Toolkit for Risk-based pensions supervision

Case Study

Australia

Risk-based Pensions Supervision provides a structured approach focusing on identifying potential risks faced by pension funds and assessing the financial and operational factors in place to mitigate those risks. This process then allows the supervisory authority to direct its resources towards the issues and institutions which pose the greatest threat.

The IOPS Toolkit for Risk-based Pensions Supervisors provides a 5-module framework for pensions supervisors looking to apply a system of risk-based supervision. A web-based format allows: a flexible approach to providing updates and additions; users to download each module separately as required; and a portal offering users more detailed resources, case studies and guidance. The website is accessible at www.iopsweb.org/rbstoolkit.

This document contains the **Australia Case Study.**

AUSTRALIA[1]

I. Background

A. Pension System

Australia started off with the trust-based defined benefit (DB) model similar to other Anglo-Saxon countries, except that payout has generally taken the form of a 100% lump sum at retirement, often reinvested in the fund or rolled over to a separate fund for purchase of a pension. By the 1980s employers were already starting to make trust-based defined contribution (DC) provision available. From 1992, Australia introduced mandatory employer contributions (9% of salary). All employees have to be enrolled into a trust-based superannuation fund. These were traditionally company or industry wide funds limited to employees of the company or industry concerned. DC arrangements can be offered by 'public offer' funds which are either employer or industry funds that have decided to expand their membership base, or funds offered under a master trust by commercial providers. Trustees can be corporate trustees or a group of individual trustees. Because 'public offer' funds and any fund that pays lump sum benefits must have a corporate trustee, there are very few prudentially regulated funds whose trustee is a group of individuals. While DC funds can be pooled DC, most now offer investment choice. Since 2005 employers have had to offer a choice of funds.[2]

Open superannuation funds are now nearly all DC, with only a few 'legacy' DB plans remaining. Since 1997 employers and employees have had the option of contributing to commercially provided contract-based Retirement Savings Accounts (RSAs) instead of to a superannuation fund. RSAs provide a guaranteed minimum return (hence with returns usually much less than a superannuation fund) and are targeted at low earners who are intrinsically less attractive to public offer pension funds. All DC funds with more than 4 members must ensure that member balances under $Aus 1,000 are not eroded by administration charges that exceed investment returns.

Since 2006 the trustees of all superannuation funds with five or more members have had to be licensed by the supervisor, the Australian Prudential Regulation Authority (APRA), which also supervises the providers of RSAs. This has been accompanied by a substantial reduction in the number of trustee entities that APRA supervises, with some 300 in June 2009.[3]

[1] This case study was prepared by Australian Prudential Regulatory Authority ('APRA'). Details can be found in (APRA 2008). Additional details of the PAIRS system are also taken from (Brunner et al 2008).

[2] Except in some cases where scheme membership is a condition of a collective bargaining agreement

[3] APRA also regulates approved deposit funds and eligible rollover funds, the latter established to accept mainly small or lost member superannuation accounts rolled over by trustees of other regulated funds.

B. Risk-based Supervisory Approach[4]

The private pension system in Australia is subject to regulation and supervision by three main authorities, i.e. the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC), and the Australian Taxation Office (ATO). The Australian financial supervisory structure adopts the so called "twin peaks" model, with APRA, the prudential regulator, mainly covering issues which affect the financial health of supervised financial services institutions, while ASIC, as the conduct and disclosure regulator, is mainly concerned with market integrity, business conduct and consumer protection issues. The ATO also plays an important role in the Australian pension system in that it is the regulator of the self-managed superannuation funds (SMSF)[5].

In October 2002, APRA introduced new risk assessment and supervisory response tools known as the Probability and Impact Rating System (PAIRS) and the Supervisory Oversight and Response System (SOARS). These supervisory tools are the centrepiece of APRA's risk-based approach to supervision.

Before the introduction of PAIRS and SOARS, the second largest general insurer in Australia failed. Subsequently and not directly related to the failure, there were many supervisory improvements made in APRA focussed on:

- making better risk judgements;
- quickly and consistently taking supervisory action where necessary;
- strengthening the ability of supervisors to take effective action; and
- improving oversight and reporting on problem entities.

