian Government has committed to effectively remove those barriers by July 2017.
- Suboptimal outcomes may also arise due to behavioural and cognitive constraints of members. There may be a greater role for more customised products (including any defaults), underpinned by robust information about members. The effectiveness of policies to address behavioural and cognitive constraints — such as information provision, financial education and advice — could also be examined as a complementary indicator.
- Ultimately, an assessment of the sector needs to go beyond a simple examination of product diversity and levels of uptake. It should also focus on information, market and policy barriers to product development and the implication of those barriers for competition and efficiency.

Several recent reviews of the superannuation system have focused on the supply and uptake of retirement income products (Henry et al. 2010; Murray et al. 2014a).<sup>36</sup>

The Financial System Inquiry (FSI) concluded that low uptake and a lack of diversity in the products that would allow retirees to manage their longevity and other risks was evidence of overall inefficiency of the market.

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<sup>36</sup> The 2010 Cooper Review recommended that MySuper products include at least one product that spans the entire life cycle of members, including retirement. The Australian Government (2010, p. 18) noted this recommendation and committed to ‘consult with relevant stakeholders on whether post-retirement products should be mandated for MySuper products at some time in the future’.

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A well-functioning market would be expected to provide a wider range of products that meet different needs and preferences. This would allow people to combine products to achieve their desired levels of income, risk management and flexibility. However, there are tax, regulatory and other impediments to developing innovative retirement income products. (Murray et al. 2014a, p. 120)

The FSI recommended that to increase retirement incomes and facilitate the development of the market, members should be offered a default ‘comprehensive income product for retirement’ that includes a ‘regular and stable income stream, longevity risk management and flexibility’ (Murray et al. 2014a, p. 117). This recommendation was accepted by the Australian Government (2015a).

This appendix will look at the current status of the market for retirement income products, examine barriers to further product development and draw out any implications for efficiency and competitiveness.

## **D.1 Overview of the market**

### **What are the different options for withdrawing super?**

At a high level, members that meet the preservation rules can access their superannuation in the form of a lump sum, income stream or a combination of the two.

Most superannuation funds allow single and/or multiple lump sum withdrawals for retirees of preservation age and members who are over 65. Depending on fund rules, those members may also convert an existing income stream to a lump sum (commutation). There are no regulated minimum or maximum requirements for lump sum withdrawals for retirees. The superannuation benefit can also be received as a series of regular payments and be in the form of an account-based income stream or a guaranteed (non-account-based) income stream.

#### **Account-based income streams**

Account-based products are the dominant income stream product in Australia. These products are essentially managed investments with a minimum annual drawdown required by regulation (Australian Government 2014c). A key feature of this type of product is that members bear the full extent of their investment and longevity risks. Nevertheless, members retain scope to manage some of those risks through asset allocation.

Life-cycle and target date investment products are an example of a service growing in popularity in Australia and overseas. Such products seek to address the investment risks that are specific to the person’s age or stage in the life cycle. In Australia, the development of these products was stimulated by Stronger Super reforms, which allowed trustees to register a life-cycle product as their fund’s default investment strategy. While the reforms



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only covered the accumulation stage of superannuation, several life-cycle products try to cater to older member cohorts.

The concept behind life-cycle products is that the investment risk in the allocation of assets should reflect the investment and decumulation horizons of the member. Under the *Superannuation Industry (Supervision) Act 1993* (Cwlth) (s. 29TC (2)) and Regulations (r. 9.47), the factors that may be considered in designing a life-cycle product include the member's age, account balance, current salary, gender and estimated time before retirement. While life-cycle products tend to differ across providers, the general approach is to make the investment portfolio increasingly conservative as the investor ages (Basu, Doran and Drew 2012).

### Guaranteed and hybrid income stream products

In contrast, guaranteed income stream products, which are typically offered by life insurers, provide the member with a guaranteed income for a defined period or for life. Over the term of the product, the member is insured for investment and longevity risks. The sequencing risk is crystallised at the time of purchase, and thereafter the member is insured for any future sequencing risks. Guaranteed income products can take various forms and a large number of variants exist around the world (box D.1). The distinction between such products and standard investment products can become blurred, and some products share characteristics from both sides of the spectrum.

#### Box D.1 Types of guaranteed income stream products

There is a diverse range of types and payoff structures of guaranteed income stream products that exist around the world.

- *Lifetime annuities* — provide a guaranteed payment conditional on the survival of the annuitant.
- *Term annuities* — provide a guaranteed payment over a contracted term.
- *Guaranteed annuities* — provide a guaranteed income throughout the annuitant's life conditional on the survival of the annuitant to the payment date, and the payments are also guaranteed for a particular term, regardless of the annuitant's survival.
- *Joint life and last survivor annuities* — a lifetime annuity payable until the first or last death in a group.
- *Deferred annuities* — provide a guaranteed payment conditional on the survival of the annuitant to the payment date throughout the annuitant's life (deferred lifetime annuities) or for a maximum term (deferred term annuities); the commencement of payments is, however, deferred.

(continued next page)

Box D.1 (continued)

- *Variable annuities* — investment accounts, typically held with an insurance company, that provide some guarantees for decumulation, for example, a minimum income, duration of payments or value on termination (capital protected accounts).
- *Pooled annuities* and *group self-annuitisation schemes* — members of a group pool their investment and longevity risks, with the size of the payout to surviving members dependent on actual mortality of the group and investment performance.

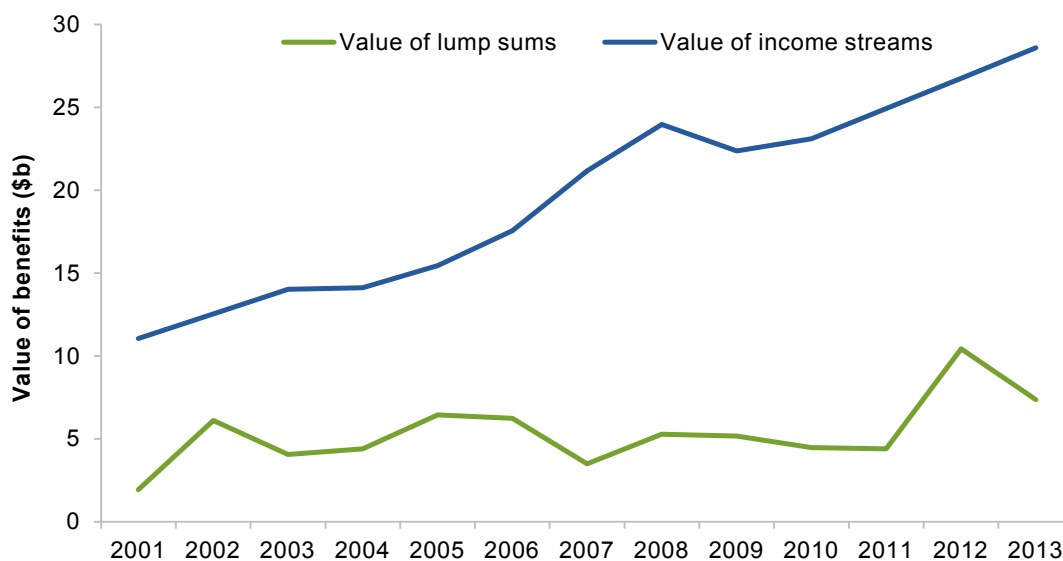
Sources: Fung and Shevchenko (2015); Ralston and Maddock (2015).

## Recent trends in the composition of retirement benefit products

### Most decumulation is through income stream products

Recent analysis by the Commission demonstrated that most of the decumulation of superannuation balances in Australia occurs through income stream products, rather than lump sums, with some estimates suggesting that the share of income stream products was over 80 per cent. Moreover, a substantial proportion of lump sums are subsequently invested, with over 30 per cent of lump sums being used to purchase financial assets (PC 2015b). And the share of income stream products appears to be growing over time (figure D.1).

Figure D.1 Total superannuation benefits over time



Source: PC (2015b).

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## Guaranteed income streams are a minority

While there are limited data on the size of the market for guaranteed income retirement products, most estimates suggest that it has traditionally been small, and that most income stream withdrawals have been in the form of account-based pensions. In a review of the history of the annuities market in Australia, Bateman and Piggott (2010) concluded that uptake of longevity insurance has always been low, irrespective of the policies in place. They noted that lifetime annuities held a niche place in the market between 1998 and 2004, when they were exempt from the Age Pension means test. After the exemption was phased out, the uptake of lifetime annuities virtually disappeared, with a 90 per cent decline in value between 2007 and 2008. Only 17 annuities were purchased in the first three quarters of 2009.

Over the past five years, the market for guaranteed income streams and in particular lifetime annuities, has grown. Challenger (sub. DR89) data submitted to this study indicates that lifetime annuity sales in Australia grew from about \$10m in 2009 to about \$400m in 2015. However, it is still a small market, with various researchers estimating that guaranteed income products make up about 5 to 6 per cent of the overall retirement incomes market in superannuation (DEXX&R 2016; Mercer 2014).

The market for annuities is also highly concentrated, with one provider (Challenger) accounting for over 95 per cent of the annuity market flows in 2013 on its own estimates (Challenger 2014). ASFA (sub. DR98) argued that high market concentration was due to low demand for the product. Similarly, Challenger (sub. DR89) contended that the market was contestable, with many life insurers operating in Australia, who would be able to offer annuities if demand for the product increased.

The low level of voluntary uptake of annuities is not unique to Australia. Around the world, there are very few examples of pension schemes that have achieved significant uptake of privately provided annuities in the absence of mandatory longevity insurance (Brown et al. 2016; James and Song 2001). This has led the researchers studying the phenomenon to coin the term ‘the annuity puzzle’.<sup>37</sup>

## Life-cycle products are simplistic and generally not used post-retirement

For people that choose to remain invested in their superannuation fund after preservation age, there are few investment options that are calibrated to their age and other circumstances. Life-cycle investment products currently account for a minor share of superannuation balances — about 12 per cent of all assets under management of APRA-regulated funds (APRA 2016a, 2016i). Only about one third of those products are

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<sup>37</sup> Some studies, including the Financial System Inquiry (Murray et al. 2014a) have claimed that Australia’s uptake of annuities was low by international standards. However, most comparisons of this nature fail to account for the role of policy. In most countries that have a high uptake of annuities, investment in this product is either mandatory, or subject to heavy policy incentives (such as tax concessions).

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explicitly tailored for post-retirement age groups, with most products either not specifying a maximum age, or prescribing a maximum age of about 65–70. An early assessment of MySuper life-cycle products found that the focus on ‘to retirement products’ rather than ‘through retirement products’ ignored retirement income needs of members (Chant, Mohankumar and Warren 2014). Challenger (sub. DR89) argued that this was in part because the obligations that govern trustees under MySuper do not extend to the retirement stage.

Furthermore, there is currently little evidence of tailoring of life-cycle products to individual circumstances of members. Chant, Mohankumar and Warren (2014) reported that in the vast majority of cases, life-cycle products were calibrated purely to the age of the member and that greater tailoring of products by funds was inhibited by lack of information about members. Fiduciarys Friend (sub. 7) argued that incorporating factors such as current income and projected retirement balances into life-cycle products was essential to ensuring allocatively efficient outcomes.<sup>38</sup> Moreover, even on the age criterion there is little consistency in the level of investment risk in the life-cycle products offered by different funds. For example, APRA data of MySuper life-cycle products offered to 65 year old members<sup>39</sup> in 2015 show that the allocation to cash and fixed interest assets varied between about 40 and 90 per cent of the overall portfolio (APRA 2015f).

Some commentators suggest that when constructing an asset portfolio for the transition and retirement stages, a focus on age is less instructive than a focus on the person’s consumption needs. The concept of goals-based investment suggests that the investment portfolio of a newly retired person should comprise separate buckets to reflect the various purposes for the funds, such as immediate expenditure, longer term income and emergency expenses (Cooper, Minney and Sainsbury 2014; Rice 2014). Rice Warner (sub. DR 112) provided an example of a product offered by the Australian Catholic Superannuation Retirement Fund, which draws on this approach, arguing that it offered an effective way of addressing sequencing risk.<sup>40</sup>

Ultimately, however, sequencing risk is only one of a number of investment-related risks confronting a person as they go through retirement, and several of these involve trade-offs in the investment strategy. In this context, the merits of life-cycle and other dynamic

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<sup>38</sup> Some funds are beginning to adopt life-cycle products that draw on additional information about their members. For example, QSuper’s accumulation life-cycle product is calibrated to both member age and investment balance (QSuper 2016). QSuper (sub. DR96) indicated that it is seeking to incorporate other member characteristics, including contribution rates and gender (to allow for career breaks and life expectancy differences), and that the same approach will be extended to the retirement stage in the future.

<sup>39</sup> Depending on the fund, the products are either tailored to an age band that incorporates this age or to the particular age.

<sup>40</sup> The product involves running a growth pool of illiquid assets (largely retained over the long term) alongside a ‘cash bucket’ which is used for regular pension payments. The cash bucket draws income from the growth pool or distributes excess cash to it, to always maintain the size of the cash bucket in the range of 2 to 3 times the size of the annual income nominated by the retiree (Australian Catholic Superannuation Fund 2016).

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investment approaches that progressively de-risk the asset allocation, vis-à-vis a more static asset allocation, is up for debate (chapter 6).

### Some members manage longevity risk through slower draw down of their savings

While account-based pensions do not provide an explicit protection for longevity risk, this risk can be managed by members through controlling drawdown rates. In a longitudinal study, Wu et al. (2015) found that age pensioners typically drew down 2.5 per cent of their assets per year until death, with lower wealth pensioners being net savers from an early stage of their retirement. That study found that the median pensioner who passed away during the survey period (1999–2007) left about 90 per cent of their wealth from the beginning of the period. CSIRO research (CSIRO Super Cluster 2016) of retirees aged in their 60s and 70s, shows that they draw down their account-based pensions at very conservative rates. Many are using the legislated minimum draw down rates as their default strategy.

There are several potential reasons for conservative spending in retirement, including lower private consumption needs in old age (coupled with greater reliance on publicly funded services). Nevertheless, the Commission and others (for example, Murray et al. 2014a; PC 2015a; Ralston and Maddock 2015) recently found that precautionary saving was a key driver of spending decisions of older Australians and that this might be resulting in lower than optimal consumption and unintended bequests.

## D.2 Barriers to further product development

### Demand-side barriers

#### The role of member preferences

The preferences of members play a significant part in the demand for income stream products that provide investment and longevity insurance. ASFA (sub. DR98, p. 68) argued:

Individual circumstances and preferences are an incredibly strong determinant of the availability of retirement income products. Demand is driven by a myriad of individual member decisions and — by and large — the average member prefers to acquire an account-based pension. Not only should member preferences and circumstances not be discounted, they are the driving factors — an example of market forces at work in a competitive market.

There are several trade-offs that could constrain demand for protection against longevity, investment and sequencing risks.

First, to the extent that such protection involves a switch to a more conservative portfolio (as with life-cycle products) or a transfer of all downside and *upside* investment risks (as with annuities), it has a cost in the form of foregone creation of wealth. That cost would be

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amplified with increased life expectancy (Rice Warner, sub. DR112). In this context, the conventional life-cycle investment approach of dealing with sequencing risks might not always provide superior protection against inadequate retirement incomes (ACTU, sub. DR78; Drew Walk and Co, sub. 26; MLC, sub. DR115; Rice Warner, sub. DR112; Estrada 2014).

Similarly, modelling by the Australian Centre for Financial Studies (ACFS 2015b) demonstrated that lifetime annuities generally deliver a lower return on investment than account-based pensions. ACFS concluded that for some retirees, investing all of their savings into an account-based pension is the optimal strategy, even after accounting for explicit longevity protection from the annuity (discussed below).

Second, there is a trade-off between a preference for a guaranteed stream of income and flexibility in being able to withdraw lump sums for unexpected one-off expenditure, for example an adverse health event. In contrast to account-based pensions, annuities generally do not provide such liquidity. Several studies have noted that such flexibility is important to members (for example, Murray et al. 2014a; PC 2015a; Ralston and Maddock 2015).

Third, products such as lifetime annuities are typically less well-suited to accommodating a preference for bequests. While there is evidence that this motive is in decline with the recent cohorts of retirees, it is still an important consideration (PC 2015a). In the past, lifetime annuity products were offered with no value on termination. There are products emerging that retain some residual capital value, which might have contributed to recent growth in demand (Challenger, sub. DR89), but these are still relatively new.

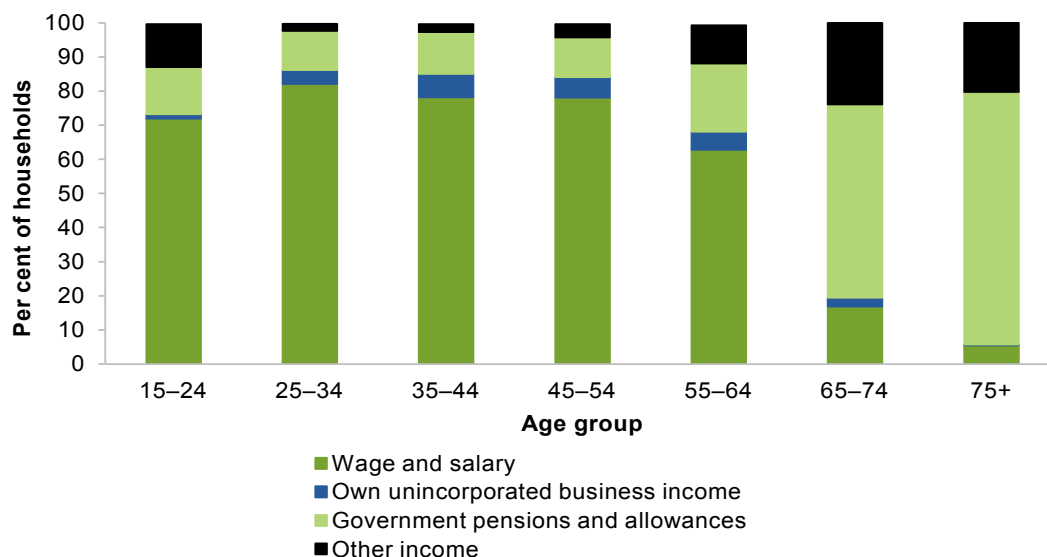
Fourth, while lifetime annuities offer protection for future investment and longevity risks, their price at purchase is typically locked by current or short-run market conditions. This makes them vulnerable to their own form of sequencing risk, where factors such as a low interest rate environment would make the product unattractive to a prospective purchaser (ACFS 2015b).

Ultimately, the desired level of longevity and investment risk protection depends on the person's tolerance for those risks and the value they attach to managing or transferring them.

### Tax and social security settings

Demand for longevity insurance through superannuation savings cannot be viewed in isolation from other forms of longevity insurance already available to retirees. The Age Pension offers a form of longevity insurance and is the dominant source of income for the majority of retirees, with nearly 75 per cent of those aged over 75 relying on it for most of their income (figure D.2). The availability and size of the Age Pension is a natural constraint on the demand for privately provided longevity insurance.

Figure D.2 **Main source of weekly household income, by age group<sup>a,b</sup>**  
2011-12



<sup>a</sup> Observations are only captured if income is positive. <sup>b</sup> Age of household is defined as age of household reference person.

Sources: Commission estimates based on ABS (*Survey of Income and Housing, Australia, 2011-12 Basic CURF*, Cat. no. 6541.0.30.001).

The ACFS (2015b) modelled several representative scenarios to examine the relative wealth and longevity risk implications of alternative retirement income products. It concluded that for low wealth and low income retirees the Age Pension provided sufficient longevity protection, and the optimal strategy was to convert the entire superannuation savings into an account-based pension. The modelling showed a stronger case for using lifetime annuities for a part of the savings, as the wealth of the person increased and they became less reliant on the Age Pension. Similarly, modelling by Iskhakov, Thorpe and Bateman (2014) showed that current Age Pension settings largely crowd out the incentive to purchase a lifetime annuity. According to that modelling, the optimal strategy for those with balances under \$200 000 was zero annuitisation. Retirees with higher levels of wealth benefited from some annuitisation, but that level generally did not exceed 25 per cent of wealth at retirement.

### Current disincentives in the tax and social security settings for some types of annuities

Several reviews have argued that deferred annuities, pooled annuities and variable annuities are disadvantaged by the current tax and social security arrangements relative to other income stream products (Murray et al. 2014a; Treasury 2016a).

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Currently, tax exemptions apply to income derived from assets supporting superannuation income streams during decumulation. However, eligibility for the earnings tax exemption is limited to income stream products that meet a set of rules contained in the Superannuation Industry (Supervision) Regulations 1994. There are two key rules.

- Superannuation income streams must make payments at least annually.
- For non-account-based products, payments cannot vary from year to year, other than to increase consistently by a certain percentage, or vary with the consumer price index or average wages.

The first requirement effectively disqualifies deferred annuities from the exemption, because by design payments do not commence on purchase. The second requirement affects the eligibility of variable annuities and of pooled annuitisation schemes, because payments for those products could vary over time. For the former, this would be a function of investment returns, while for the latter it could be affected by mortality of group members.

The Treasury's review of retirement income stream regulation recommended that separate tax exemption rules should be introduced for non-account-based income stream products (Treasury 2016a). Under the new rules, such products would qualify for exemptions. The Australian Government accepted this recommendation (O'Dwyer 2016a).

### Other sources of wealth also play a role

The Commission recently examined the role of owner-occupied housing in financial decisions of retirees and found that the family home played a key role as a vehicle for precautionary saving of older Australians (PC 2015a). Moreover, housing is a significant part of consumption for the majority of older Australians — so home ownership offers a form of consumption annuitisation in and of itself (Lloyd 2014). There are some disadvantages to using the family home in this manner, in particular the illiquidity and high transaction costs in drawing out equity whether through outright sale or via an equity release product. However, the incentives of retirees, and their attitudes to using the family home as a form of financial insurance in retirement, have been entrenched by decades of policy settings. Specifically, the family home is exempt from the Age Pension means test and is also subject to various exemptions or concessional treatment in the means tests for aged care support.

### Demand can be affected by cognitive constraints and behavioural biases

While lifetime annuities and their variants deliver a simple and transparent stream of income to the purchaser, the annuity valuation process is a complex exercise, for both the suppliers and purchasers. There is emerging behavioural research indicating that cognitive constraints and behavioural biases distort the demand for lifetime annuities (appendix B; Lloyd 2014). Consumers face challenges in making decisions with long-term horizons,



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while assessing their longevity risks as well as balancing the trade-offs with other risks. Brown et al. (2016) concluded that this complexity and bounded rationality of consumers was one of the key reasons behind low international demand for annuities. There is also evidence of ‘framing’, where demand for annuities is sensitive to how the information is presented to the consumer. In this context, Hu and Scott (2007) applied a behavioural economics model to longevity insurance and concluded that consumers tend to perceive annuities as a gamble on their longevity, rather than an income product. Loss aversion and overweighting of small probabilities provide a powerful disincentive to uptake of such products.

In Australia, these issues may be amplified by constraints on the purchase options for retirement income products. Specifically, members are unable to spread their purchase of a retirement income product over time through multiple premiums.<sup>41</sup> The Treasury, in its review of Retirement Income Streams (2016a), recommended that this constraint be removed, and the Australian Government accepted that recommendation (O’Dwyer 2016a).

### Adverse selection

Longevity insurance products may be vulnerable to the problem of ‘adverse selection’ (Murray et al. 2014a). The issue arises where prospective purchasers have more information about their life expectancy than providers of insurance, who would find it difficult to accurately tailor premiums to individual circumstances. This could lead to a tendency for self-selection bias on the demand side, where those who expect to live longer are more likely to purchase longevity protection. This bias would be reflected in higher prices making it unattractive for those with a shorter life expectancy. It would also limit the ability of providers to diversify longevity risk.

The FSI cited Challenger estimates of the cost of adverse selection:

Challenger estimates that for a 65-year-old male buying an annuity in the current environment, adverse selection lowers indexed annuity payments by around 7 per cent (from around \$6000 annually per \$100 000 premium to \$5600). (Murray et al. 2014b, p. 4.17)

Henry (2010) observed that the most effective way of overcoming the adverse selection problem in lifetime annuities was through a mandatory scheme, but this option was rejected on equity grounds, among others. The FSI (Murray et al. 2014a) cited experimental behavioural research by Bateman et al. (2013) that found default allocations to annuities could also overcome adverse selection (by creating a quasi-mandatory system), because most people tended to stay close to their default allocation.

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<sup>41</sup> The only exception is if the income stream had not commenced payments yet.

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## Supply-side barriers

### Regulatory and policy barriers to product development

The tax and social security disincentives on the demand side for deferred, variable and pooled annuities are also a barrier on the supply side. Several stakeholders in the Treasury (2016a) review, as well as participants in this study (for example, PWC, sub. 11) argued that those arrangements hindered the development of new products.

Beyond that, two inter-related supply-side barriers have been raised by participants in this and past reviews. First, stakeholders argued that there is a lack of clarity on how new and innovative products would subsequently be treated in the social security means test.

Second, several participants in the FSI (Murray et al. 2014a) and Treasury (2016a) reviews argued that administrative duplication and lack of coordination between responsible regulating agencies was leading to confusion and excessive compliance costs. Treasury noted that providers need to approach a number of government agencies including:

- the Australian Taxation Office (on compliance with the *Income Tax Assessment Act 1936* (Cwlth) definition of a superannuation income stream and eligibility for the earnings tax exemption)
- the Department of Social Services (on the treatment of the product under the social security means tests)
- the Australian Prudential Regulation Authority (on the prudential rules for managing the product within the provider's business)
- the Australian Securities and Investment Commission (on licensing).

In its response to the Treasury review, the Australian Government committed to clarify the treatment of the new deferred and pooled annuity products under the Age Pension means test, before July 2017 (O'Dwyer 2016a).

### Lack of competition

The general lack of demand-side competitive pressures in the superannuation system is well documented (chapter 5). Moreover, the retirement phase of superannuation has not traditionally been the focus of policy makers and is not explicitly targeted by MySuper regulations. Low levels of supply and innovation by funds and other providers of retirement income products could, in part, be a consequence of a market that has not been subject to sufficient competitive pressure.

One area for examination will be the extent to which account-based products are evolving to reflect the needs of members in retirement. This assessment could be informed by evidence of providers seeking to discover the circumstances and preferences of current and prospective consumers, as well as drawing on available information to tailor the products to those circumstances and preferences. A similar assessment would need to be undertaken

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for non-account-based products, but this would need to be cognisant of the other policy and regulatory constraints on the market to date.

A separate issue for the supply of guaranteed income stream products is whether the current market concentration is a symptom of a lack of competition and contestability. This would involve testing the provision of those products for exercise of market power, analysis of barriers to entry into the market and looking at whether the current market structure is generating benefits for retirees due to economies of scale.

### Information demands on providers

A key factor in the development of well-calibrated retirement products is the extent to which providers collect and utilise information about their members, particularly where member disengagement and cognitive constraints are preventing those market signals from emerging naturally. Providers trying to specify a comprehensive income product for retirement, as recommended by the FSI, face significant informational challenges.

MLC (sub. DR115, p. 19) observed:

It is not possible in a fund, such as the main master trust administered by MLC to set ‘ideal/best’ asset allocations for individual members in accumulation or retirement phases, as insufficient information is available. Data analytics may help to improve offers, or indeed in future, help design a number of ‘cameos’ based on a set of common but differentiated characteristics but again, this can have pros and cons — no individual will ever exactly ‘fit’ a given cameo. Engagement, along with appropriate, timely and accessible advice will generally deliver the most effective outcomes.

As noted by the ACFS (2015b), ideally providers would need information on:

- what sources of retirement income are available to the member, including income from the Age Pension and other assets
- how much income is required — which could be influenced by life expectancy, health, household composition, and would also need to account for preferences
- the member’s risk preferences, and the extent to which they could trade off their desire to minimise longevity and investment risk against flexibility and a bequest motive.

The Commission recognises that collecting very detailed information about members is not costless, and that in some cases information gaps may be very difficult for a provider to overcome, irrespective of cost. For example, while superannuation funds might have (or be able to collect) information at an individual member level, retirement income decisions are typically made at the household level.

The Commission’s early research indicates that the extent to which providers collect and draw on important information about members will be an important matter for assessment in the future review.

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### **D.3 Implications for assessment**

The above discussion illustrates the challenges for drawing simple conclusions about the competitiveness and efficiency of the superannuation system from evidence of low supply and uptake of income products that seek to manage investment and longevity risks of retirees. Many potential reasons could be at play. Some could relate to individual preferences and circumstances, in particular where people do not attach a great value to additional longevity risk protection, have a desire for flexibility or a strong bequest motive. In such situations, a low level of demand for longevity insurance is not symptomatic of inefficiency of the system.

Other barriers could stem from policy distortions and incentives formed outside the superannuation system, in particular the availability and size of the Age Pension and the exemption of the family home from the means tests for various forms of social security support. The combined impact of those factors is a potential barrier to the efficiency of the retirement incomes market, but not one that could be resolved within the superannuation system.

There are also some policy distortions within the system — in particular the non-neutral treatment of account-based and some longevity-protected income streams — that may be a barrier to competition and dynamic efficiency. However, the Australian Government has committed to effectively remove those barriers by July 2017.

And there are some non-policy barriers, in particular the behavioural and cognitive constraints that may be leading to suboptimal outcomes, and should be examined as a potential barrier to system efficiency. In this context, there may be a greater role for more customised products (including any defaults), underpinned by robust information about members. The effectiveness of policies to address behavioural and cognitive constraints — for example, information provision, financial education and advice — could also be examined as a complementary indicator.

Ultimately, an assessment of the sector needs to go beyond a simple examination of product diversity and levels of uptake, and focus on market and policy barriers to product development and the implication of those barriers for competition and efficiency.

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# E International approaches

## Key points

- Globally, pension systems have assets of over US\$25 trillion (OECD 2015). There are wide differences in funds under management as a percentage of GDP and in coverage across countries. This is mainly due to design differences on key aspects such as participation requirements and contribution rates.
- Most developed countries are embracing private, defined contribution pension schemes as an increasingly important part of multi-pillar retirement income systems. Mandatory or quasi-mandatory settings tend to be preferred, and default arrangements are moving towards centralised competitive tenders or large scale sovereign funds.
- The OECD produces publications analysing the performance of retirement income systems. This work provides guidance on system design and (more recently) compiles some information relating to the performance of private pension systems.
- There is a degree of consensus regarding some key factors that drive operational efficiency across jurisdictions. These include gaining economies of scale, both at the fund and system level, as well as the quality of governance practices of individual funds.
- Benchmarking funds or systems internationally is fraught with difficulty due to differences in policy settings and data standards. However, limited benchmarking, of funds rather than systems, is possible and credible by collecting data directly, and carefully unbundling it into comparable components.

This appendix seeks to explore what lessons can be learnt from looking at pension systems overseas. Section E.1 assesses the broad global trends in pension systems and the challenges ahead. Section E.2 provides an overview of the key lessons with regard to assessment frameworks and the common drivers of efficiency. Last, section E.3 examines cross-country comparisons — both at the system- and fund-level — and details the many difficulties inherent in such work and how these have been overcome in some cases.

## E.1 Global trends

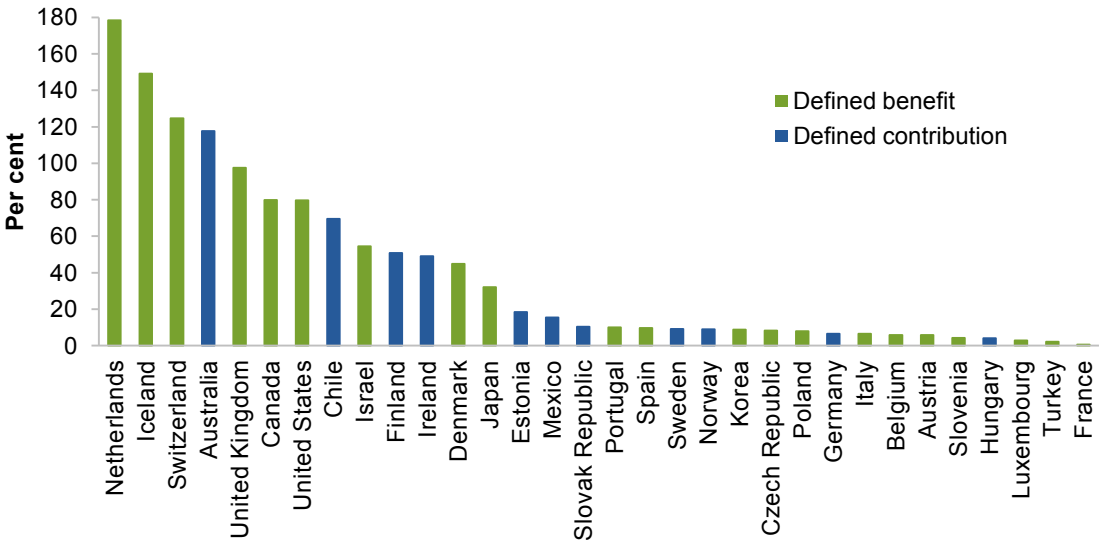
### Design and participation

Developed countries' pension systems have grown at a significant pace in recent times. The broad reform trend is characterised by an increasing focus on private defined contribution schemes and a declining use of public pensions and defined benefit schemes.

There are several factors driving these trends. These include ageing populations putting pressure on the sustainability of public pension schemes, and increased labour mobility undermining the ability of defined benefit funds to deliver adequate retirement incomes (Aaronson and Coronado 2005).

Despite these broad global trends, there is wide variation in the size (figure E.1), and coverage (figure E.2), of pension systems across OECD countries. This is primarily attributable to design differences on aspects such as contribution rates and participation requirements. At present, 18 OECD countries have mandatory or quasi-mandatory pensions, and a further eight have voluntary schemes. For example, New Zealand has an auto-enrolment defined contribution scheme with an opt-out option for new employees, and the United Kingdom’s recently launched National Employment Savings Trust operates in a similar fashion. Although there is a broad trend towards defined contribution models, not all countries are embracing this approach. Many European countries maintain large scale defined benefit schemes, and other countries, such as Poland and Hungary, have reduced or closed down defined contribution schemes in recent years (OECD 2013).

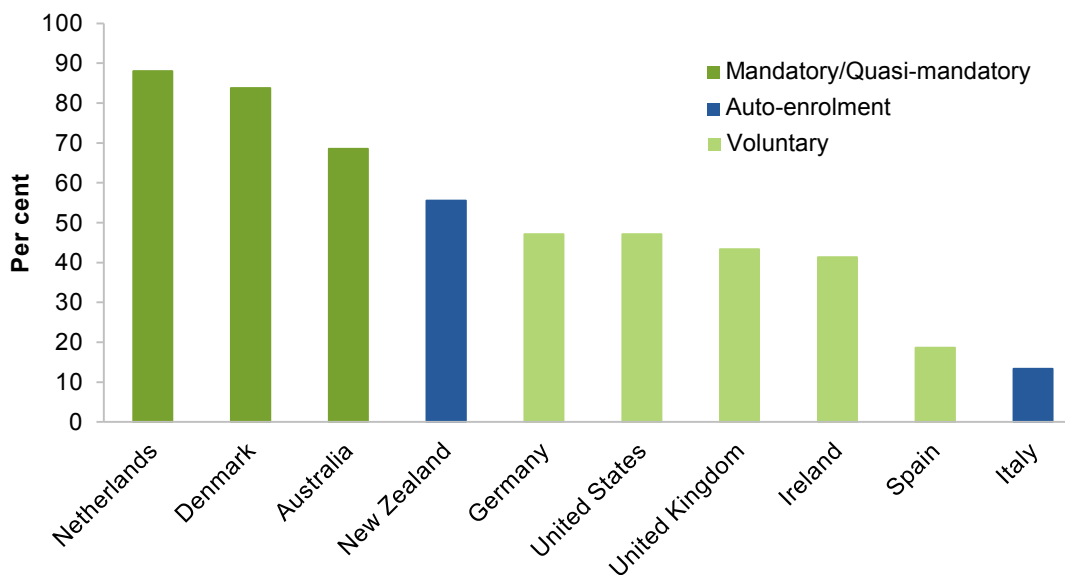
**Figure E.1 Pension system assets as a percentage of GDP<sup>a,b</sup>**  
 By system design (defined contribution / defined benefit), OECD countries



<sup>a</sup> Systems are classified as defined contribution or defined benefit based on the dominant arrangement in each country. <sup>b</sup> Defined contribution includes notional defined contribution, in which the rate of return is determined by government guarantee not market returns.

Data sources: OECD (2015, 2016b).

**Figure E.2 Private pension system coverage**  
As a percentage of the working-age population, select OECD countries



Data source: OECD (2013).

There is broad consensus that defined contribution plans are preferable to defined benefit plans from a society-wide perspective (OECD 2012b, 2013, 2015). An analysis of the risks in different pension systems shows that relative to defined benefit schemes, defined contribution schemes carry fewer risks and transfer some of the key risks to the ultimate beneficiary — the individual (table E.1). There are some hybrid schemes, and the distribution of risks in such schemes depends on which elements of defined contribution and defined benefit models have been incorporated.

## Pension system challenges

One of the key motivating factors driving the shift to private pension schemes is the ageing of the population. Globally, the percentage of the population aged over 65 is expected to increase from 8 per cent currently to 15 per cent by 2050. As the proportion of the population living in retirement increases, the sustainability of public pension schemes is increasingly compromised. However, across OECD countries, it has also been argued that private pension systems have not adequately addressed longevity risk and that middle- and low-income earners continue to require public pensions (OECD 2013).

Citibank (2016) contended that both public sector pensions and private sector defined benefit schemes face growing challenges in the future. The total value of unfunded or underfunded public defined benefit liabilities for 20 selected OECD countries (including Australia) is estimated to be \$78 trillion. Citibank also identified substantial shortcomings

in private defined benefit schemes, arguing that ‘corporations have also not consistently met their pension obligations and most US and UK corporate pension plans remain underfunded with an aggregate fund status in the US of just 82 per cent’ (Citibank 2016, p. 3). Private defined benefit schemes in Australia are subject to regulatory oversight to ‘... enable[s] fund liabilities to be met as they fall due and for the value of assets to be sufficient to cover vested benefits’ (APRA 2013b, p. 4) (chapter 4).

More broadly, the OECD (2013) argued that private pensions have come under strong pressure due to distrust of the financial sector and a prolonged low interest rate environment. Further, they also contend that there is scope to improve the operational efficiency of private pension providers worldwide via more competitive processes, particularly for default contributions.

**Table E.1 Who bears the risks in different pension systems?**

<i>Risk</i>	<i>Details</i>	<i>Defined benefit</i>	<i>Defined contribution</i>
Investment	The risk that the market produces lower than expected returns	Employer	Employee
Longevity	The risk that a member outlives their savings	Employer	Employee
Wage-path	The risk that future wages do not match expectations	Employee <sup>a</sup>	..
Inflation	The risk that inflation will reduce the purchasing power of benefits	Employer/ Employee <sup>b</sup>	Employee
Accrual	The risk that benefits are not transferable from one employer to another	Employee	..
Insolvency	The risk that the plan sponsor declares bankruptcy and the plan is underfunded	Employee/ Government <sup>c</sup>	..
Sequencing	The risk that poor returns just before or early in retirement heavily impact final income	Employer	Employee
Salary replacement	The risk that working-life savings will produce an inadequate replacement rate in retirement	Employer	Employee

<sup>a</sup> In defined benefit schemes, benefits are often calculated using the employees final salary. <sup>b</sup> In defined benefit schemes, it is not uncommon for final benefits to be only partially indexed to inflation, or not indexed at all. <sup>c</sup> Some governments guarantee employee benefits in the case of employer insolvency. .. Not applicable.

Sources: Bodie, Marcus and Merton (1988); Broadbent, Palumba and Woodman (2006).

## E.2 Lessons

### International frameworks

The OECD conducts commissioned assessments of member countries’ pension systems. These are guided by the *OECD Best Practices in Pension Design* — a collection of objectives, recommendations and indicators spread across different publications. Although the OECD framework typically looks at the policy settings of retirement income systems



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as a whole, some of the criteria and indicators relate to the efficiency and competitiveness of private schemes similar to Australia's superannuation system (box E.1).

**Box E.1      The OECD roadmap for the good design of defined contribution pension plans**

In 2012, the OECD's *Working Party on Private Pensions* approved a list of 10 criteria to be added to the *OECD Best Practices in Pension Design* that would characterise a well-performing defined contribution pension plan. Some criteria relate to goals regarding **allocative efficiency**. For example, the following criteria are all aimed at ensuring products achieve high quality outcomes for members by ensuring benefit settings have a life-cycle orientation:

Ensure the design of defined contribution pension plans is internally coherent between the accumulation and payout phases and with the overall pension system.

Consider establishing life-cycle investment strategies as a default option to protect people close to retirement against extreme negative outcomes.

For the payout phase, encourage annuitisation as a protection against longevity risk.

Develop appropriate information and risk-hedging instruments to facilitate dealing with longevity risk.

Promote the supply of annuities and cost-efficient competition in the annuity market.

The following criterion is aimed at increasing demand-driven **competitiveness** by improving consumer engagement, access to information and financial literacy:

Ensure effective communication and address financial illiteracy and lack of awareness.

One criterion relates to **operational efficiency**:

Promote low-cost retirement savings instruments.

Two criteria relate to aspects more directly connected to policy settings than the competitiveness and efficiency of the superannuation system, such as ensuring participation and adequacy of retirement outcomes:

Encourage people to enrol, to contribute, and contribute for long periods.

Improve the design of incentives to save for retirement, particularly where participation and contributions to defined contribution pension plans are voluntary.

Last, the following criterion relate to **competitiveness** (via competitive defaults), and **allocative efficiency** (via ensuring consumers can allocate themselves based on personal preferences):

Establish appropriate default investment strategies, while also providing choice between investment options with different risk profile and investment horizon.

*Source:* OECD (2012b, pp. 1–2).

Further to this, the OECD publication, *Pensions at a Glance*, proposed a collection of performance indicators for private pension systems. These include coverage rates, funds under management and asset allocation, real net returns, operating expense ratios, and average administration fees (OECD 2013). However, there is a lack of specificity, as the framework is used simply to illustrate the overall state of a given retirement income system rather than to rank systems or to assess them against a particular benchmark.

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## Common drivers of efficiency

Researchers have identified a number of factors driving operational efficiency in pension systems globally (table E.2). Two factors that stand out as having a broad consensus and/or empirical evidence backing their importance are governance arrangements at the fund level, and economies of scale at both the fund and system level.

### Governance arrangements

Governance is essentially all mechanisms and processes by which firm decisions are made. Donald and Le Mire (2016) reviewed the literature and concluded that research into the impact of governance on the investment performance of pension funds globally is underdeveloped. However, they did identify some studies with noteworthy empirical findings linking governance with costs and returns. The aspects of governance that most commonly related to improved performance were the extent to which boards undertook performance targeting and evaluations of their fund, as well as board composition (independence) and board size.

A key issue with these studies relates to the measurement of governance. Some of the work involved creating indexes of governance quality in order to make regression analysis tractable (Ambachtsheer, Capelle and Lum 2008; Ammann and Zingg 2008). Constructing an index from a collection of indicators invariably involved some degree of judgment of what aspects are relatively important. Further, even for those that did not construct an index, there were large discrepancies in what was included in the regression equation. For example, Albrecht, Shamsub and Giannatasio (2007) focused on board-level information such as the number of independent directors, whereas others included variables such as whether particular information is publicly reported (Mitchell and Yang 2005). Another measurement consideration relates to data collection. Although most researchers were able to utilise publicly available data, some relied on self-reported data (Ambachtsheer, Capelle and Lum 2008).