At the time the original PAIRS model was introduced, APRA had not fully developed its Framework for Prudential Supervision including procedures for the conduct of prudential reviews and the financial analysis of regulated institutions. This Framework has been developed in subsequent years and continues to evolve and APRA matures. APRA embarked on a process in 2007-2008 to align the PAIRS risk assessment model and the Framework for Prudential Supervision. The alignment process was mostly concerned with aligning the categories of assessment in PAIRS with the categories of assessment considered as part of prudential reviews (on-site visits). This process was extensive and involved a rebuild of APRA's IT application that supports PAIRS. With hindsight, APRA acknowledge that developing the risk assessment and response models at the same time as the framework for prudential supervision would have been ideal.

APRA applies the same broad risk-based supervisory model to superannuation (pension) funds as to banks and insurance companies, with some adaptations for pension funds (see section on risk focus).

[4] Details of the APRA's historical development and moves towards risk-based supervision are available in '*Risk-based Supervision of Pension Funds: Emerging Practices and Challenges'*, Brunner et al 2008

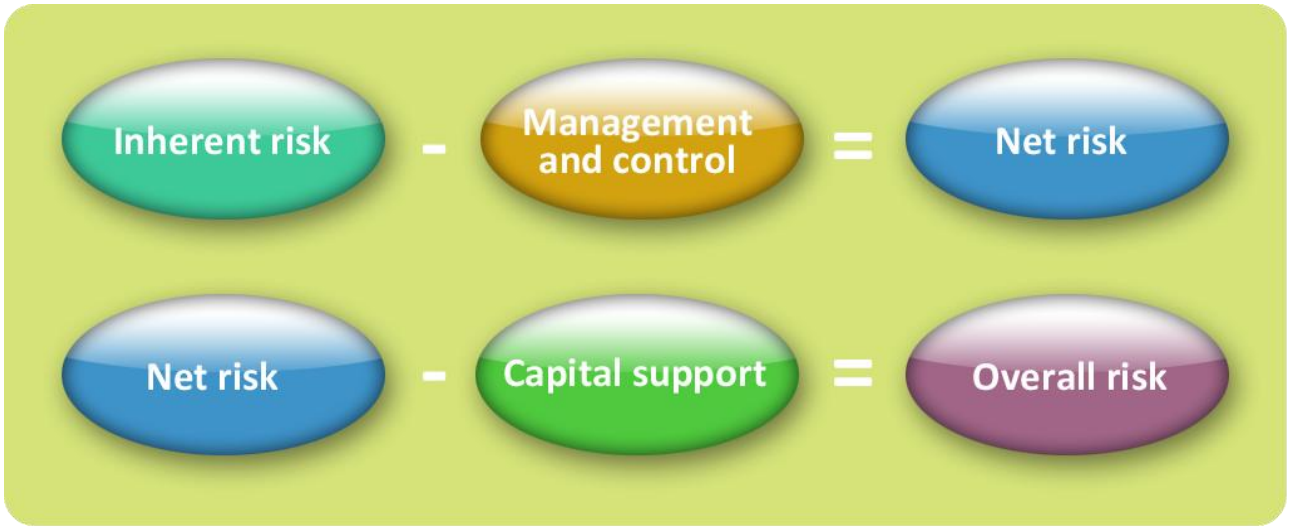
[5] SMSFs are funds with up to 4 members, all of whom must be involved in the operation and management of the fund as trustees or directors of a corporate trustee, and none of whom may be an arms-length employee of another member. The SMSF sector accounts for almost one third of all superannuation savings in Australia. APRA also supervises some 6000 small funds that do not meet the SMSF criteria and have appointed an APRA-licensed trustee.

Table 1: PAIRS summary

	Type of Risk Scoring System	Aims of the Model	Main Elements of Risk Scoring System	Special features for pensions
Australia (PAIRS)	Comprehensive risk scoring model applied to all types of institutions covered by integrated supervision authority	Identify and measure all major risks and the capacity of the entity to manage them. Determine supervisory response. Induce build-up of internal risk management capacity	Definition of gross or inherent risks, as well as mitigating factors through risk controls. Use of reference points. Combined probability and impact. Single net risk score built up from common elements	Capital strength component excluded for DC funds

Under the PAIRS, analysts are asked to assess the significance of the risks and mitigating factors and to assess the extent to which each contributes to (for the inherent risk factors) or reduce (for the management and control areas) the overall risks of a fund.