Another issue relates to sample size and selection. Ammann and Zingg (2008) noted that information on larger funds was more readily available, potentially biasing their sample as it may be easier for larger funds to implement good governance practices. Further, Ambachtsheer, Capelle and Lum (2008), as well as Iglesias and Palacios (2000), conceded that their samples may be too small to robustly identify a relationship between governance and performance.

**Table E.2 Identified drivers of operational efficiency in international studies**

<i>Driver</i>	<i>Source</i>	<i>Notes</i>
Governance	Romano (1993)	Used a US panel dataset and concluded that there is an inverse relationship between public pension fund returns and the degree of political involvement (measured as the proportion of independent directors).
	Iglesias and Palacios (2000)	Used international data and identified positive relationships between private schemes (compared with public) and performance, as well as between governance quality and performance.
	Useem and Mitchell (2000)	Used US public pension fund data and found a positive relationship between 'good' governance practices and performance-enhancing investment strategies. Independent evaluations had a particularly strong impact.
	Mitchell and Yang (2005)	Used a panel dataset on US public pension plans and identified a positive relationship between particular governance practices and fund performance. Board independence stood out as a strong predictor of high returns.
	Albrecht, Shamsub and Giannatasio (2007)	Used a panel dataset of US public pension funds and identified a positive link between 'good' governance practices and fund performance. In particular, funds whose boards had authority over asset allocation performed relatively poorly.
	Ambachtsheer, Capelle and Lum (2008)	Used CEM Benchmarking data covering funds across different countries and identified a positive correlation between self-reported governance standards and performance.
	Ammann and Zingg (2008)	Used Swiss data and found a positive relationship between governance (target setting in particular) and returns.
	Kowalewski (2011)	Used Polish fund data and found a positive relationship between the number of independent directors and returns.
Scale	Lum (2006)	Used global panel data and identified a positive link between system scale and gross real returns.
	Bikker and De Dreu (2009)	Used US data and concluded that economies of scale largely explained cost differences between pension and mutual funds.
	Bauer, Cremers, and Frehen (2010)	Used CEM Benchmarking data to show that (internationally) investment management costs declined by over one-half from 33 basis points for funds under US\$1b to 16 basis points for funds over US\$50b.
	Musalem and Pasquini (2012)	Used a panel dataset on Dutch pension funds and found that economies of scale explained the strong dispersion in both administrative and investment costs across pension funds.
Design	Bikker and De Dreu (2009)	Used the same data as above and found that defined contribution operating costs were lower than those of defined benefit.
	Musalem and Pasquini (2012)	Used global panel data and found that closed and/or defined benefit schemes performed better than open and/or defined contribution schemes.
Passive investment	Lum (2006)	Used CEM Benchmarking data and found a positive relationship between active management, high-cost asset classes and costs.
Active investment	Beath (2015)	Also used CEM Benchmarking data, and contradictory to Lum (2006) above, found a positive relationship between active management and net returns.
Internal management	Miller and Flynn (2010)	Used CEM Benchmarking data on 363 defined benefit funds from around the world and concluded that internally managed non-US equities outperformed (in net returns) those that were externally managed.

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## Scale

Scale has been cited as important at both the fund and system level. Indeed, much of the literature on governance outlined above controlled for fund or system size and estimated statistically significant positive coefficients. At the fund level, there have been a number of studies finding links between economies of scale and operational efficiency in the Australian superannuation system (chapter 5). Globally, Lum (2006) used CEM Benchmarking data and found a global negative correlation between investment costs and funds under management.

At the system level, empirical work by Musalem and Pasquini (2012) concluded that higher gross returns were observed in systems that are larger, measured by FUM as a percentage of GDP. Centralisation measures are also often cited as a means toward improving economies of scale and operational efficiency. Such measures include a single default fund for all new employees, or streamlined payment flows and clearing houses. The Grattan Institute (2014) and the OECD (2012b, 2013) argued that a key lesson from international experiences is that central defaults and administration systems can reduce fees by increasing economies of scale. For example, Denmark created a centralised payment processing institution in 2012, while Chile first held a competitive tender for default status in 2010.

## E.3 Benchmarking and comparisons

### Attempts at benchmarking and comparing Australia internationally

There have been several attempts to benchmark Australian outcomes to those in other countries. Most of these revolve around fees. For example, the Grattan Institute (2014) analysed OECD countries and concluded that the fact that the Australian system has higher fees than most other OECD countries — in particular those with private pension systems of a similar size — indicated a shortfall of operational efficiency.

Deloitte (2014) attempted a similar project benchmarking fees and returns across Australian superannuation funds, relative to international experiences. The report found that there may be scope for lower fees in the Australian system, but also noted that the Australian system delivered relatively high gross returns over an extended period before the global financial crisis. However, the report noted that fees may not be directly comparable across jurisdictions.

Lum (2006) used CEM Benchmarking data to compare the investment management costs of a collection of European funds and Australian funds. The paper concluded that the substantially lower investment management fees of European funds (0.19 per cent compared with 0.44 per cent for Australian funds) were likely attributable to asset allocation. Australian institutional funds had a stronger preference for relatively higher-cost alternative asset classes such as real estate and infrastructure (13 per cent

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verses 6 per cent), and private equity and hedge funds (9 per cent versus 1 per cent), while European funds opt for larger allocations of low-cost assets such as fixed income (47 per cent versus 25 per cent). This is consistent with more recent OECD data which showed that the 15 large Australian funds surveyed, combined, had over 35 per cent of funds in alternative assets (land and buildings, unlisted infrastructure, private equity and hedge funds). European countries were generally well below this — almost all held less than 10 per cent in alternatives (OECD 2016a).

As part of the *OECD Working Papers on Insurance and Private Pensions*, the OECD benchmarked the investment performance of private pension systems from select OECD countries against a hypothetical portfolio that achieves the highest return possible for a given level of risk. The conclusions drawn from the analysis were that the performance of funds in most countries was below their potential, and that countries subject to stricter quantitative investment restrictions underperformed by a larger margin than those without such restrictions. However, the author cautioned against uncritical acceptance of these results (outlined in the following section) (Antolin 2008).

Composite measures have been used to rank systems internationally (box E.2). However, they typically focus on public and private pension systems combined, rather than the efficiency of the private system alone (although some of the sub-indexes relating to integrity are broadly relevant to governance-related criteria (chapter 6)).

## **Difficulties in making international comparisons**

### **Differences in policy, regulation and market settings**

Different policy and market settings are critical factors when trying to compare fundamentals like returns and fees across countries. For example, a substantial component of fees for any private pension fund are administration fees. These are likely to vary across countries with different regulatory landscapes and compliance costs, without necessarily reflecting the efficiency of the system or individual funds. Investment return comparisons are also complicated by the fact that countries vary in their relative use of defined benefit and defined contribution schemes. Many defined benefit oriented schemes have strong asset allocation stipulations that prescribe a conservative bias (OECD 2015). Furthermore, the level of competition in the upstream market for investment management is likely to affect final fees charged to members, and is also outside of the fund's control.

Antolin (2008) provided a detailed description of the differences in regulatory approaches that make like-for-like comparisons difficult. Looking across various OECD and Latin American countries, he identified three main sources of variation. First, the level of development of the system, and of capital markets more broadly, matters. Systems that are less developed, or based in countries with underdeveloped financial markets, tend to have stricter investment regulation. Second, countries with mandatory systems tend to have stricter controls on investment as governments assume a higher degree of responsibility, and therefore risk-aversion is likely a factor in policy formulation. Third, defined

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contribution schemes are often subject to stricter controls on investment than defined benefit ones. This is because the latter is guaranteed by the employer, whereas the former's value depends more closely on fund performance.

Several submissions also noted the difficulties in making international comparisons related to different policy landscapes (box E.3).

## Box E.2      **Some composite measures of pension system performance**

### **Melbourne Mercer Global Pension Index**

The Melbourne Mercer Global Pension Index (MMGPI) has been produced annually from 2009. In 2015, the MMGPI measured 25 retirement income systems against more than 40 indicators. These comprise a collection of 'yes' or 'no' questions, percentages, and other values, which are transformed and aggregated into scores out of 100 for the following three sub-indexes:

- adequacy (40 per cent) — the capacity of the system to generate adequate retirement incomes (indicators include the minimum and average pension relative to wages, and whether contributions are taxed concessionally)
- sustainability (35 per cent) — the long-term viability of the system in the face of fiscal and demographic considerations (indicators include the proportion of the working age population that are members of private pension plans, overall pension assets as a percentage of GDP, and current and projected life expectancy relative to the state pension age)
- integrity (25 per cent) — whether the system is operating primarily for members' benefit (indicators include whether private pensions need regulatory approval and supervision, and whether or not industry data are publicly available).

However, with regards to the index's relevance to this study, Mercer (sub. 31, pp. 19–20) noted that:

... the provision of data and comparable information is problematic in the pension space, particularly when one is comparing 25 countries with a range of languages, legislative backgrounds and societal expectations. In addition, the use of pension terminology is not consistent around the world.

The only indicator that the MMGPI uses that considers efficiency or competition is the assessment of costs which was discussed earlier in this chapter. However, the two proxies used for this indicator are not perfect and are merely indicative. Obtaining hard, reliable and truly comparative data for the pension industry around the world is very, very difficult.

### **Allianz Pension Sustainability Index**

The Allianz Pension Sustainability Index was created in 2004, and has been produced sporadically in various forms since. The latest release was in 2014. The Pension Sustainability Index differs from the MMGPI in that it does not address adequacy or integrity. However, it uses similar indicators to assess sustainability, separating them into three sub-indexes: demographics, pension system, and public finances. Indicators are transformed into scores out of 10, which are used to give each country an overall score out of 10.

*Sources:* Allianz (2014), Mercer and the ACFS (2015).

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### Box E.3 Submission comments relating to international comparisons

The broad consensus among study participants is that making international comparisons should not be a top priority for the study given the issues outlined above.

The **Centre for International Finance and Regulation** (sub. 10, p. 5) argued that ‘... obtaining a clean comparison (between funds from different countries) would seem problematic given differences across systems’.

**Mercer** (sub. 31, p. 18) noted the ‘... great difficulty in obtaining comparable international data and thereby making valid comparisons of quite different pension systems’, and that a ‘... lack of data across the whole pension industry hinders the validity of the international comparisons that are often made’.

**APRA** (sub. 32, p. 11) contended that ‘[c]omparisons of fee or cost levels between RSEs and international equivalents ... may therefore not be reliable or appropriate due to the different methodology used to calculate and/or attribute fees or costs or different regulatory approaches’.

The **Financial Services Council** (sub. 29, p. 26) claimed that a system-level benchmarking exercise ‘raises a number of challenges as Australia’s superannuation system is more complex than most international pension systems and requires superannuation trustees to deliver higher degrees of member services, insurance coverage and administrative support’.

**Industry Super Australia** (sub. 38, p. 35) submitted that ‘... there are very distinct aspects of the Australian system which impact the validity of (international) comparisons’.

University of New South Wales academic **Anthony Asher** (sub. 21, pp. 7–8) reasoned that to make international comparisons ‘[c]osts must be divided into administration, investments and advice.’ And therefore ‘[i]t will be difficult for the Commission to undertake an international comparison of costs’.

Last, the **Institute of Public Accountants** (sub. 22, p. 3) suggested that ‘... the application of international composite benchmark indexes to test efficiency in the system is limited given the different institutional settings and characteristics of pension funds that exist in different countries’.

### Reporting and data

A further consideration is the fact that data reporting practices and standards are likely to differ across jurisdictions. Fees and returns reported for one country may not be directly comparable with another, and simply collating datasets from various regulators is not likely to lead to valid conclusions. For example, most Latin American countries report returns gross of fees, while other countries report them net of fees. Furthermore, the netting of fees is often inconsistent, with some subtracting administration fees, some management, and some both (Antolin 2008). This means that for truly valid cross-country comparisons, only a dataset compiled by directly surveying the participating funds, such as that from CEM Benchmarking used by Lum (2006), can be used.

Chant West (2014c) argued that the Grattan Institute’s (2014) conclusion that the fees of Chile’s default fund were one third those of MySuper was based on an invalid comparison of the data. According to that analysis, the Grattan Institute compared fees that were just

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administration (Chile), with administration and investment together (MySuper). When taking this into account and re-comparing the two products, Chant West argued the difference was negligible and that the small discrepancy in investment fees was due to the highly conservative asset allocation preferred by the Chilean default fund.

In addition to differences in fee reporting standards, Antolin (2008) identified several key problems often present in pension fund performance data that make the comparison of investment performance across countries particularly difficult (box E.4).

Taking all these issues into account, (Antolin 2008) concluded:

As a result of differences in reporting frameworks and valuation methodologies, as well as differences in the regulatory environment, in the time-frame of their pension systems and, most importantly, because of differences in investment efficiency and idiosyncratic characteristics of each country pension system, it is meaningless to compare investment performance across countries using just reported returns.

### Overcoming these difficulties

International benchmarking can be credible if it is undertaken in a careful and considered way and focuses on very specific aspects of performance that can be compared irrespective of policy settings and market structure. These include:

- investment management fees and performance broken down by asset class
- the efficiency of specific administrative services.

By focusing on a single, well-defined metric, such an approach can overcome the issues caused by differences in policy settings outlined above. It also requires collecting fit-for-purpose data directly to overcome data comparability issues. CEM Benchmarking is an example of a firm that maintains a proprietary dataset to undertake benchmarking of pension funds. The necessity of these two steps essentially means that only the benchmarking of funds across countries, rather than systems, is credible.

In this regard, the draft report proposed an indicator of ‘investment management fees by asset class compared to other countries’. Participants generally expressed cautious support for this approach, continuing to emphasise the difficulties of international comparisons and the need to take all differences into account.

... the range of fees being compared should take into consideration all government and employer subsidies on behalf of members, and the analysis should ensure that quoted international fees include the same sets of fees that are charged — *whether reported or not* — as those charged/reported in the Australian system. (ASFA, sub. DR98, p. 35)

... care will be required to understand what fees/costs are included and not included in international data vs. Australian data. Tax considerations also add an extra dimension in Australia that is absent in most other countries. (Mercer, sub. DR104, p. 42)



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## Box E.4 Issues with pension fund performance data

### Performance bias

When calculating the aggregate performance of a group of pension funds in a country, some regulators use the relative weight (i.e. funds under management) of each pension fund at the end of the period. This leads to a bias in favour of funds that experience a higher performance over the observation period. This is because the funds with higher returns over a period will by definition have higher growth in their value over that period. The aggregate result is then a potentially significant positive bias in the system-level result.

### Overlapping returns

Some countries will only report overlapping data (for example, a 12 month moving average), from which other data forms cannot be deduced easily. Further, these metrics are often weighted inappropriately, leading to performance bias as detailed above.

### Inconsistent methodology control

Some countries, such as those in Latin America, and Central and Eastern Europe, have detailed regulations defining the methodology for calculating returns. However, other countries, such as those in Western Europe, North America and the Asia–Pacific allow for firm-level methodology when calculating returns.

### Inconsistent asset classification and valuation

Subtle differences in the meaning of ‘short-term’ or ‘long-term’ bonds, ‘domestic’ or ‘foreign’ shares, as well as what is captured by the ‘alternative’ category makes it difficult to measure the returns of a specific product relative to a hypothetical portfolio benchmark. Further, although most countries in the OECD used a typical ‘market value’ approach, several countries used alternative methods, such as ‘book value’ for certain bonds.

### Survival bias

Using only funds that are in operation at the end of a period to assess aggregate performance causes upward bias by failing to account for ‘failed’ funds that exited the sample during the period before the end of the observation period.

### Gross versus net returns

When comparing purely the investment performance of funds or systems across countries, what really matters is returns net of investment costs. This is made difficult by the fact that there is a lack of consistent and publicly available data on investment costs in most countries.

*Source:* Antolin (2008).



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## F Systemic stability and risk

### Key points

- The long-term stability of the superannuation system, and its potential impact on the financial system more generally, is an important consideration when assessing the system's efficiency and competitiveness. System stability is an important aspect of dynamic efficiency.
- There are distinctly differing views on the extent of systemic risk in the superannuation system.
  - Some experts have expressed concern about high levels of concentration in markets providing services to superannuation funds, such as administrative, funds management and custodial services.
  - The growth of the self-managed superannuation fund sector is also seen by some as a potential source of systemic risk in superannuation.
  - Others see superannuation as *adding* to financial system stability, particularly as it represents a major source of bank deposits and has a (relatively) long-term investment perspective.
- The relationship between competition and systemic stability is a complex one. Competitive processes within the financial sector typically lead to more efficient resource allocation but could also potentially create incentives for excessive risk taking.
- The criteria for assessing the efficiency and competitiveness of the superannuation system must reflect this complex relationship, and any potential trade-offs over the long term.

The superannuation system accounts for about one quarter of financial institution assets in Australia (RBA 2016a), a share expected to increase significantly as the system matures. It is therefore important to focus on the likely impacts of the superannuation system on financial stability.

Moreover, in the context of this study, the stability of the superannuation system, and its potential impact on the financial system more generally, is an important consideration when assessing the system's efficiency and competitiveness. In reaching conclusions about whether the system is efficient, it is important to assess the superannuation system's long-term stability. Similarly, in assessing the competitiveness of the system it is important to consider whether levels of competition impact on stability. The relationship between competition and systemic stability is complex, and the subject of considerable debate (Allen and Gale 2004). Most of the academic research on the topic relates to the banking system, and might not always be translatable to superannuation.

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There are distinctly differing views on the impact of superannuation on financial stability. Some experts are concerned about high levels of concentration in markets providing services to superannuation funds, such as administrative, funds management and custodial services. Others see superannuation as *adding* to stability, particularly as it represents a major source of bank deposits and has a (relatively) long-term investment perspective. This appendix discusses these differing perspectives, and consequent implications for assessing the competitiveness and efficiency of the superannuation system.

Following the release of the Commission's draft report, relatively few participants expressed concern about systemic risk arising from the superannuation system.

## **F.1 What is systemic risk?**

Systemic risk can be defined as the risk that an event at an individual firm or fund level could threaten stability of the overall system (Caruana 2010). Companies considered a systemic risk are sometimes referred to as 'too big to fail'. This is not always necessarily because of the company's disproportionate size, but also potentially because of its interconnectedness with other companies or funds. If a large number of funds rely on one provider, that provider could be a potential source of systemic risk. These companies have been described as 'too connected to fail' (Donald et al. 2016).

Related to systemic risk is 'systematic risk' (sometimes also called market risk). This risk is inherent to the entire market (Kazi 2008). It is unpredictable, unavoidable and unable to be mitigated through diversification, although individual entities may be able to use hedging and diversification strategies to mitigate some impacts.

At 30 June 2016 there were 144 licensees of Australian Prudential Regulation Authority (APRA)-regulated institutional superannuation funds (APRA 2016h). No single licensee has a market share of more than about 6 per cent (APRA 2016d). In addition, over \$600 billion of assets (or about 30 per cent of total superannuation assets) are held in self-managed superannuation funds (SMSFs) (APRA 2016h). Ownership and control of the sector is therefore quite diverse, possibly providing reassurance about systemic risks arising from market concentration.

However, the largest superannuation funds are still large in absolute terms (with the largest having just under \$95 billion in assets in June 2015) (APRA 2016d), and will become significantly larger as the system grows. Moreover, their *combined* behaviour could have consequences for local asset prices and financial volatility if they pursue similar strategies.

### **'Black swan' and 'butterfly' events**

In finance markets, a 'black swan' event is one that comes as a major shock to market participants and is considered highly significant. Such events are therefore likely to have a

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major impact on financial markets. The most recent black swan event was the global financial crisis (GFC).

Superannuation funds generally came through the GFC without major liquidity issues, although there were liquidity strains for some funds as listed and unlisted asset values moved disparately (and materially so) and some members moved into more conservative investment options such as cash. Overall, the Cooper Review (Cooper et al. 2010b, p. 174) concluded:

It is noteworthy that though short-term liquidity of some significant funds was challenged, most funds did not have liquidity problems and there was not a large scale flight toward what was perceived as the most liquid, or safe, fund or investment option.

Much of the concern expressed in Australia about systemic risk is focused not on major catastrophic financial events but on relatively minor shocks with the potential to reverberate throughout the system (so called ‘butterfly effects’) (Donald et al. 2016).

## **F.2 Where could stability issues emerge?**

There are a number of areas where it has been suggested stability issues could emerge in the superannuation system. These areas, their likely significance, and the ways in which regulatory agencies are dealing with them are summarised below.

### **Industry concentration at the service provider level**

As noted above, the major area of concern for those who see systemic stability issues in the superannuation system is the high level of industry concentration in some provider markets, and the linkages between many of the entities within the system. High rates of concentration in these provider markets are unsurprising, as one of the key reasons for outsourcing these services is to obtain economies of scale. In other cases, superannuation funds will be looking to specialised providers with expertise in particular areas. Concentration in these markets is likely to be consistent with promoting short-term efficiency.

The trend towards concentration in some provider markets was noted by Deloitte (sub. DR85, pp. 3–4):

Administration, in particular, has become increasingly complex with relatively low margins. If we were to exclude self-administration arrangements an industry fund has a very limited range of options: primarily Link/AAS, Mercer and Pillar. ... Likewise a new master trust provider, that doesn't opt for self-administration has the same limited range of options.

Some observers have, however, questioned the long-term implications of this with regard to stability. Recent work in Australia (Donald et al. 2014, 2016; Donald and Nicholls 2015) has explored the level of concentration and interconnectedness in the

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Australian superannuation system, and sought to determine the implications for systemic risks and stability. Findings from this work include that:

- there are high levels of concentration in a number of upstream service provider markets, including asset consulting, auditing, custody, insurance and actuarial services.<sup>42</sup> Donald et al. 2016 found the largest five providers of asset consulting services to superannuation funds held 96 per cent of the market, while for auditing services the equivalent figure was 92 per cent, and 84 per cent for custody services
- a small number of service providers are highly interconnected. Some are also part of large financial conglomerates
- the failure of an upstream provider — particularly custodians or member benefit administrators — with many linkages and interdependencies could become a disruptive issue for funds, due to the likely difficulties in finding an alternative provider in a realistic timeframe
- the question of who bears the risk in the event of an upstream provider failing depends in part on the legal form of the relationship between the parties (that is, whether contract, trust, agency or fiduciary), and in turn, how widely a local failure might resonate. Such a failure could result in financial loss and delay (for example, funds being temporarily frozen) for many people.

The impact of an upstream service provider unexpectedly closing would vary from case to case, but any such closure would cause disruption and short-term losses or inconvenience to potentially many members. This could reduce confidence in the superannuation system and have flow-on effects for other participants.

Many of the upstream providers involved in the superannuation system are not formally within APRA's supervisory jurisdiction, with the licensees of superannuation funds effectively responsible for the outsourcing decisions they make.

The Reserve Bank of Australia (RBA) has said:

In recent years, [outsourced service] providers have become more concentrated and most of them fall outside of APRA's regulatory mandate. Operational or financial failures at any of the large service providers could cause a material disruption to the superannuation system. Superannuation funds are legally responsible for managing their service provision and for developing contingency plans in the event of disruptions to outsourced services. Hence, it continues to be important that superannuation funds allocate adequate resources and focus to managing these risks. (RBA 2016b)

The absence of direct regulation of many service providers is seen by some as a cause for concern. APRA's licensee-focused prudential regulation has also been criticised, with some suggesting its focus on the system as a whole and systematic stability is inadequate.

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<sup>42</sup> These estimates of market concentration must be considered against the backdrop that much of the work done by organisations such as asset consultants could alternatively be done in house, so they do not necessarily reflect the competitive dynamics for such services.

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APRA noted that it seeks to determine whether there are broader issues influencing the entire industry or system that may require action. However, concerns remain.

Notwithstanding the statement ... in APRA's Supervision Blueprint that APRA does have regard for 'broader industry or process issues', it is clear that APRA still regards systemic issues in the superannuation system as a matter for ad hoc enquiry and not continuous attention. (Donald et al. 2016, p. 76)

## **A concentrated shift to the decumulation/retirement phase for many members is forthcoming**

Many have suggested the superannuation system will come under pressure as a large number of 'baby boomers' shift from the accumulation phase of superannuation to the decumulation (or retirement) phase. Rice Warner (2014a) has estimated that members in the decumulation phase will account for 44 per cent of total superannuation assets in 2043, up from about 30 per cent in 2013.

The Financial Services Council (sub. 29, p. 6) noted that this period of transition is now commencing.

The industry, however, is undergoing a period of transition as the baby-boomer generation begins to retire, shifting the balance between inflows of contributions and outflows of benefits for most trustees.

Industry Super Australia (2014a, p. 149) has highlighted the potential consequences for liquidity.

As demographic changes bite, it is quite possible that superannuation flows will be outward on a net basis, excluding investment returns. In such circumstances, superannuation funds may need to actively liquidate positions on an ongoing basis to meet obligations to the extent that those obligations exceed inflows plus crystallised investment gains. This will drive a system-wide shift toward greater liquidity.

The RBA (2016c, p. 37) has noted the need for funds to consider liquidity in coming years:

While net contributions have remained fairly stable in recent years, it is likely that outflows will trend higher relative to contributions as the population ages and more members enter the drawdown phase. Superannuation funds will therefore need to consider the associated liquidity implications.

Dixon Advisory (sub. DR103, p. 19) saw the period of transition as challenging for many funds:

Given the lack of experience for many of the default funds in managing an underlying portfolio with a net-outflow position, this is a significant risk to the sector.

Rice Warner (2014a, p. 33) has suggested that over the next 30 years as the system reaches maturity, net real cash flows will move towards neutrality as growth in superannuation balances and the drawdowns in the retirement phase cancel each other out.

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The shift of many fund members from the accumulation phase to the decumulation phase will put pressure on trustees, and potentially cause them to change investment strategies. However, it is unlikely that this issue would, of itself, create issues from a system stability perspective. While funds can never know the precise timing of superannuation payouts, superannuation is a long-term saving vehicle and ageing is predictable. Trustees should know the timing of the transition phase and adjust their investment strategies accordingly.

This is very different to the type of scenario that typically leads to liquidity concerns in the finance sector, such as a ‘run’ on banks.<sup>43</sup> Moreover, preservation rules and restrictions on maximum drawdowns also mean the superannuation system is not subject to ‘runs’ in the same way as banks.

Industry Super Australia (2014a, p. 150) noted that funds should be adequately prepared to meet pension payout obligations.

Payment obligations to beneficiaries in the form of pension payments must be in cash and reasonably on demand or as scheduled. This form of payment can be monitored and forecasted with a certain level of confidence based on a fund’s demographics and other information.

The conclusion that trustees should be adequately prepared for the decumulation phase is supported by regulatory arrangements explicitly requiring trustees to consider liquidity. Liquidity management plans are required, incorporating procedures for monitoring and managing liquidity, identifying circumstances that would represent an adverse liquidity event and outlining how a licensee would respond when such an event occurs. Each licensee must also have a risk management framework that incorporates liquidity considerations, identifying the level of risk the fund is prepared to tolerate, the strategy for monitoring that risk and the policies and procedures for managing it.

Overall, it is likely that the shift of many members to the decumulation phase will somewhat restrict the strategies open to trustees<sup>44</sup>, which could see the ‘liquidity premium’<sup>45</sup> available to members decrease. However, it is unlikely to present major liquidity problems for funds.

## **The increasing significance of SMSFs**

Some perceive the growth of the SMSF sector to be a potential source of systemic risk in superannuation, particularly as it is not regulated by APRA and there are many ‘mum and dad’ trustees who might not be highly skilled in making investment decisions. Pruge

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<sup>43</sup> Superannuation funds are not entirely immune from similar customer behaviour, and are potentially subject to liquidity problems if they have invested heavily in illiquid assets.

<sup>44</sup> To the extent these more conservative strategies involve increasing the proportion of assets held as bank deposits, this would increase the interconnectedness between the superannuation and banking systems. However, as will be discussed in section F.4, this could add to the overall stability of the financial system by providing banks with a reliable stream of deposits.

<sup>45</sup> That is, the additional return sought when investing in relatively illiquid assets.



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(2015) suggested that the growth of SMSFs and the subsequent potential for poor investment decisions could lead to losses that are material to the overall superannuation system. Such losses could increase retirees' reliance on the Age Pension, creating higher liabilities for taxpayers.

The RBA (2015, p. 21) has noted that increased borrowing — particularly by SMSFs — for property investment could, at the margin, introduce new vulnerabilities in the financial system by encouraging property speculation. APRA (2014b, p. 32) has stated that it:

... remains of the view that the risks associated with direct leverage are incompatible with the objectives of superannuation and cannot adequately be managed within the superannuation prudential framework.

APRA (2016f) has recently released (for consultation) revised guidance and reporting requirements for authorised deposit-taking institutions on residential mortgage lending, noting that loans provided to SMSFs give rise to unique risks that differ from those of a traditional mortgage, and that lending practices would be expected to reflect these risks.

Dixon Advisory (sub. DR103, p. 20), on the other hand, saw borrowing by SMSFs as being of little policy concern:

Direct leverage of SMSFs is a very small part of the financial system, accounting for \$2.3 billion of the \$4.9 trillion in total lending for residential property. Lenders still retain control over borrowing conditions, and have the discretion to approve the borrowing.

Stability concerns regarding SMSFs generally relate to direct leverage. There are also anecdotal concerns about SMSFs investing in a non-related trust that subsequently borrows to buy property. While this may not have the same stability implications as direct leverage, it may nonetheless expose SMSF members to poor investments.

These concerns, and particularly the potential for borrowing to drive speculative investments in property, represented a major reason why the RBA, APRA and the Financial System Inquiry (FSI) have all suggested the removal of the limited recourse borrowing exception (introduced in 2007) to the general prohibition on borrowing by superannuation funds (APRA 2014b; Murray et al. 2014a; RBA 2015). While the level of borrowing is relatively small, the FSI noted if the trend continued it could, over time, pose a risk to the financial system.

Although the level of borrowing is currently relatively small, if direct borrowing by funds continues to grow at high rates, it could, over time, pose a risk to the financial system ... In addition, such direct borrowing could also compromise the retirement incomes of individuals. (Murray et al. 2014a, pp. 87–88)

The FSI recommendation to remove the limited recourse borrowing exception for superannuation funds was not adopted by the Australian Government, which instead commissioned the Council of Financial Regulators and the Australian Taxation Office to monitor leverage and risk in the superannuation system and report back after three years (Australian Government 2015a).

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Notably, the FSI considered the implications of the overall growth of the SMSF sector and the implications for systemic risk. While some FSI participants argued for SMSFs to be brought within scope of prudential regulation by APRA, the FSI did not support this view, noting that ‘the defining characteristic of the SMSF sector is that trustee members are directly responsible for each fund and must take responsibility for their own decisions’ (Murray et al. 2014a, p. 234).

## **Lower returns encouraging greater risks**

The RBA (2014) has noted anecdotal evidence that the recent environment of low returns has prompted some Australian funds to increase the risk profile of their portfolios in order to maintain higher returns to members, possibly exposing members’ retirement incomes to an undesirable level of risk (and, from the perspective of this study, potentially causing asset allocations to be inconsistent with members’ risk preferences, thereby reducing the efficiency of the system). The RBA has also expressed concern that such behaviour ‘could potentially lead to asset prices outstripping market fundamentals’ (RBA 2014, p. 185), potentially contributing to financial instability by amplifying asset price cycles.

The RBA has particularly expressed concern about defined benefit funds. In a defined contribution system, risks relating to factors such as longevity, investment and inflation are borne by individual fund members. However, in a defined benefit system, these risks lie with superannuation funds and employers. Sponsors of annuity-based ‘whole of life’ income products confront similar issues. The RBA (2015, p. 17) has said:

In response to the persistent low-yield environment and the associated pressures on their funding ratios and cash flows, life insurance firms and defined benefit pension funds have altered their business models significantly. ... Firms in both industries have ... adjusted their asset allocations ... These shifts in asset allocation may have increased expected returns at the cost of greater exposure to credit risk, liquidity risk and asset price volatility.

The International Monetary Fund (IMF) (2015) has noted that pension funds in the United States could pose systemic risks to the financial system because pressure to improve returns could spur undue risk taking.<sup>46</sup> In the United States, 50 per cent of pension funds are defined benefit schemes, with 20 per cent being unfunded.

However, as Australia’s superannuation system consists predominantly of defined contribution funds (representing about 95 per cent of member accounts) (chapter 2), and annuity-based products have a low take-up rate, the nature of these risks is likely to be significantly lower. Industry Super Australia (2014b, p. 12) has noted that:

One benefit of [Australia’s defined contribution] structure is that superannuation should not be a transmission mechanism of financial risks. In countries where defined benefit schemes dominate, decreasing asset values due to financial market downturns (or increasing liability

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<sup>46</sup> The IMF also noted some of this risk has effectively been transferred to the insurance industry through ‘longevity swaps’ and other insurance.

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values due to falling interest rates) can adversely impact sponsoring employers, including threatening their viability. In such systems, pensions are one mechanism by which financial market crises are transferred to the wider economy.

As noted by the RBA (2015), fund managers and regulators must always be cautious in ensuring an appropriate risk profile for portfolios. Similarly, as noted earlier, APRA prudential standards require licensees to have risk management frameworks that incorporate the articulated level of risk the fund is prepared to tolerate, the strategy for monitoring that risk and the policies and procedures for managing it.

From the perspective of this study, to the extent lower returns might influence the decisions of trustees, they need to be factored into considerations about the efficiency of the superannuation system. Were the decisions of trustees inconsistent with the risk preferences of fund members, this would reduce the efficiency of the system. However, the risk–return preferences of members might change in a low-return environment given the need to ensure the overall adequacy of retirement incomes.

## **Peer risk**

Some participants have suggested ‘peer risk’ could represent a potential threat to systemic stability. Peer risk refers to the possibility that a large number of funds, seeking to minimise the risk of underperforming relative to their peers, could follow largely identical investment strategies.

A 2014 Centre for International Finance and Regulation survey of 20 superannuation fund executives received a number of comments expressing concern about herding behaviour among funds seeking to avoid being in the lower tiers of performance tables (Butt et al. 2014). As performance tables typically focus on the short term, peer risk can be amplified because of an overemphasis on short-term, rather than long-term performance.

The major concern from a systemic stability perspective is the possibility of such herd behaviour exacerbating the volatility of asset prices as balances are ‘herded’ into (and out of) particular asset classes. Another concern is that funds may persistently underperform if they fail to make investments in the best interests of members because they are too focused on ensuring their fund’s investment strategy is the same as other funds.

The Australian Institute of Superannuation Trustees (sub. DR102, p. 67) suggested two potential examples of peer risk:

If super funds were to shift collectively to passive management of Australian shares this would potentially lead to concentration risks. There is evidence that increased passive investment may have impacts on market volatility. The second example is if SMSFs moved significantly into a particular asset class such as residential property. This could overheat a market, but would also have implications from the withdrawal from existing assets. The large proportion of SMSF investments in bank deposits for instance could be impacted which would have systemic impacts due to the importance of deposits for bank funding under Basel III.

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The Commission considers peer risk represents an issue with the potential to impact the allocative and dynamic efficiency of the superannuation system — that is, the risk that trustees are not investing in their member’s best long-term interests. However, the possibility of peer risk within superannuation exacerbating the volatility of asset prices to the point where concerns arise about systemic stability is considered remote.

### **F.3 The nexus between competition and stability**

While the benefits of increased competition in the financial sector are widely recognised, there are some tensions between increasing competition and financial stability. For example, competitive processes within the financial sector can create incentives for excessive risk taking as entities seek higher performance relative to their competitors, potentially creating systemic risks (IMF 2013). Various studies have explored the trade-off between financial stability and competition in financial markets and there is no consensus view on nature of the relationship (Allen and Gale 2004; APRA 2014c).

APRA’s (2014c, p. 16) initial submission to the FSI distinguished between sustainable and unsustainable competition in the financial sector.

As the global financial crisis showed emphatically, weak prudential regimes can foster unsustainable competition and unsafe financial institutions cannot be relied upon to deliver on their financial promises over time.

Increased competition may provide a more challenging environment for prudential regulators. For example, Donald et al. (2016, pp. 76–78) noted a more widely dispersed market could be harder for APRA to supervise. Conversely, an industry made up of a small number of very large players might be relatively easy to supervise, but could lead to the presence of institutions considered ‘too big to fail’ because of their impact on the broader local market or economy more generally (IMF 2013).

The FSI, in discussing the possibility of introducing a new, formal competitive process for default funds, noted that such a process would need to be ‘carefully designed and implemented’ (Murray et al. 2014a, p. 114) in response to concerns it could lead to market disruption and instability.

Importantly, as noted by APRA (2014c, p. 23), financial stability and increased competition are not always in conflict.

The global financial crisis has dispelled any simplistic notion that there is a trade-off between financial stability and sustainable competition. It is often forgotten that the pursuit of financial stability and of competitive and efficient outcomes has the same ultimate goal, viz. to facilitate the efficient allocation of resources. The crisis fall-out ... has confirmed that stability is a prerequisite for a competitive and efficient financial industry; the objectives are not mutually exclusive.

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This is important when considering the nexus between competition and financial stability. To the extent that competition leads to more efficient resource allocation, this is likely to enhance the stability of the financial system. Similarly, for competition to be sustainable in the long term, superannuation funds and other players need to be financially viable. Policy makers and regulators must balance the competition and stability objectives without undermining either.

As is common worldwide, Australia's prudential regulator (APRA) must explicitly balance competition considerations with financial stability and a range of other objectives. Under the *Australian Prudential Regulation Authority Act 1998* (Cwlth), APRA's mandate is to balance the objectives of financial safety and efficiency, competition, contestability and competitive neutrality, with an overarching requirement to promote financial system stability.

The IMF (2013, p. 13) has suggested two potential ways of ensuring that the interplay between competition and systemic risk is adequately considered by regulators:

- assign traditional powers of competition policy to the prudential authorities
- ensure adequate coordination and consultation between the prudential and competition authorities, and introduce financial stability as a secondary objective of the latter.

In Australia, the Australian Competition and Consumer Commission is the main body responsible for competition law. Given APRA's involvement in competition regulation for the finance sector, there is a memorandum of understanding between APRA and the Australian Competition and Consumer Commission to facilitate policy coordination and information sharing between the organisations. The effectiveness of the coordination between the two bodies has the potential to influence the efficiency and competitiveness of the superannuation system.

The FSI expressed concern that current arrangements can lead to complacency on the issue of promoting competition.

The Inquiry believes there is complacency about competition, and that the current framework does not systematically identify and address competition trade-offs in regulatory settings ... It is not always clear how APRA and [the Australian Securities and Investments Commission] balance their core regulatory objectives against the need to maintain competition. Policy makers and regulators need to take increased account of competition when making regulatory decisions. (Murray et al. 2014a, p. 237)

To address these concerns, the FSI recommended reviews be undertaken of the state of competition in the financial sector every three years, improved reporting of how regulators balance competition against their core objectives, identification of barriers to cross-border provision of financial services, and the inclusion of competition considerations in the Australian Securities and Investments Commission's mandate (Murray et al. 2014a).

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## **F.4 Is the superannuation system a stabilising influence overall?**

Various studies and reports have highlighted features of superannuation (or pension) systems that make them inherently less risky than the rest of the financial system, suggesting the likelihood of systemic risk is low. This is a view shared by the RBA (2014) — which is responsible for monitoring financial stability — and the prudential regulator APRA. APRA (2014c, p. 58) has said that:

Generally, the superannuation industry poses less significant risks to financial stability than the banking and insurance industries. This is due to the largely defined contribution and preserved nature of superannuation. ... However, material losses or changes in asset allocation by a large proportion of superannuation funds over a short period could have system-wide impacts.

A number of reasons have been put forward to suggest that systemic risks in the superannuation system are lower than in other financial services (Antolin, Schich and Yermo 2011; ISA 2014b; Price and Schwartz 2015). These include:

- lower liquidity risk due to the compulsory nature of superannuation and the inability of investors to access their superannuation until they reach the preservation age. There are also relatively low levels of switching between funds, which further lowers liquidity risk
- the long-term investment focus of superannuation funds, which reduces the potential for riskier investments to boost short-term returns
- the lack of direct leverage in the superannuation sector
- the low degree of concentration and interconnectedness among superannuation funds when compared with sectors such as banking. APRA (sub. 32. p. 14) noted that ‘the superannuation industry is the least concentrated of the industry sectors that APRA supervises’
- the dominance of defined contribution funds in the sector, which potentially have less incentive to search for yield compared with defined benefit funds, because defined contribution funds do not currently offer a guaranteed income stream.

The view that superannuation funds may pose lower systemic risks than other financial institutions is also supported internationally. Indeed, the IMF (2013, p. 18) has stated that non-bank sectors in which credit provision and investment do not involve leverage or liquidity mismatch potentially provide greater resilience by providing an alternative funding source.

Further, the Financial Stability Board and the International Organisation of Securities Commissions (2015) are seeking to determine which non-bank, non-insurer (NBNI) entities should be classified as systematically important financial institutions.

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In their most recent consultation paper, they proposed to exclude pension funds from the NBNI definition on the basis that:

- they pose low risk to global financial stability and the wider economy due to their long-term investment perspective
- in general, they are indirectly covered through contractual relations with asset managers or use of investment funds (which are captured by the NBNI definition).

This decision is preliminary and subject to ongoing debate. Some stakeholders continue to argue for the inclusion of pension funds on the basis that they are part of a broader financial services market, and that decisions about the level of risk they present are probably best determined by policymakers (Lokhandwala 2015).

A number of stakeholders have suggested that the superannuation system actually reduces systemic risk to the overall financial system. For example, Industry Super Australia (2014b, p. 12) has stated that:

In Australia, instead of adding to financial system risks, superannuation reduces them. Super funds can absorb losses, and their lack of leverage means they do not pass on losses to counterparties through defaults on obligations. Indeed, super funds are largely free from leverage ... [In] the absence of significant leverage, super funds can absorb market volatility without risk to themselves or other institutions. In contrast to other types of financial institutions, superannuation funds effectively are entirely capitalised.

Former Treasury Secretary Martin Parkinson (2012, p. 5) has also suggested that the Australian superannuation system adds to stability.

Superannuation's large pool of stable and unleveraged superannuation assets contributes to financial stability by adding depth and liquidity to financial markets; providing an alternative source of finance for other sectors; and acting as an important buffer against external shocks.

While noting the superannuation system still needs to be constantly monitored, the RBA (2014, p. 185) has said that:

The Australian superannuation sector appears to have supported the stability of the financial system by adding depth to financial markets, and providing a stable source of finance for other sectors. In particular, since the global financial crisis Australian superannuation funds have provided an alternative source of finance to Australian firms and banks, allowing them to raise equity in the domestic share market, and alleviating some of the funding pressures associated with the increase in global risk aversion and the pull-back from domestic and global debt markets. Around half of net equity financing for banks and private non-financial corporations since the financial crisis has been sourced from superannuation funds.

The FSI noted financial stability advantages of Australia's largely unleveraged superannuation system.