Figure 1: PAIRS overall risk



Weighted numerical assessments are combined into an overall score. This score is converted to a risk rating using a non-linear function to ensure that higher risk funds are given greater attention. The method of assessing riskiness and impact, PAIRS, is essentially a structured framework within which supervisors make assessments and reach judgments about the risk areas that are important for each fund and whether they are well managed or not.

The measure of overall risk is then combined with the size of an entity to determine APRA's supervisory approach. This recognizes that, with limited resources, APRA must give more attention to larger entities than smaller ones; financial weakness in a large fund will affect the interests of more members and will pose greater risk to confidence in the superannuation system (and its regulation) as a whole.

APRA's supervision staff found that a risk-based supervisory approach took some time to embed in the culture of the organisation and has involved extensive training programs. Moving from a compliance-based to a risk-based approach is something that has not happened overnight and APRA continually strive to make improvements in this area. One of the key challenges for APRA is to ensure that supervisors do not use a tick box approach when making assessments of regulated institutions but rather use the guidance material provided and their professional judgement and expertise when forming opinions on regulated institutions.

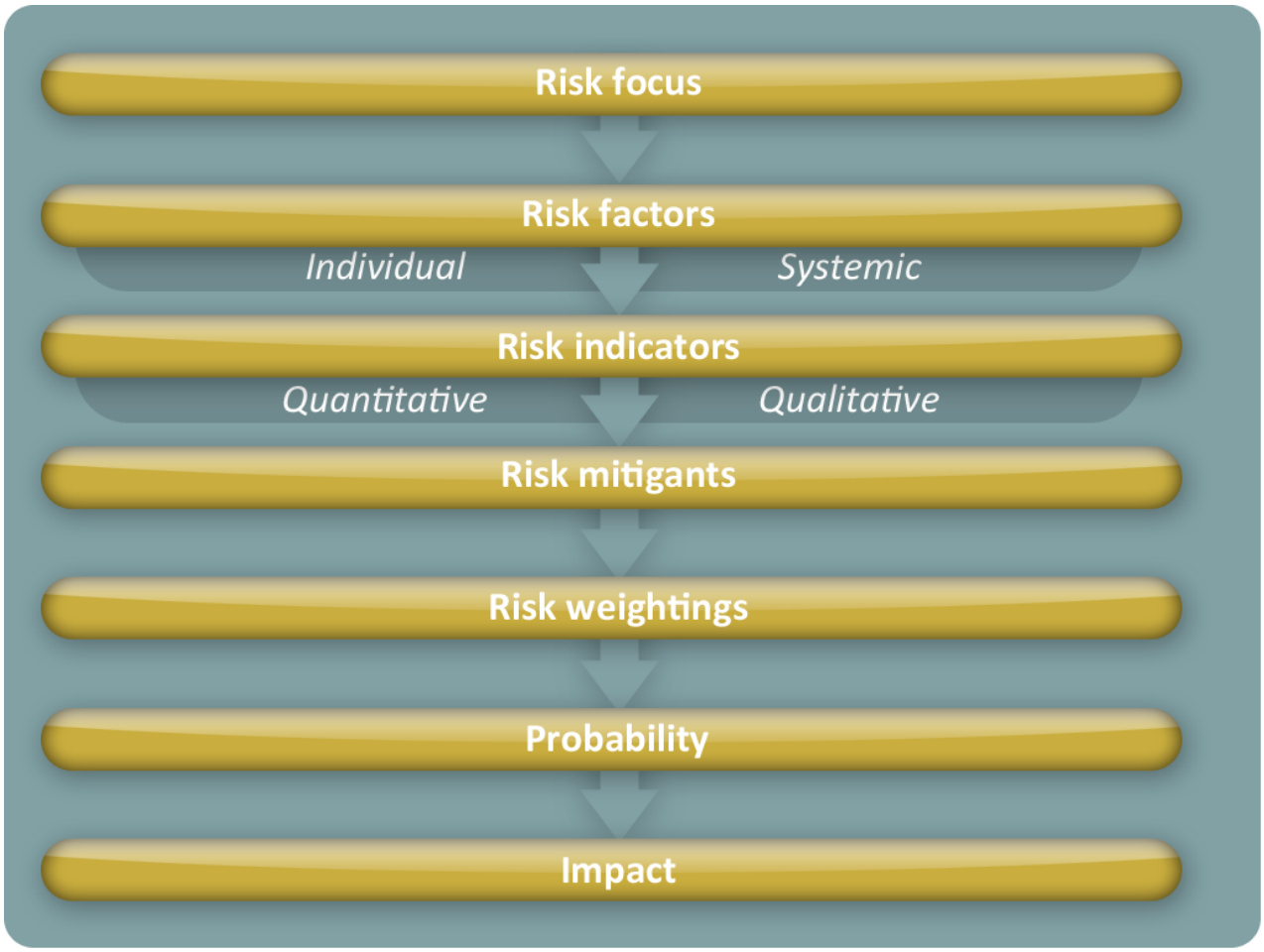
In terms of organisation, APRA's resources dedicated to superannuation are dispersed throughout the organisation rather than concentrated in one area. For example, the Specialized Institutions Division supervises stand-alone financial entities, including the majority of superannuation funds, conducting on and off-site reviews and PAIRS risk assessments. The Diversified Institutions Division supervises financial conglomerates, including many large retail funds. Supervision teams are supported by specialists in particular types of risk, and statistics, legal and technical groups

Frontline supervisory staff in the specialized and diversified institutions are assigned a number of institutions (depending on the size of entity and the supervisor's experience), usually from 2 industry sectors. Analysis of off-site pension fund data is undertaken by the same team that undertakes on-site supervision of the fund. They use their off-site information and analysis to focus the on-site prudential review, in particular to determine areas for further investigation.[6] They also use supervisory support teams where technical expertise is required. Separate enforcement teams take responsibility when a fund has been classified as requiring more intensive supervision.

[6] The D2A system is used for reporting by all of APRA's regulated entities (not just by pension funds). At the time of its introduction during 2001-2003 it was estimated to cost approximately €0.8 million. APRA's 'back of the envelope' estimate for the current cost of designing and implementing a new collection system, including forms design and management, returns management, levy collections, data warehouse and project management, in today's money is at least €2.8 million for the pensions component of the framework.

II. Risk-based Supervision Process

Figure 2: RBS process



1. Risk Focus

Supervisory Objectives

The legislation establishing APRA is relatively vague in stating: "APRA is established for the purpose of regulating bodies in the financial sector in accordance with other laws of the Commonwealth that provide for prudential regulation or for retirement income standards ... "[7] Nor, for that matter, are the other laws of the Commonwealth particularly helpful.

APRA's Mission Statement, however, is clearer in terms of supervisory objectives. It states that APRA's mission is to: *"establish and enforce prudential standards and practices designed to ensure that, under all reasonable circumstances, financial promises made by institutions we supervise are met within a stable, efficient and competitive financial system".*[8] In implementing RBS for pension schemes APRA has

[7] Australian Prudential Regulation Authority Act 1998, s.8.

[8] See inside cover of any APRA Annual Report (APRA 2001).

interpreted this last clause as requiring it to minimize the probability of, and damage to fund members and beneficiaries caused by fund failure.

Nature of Pension System

Risks within the Australian system are largely controlled via market mechanisms. APRA's approach is based on the premise that responsibility for risk management rests with the governing boards of its regulated entities, with APRA's role to promote the prudent behaviour of these entities. There are almost no quantitative limits on investments, no caps on costs and full choice of product at retirement. The main operational risk challenge is outsourcing.

APRA's approach to risk-based supervision consequently focuses on whether prudential oversight mechanisms are working. Where a risk area or potential problem is identified by APRA, their response is likely to be to provide guidance to industry on how they can work to mitigate this risk (e.g. guidance notes on outsourcing risk, internal risk control etc. have been provided). Given the large number of entities which they oversee, the focus of APRA is on identifying higher risk institutions which therefore require more intensive supervisory oversight.

Based on the type of system it oversees and its prudential approach, APRA has identified the following areas as its main risk focus (the last three categories applying only to DB funds):[9]

- Board
- Management
- Risk Governance
- Strategy and Planning
- Liquidity Risk
- Operational Risk
- Credit Risk
- Market and Investment Risk
- Insurance Risk
- Capital Coverage/ Surplus
- Earnings
- Access to additional Capital

Some variation in use is required for defined contribution superannuation where trustees have broad responsibilities to the members of a fund but do not make specific promises about performance (as reflected in the amount of final benefit). An assessment of capital support is, therefore, irrelevant (except for public offer trustee companies) and 'overall risk' is the same as 'net risk'.