The GFC highlighted the benefits of Australia's largely unleveraged superannuation system. The absence of leverage in superannuation funds meant that rapid falls in asset prices and losses in funds were neither amplified nor forced to be realised. The absence of borrowing benefited superannuation fund members and enabled the superannuation system to have a

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stabilising influence on the broader financial system and the economy during the GFC. (Murray et al. 2014a, p. 87)

In a paper prepared for the Financial Services Council, Maddock (2014) noted that banks have a propensity to see superannuation funds as a significant source of deposits, although perhaps at higher cost than other sources.

While there is no unanimity regarding whether the superannuation system potentially adds to or threatens the overall stability of the financial system, there is agreement that superannuation can potentially have a significant impact in this area. This highlights the importance of having a well-performing, efficient superannuation system.

## **F.5 Summary**

In reaching conclusions about the performance of the Australian superannuation system, it is important to consider the system's long-term stability and, by extension, its potential impact on the stability of the broader financial system. In developing criteria for assessing the efficiency and competitiveness of the Australian superannuation system, the Commission is therefore incorporating systemic stability considerations, taking account of the potential trade-offs between short- and long-term efficiency. The Commission is also cognisant that the relationship between competition and systemic stability is a complex one, and that the assessment criteria must reflect this.



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## G Self-managed superannuation funds

### Key points

- As at June 2016, there were 577 000 self-managed superannuation funds (SMSFs) with over one million members that collectively held approximately 30 per cent of total superannuation assets. An assessment of the competitiveness and efficiency of the superannuation system therefore needs to incorporate the SMSF sector.
- There is significant member heterogeneity within the SMSF sector. However, some key SMSF trends provide relevant context for examining the efficiency and competitiveness of the broader superannuation system.
  - On average, SMSF members are older, earn higher incomes, and have much larger superannuation balances than members of other superannuation funds. However, the average age of members establishing new SMSFs has been on a downward trend.
  - Relative to other funds, on average, SMSFs have a higher allocation to cash, Australian shares and real property, and a lower allocation to international shares and fixed-income.
  - Most people setting up an SMSF cite a desire to have greater control over their superannuation balances and more flexibility for tax management.
- The evidence base on the SMSF sector has improved. The Australian Taxation Office collects and reports information, and various surveys have been conducted. However, the scope and granularity of published data is less than that reported for funds regulated by the the Australian Prudential Regulation Authority and issues of comparability remain. This raises potential issues for the application of some indicators to the SMSF sector.
- As far as possible, the Commission will apply the criteria and indicators developed in chapters 5 and 6 to the SMSF sector. However, in certain cases the differences between SMSFs and institutional funds mean that specific criteria and/or indicators, such as those relating to trustee governance and insurance, are not relevant for SMSFs.

Over one million Australians use a self-managed superannuation fund (SMSF), where the members are the trustees of the fund. This number has grown rapidly in recent years.

This appendix outlines how trends in the SMSF sector will be factored into the Commission's framework to assess competition and efficiency in the superannuation system. Specifically, it outlines: how SMSFs are different to other types of funds (section G.1); trends evident in this sector (section G.2); the evidence base (section G.3); the implications for the Commission's assessment framework (section G.4); and where the Commission's evidence base for SMSFs could be improved (section G.5).

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## **G.1 How do SMSFs differ from other types of funds?**

### **Institutional structure**

As with other superannuation funds, SMSFs are structured as a trust. But unlike funds regulated by the Australian Prudential Regulation Authority (APRA), all members of an SMSF must also be the trustees and therefore bear the full responsibility of managing the fund for themselves. By law, an SMSF can have no more than four members, though the majority of funds comprise couples or individuals. SMSF assets can be held either in the members' own names (individual trustee) or under a company name (corporate trustee). About three quarters of SMSFs use an individual trustee structure (ATO 2015j).

SMSFs outsource a range of functions to external service providers. A Rice Warner (2012) survey of SMSF members found 52 per cent of respondents had paid for financial advice from a planner. Anecdotal evidence indicates the extent and type of outsourcing varies widely across the SMSF population, however there are limited data. A sizable industry of financial advisers, investment managers, fund administrators, accountants and auditors has arisen around SMSFs (with many having links to banks and other large financial services corporations).

### **Regulatory landscape**

Study participants note SMSFs are a unique feature of the Australian system (ASFA, sub. 42; Mercer, sub. 31). SMSF trustees have considerable freedom to administer their balances as they see fit. They are not subject to prudential regulation by APRA. They also fall outside the direct purview of the Australian Securities and Investments Commission (ASIC), although ASIC is responsible for licensing and supervising SMSF auditors, financial advisers, accountants and other financial services providers that SMSF trustees engage with (Dixon Advisory, sub. DR103).

As with all superannuation funds, SMSFs are subject to legal requirements relating to how superannuation contributions can be accumulated and drawn down, and are subject to tax laws (Dixon Advisory, sub. DR103; SMSFOA, sub. DR108). The Australian Taxation Office (ATO) is the primary regulator of SMSFs. Funds are required to lodge an annual return with the ATO, pay an annual supervisory levy and arrange an annual audit by a registered auditor. The ATO has a strong focus on SMSF compliance with tax and superannuation law. It also publishes statistics on SMSFs (section G.3). More detail on the regulatory arrangements applying to SMSFs is in appendix H.

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## Why do people set up SMSFs?

A range of factors have been put forward to explain the rapid growth of SMSFs, including:

- a desire for greater control over superannuation balances and investments
- access to a wider range of investment opportunities (such as residential property and business assets)
- greater flexibility for better tax management
- decreased satisfaction with the returns, services and fees of APRA-regulated funds
- for estate/succession planning (ASFAs, sub. DR98; Dixon Advisory, sub. DR103; Gordon Mackenzie, sub. DR73; QSuper, sub. DR96; SMSFOA, sub. 20).

These factors were also reflected in results of a 2012 survey conducted by Rice Warner (table G.1). More recent research has also indicated that a desire for greater control over investments is a primary reason for setting up an SMSF (Bird et al. 2016; FSC 2015).

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**Table G.1 Main benefits of SMSFs as perceived by members**

<i>Benefit</i>	<i>% respondents considering this to be important</i>
Control over investing fund's money	95
Flexible investment choices	75
Lower cost	62
Better tax management	58
Easy transition from accumulation to pension	48
Estate planning	44
Able to borrow to invest in some assets	18

*Source:* Rice Warner (2012).

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The growth of SMSFs has also been fuelled by legislative changes that allowed employees choice of fund (in 2005), provided a temporary increase in the after-tax contributions cap (in 2007) and permitted limited-recourse borrowing arrangements (in 2007) (RBA 2014).

Recent studies also pointed to the influence of financial advisers in encouraging people to set up an SMSF. For example, Bird et al. (2016) found that the catalyst for establishing an SMSF for *over half* the SMSF population surveyed was the advice of an accountant or financial adviser, and about 80 per cent of members who reported using the services of financial professionals to help start the fund continued to use them later. Study participants also noted that most people operating an SMSF are doing so under advice (AIST, subs. 30, DR102; Dixon Advisory, sub. DR103).

By and large, SMSF members are satisfied with their funds. For example, in a 2012 survey of SMSF members, 87 per cent of respondents indicated the performance of their fund met their expectations (Rice Warner 2012).

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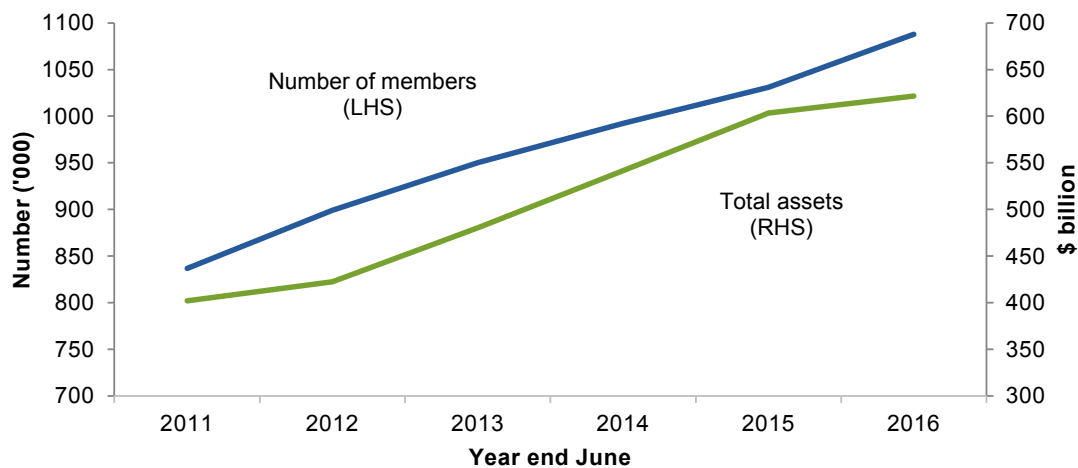
## G.2 What trends are evident?

### Fund size and members

As at June 2016, there were about 577 000 SMSFs in Australia, with 1.08 million members and total Australian and overseas assets of over \$600 billion (ATO 2016f). Total membership and assets have grown significantly in recent years (figure G.1). SMSFs now hold about 30 per cent of all superannuation assets, up from 9 per cent in 1995 (APRA 2016h; RBA 2013).

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Figure G.1 **Number of SMSF members and total assets by year**



Data source: ATO (2016f).

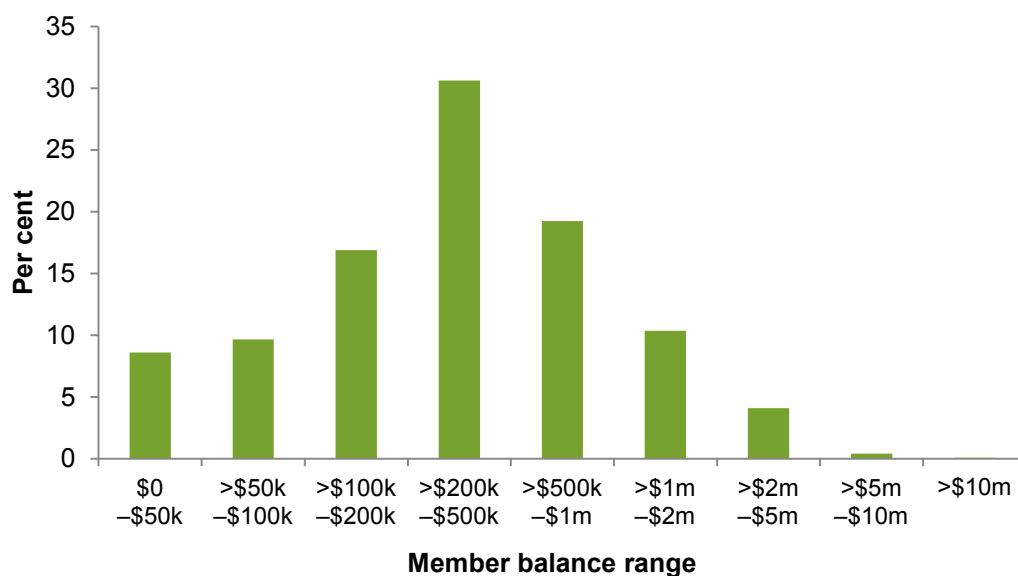
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The net annual growth rate of SMSFs has consistently exceeded net growth in APRA-regulated fund accounts in recent years. There are a range of views on whether SMSF growth will continue as strongly as in the past or stabilise in the future, and some study participants noted that the SMSF sector's share of system assets and members has declined slightly over the last few years (ASFA, sub. DR98; Maddock 2014).

As at June 2014, average assets per SMSF member was about \$560 000 (with a median of about \$340 000) (ATO 2015j). The high average balance in SMSFs is driven by a skewed distribution: 65 per cent of members had an account balance above \$200 000 in 2014, and 15 per cent had a balance exceeding \$1 million (figure G.2).

In 2013-14, the average assets per member of a newly established SMSF was about \$187 000 (estimated by dividing the total assets for newly established funds by the total number of new members). These large balances in part reflect the fact that SMSF members have higher incomes: at \$108 600, their average taxable income was close to double that of non-SMSF members in 2014 (at \$57 800) (ATO 2015j).

Figure G.2 **Proportion of SMSF members by member balance range**  
Year end June 2014



Data source: ATO (2015j).

Another distinguishing features of SMSFs is the relatively high proportion of member contributions. For example, member contributions comprised about three-quarters of contributions in 2014-15, with employer contributions making up the rest (ATO 2016d). In comparison, the majority of contributions for members of APRA-regulated institutional funds were made by employers (APRA 2016h).

## Member profile

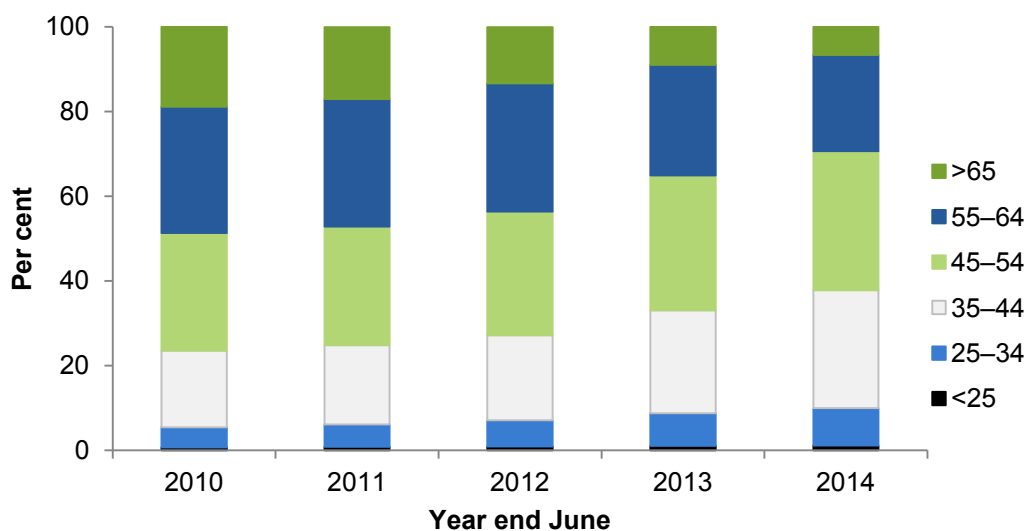
### Age profile and retirement income

SMSF members are, on average, older than other superannuation fund members. The average age of an SMSF member was 58 in 2015 (ATO 2015j). However, in recent years there has been a growing share of younger members establishing SMSFs (figure G.3). Nevertheless, 33 per cent of members were aged over 65, and only 15 per cent were under 45 (ATO 2015j). On average, SMSFs have about two members, reflecting that many are spousal unions (AIST, sub. 30; Arnold et al. 2014). (In 2015, only about 8 per cent of SMSFs had 3 or 4 members) (ATO 2016d).

Just under half of SMSFs were in full or part pension phase in 2014, compared with 8 per cent of APRA-regulated institutional funds' member accounts (APRA 2016e; ATO 2015j). Over 80 per cent of benefit payments from SMSFs were in the form of

income streams, compared with just 6 per cent in lump sums and 13 per cent in ‘transition to retirement benefits’ (ATO 2015j).

**Figure G.3 Age distribution of members, by establishment year of SMSF**



*Data source: ATO (2015j).*

## Occupation type

No official data are available on the occupations of SMSF members. However, some submissions to the Financial System Inquiry noted (anecdotally) that SMSF ownership is popular among small-business owners and farmers. Among respondents to a 2012 survey, 81 per cent held a tertiary qualification (Rice Warner 2012).

## Member engagement and education

There is mixed evidence from recent survey-based studies on the level of financial literacy within the SMSF sector compared to members of other types of funds (appendix B).

Some study participants noted SMSF growth is a sign of members engaging more with their superannuation, and that many SMSF members check their fund frequently, have a high awareness of financial products, and above average financial literacy (Anthony Asher, sub. 21; Fiduciary's Friend, sub. 7; SMSFOA, sub. 20). AIST (sub. 31) submitted that member disengagement also exists in the SMSF sector. The SMSF Owners' Alliance (sub. DR108) suggested that survey results which indicate that SMSF members have below average numeracy and financial literacy seem counter intuitive.

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As noted above, some studies indicate many people set up an SMSF under advice. Recent reforms to financial advice laws aim to better align the interests of providers and clients, including SMSF members (appendix H).

## **Asset allocation**

Relative to other superannuation funds, as at June 2016, SMSFs (on average) had a higher proportion of assets held in cash, Australian listed shares, trusts and real property, and lower allocations to international equities and fixed-income products (figure G.4).

However, differences in asset allocation categories reported for SMSFs and APRA-regulated institutional funds make direct comparisons difficult.<sup>47</sup> In particular, some categories reported for SMSFs (such as unlisted and listed trusts) do not permit ‘see through’ to the underlying asset type (such as property assets), whereas APRA reporting is based on the type of underlying asset. For example, study participants noted that while SMSFs (on average) appear to have a relatively low exposure to international equities, this may not take into account exposure to this asset class through Australian Stock Exchange listed investments, such as exchange traded funds and listed investment companies (Dixon Advisory, sub. DR103; Rice Warner, sub. DR112). For the stage 3 review, the Commission will explore ways to get a more complete understanding of SMSF asset allocation (for example, via case studies or surveys).

Another notable feature is that some SMSFs were highly concentrated in a few asset classes. For example, over the period 2010–2014, 86 per cent of SMSFs had over 50 per cent of their total assets in a single asset class, and about 10–12 per cent had all assets in a single asset class (ATO 2015j). Study participants noted that highly concentrated SMSF investment portfolios may suit the needs of the associated members. For example, a higher allocation to cash may reflect a method of managing liquidity risks (as a greater proportion of members are in or near retirement), or that many SMSFs have other complex financial arrangements and assets outside superannuation (and therefore seek to manage risks across their entire financial position) (Dixon Advisory, sub. DR103; SMSFOA, sub. DR108).

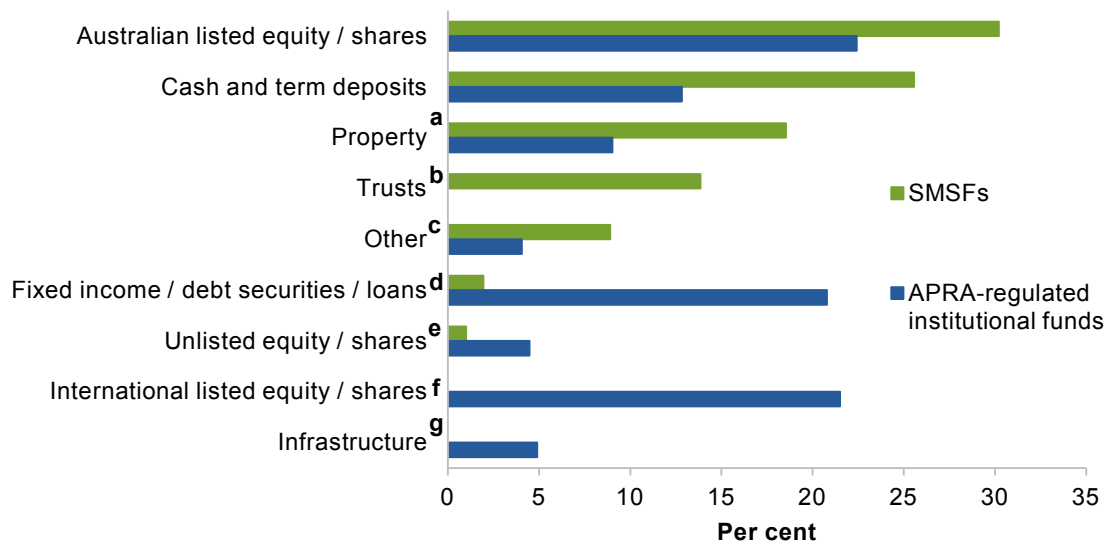
Asset allocations in the SMSF sector were broadly consistent across the accumulation and retirement phases, on average, with the main exception of a greater allocation to Australian listed shares in retirement. Differences in asset allocation are observed by SMSF fund size. For example, ATO data indicate larger funds tended to have a lower proportion of assets in cash and term deposits and a greater proportion in unlisted trusts and non-residential real property (ATO 2015j, 2016d).

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<sup>47</sup> ASFA (sub. DR98) suggested the Australian Government could consider standardising nomenclature and categorisations in the collection and reporting of asset allocation data by the ATO and APRA, and having one statistical house to collect all of the data, such as the Australian Bureau of Statistics.

**Figure G.4 Asset allocation of SMSF and APRA-regulated institutional funds**

As at June 2016



<sup>a</sup> SMSF-held property includes assets held under limited-recourse borrowing arrangements. (A small percentage of limited-recourse borrowing may be for non-property assets.) APRA-regulated institutional fund property includes listed and unlisted property. <sup>b</sup> SMSF listed and unlisted trusts (this category is not reported by APRA-regulated institutional funds). The underlying assets attributed to listed and unlisted trusts are not clear from the available data. <sup>c</sup> Other SMSF assets include insurance policies, collectables and personal use assets, overseas managed investments, other overseas assets, other managed investments and the other assets category used in ATO statistics. Other APRA-regulated institutional fund assets as used in APRA statistics. <sup>d</sup> SMSF categories for debt securities and loans are included. For APRA-regulated institutional funds, Australian and international fixed income are included. <sup>e</sup> SMSF unlisted shares does not include international unlisted shares as they are not reported separately from international listed shares. <sup>f</sup> SMSF data do not separate international listed and unlisted shares, so SMSF international shares (0.5% of assets) have been included in 'other'. <sup>g</sup> SMSF data do not contain a separate category for infrastructure investments. APRA-regulated institutional fund infrastructure includes listed infrastructure, Australian unlisted infrastructure and international unlisted infrastructure.

Data sources: APRA (2016h); ATO (2016d).

## Performance

### Investment performance

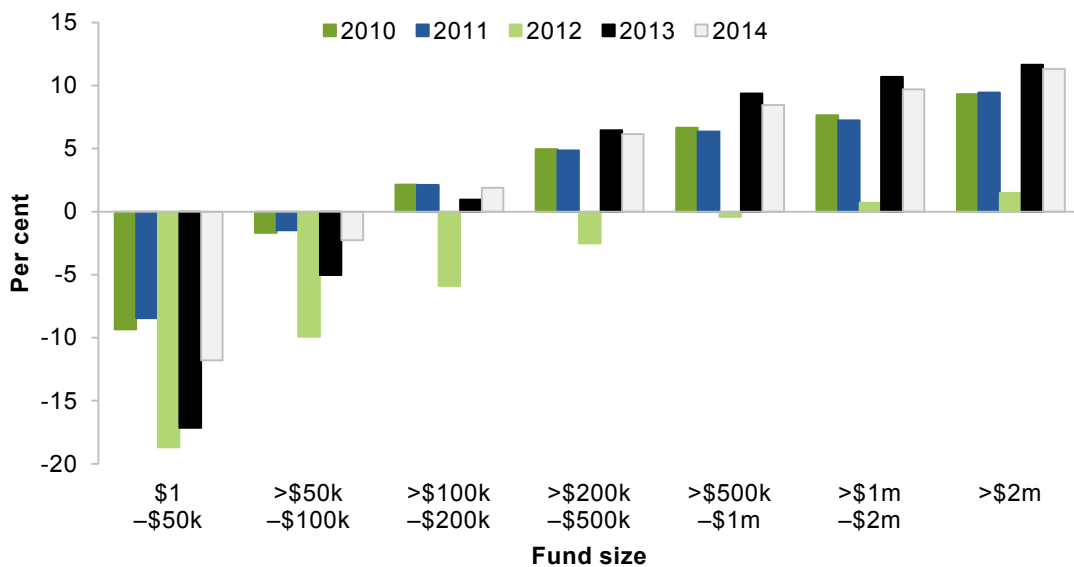
The returns on assets for the SMSF sector was, on average, positive over the period 2010–2014.<sup>48</sup> However, performance varied significantly depending on fund size with larger funds recording relatively better investment performance (figure G.5).

<sup>48</sup> The ATO (2015j) notes the average return on assets is calculated by determining the net earnings, and comparing this to average assets during the financial year to determine the percentage return on assets.



ATO data indicate that average returns on assets in the SMSF sector were below, but followed a broadly similar trend to, net returns for APRA-regulated institutional funds over the period 2010–2014 (ATO 2015j, 2015l). However, some study participants noted that SMSFs outperformed APRA-regulated funds over other time periods (for example, Dixon Advisory, sub. DR103; Rice Warner, sub. DR112). Issues associated with the comparability of ATO and APRA data are discussed further in section G.3.

**Figure G.5 Average return on SMSF assets, by fund size, by year**  
Year end June



Data sources: ATO (2015j, 2015l).

## Operating expenses

The ATO (2015m) estimated the average operating expense ratio for SMSFs was 1.06 per cent in 2013-14 (operating expenses as a proportion of assets).<sup>49</sup> However, smaller SMSFs had higher average operating expense ratios than larger ones. For example, over the period 2010–2014 period, the average operating expense ratio was in the range of 4 to 12 per cent for SMSFs with less than \$100 000 compared with less than 1 per cent for SMSFs with over \$1 million (ATO 2015j).

Past studies have examined the impact of SMSF scale on their cost competitiveness. For example, a report commissioned by ASIC found that SMSFs with balances of \$200 000 or more are likely to be cost competitive with APRA-regulated funds provided trustees

<sup>49</sup> The ATO further noted that the estimated operating expense ratio in 2013-14 increased to 1.06 per cent, largely due to new data collection on non-deductible expense items. By comparison, the average operating expense ratio over the three years to June 2012 was 0.65 per cent.

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undertake some or all of the administration themselves, and that balances over \$500 000 can provide equivalent value for money on a full service basis where administration has been outsourced (Rice Warner 2013). This report also observed SMSFs potentially become less cost competitive in the retirement phase as members draw down their balances. In addition, Arnold et al. (2014) found, on average, that SMSFs are a cost competitive means to save for retirement.

Participants to this study and previous inquiries (such as the Financial System Inquiry) emphasised that costs and fees are only part of the story; some people want the flexibility to pick their own investment options, some start with small funds but expect to expand them with asset transfers in the future, and some keep their costs to a minimum by doing much of the administrative work themselves (ASIC 2014a; Dixon Advisory, sub. DR103; SMSFOA 2014, sub. 20; SPAA 2014). Proposals to impose a minimum size for SMSFs (or regulate asset diversification) have occasionally surfaced but were rejected by the Financial System Inquiry (2014a) and many of its participants, as well as by participants in this study (for example, Dixon Advisory, sub. DR103).

### **G.3 What is the evidence base for SMSFs?**

The Cooper Review (2010b) noted there was scope to improve the level and quality of information available on SMSFs and the SMSF sector. The information base on SMSFs has expanded in recent years and consistency with APRA superannuation data appears to have improved. Broadly, there are two key sources of information: surveys and ATO data.

#### **Survey-based information**

Several surveys of SMSF members have been undertaken either in their own right or as an input into a wider study (box G.1). These surveys reveal a range of useful information about SMSFs, including attitudes for their establishment, comparative costs and level of knowledge among members. That said, use of such survey data is not necessarily a basis on which the Commission can conduct a systematic analysis of SMSFs, either over time or compared with other segments of the superannuation system.

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### Box G.1 Some recent SMSF studies

- Rice Warner (2012) surveyed 384 SMSFs (with 279 completed returns) on a range of questions about the financial concerns and needs of (SMSF members).
- Using a proprietary sample of Australian Taxation Office data, Arnold et al. (2014) documented the size, asset allocation and expenses for a sample of 209 420 SMSFs for the three years to June 2010. This study aimed to address concerns about the paucity of research on the costs associated with running an SMSF. Among other things, it found heterogeneity among SMSFs in terms of both size and asset allocation and, on average, cost advantages in running an SMSF.
- The Commonwealth Bank (2016), in partnership with the SMSF Association, conducted a national survey of 801 SMSF trustees and 535 members without an SMSF to investigate differences in perception and behaviour. Among other things, it found that SMSF trustees are more likely to be satisfied with the performance of their fund, men are more likely than women to have initiated the establishment of their SMSF, and men are more confident that they know the levels of international exposure among different asset classes.
- As part of an ongoing research project Bird et al. (2016) undertook an online survey of 1018 superannuation fund members, 50 per cent of which were SMSF members. The survey explored the reasons why members start an SMSF, ongoing member interactions with their funds, and the influence of financial professionals. It drew comparisons between SMSF and non SMSF members based on skills, attitudes and demographics.

### Published ATO data

The ATO regularly collects data from individual SMSFs as part of its regulatory functions, which it uses to publish statistics on the SMSF sector on a quarterly and annual basis. From 2011, the ATO has published an annual statistical report — the latest one contains 2013-14 data (ATO 2015j). The latest quarterly statistics report is for June 2016 (ATO 2016e). Separately, the ATO publishes a report which contains some high-level tax information related to superannuation, including for SMSFs (ATO 2016i).

### Less comprehensive data than for APRA-regulated institutional funds

The scope and granularity of the data published on SMSFs has evolved from 2011 and efforts have been made to improve comparability with APRA data (ATO 2015j, 2015k, 2015l, 2015m; ISA sub. 38). However, for various reasons — many of which relate to institutional differences — the data on SMSFs are narrower in scope and less granular compared with data reported for APRA-regulated institutional funds (table G.2). Some study participants also pointed out that aggregated SMSF data conceal the high level of diversity among individual SMSFs (for example, SMSFOA, sub. DR108).

**Table G.2 Comparing some reported data categories on SMSFs and APRA-regulated institutional funds**

<i>Data item</i>	<i>SMSF sector</i>	<i>APRA-regulated institutional funds<sup>a</sup></i>
Asset allocation	<ul style="list-style-type: none"> <li>Actual asset allocation (aggregate, accumulation and pension phases, by fund size)</li> <li>Limited recourse borrowing type</li> <li>Asset concentration</li> </ul>	<ul style="list-style-type: none"> <li>Actual asset allocation (aggregate, by fund type, individual funds, member accounts by age category)</li> <li>Asset allocation targets for MySuper products (not actual allocations)</li> </ul>
Investment performance	<ul style="list-style-type: none"> <li>Average return on assets by fund size</li> </ul>	<ul style="list-style-type: none"> <li>Annual average rate of return (by fund type, individual funds, MySuper products)</li> <li>Return target for MySuper products</li> </ul>
Expenses	<ul style="list-style-type: none"> <li>Total operating expenses (aggregate) and ratios (aggregate and by fund size)</li> <li>Expenses by type (including 'investment' and 'management and administration' expenses)</li> </ul>	<ul style="list-style-type: none"> <li>Total expenses (aggregate, by fund type, individual funds)</li> <li>Total 'administration and operating expenses' (aggregate, by fund type, individual funds, MySuper products)</li> <li>Total 'investment expenses' (as above), plus split of internal/external providers</li> <li>Expenses by service provider type (aggregate, by fund type)</li> </ul>
Fees	<ul style="list-style-type: none"> <li>Average and median auditor fees</li> <li>No reporting of fees in other categories</li> </ul>	<ul style="list-style-type: none"> <li>Fees by source of payment (aggregate, by fund type, individual funds)</li> <li>Investment fees (aggregate, by fund type, individual funds, MySuper products)</li> <li>Administration fees (aggregate, by fund type, individual funds, MySuper products)</li> </ul>
Insurance	<ul style="list-style-type: none"> <li>Insurance premiums</li> <li>Number of members and amount paid</li> </ul>	<ul style="list-style-type: none"> <li>Net insurance flows (by fund type, individual funds, MySuper products)</li> <li>Insurance fees (by fund type, individual funds, MySuper products)</li> <li>Insurance premiums (aggregate, by fund type)</li> <li>Claims paid, number and dollar amounts (aggregate, by fund type)</li> </ul>
Retirement income (benefit payments)	<ul style="list-style-type: none"> <li>Total, average and median benefit payments in each financial year</li> <li>Type of benefit payments (lump sum, income stream, transition to retirement, combined lump-sum/income stream)</li> <li>Proportion of SMSF members receiving benefit payments by age range and opening account balance</li> <li>SMSF income stream payments compared to total income stream payments for APRA funds and SMSFs</li> </ul>	<ul style="list-style-type: none"> <li>Lump-sum benefit payments and pension accounts open – total benefit payments, number of accounts and average payment per member account (aggregate, by fund type, individual funds)</li> <li>Lump-sum benefit payments and pension benefit accounts open by condition of release (aggregate, by fund type, individual funds)</li> </ul>

<sup>a</sup> Some statistics from APRA quarterly publications do not include data for funds that have less than \$50 million in assets under management.

*Data sources:* APRA (2014a, 2015f, 2015g); ATO (2013a, 2015j, 2015n, 2016e, 2016i).

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### *Data on retirement outcomes and benefit payments*

A key matter of interest in this study is how investment returns influence and are converted into retirement income (chapter 6). This is an area where SMSF data have greater scope and granularity than APRA data (although much of the detailed data collected by the ATO is not published).

As indicated in table G.2, the ATO publishes aggregate data on: SMSF benefit payments each year; the types of retirement income products consumed; average income payments by age range (including <55 category) and opening account balance, and the proportion of SMSF members receiving benefit payments in each category. The ATO also compares the level of income stream payments between SMSF and APRA-regulated institutional funds for each year.

### *Data comparability remains an issue*

Even where ATO data are available and appear comparable to APRA data, use of different underlying metrics and methodologies means comparisons would need to be made with caution (ATO 2015k; ISA, sub. 38). Some study participants argued that this effectively invalidates comparisons between the SMSF and institutional-fund segments of the system on matters such as fees, performance, risk levels and asset allocation until there is synchronisation in the APRA and ATO reporting requirements (for example, Dixon Advisory, sub. DR103). The sections below outline some of the issues that would need to be taken into account in applying indicators to assess efficiency and competitiveness as part of the stage 3 review (chapters 5, 6).

### *Asset allocation*

As noted above, the information reported by the ATO on asset allocation is less detailed and more opaque than for APRA-regulated institutional funds. Some ATO asset allocation categories do not permit full ‘see through’ to the type of underlying asset, and are different to the categories used by APRA. This makes direct comparisons between asset allocation in SMSFs and APRA-regulated institutional funds difficult. For the stage 3 review, the Commission will be particularly keen to better understand the underlying assets held by SMSFs in trusts.

### *Investment performance*

The ATO has reported information on return on assets for SMSFs. While the ATO attempts to follow APRA’s methodology in estimating investment performance, it acknowledges that the data collected are not the same (ATO 2015j, 2015k, 2015l).

Other issues may also make comparing investment performance between the SMSF and APRA-regulated sectors problematic. For example, SMSFs have only been required to

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value all assets at their market value (including property) from 2012-13, making data prior to this period potentially inconsistent with APRA data (ATO 2015j, 2015k). Further, the SMSF sector has a proportionately higher number of members in the retirement phase (where funds do not have to pay income tax on investment earnings in respect of retirement phase assets) which means identical investments will result in higher net after tax returns for SMSFs compared with APRA-regulated funds (ISA sub. 38).

### *Expenses and fees*

The ATO publishes annual and quarterly information on SMSF operating expenses in aggregate and by fund size, and separately in its Tax Statistics publication (2016i) broken down into sub-categories including ‘investment expenses’ and ‘management and administration expenses’. Recent changes to ATO data collection may have improved comparability to APRA data — for example, since 2013, SMSFs have been required to report non-deductible operating expenses (data for previous years did not include these expenses) (ATO 2015m).

However, the ATO notes that while the methodology it uses to estimate operating expenses is as close as possible to APRA’s, the data collected are not the same (ATO 2015m). Further, the costs of setting up an SMSF and members conducting their own administration (which has an opportunity cost) are not reflected in reported operating expenses, whereas these types of costs are more likely to be reflected in data for APRA-regulated funds (ATO 2015k, 2016i; ISA, sub. 38).

This raises the issue of the appropriate basis for comparing costs (and fees) in the SMSF and APRA-regulated sectors. The simplest approach would be to use reported SMSF operating expenses. However, one limitation is that this would only be a partial measure of true SMSF costs as it would not capture the extent to which (some) members expend time and effort in operating their SMSF. This issue is not easily resolved. Further, comparisons would also need to take into account other differences in the data collected, such as with respect to insurance premiums and invisible costs embedded in externally held investment structures (ATO 2015k).

## **G.4 How will the Commission’s assessment framework incorporate the SMSF sector?**

The SMSF sector is a substantial component of Australia’s superannuation system. Ideally, the criteria and indicators developed in this study (chapters 5 and 6) would be applied consistently across all the elements of the superannuation system, including the SMSF sector. In some instances, comparisons between the SMSF and APRA-regulated fund sectors may be useful for assessing system-level efficiency and competitiveness.

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Notwithstanding several data comparability issues and challenges (discussed in section G.3), and raised by study participants, the Commission considers they are not significant enough to warrant excluding use of SMSF data as part of a review of the competitiveness and efficiency of the superannuation system. That said, it will be important to be aware of these issues and to take them into account in stage 3, including for the interpretation of results. Nevertheless, in some areas incorporating the SMSF sector may not be possible due to a lack of data. In other cases, the application of specific criteria and indicators will not be relevant to the SMSF sector given its unique characteristics.

This section explains how the Commission will apply its assessment framework (including criteria and indicators developed to assess competition and efficiency) to the SMSF sector.

## **Implications for assessing competitiveness**

### **SMSF growth is an indicator of competition**

The growth of SMSFs is an indicator of competition at the retail level in the superannuation system. The impact may spill over to members of APRA-regulated funds through the introduction of new products and services which provide SMSF-like features (ASFA, sub. 42; Dixon Advisory, sub. DR103; Luke Smith, sub. 5).<sup>50</sup> However, the impact of pro-competitive trends from SMSF growth would also need to be balanced against an assessment of efficiency which takes into account a broader range of factors.

### **Some competition criteria and indicators are not relevant to SMSFs**

Several competition criteria and indicators (chapter 5) are relevant to the SMSF sector. For example, demand-side criteria and indicators focused on informed member engagement and on the role SMSFs play in exerting competitive pressure in the system are clearly relevant. Similarly, supply-side indicators examining the nature and extent of competition in upstream service provider markets (given SMSFs outsource extensively) and indicators of cost trends are relevant. More broadly, it will be relevant to consider the extent to which the rapid growth in SMSFs is symptomatic of competition and efficiency problems and distortions elsewhere in the system.

However, some competition criteria and indicators are not relevant to SMSFs. For example, the criteria to assess competitiveness in the superannuation system focus in part on supply-side barriers to competition. Without pre-empting the evaluation in stage 3, the rapid growth of SMSFs and the relatively low set-up costs indicate that the height of any barriers to entry and exit in this market are likely to be quite low, and hence would not be a central focus in the competition assessment.

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<sup>50</sup> For example, members having the option of directly choosing investments, direct share options and managed investment schemes that allow taxation to be assessed on an individual member basis rather than on a fund-wide basis.

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## Implications for assessing efficiency

### Maximising long-term net returns

This system level objective is closely linked to operational efficiency (chapter 4). Some participants submitted that it is not necessary to consider operational efficiency of the SMSF sector (or it should be excluded) because individuals have made a deliberate choice to conduct their superannuation this way, and should be allowed to operate their funds in a manner they see fit, including the payment of any costs (ASFA, sub. 42; Mercer, sub. 31). The counter view is that an understanding of the operational efficiency of the SMSF sector is relevant, particularly given it is now a large component of the overall system (even if just to better understand sources of difference) (for example, AIST, sub. DR102).

Under the Commission's assessment framework, assessment of the system-level objective of maximising long-term net returns (section 6.1) would in stage 3 incorporate the SMSF sector (as far as possible given available and comparable data), with appropriate caveats in place.<sup>51</sup> Consideration will also be given to whether SMSFs face any unique barriers or impediments to accessing particular investment markets due to, for example, a lack of scale, and to how taxation is managed in SMSFs compared with institutional funds. However, several indicators on costs and fees and on other account leakages will not be applied to the SMSF sector.

### Meeting members' needs

This system level objective is closely linked with allocative efficiency (chapter 4). Assessing this in the context of the SMSF sector will need to take account of its unique characteristics — namely the lack of separation between members and trustees, and the fact members take an active decision to establish an SMSF and bear the financial consequences directly. For these reasons, some criteria and indicators in chapter 6 are not relevant to the SMSF sector, including those focused on minimising principal-agent problems between members and trustees.

That said, the criterion on whether the system provides products to help members manage risks and optimally consume their retirement income remains relevant to the SMSF sector. In principle, comparisons between how income is drawn down in retirement in different segments of the system may provide useful insights. The criterion on whether the system is providing high-quality information and advice to members is also relevant to SMSFs.

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<sup>51</sup> That said, the indicator which aims to examine the proportion of default products that persistently underperform a relevant reference portfolio will not be applied to SMSFs.



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## Improving efficiency over time

An assessment of this system-level objective is linked with dynamic efficiency and system stability (chapter 4). An issue raised in previous inquiries is the ability of SMSFs to undertake limited-recourse borrowing (appendix F). Some study participants argued this should not be a focus in this study because direct leverage of SMSFs is a very small part of the financial system and existing regulations sufficiently protect lenders and customers (for example, Dixon Advisory, sub. DR103). Other participants argued the indicator is relevant and should be expanded to take into account the prevalence of such activities among SMSFs and intended levels of leverage (AIST, sub. DR102; ASFA, sub. DR98; FSC, sub. DR110).

The Commission's assessment framework in chapter 6 includes an indicator on levels of leverage in SMSFs. In interpreting the indicator, the Commission will take into account the prevalence of leverage. However, the Commission anticipates that this will not be a major issue in the stage 3 review.

The criterion focusing on whether the system overcomes impediments to improving long-term outcomes for members is relevant to SMSFs. Indicators on new methods of service delivery and the removal of regulatory impediments to innovation are particularly relevant.

## Value for money insurance

An assessment of this system-level objective will not be applied to the SMSF sector. SMSFs are required under law to consider their insurance needs when drafting their investment strategy, but there are no default arrangements or obligations. There are also limited data available on insurance policies held within SMSFs.

## **G.5 Further developing the evidence base**

The Commission notes study participants' views on the risks of imposing more onerous data requirements on SMSFs (Luke Smith, sub. 5; SMSFOA, sub. 20). The SMSF Owners Alliance (sub. DR108) argued the ATO could publish more of the data it collects.

While data on SMSFs are not perfect, there appear to be no material data gaps. One of the main comparability issues arises for asset allocation data given differences in the categories reported by the ATO compared to APRA. Comparing costs across SMSFs and institutional funds may also raise challenges. The Commission is not at this time proposing any changes to reporting requirements for SMSFs. However, the Commission expects to conduct (or commission) its own survey of fund members (including SMSF members) for the stage 3 review, and this survey could potentially address some of these data gaps.

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The Commission will liaise with the ATO to understand what further data are available within its databases, and what can be made available for the stage 3 review. The Commission will also liaise with the ATO and APRA to further clarify data comparability issues across the SMSF and APRA-regulated sectors, to understand how reporting requirements and practices are continuing to change over time, and to ensure that appropriate caveats are applied when data are ultimately used to inform the assessment of efficiency and competitiveness in the system.

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# H The regulatory environment

## Key points

- The superannuation system has many unique characteristics, which may contribute to market or government failures, reducing the system's competitiveness and efficiency. In particular, the number and diversity of participants has led to many principal-agent relationships, increasing the importance of adequate governance and corollary regulatory oversight.
- The Australian Government regulates governance arrangements to manage conflicts of interest between parties and ensure that agents are qualified to act on behalf of members. Regulators also have a role in improving information transparency. Good quality information is an important condition for competitive markets.
- The system has a number of regulators with different and sometimes overlapping roles, creating a complex regulatory environment. APRA, ASIC and the ATO are the primary regulators of the superannuation system, given their prudential, conduct and compliance roles, respectively. Several other regulators also have roles within the system.
- APRA has many regulatory instruments under its prudential framework, such as prudential and reporting standards. Some instruments provide useful indicators of the competitiveness and efficiency of the system, such as conflicts of interest standards, an annual scale assessment requirement and bulk transfer rules.
- ASIC regulates the conduct and disclosure obligations of superannuation trustees and financial service providers, including providers of life insurance. ASIC gives guidance to all service providers on how to adequately manage conflicts of interest. Its role also extends to requiring adequate disclosure to improve transparency, including regulations for product disclosure statements, product dashboards and portfolio holdings disclosure.
- The ATO has a general administrative role over several aspects of the superannuation system. It administers compliance of employer contributions and manages unclaimed accounts. The ATO is also the primary regulator for self-managed superannuation funds, ensuring trustees (who are also members) comply with tax and superannuation law.
- There are several ways that regulators of the superannuation system work together to coordinate regulation and minimise regulatory burden, for example, through high-level forums and bilateral agreements.

The superannuation system operates within a complex regulatory environment. While the Commission will take current policy settings as given in its task, much of regulation (especially how it is implemented) is within the influence of system participants and therefore within the scope of this study. The degree to which this regulation, and its implementation, improves or impedes efficiency and competitiveness will need to be assessed as part of the stage 3 review (chapter 3).

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While regulation can provide many benefits, such as governance and transparency measures, it is not without its costs. Both the upfront cost of frequent regulatory change and ongoing cost of compliance with regulatory and legislative obligations impact the efficiency of the system (ASFA, sub. DR98; QSuper, sub. DR96). However, given the superannuation system is still maturing (chapter 2), ongoing regulatory refinement is to be expected.

This appendix first describes the system's regulatory framework (section H.1). This involves a description of the key regulatory agencies in the system, as well as a discussion on the objectives of regulating the system. Second, the appendix describes how the main regulators go about achieving these objectives, and the implications this has for the Commission's task to develop criteria and indicators to assess the competitiveness and efficiency of the system (section H.2).

The purpose of this appendix is to identify the key regulatory settings that affect the efficiency and competitiveness of the superannuation system. This is done on an exception basis (for example, issues that were raised in consultations and submissions). The key issues identified here underpin the selection of governance criteria and indicators proposed in chapter 6.

## **H.1 A complex regulatory framework**

The design of the superannuation system is driven by government policy. However, the system also has many unique characteristics that may contribute to market failures or government failures, reducing the system's competitiveness and efficiency (chapter 2). Several aspects of the system are regulated to address these failures, improving the competitiveness and efficiency of the system.

A key characteristic of the superannuation system is the number and diversity of participants operating under principal-agent relationships (chapter 2). Therefore, regulation of the superannuation system has a strong focus on managing these relationships, using rules and incentives to promote adequate governance standards and information transparency within the system. Regulation of governance arrangements aims to ensure trustees and service providers are adequately representing the best interests of members. Further, transparency and availability of information can facilitate members' ability to act in their own best interests and achieve more efficient outcomes overall.

### **The superannuation system is highly regulated**

The regulatory environment of the superannuation system is made up of both legislation and regulators. Legislation lays the foundations of the system, giving legal effect to the rules of the system and conferring certain powers on regulators. Regulators use their legislated powers to enforce the system's design and promote desired market behaviour.

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However, there may be costs associated with regulation, such as regulatory burden and unintended consequences.

The foundations of the superannuation system lie in several different pieces of legislation. However, the system is primarily built on the *Superannuation Industry (Supervision) Act 1993* (Cwlth) (SIS Act) and the *Superannuation Guarantee (Administration) Act 1992* (Cwlth) (SG Act). In particular, the SIS Act gives many unique powers and responsibilities to different regulators.

Australia's financial regulatory system is described as a 'twin peaks' model, where regulators 'focus on particular outcomes across the system, rather than particular sectors' (Murray et al. 2014a, p. 233). The twin peaks include:

- the Australian Prudential Regulation Authority (APRA), which specialises in prudential regulation and supervision of financial institutions, such as superannuation, banking and insurance
- the Australian Securities and Investments Commission (ASIC), which has a broader conduct oversight and integrity role as the corporate, markets and financial services regulator.

A number of other agencies, such as the Australian Tax Office (ATO) have responsibilities for regulating specific aspects of the superannuation system (box H.1). While these roles and responsibilities may differ, there is potential for counterproductive overlap between regulators, increasing regulatory complexity, although some coordination exists (section H.2).

The majority of institutional superannuation funds are regulated by APRA (chapter 2). However, almost one third of all superannuation assets are held in self-managed superannuation funds (SMSF), which are regulated by the ATO. There are also a number of public sector superannuation funds that are exempt from regulation under the SIS Act and are instead regulated under other government legislation (chapter 2).

Regulators are generally funded by the finance industry through supervisory levies. APRA imposes a levy on the financial services sector designed to cover the majority of its own costs as well as specific costs for other organisations, such as the ATO, ASIC and the Department of Human Services (Australian Government 2013). The ATO also collects a supervisory levy from SMSFs (ATO 2013b). These levies are generally passed through to members as fees. The Financial System Inquiry recommended an industry funding model for ASIC (Murray et al. 2014a). In response, the Australian Government has since consulted with industry and undertaken to introduce an industry funding model to commence in the second half of 2017 (Australian Government 2015b; Morrison 2016).

## Box H.1 Regulator involvement in the superannuation system

**Australian Prudential Regulation Authority (APRA)** — the prudential regulator of the Australian financial services industry, including superannuation and life insurance. APRA supervises most institutional superannuation funds.

**Australian Securities and Investments Commission (ASIC)** — oversees conduct and integrity of corporations, markets and financial services. ASIC licenses and monitors financial service providers that interact with superannuation funds as well as funds themselves.

**Australian Tax Office (ATO)** — provides administrative oversight of employer contributions, regulates compliance of self-managed superannuation funds (annual returns and auditing requirements) and manages some reporting by APRA-regulated funds.

**Reserve Bank of Australia (RBA)** — uses monetary policy and administers the monetary and payments system to maintain a strong financial system. The RBA is not directly involved in the regulation of participants in the superannuation system.

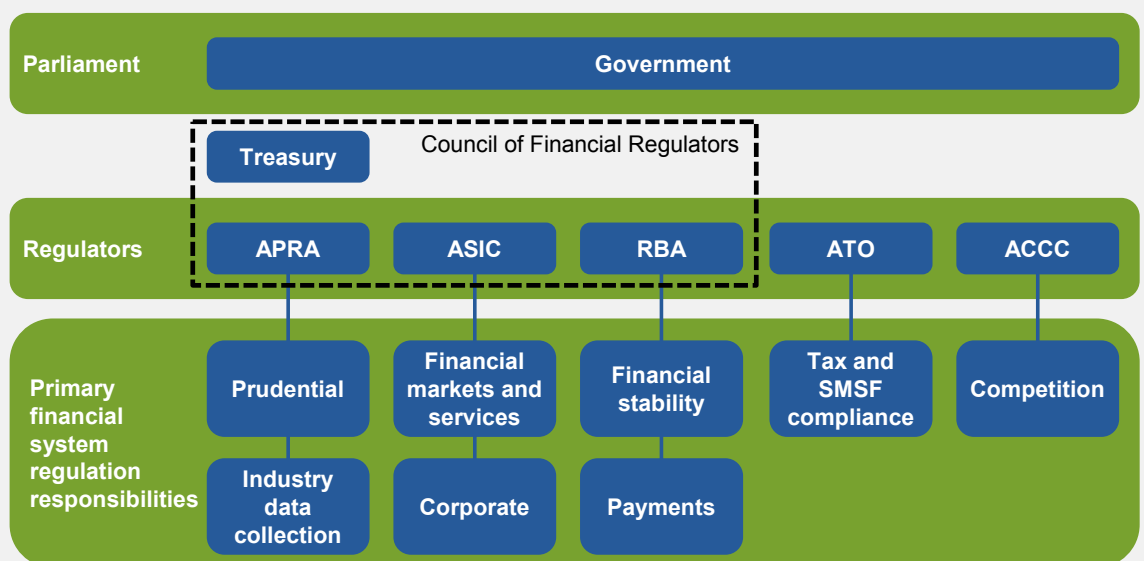
**Council of Financial Regulators (CFR)** — the coordinating body for Australia’s main financial regulatory agencies, operating as a high-level forum for co-operation and collaboration among members. Membership includes APRA, ASIC, the RBA and the Treasury.

**Australian Competition and Consumer Commission (ACCC)** — the competition regulator, promotes fair trade in markets to benefit the wider community. The ACCC regulates participants in the superannuation system as part of a broader mandate to ensure that individuals and businesses comply with competition, fair trade and consumer protection laws.

**Superannuation Complaints Tribunal (SCT)** — an independent dispute resolution body that deals with complaints relating to decisions and conduct of trustees, insurers and other decision makers within the superannuation system.

**Department of Human Services (DHS)** — assesses applications for early release of superannuation in certain circumstances as determined by legislative requirements.

### The Australian financial system regulatory framework



Sources: ACCC (2012); APRA (2016c); ASIC (2016h); ATO (2015o); CFR (2016a); DHS (2016); SCT (2016); Treasury (2016b). Figure adapted from Murray et al. (2014b).

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## Regulating governance can improve member outcomes

The superannuation system is characterised by myriad principal–agent relationships (chapter 2). An important example is the relationship between members and trustees of institutional superannuation funds, where a small number of trustees make decisions for many members.

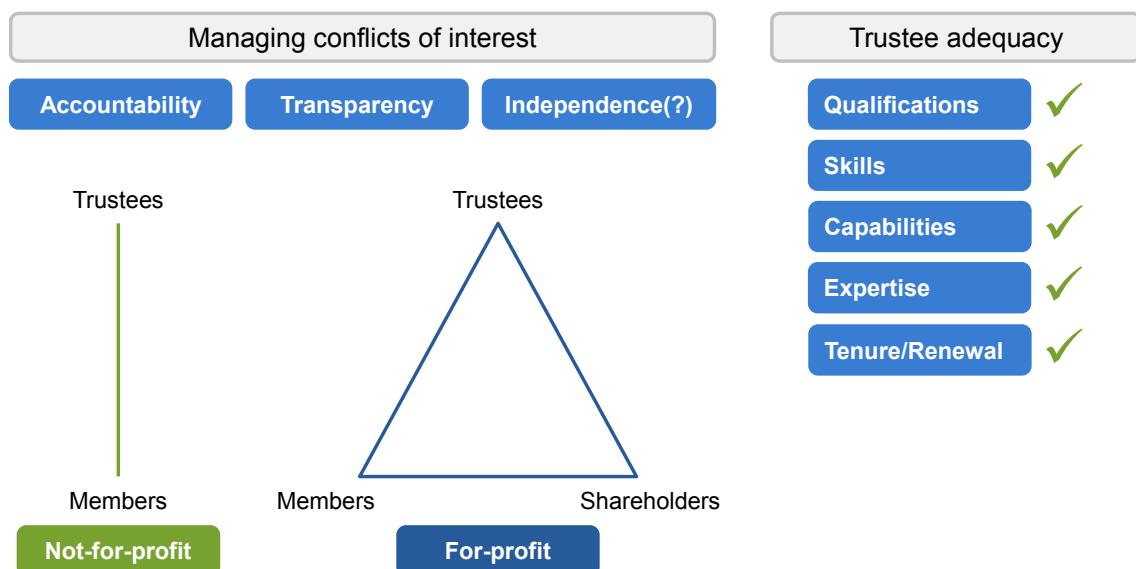
To address issues arising from these principal–agent relationships, trustees and service providers are regulated to promote adequate governance arrangements. There are two core principles to good governance arrangements:

1. effective management of conflicts of interest between parties
2. adequate capacity of trustees (usually trustee board members) to act in the best interests of members (figure H.1).

Conflicts of interest are managed differently depending on whether the trustees operate under a not-for-profit or for-profit structure. Governance arrangements for not-for-profit trustees rely on managing conflicts between the trustee and the member, whereas for-profit trustee arrangements must also manage the interests of shareholders. Conflicts of interest — and the principal–agent relationship more broadly — can be managed effectively when trustees have processes in place to manage them, can be held accountable for their actions and information is transparent.

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Figure H.1 Principles of governance



The second dimension of governance focuses on the adequacy of trustees to fulfil their role. This includes the necessary qualifications, skills, capabilities and expertise of board

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members to undertake their duties and the process for renewal of board members over time.

In principle, independence of trustees (board members) can improve the quality of decision making and demonstrate this process to stakeholders. However, there is little empirical evidence concerning the relationship between the independence of trustees and institutional fund performance (Donald and Le Mire 2016). In 2015, the Australian Government attempted to mandate a minimum one third independent directors (and chair) on APRA-regulated superannuation boards, but the *Superannuation Legislation Amendment (Trustee Governance) Bill 2015* (Trustee Governance Bill) did not pass the senate (Parliament of Australia 2016).

Governance is not regulated by governments alone — there is also a role for self-regulation. For example, the Financial Services Council (2013b) requires that all of its superannuation trustee members comply with its self-imposed standards. In particular, ‘Standard 20’ aims to promote strong governance through a requirement that boards have a majority of independent directors and an independent chair. Further, the Australian Institute of Superannuation Trustees and Industry Super Australia initiated a review of best practice governance in the not-for-profit superannuation sector (‘The Fraser Governance Review’). Submissions to the review closed in February 2016 and the process has now moved into a further consultation phase, with the appointment of a panel of experts to provide consultancy services to the review (ISA 2016).

## **Regulating information transparency can improve decision making**

Good quality information is an important condition for competitive markets. However, the superannuation system is inherently complex (chapter 2). This complexity can limit the availability of information or obscure its understanding, leading to suboptimal outcomes for participants. For example, problems can arise due to the asymmetry of information between principals and agents.

Regulators, particularly APRA and ASIC, have a role to make information in the superannuation system transparent and easy to understand. Disclosure requirements and reporting standards are the main policy mechanisms for improving transparency and accountability of trustees and service providers.

Transparency through improved disclosure is critical to the efficiency and operation of Australia’s market based superannuation system, as it improves understanding, awareness and engagement across the community. (O’Dwyer 2016b, p. 3)

A key element of transparency is relevant information that is presented in an accessible form for a broad range of participants. For example, superannuation product dashboards are designed to provide easily accessible and understandable information to aid in member decision making.



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## H.2 Regulatory implications for the Commission’s task

This section describes the role and instruments of the three main regulators of the superannuation system — APRA, ASIC and the ATO — and how they coordinate their activities. Each regulator has an important role in either regulating governance or improving transparency of the system. This section focuses on some of the key aspects of regulation that have significant implications for assessment criteria and indicators.

### Australian Prudential Regulation Authority

As the prudential regulator of Australia’s financial services industry, APRA has a key role in the superannuation system. In particular, APRA regulates and supervises superannuation funds, Approved Deposit Funds and Pooled Superannuation Trusts under the SIS Act. APRA is responsible for ensuring that registered funds act in a prudent and honest manner. Under its mandate, APRA is explicitly required to balance objectives of financial safety with competition and efficiency.

In performing and exercising its functions and powers, APRA is to balance the objectives of financial safety and efficiency, competition, contestability and competitive neutrality and, in balancing these objectives, is to promote financial system stability in Australia. (*Australian Prudential Regulation Authority Act 1998* (Cwlth), s. 8(2))

APRA further elaborated on guidance from the Minister’s statement of expectations on the balancing of objectives, noting:

... it is important that the prudential regulation regime maintain a low incidence of failure of regulated institutions while not impeding continued improvements in efficiency or hindering competition. (APRA 2014c, p. 22)

### Prudential framework for superannuation

APRA’s prudential framework for superannuation seeks to ensure that trustees ‘are undertaking their duties and responsibilities in the best interests of members’ (APRA, sub. 32, p. 14). The framework incorporates legislation, prudential standards, a reporting framework, a supervision framework and other guidance material. Many of the instruments work to improve governance or information transparency.

APRA primarily receives its superannuation-related regulatory roles and powers from the SIS Act, and several other pieces of **legislation**, such as the *Retirement Savings Accounts Act 1997* (Cwlth). APRA’s capabilities to fulfil its prudential mandate derive from its **licensing, registration and authorisation** powers.

As the regulatory body that registers and licenses superannuation trustees, APRA is responsible for the oversight of trustee conduct. APRA licenses trustees to ensure they have the appropriate qualifications and ability to manage a superannuation fund in the best

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interests of members. Applicants must provide evidence of likely compliance with prudential standards (APRA 2013a). For example, one aspect of APRA's prudential standard for governance requires that registrable superannuation entity (RSE) licensees are adequately qualified, and another 'establishes requirements for the identification, avoidance and management of conflicts of duty and interest by a RSE licensee' (APRA 2012c, 2013b, p. 1). In addition, APRA registers superannuation funds (RSEs) and authorises MySuper products, giving it the ability to monitor funds and publish information to improve transparency. For example, APRA maintains a publicly available register of RSE licensees (trustees), RSEs, Retirement Savings Accounts, MySuper authorisations and eligible rollover fund authorisations on its website (APRA 2016c).

All RSEs are required to comply with 13 superannuation **prudential standards** set by APRA (2016l). The standards include requirements for trustees and funds to have appropriate frameworks and systems in place to manage various elements of their business, such as risk and conflicts of interest. APRA (2016k) also provides 22 prudential practice guides, which are not binding, to assist superannuation funds by outlining prudent practices.

RSEs are also required to provide data to APRA under the *Financial Sector (Collection of Data) Act 2001* (Cwlth). Under its superannuation **reporting framework**, APRA collects data through a set of superannuation reporting standards. These standards require funds to report data on a range of business elements, such as asset allocation, membership profile and financial statements. APRA reports some collected data in various publications covering the superannuation system (APRA 2016f). APRA's data collection and publication improves transparency in the overall system.

The objective of these collections and publications is to support APRA's prudential supervision and provide appropriate transparency and disclosure in relation to the operations of the industries it regulates. Achievement of these objectives benefits all industry stakeholders. (APRA 2013d, p. 9)

However, APRA (sub. 32) noted that its superannuation data have some limitations due to quality and comparability of data collected. For example, Rice Warner (sub. DR112, p. 22) suggested that 'many well-known funds with visible advertising campaigns have reported zero [advertising] expenditure on the APRA forms'.

Prior to the most recent release of the annual publications, however, APRA raised 1400 queries on the information submitted which led to over 500 data re-submissions. This suggests that there is some way to go before APRA can be comfortable that credible and reliable information is available to meet the enhanced transparency and disclosure objective of the Stronger Super reforms. (APRA, sub. 32, p. 9)

APRA uses two main tools to **supervise** trustees' ability to manage risk prudently on behalf of members and maintain the stability of the overall system.

- Risk assessment — Probability and Impact Rating System (PAIRS).
- Supervisory response — Supervisory Oversight and Response System (SOARS).

In particular, PAIRS provides a useful measure of superannuation fund governance. Under a PAIRS risk assessment, APRA (2012a) assesses 12 risk categories, giving a score between 0–4 (0 being the best and 4 the worst). Three of these categories assess areas of governance, such as board quality, independence and conflicts of interest (figure H.2). The PAIRS scoring ultimately provides an overall estimate of the risk of failure that feeds into APRA’s supervisory response (SOARS). PAIRS data can provide a useful indicator for assessment of trustee adequacy and conflict of interest management. The Commission anticipates that high-level, aggregated PAIRS data may provide some insights on governance trends at a system level.

Figure H.2 **Probability and Impact Rating System (PAIRS) categories**

PAIRS category	Risk score	
Board	(0–4)	Governance-related categories
Management	(0–4)	
Risk governance	(0–4)	
Strategy and planning	(0–4)	
Liquidity risk	(0–4)	
Operational risk	(0–4)	
Credit risk	(0–4)	
Market and investment risk	(0–4)	
Insurance risk	(0–4)	
Coverage/surplus	(0–4)	
Earnings	(0–4)	
Access to additional capital	(0–4)	

Source: Adapted from APRA (2012a).

APRA continues to review and update elements of its prudential framework (box H.2). Under its prudential framework for the superannuation system, APRA also has regard to insurance offered by superannuation funds. For example, APRA’s prudential standard for insurance (SPS 250) requires that a RSE licensee has an insurance management framework in place (APRA 2012c). Further, APRA is also the prudential regulator for the life insurance industry. Its prudential framework for life insurance involves legislation, prudential standards and practice guides, reporting, publications and industry consultations. In 2016 APRA (2016n, 2016o) requested life insurers and a selection of 25 superannuation fund trustees provide information on their practices for claims oversight and governance. After reviewing industry responses to the information requests, APRA identified a number of areas where trustees and insurers can improve practices, including closer co-operation between trustees and insurers as well as better sharing of claims data. Recently, several superannuation industry bodies established a joint working group to develop an industry

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Code of Practice by the end of 2017, to improve standards for trustees and insurers in providing life insurance in superannuation (ASFA 2016).

### Box H.2 APRA reviews of governance

In 2014, the Australian Prudential Regulation Authority (APRA) reviewed the conflicts management frameworks for 37 superannuation funds and found that ‘around one third of the [conflicts management frameworks] reviewed [were] assessed as vulnerable or weak’ (APRA 2015d, p. 28). This conclusion is an important qualitative indicator of the current state of conflicts of interest management within the superannuation system. As part of the review, APRA identified good practices by entities with a robust framework, such as having consideration of conflicts of interest as a standing agenda item for board and committee meetings.

In 2015, APRA (2015c, p. 1) commenced consultations to revise its prudential standards (SPS 510) and practice guides (SPG 510) for trustee governance arrangements. In November 2016, APRA (2016g, 2017) updated this standard to require trustees to have a governance framework in place to achieve appropriate board skills, structure and composition. Further, the board must have a written policy setting out the requirements for nomination, appointment and removal of board directors on an ongoing basis. These updates will commence on 1 July 2017.

APRA (sub. DR111) is also due to complete two governance-related thematic reviews in 2017. One thematic review will focus on director appointment and board performance assessment processes. This includes potential areas where the industry can improve performance — including board size, tenure limits and renewal policies, processes to identify skill gaps and board performance assessment processes. The other review will follow up its 2014 review of conflicts management by reviewing management practices and oversight of different types of related party arrangements (Rowell 2016).

The reviews will further enhance APRA’s understanding of practices adopted by RSE licensees across these areas and the findings may highlight areas where changes to the prudential framework and/or APRA’s data collection may be needed. (APRA, sub. DR111)

### Some implications for efficiency and competitiveness

Many of APRA’s regulations have implications for measuring the efficiency and competitiveness of the superannuation system. Specific elements are discussed below. More generally though, APRA itself assesses whether it unnecessarily impedes the efficient operation of regulated entities, including in its development of standards (APRA 2015h). APRA’s key indicators for its own assessment include the number of responses during consultation and number of Regulation Impact Statements undertaken.

Several of APRA’s prudential standards are aimed at fostering appropriate governance arrangements of superannuation funds, such as the **governance** (SPS 510) and **conflicts of interest** (SPS 521) standards (APRA 2012c, 2013b). Reviews of these standards and other system-level reviews of governance — such as those detailed in box H.2 — provide a good qualitative indication of trends in governance over time (chapter 6).

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From 2013, trustees that offer a MySuper product are also required to undertake an annual **scale assessment** to ensure that members are not disadvantaged relative to members of other MySuper products as a result of scale (box H.3). Although it is relatively new, the scale assessment is expected to have an impact on fund consolidation (chapter 5). This has important implications for the competitiveness and operational efficiency of the superannuation system more broadly (chapters 5 and 6).

### Box H.3 **Scale assessment for MySuper products**

Under section 29VN of the *Superannuation Industry (Supervision) Act 1993* (Cwlth), trustees that offer a MySuper product are also required to undertake an annual 'scale assessment' (APRA, sub. 32; sub. DR111). The assessment requires trustees to consider whether members of their MySuper product are disadvantaged relative to members of other MySuper products as a result of scale (the number of members and assets in the MySuper product and fund). The Australian Prudential Regulation Authority (APRA) observed this sort of assessment should not be limited to funds offering MySuper products (APRA, sub. 32).

If trustees determine that scale is insufficient, they are required to take appropriate action (Shorten 2012). For example, this might involve transferring those members to another superannuation fund.

... at times this will mean making difficult decisions, such as deciding that the strategy that is in the best interests of fund members is to transfer them to another fund. APRA expects boards to be prepared to take those hard decisions, acting in the best interests of their members rather than self-interest. (Rowell 2015, p. 14)

There is little publicly available information on any scale assessments, so its impact on fund consolidation to date is unclear. However, APRA (sub. DR111, pp. 6–7) noted that it:

... will be paying close supervisory attention to strategic and business planning practices in recognition of its fundamental role in ensuring that RSE licensee boards deliver on their obligation to act in the best interests of members. APRA will pull together information on key themes from this work, including any trends in terms of identified issues or areas of concern, as well as areas of better practice. As part of this, APRA will continue to review the application of the scale test across MySuper products. APRA will also consider the need for any amendments to the prudential framework to clarify its expectations in relation to strategic and business planning and the administration of the scale test.

**Bulk transfer rules** (a type of successor fund transfer) may also affect competitiveness of the superannuation system (chapter 5). Under the SIS Act, bulk transfers of members to successor funds must be made in the best interests of members (APRA, sub. 32). In fact, a successor fund must give the member equivalent rights to those they had in the original fund (*Superannuation Industry (Supervision) Regulations 1994* (Cwlth) (SIS Regulations)). There is some concern that these requirements can act as a barrier to consolidation in the industry by discouraging potential successor fund transfers and restricting potential mergers (APRA, sub. 32; ASFA, sub. 42; Mercer, sub. 31). For example, the requirement to protect all member interests in a fund may prevent a merger that would benefit the member group on average, while leaving some members worse off. APRA (sub. DR111) is currently developing guidance for industry to address some of these complexities. APRA has only recently begun to publish data on the number of new

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and closed member accounts as a result of successor fund transfers. However, APRA does not collect data for the number of attempted bulk transfers that were denied.

## **Australian Securities and Investments Commission**

ASIC is Australia's corporate, markets and financial services regulator. Its role is to ensure that 'Australia's financial markets are fair and transparent, supported by confident and informed investors and consumers' (ASIC 2016h). ASIC's roles span both the governance and disclosure aspects of competition and efficiency in the superannuation system. ASIC also leads the *National Financial Literacy Strategy*, aimed at improving the financial literacy of Australians (ASIC 2016g).

Under its mandate, ASIC does have reference to promoting the efficiency of the economy (*Australian Securities and Investments Commission Act 2001* (Cwlth) (ASIC Act)). Nevertheless, the Financial System Inquiry noted that there is no explicit reference to competition in the ASIC Act and recommended for this to be included in ASIC's mandate (Murray et al. 2014a). In response, the Australian Government (2015a) undertook to update ASIC's mandate by the end of 2016.

ASIC regulates the conduct and disclosure obligations of superannuation trustees and financial service providers. ASIC assumes its regulatory role within the superannuation system primarily from the *Corporations Act 2001* (Cwlth) (Corporations Act) and the SIS Act. These powers give ASIC several instruments for administering its objectives, including: licensing and registration, enforcement, complaints management, stakeholder engagement, surveillance, guidance, education and policy advice.

Given its regulation of financial service providers, ASIC also has an important role in regulating the conduct and disclosure of the life insurance industry. For example, a recent ASIC (2016i) review of life insurance claims noted the regulator's concerns regarding declined claim rates and handling procedures. Following this review, ASIC will undertake further reviews into particular areas of insurance claims conduct and establish consistent reporting of claims data to APRA.

Further, ASIC regulates the conduct and disclosure of SMSF-related parties (such as auditors, advisers and accountants). For example, ASIC (2015d, 2015e) provides information sheets on disclosure of risks (INFO 205) and costs (INFO 206) to advisors of SMSFs.

ASIC is also responsible for funding the Superannuation Complaints Tribunal (SCT) — an independent dispute resolution body that deals with superannuation-related complaints (SCT 2015). Complaints that fall within the SCT's jurisdiction often relate to fund administration and death or disability insurance. The SCT publishes time series data on the number of inquiries or complaints received, withdrawn and resolved as well as the nature of complaint and trends by fund type. For example, in 2014-15, the SCT received 2688 written complaints, with 389 cases settled via conciliation and about 60 successful determinations; the rest of complaints were either outside the SCT's jurisdiction,

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withdrawn by the SCT or complainant, or still pending an outcome. Trends in complaints and outcomes may provide a useful quantitative indicator of the conduct of participants within the superannuation system as well as member satisfaction and trust (chapter 6).

### Arrangements to address conflicts of interest

ASIC requires that all Australian Financial Service (AFS) licensees (including financial service providers and some institutional superannuation funds) have adequate governance arrangements to deal with **conflicts of interest** (Corporations Act, s. 912A(1aa)).

ASIC (2004) provides guidance (RG 181) to licensees for developing, or assessing the ‘adequacy’ of, arrangements for managing conflicts of interest, including mechanisms for controlling, avoiding and disclosing conflicts. In 2016, ASIC reviewed and provided further guidance for good governance principles and processes for managing conflicts of interest.

In general, we found that financial services organisations demonstrated a commitment to maintaining and reviewing policies and information barriers, with some focus on training. However, we found that on matters of outsourcing, product selection, remuneration and board membership, there may be areas where financial services organisations could better demonstrate a commitment to managing and, where appropriate, avoiding conflicts of interest. (ASIC 2016e, p. 4)

While ASIC imposes conflict of interest arrangements on AFS licensees under the Corporations Act, it is APRA that is ultimately responsible for regulating governance arrangements and conduct of RSE licensees.

While ASIC has a broad regulatory mandate with respect to Australian financial services providers and public companies, we do not have a specific regulatory role with respect to the governance of Australian superannuation funds. That role is performed by [APRA]. (ASIC 2015h)

### Disclosure requirements to improve transparency

ASIC uses disclosure requirements to promote transparency and comparability of trustees and service providers (ASIC, sub. 35). Disclosure is also an important input for managing conflicts of interest.

Trustees must meet certain requirements for disclosing fees and costs in **product disclosure statements** (PDS) and other periodic statements (ASIC 2015f). In particular, the PDS for each MySuper and choice product of the superannuation fund must have a table of fees and costs (ASIC 2014c). These include investment, advice, switching and exit fees, as well as indirect costs (any amount that a trustee knows will reduce member returns, but is not charged to the member as a fee). ASIC continues to make improvements to its guidance (such as RG97) on fee disclosure in PDSs, including modifications to its definition of indirect costs (box H.4).

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#### Box H.4 ASIC guidance for Product Disclosure Statements

There have been several reviews and changes to product disclosure statement (PDS) requirements in recent years.

In 2010, the Australian Securities and Investments Commission (ASIC) (2010) produced a review of 200 superannuation PDSs, and found that many are hard to understand and some could provide better information or were not up to date. Further, since June 2012, all superannuation products must meet the 'shorter PDS requirements' which limit the PDS to eight A4 pages and prescribe section headings and key content to ensure consumers can find and compare information (ASIC 2012).

In 2014, ASIC (2014e) responded to industry concern about superannuation-related fee and cost disclosure by producing a report to examine industry practice.

In the report we highlighted a number of inconsistent fee practices and reporting that have the effect of hindering accurate fee and cost disclosure for investors. Among these are issues with the inconsistent treatment of management costs associated with investing through external investment structures, different practices used to disclose performance fees and significant variations in disclosure in relation to the fund's insurance offering. (ASIC, sub. 35, p. 3)

Following this report, ASIC updated its primary fee and cost disclosure guide (RG97), which modified the definition of indirect costs and 'clarified for indirect costs that superannuation trustees are expected to make reasonable estimates where they do not know or ought to know a cost' (ASIC, sub. 35, p. 3). This modified guidance for superannuation PDSs takes effect from 1 February 2017 and is expected to improve the consistency and accuracy of fee and cost disclosure.

However, ASIC, as well as several study participants, noted that further improvements can be made to fee and cost disclosure (ASIC, sub. 35; ASFA, sub. DR98; Hartley, sub. DR82; IQ Group, sub. DR67; ISA, sub. DR106; Rice Warner, sub. DR112). For example, superannuation invested through a platform generally uses a managed fund's PDS which has different disclosure requirements to a superannuation fund's PDS.

ASIC has an important role in promoting and enforcing the use of **product dashboards** by superannuation trustees (although the dashboard measures are determined by APRA's reporting standards) (ASIC 2014a). From 31 December 2013, superannuation trustees offering MySuper products have been required to provide publicly available and easily accessible product dashboards under the Corporations Act (O'Dwyer 2016b). The dashboards are intended to provide members with key information about the product, facilitating comparisons between funds, using five separate measures.<sup>52</sup>

- Return target — net return of a representative member that exceeds the growth in the CPI over ten years.
- Return — net returns for a representative member for each of the 10 previous financial years.
- Comparison between return target and return.

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<sup>52</sup> APRA (2015b) is currently considering proposed amendments to product dashboard requirements that will split the statement of fees and other costs into its component parts and include a new measure of an investment mix pie chart reporting the benchmark asset allocation for each asset class.



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- Level of investment risk — estimated number of annual negative returns over 20 years.
  - Statement of fees and other costs (APRA 2015j).

Product dashboards for choice investment options were scheduled to be introduced on 1 July 2014, but have since been delayed by ASIC until 1 July 2017. The start date was deferred to give more time for consultation on the detail of the requirements and the passage of the stalled *Superannuation Legislation Amendment (Transparency Measures) Bill 2016* (Cwlth) (Transparency Measures Bill) (ASIC 2016b).<sup>53</sup>

Most trustees will also soon be required to publish their fund's **portfolio holdings** twice a year (Corporations Act, s. 1017BB(1)). The information must be sufficient to identify each financial product (or other property), and the value of each investment on a full 'look through' basis (including assets derived from assets) (O'Dwyer 2016b). However, like the choice product dashboards, these portfolio holdings disclosure requirements — initially due to begin on 31 December 2013 — have also been delayed until 1 July 2017 (ASIC 2016b).<sup>54</sup>

These disclosure requirements — PDSs, product dashboards and portfolio holdings — are designed to improve transparency and their success will impact on the competitiveness and efficiency of the superannuation system. While it may be difficult to produce quantitative indicators of the success of these requirements, reviews and surveys may provide insight into the overall improvement in transparency (chapter 6). For example, consumer testing of both MySuper and choice product dashboards generally found the resource to be valuable, but more so for consumers who claimed to be financially engaged (ASIC 2013a, 2015d).

ASIC (2015b) has also recently begun tracking general financial attitudes and behaviours of consumers, including potential indicators for superannuation member engagement. The tracker reports on the proportion of the population that owns a superannuation fund and if the member knows their account balance. The tracker also reports the level of life insurance cover across the population, compared with other types of insurance. While the survey is relatively high level and only has a short history, it may be a useful supplement to other research in the field (appendix B).

## Australian Taxation Office

The ATO has a general administrative role over several aspects of the superannuation system. This includes oversight of employer contributions, collecting certain information from APRA and administering SuperStream. One of its main roles is to regulate SMSFs, which are not subject to prudential regulation by APRA because the trustee of the fund is also the member (Murray et al. 2014a). However, SMSFs are still regulated under

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<sup>53</sup> The Transparency Measures Bill involved amendments to limit the choice product dashboards to a superannuation fund's ten largest choice investment options, among other measures.

<sup>54</sup> The Transparency Measures Bill involved amendments to remove certain portfolio holdings reporting obligations.

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superannuation legislation, particularly the SIS Act (Mackenzie, sub. DR73). Therefore, the ATO focuses on regulating SMSFs by ensuring members comply with tax and superannuation law.

## General administration

The ATO provides guidance, monitors and enforces compliance by employers that are required to make Superannuation Guarantee contributions on behalf of their employees. If an employer fails to meet the Superannuation Guarantee obligations, they may be liable for a range of penalties or charges, such as an administrative penalty or general interest charge (ATO 2015h). The ATO collects data on the number and value of superannuation guarantee charges and penalties for non compliance (ATO 2015d).

The ATO also administers **SuperStream** — a standard for electronically processing superannuation data and payments. SuperStream was designed to improve administrative efficiencies — for employers, superannuation funds and the Australian Government — in processing contributions, with estimates of almost \$1 billion in savings annually (AIST, sub. 30; Cooper et al. 2010b). Recently introduced reporting requirements will give APRA the ability to track the number and cost of contribution transactions into RSEs (APRA 2015k). In 2016, the ATO published its first quarterly report of these data for September 2015 — the total cost of contribution transactions from active employers was \$39 million (ATO 2016h).

An ATO-commissioned employer survey reported that businesses that had implemented SuperStream and completed more than one payment cycle saw a significant reduction in time taken to manage contributions (ATO 2015c). Since the 30 June 2016 deadline, all employers must use SuperStream to make contributions to superannuation funds (ATO 2015e). In conjunction with SuperStream, the ATO (2015p) also administers the Small Business Superannuation Clearing House — a free, optional single-payment service for employers with fewer than 20 employees or less than \$2 million in annual turnover.

APRA-regulated funds have specific reporting obligations to the ATO. For example, funds report on the contributions received for each member during the financial year and the balance of the account held in the fund. Further, funds must report and transfer unclaimed superannuation to the ATO twice a year — in particular, small **lost accounts** (ATO 2015b). This transfer ensures that ‘accounts are not eroded by fees and charges imposed by superannuation providers’ (Hockey 2015, p. 29). A member is generally considered lost if they are uncontactable or inactive as defined under the SIS Regulations. A lost account must be transferred to the ATO if its balance is below \$4000 — increasing to \$6000 from 31 December 2016. However, there is some concern that threshold increases may have unintended consequences for insurance of transferred members (ASFA, sub. 98).

The ATO (2016a) uses these elements to provide members with an overview of all of their superannuation accounts — including lost accounts — through its myGov online portal. This simplified process has encouraged members to see and consolidate their accounts,

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potentially reducing fees paid on multiple accounts. In its annual reports and statistical publications, the ATO publishes data for the number and value of lost and consolidated accounts (chapter 2 and appendix B). This information could inform indicators for measuring the number of members with multiple accounts (chapters 5 and 6).

The ATO's administrative and compliance roles have important implications for the operational efficiency of the superannuation system (chapter 6). Administrative and compliance costs reduce retirement incomes and indicators can be used to assess the operational efficiency of the system for employers, institutional funds and SMSFs. APRA's reporting standard for measuring SuperStream costs and ATO-reported data on account consolidations and superannuation guarantee penalties can be used to indicate changes in operational efficiency. In addition, the ATO plans to report a 'time-cost index for business and superannuation funds to prepare and complete key tax forms' as a measure of the reduction in compliance costs for taxpayers (ATO 2015i, p. 3).

## Regulation of SMSFs

As the regulator of SMSFs, the ATO has a strong focus on **compliance with tax and superannuation law**. Every year, SMSFs are required to lodge a return, pay a supervisory levy and arrange an audit by an approved auditor (Treasury 2014). The ATO's main SMSF-related activities include:

- verifying that a fund's primary purpose is to pay retirement benefits to its members
- providing information and forms to help set up and manage a fund
- checking that the fund is managed in accordance with the super laws
- implementing and maintaining systems to check the laws are complied with
- taking enforcement action to correct matters when there is a breach of the law
- checking that SMSF auditors perform their duties to the required standard. (ATO 2015g)

The ATO can use several enforcement actions to deal with non compliance by SMSF trustees. These include:

... education direction; enforceable undertaking; rectification direction; administrative penalties; disqualification of a trustee; civil and criminal penalties; allowing the SMSF to wind up; notice of non compliance; [and] freezing an SMSF's assets. (ATO 2015f)

Given that SMSFs are exempt from prudential regulation, they are also exempt from the statutory compensation that APRA-regulated funds can access in the event of theft or fraud (Treasury 2014). Consequently, financial advice laws and regulations on financial products (administered by ASIC) are the main forms of protection available to SMSF members.

Using these compliance tools, the ATO collects and reports on the performance of SMSFs more broadly. This information can be used to assess the competitiveness and efficiency of the SMSF market and the overall superannuation system (appendix G).

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## Coordination between regulators

As outlined above, there are a number of regulators with different, and sometimes overlapping, roles within the superannuation system. In cases where regulation overlaps, participants can be subject to unnecessary regulatory burden, reducing the system's efficiency. Under the Australian Government's regulator performance framework, a key performance indicator for all regulators relates to the streamlining and coordination of compliance and monitoring approaches (Australian Government 2014b).

There are several ways that regulators of the superannuation system work together to coordinate regulation and minimise regulatory burden. For example, many regulators, including APRA, ASIC and the ATO, follow the Standard Business Reporting (2015) approach to digital record-keeping to simplify business reporting obligations. This involves the standardisation of reporting taxonomy for business reporting.

An important method of coordination between financial regulators is through the Council of Financial Regulators (CFR), involving APRA, ASIC, the RBA and the Treasury. In addition to the CFR, these regulators coordinate bilaterally through memorandums of understanding covering operational matters such as information sharing and decisions likely to impact on other regulators (CFR 2016b).

Given the potential for regulatory overlap, coordination between APRA and ASIC is particularly important. For example, in some situations, superannuation trustees need to be licensed in two ways — they require both an APRA-issued RSE licence and an ASIC-issued AFS licence to provide superannuation services. However, overlap has been at least partly addressed by the legislation and the practice of both regulators — ASIC tends to require less information from APRA-regulated funds than other entities (ASIC 2015d). There are several examples of this coordination in practice.

- Under the Corporations Act, ASIC does not require a RSE licensee to provide information about its financial, technological or human resources, or risk management systems where the trustee also operates a registered managed investment scheme.
- If a trustee breaches both APRA- and ASIC-administered legislation, they may notify ASIC of the breach by reporting to APRA (ASIC 2015b).
- A RSE licensee could address the conflict of interest requirements of both APRA (2015e) (SPS 521) and ASIC (RG 181) by using one conflict management policy. ASIC noted that 'both APRA and the Corporations Act impose a conflicts management obligation and, fundamentally, the principles of conflicts management are consistent' (ASIC 2016e, p. 8).
- From 1 July 2013, ASIC has also been responsible for administering section 29QC of the SIS Act (ASIC 2013a). This reform ensures that any information provided by a RSE licensee to an entity or person is calculated in the same way as information reported to APRA. This was designed to ensure that information is calculated consistently — such as product dashboards and advertising of investment returns — improving comparability of superannuation products.

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### **H.3 Summary**

This appendix describes some of the features of the complex regulatory environment that have direct implications for the competitiveness and efficiency of the superannuation system. The regulatory regime works to address governance problems arising from the many principal–agent relationships and improve transparency throughout the system. Regulators aim to promote good governance arrangements — including managing conflicts of interest or trustee adequacy — so that trustees act in the best interests of members. Regulators impose disclosure requirements on participants to help manage conflicts of interest and make information more transparent and understandable so that members can act in their own best interests.

The key regulators — APRA, ASIC and the ATO — aim to address many of these issues. In doing so, these regulators collect a large amount of data and other information that can indicate competitiveness and efficiency within the superannuation system. The Commission will draw on some of those measurements in its assessment of the superannuation system.



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