[9] Detailed definitions of these categories can be found via APRA's website www.apra.gov.au

An assessment of *capital support* or *financial strength* is retained in the rating of defined benefit funds (and the trustee companies of public offer defined contribution funds). Capital support is made up of three components: current coverage / surplus, earnings, and access to additional capital. In the case of defined benefit funds, financial strength is measured by the extent to which the fund's assets cover its short-term and actuarially estimated long-term pension obligations, by its earnings performance and by its access to additional capital (for instance, from associated employers) if needed. It is analogous to assessing capital adequacy in the case of banks and insurers. For these funds, these categories of assessment only relate to the portion of defined benefit/total benefits and primarily involve looking at the solvency of the fund, its earnings capacity and volatility and an assessment of support provided by the employer sponsor. The review of actuarial reports is a key supervisory activity for these funds.

As well as rating all funds (except for those with fewer than 5 members), APRA also rates all licensed trustees.[10]

Risk Appetite

Sentiments about the limitations of financial supervision were expressed by APRA in its Annual Report in 2001.[11] APRA stress that their supervisory approach is based on the fundamental premise that the primary responsibility for financial soundness and prudent risk management within a supervised financial institution rest with its board of directors and senior management. APRA's role is to promote prudent behaviour by financial institutions through a robust prudent framework of legislation, prudential standards and prudential guidance, which aims to ensure that risk-taking is conducted within reasonable bounds and that risks are clearly identified and well managed. In doing so, APRA clearly states that it does not pursue a zero failure objective. APRA cannot eliminate completely the risk that a financial institution might fail and it recognizes that any attempt to do so would impose an unnecessary burden on financial institutions and 'harden the arteries' of the financial system.

APRA fully endorses the Statement of Expectations issued by the government that "...prudential regulation cannot and should not seek to guarantee a zero failure rate of prudentially regulated institutions or provide absolute protection for market participants (including consumers)." The Statement of Expectations confirms the objective of the prudential regulation regime is to maintain a low incidence of failure of regulated entities while not impeding continued improvement in efficiency or hindering competition. APRA intends to achieve this objective through the setting of prudential requirements and its approach to the supervision of individual institutions.

[10] In Australia, licensees/trustees responsible for single funds and those responsible for multiple funds both exist. For licensees/trustees responsible for a single fund a PAIRS assessment is required for the licensee and the fund. The PAIRS assessment for one is usually a replica of the other except where the licensee undertakes other activities, which then need to be assessed as part of the assessment of the licensee/trustee. For licensees/trustees responsible for multiple funds a PAIRS assessment is required for the licensee and each fund under trusteeship. For licensees/trustees with multiple funds, a beneficiary approach is taken where all the risks in the funds are aggregated i.e. the PAIRS assessment of the licensee/trustee reflects the underlying inherent risk/s of the funds (and, where applicable, the licensee's company balance sheet itself). It is important that the PAIRS assessment for the licensee/trustee reflects any problematic small funds that the licensee/trustee is managing poorly particularly where other funds under its umbrella are relatively large, well managed and controlled.

[11] The APRA Report notes that there are two aspects of prudential regulation that are not widely understood by the community: *"First, supervisory interventions are usually graduated .... Second, prudential regulators are not infallible. .... No regulator can promise a complete absence of failure: in particular, no regulator has the capacity to eliminate fraud."* (APRA 2001) p.4.

2. Risk Factors

A. Individual

For all APRA-regulated entities, the assessment of *gross inherent risk* assesses the board and management of the entity and its overall approach to risk governance, as well as considering:[12]

- *credit risk*: risk of default by borrowers and transactional counterparties as well as the loss of value of assets due to deterioration in credit quality.
- *market and investment risk*: risk of losses due to adverse movements in the level or volatility of market rates or prices
- *insurance risk:* insurance underwriting risk, or the risk that insurance cover will not be available as expected when needed
- *operational risk*: the risk of losses resulting from inadequate or failed processes, people and systems, whether internal or occurring within a service provider– or from an external event
- *liquidity risk:* the risk that an institution will not be able to meet its payment obligation as they fall due without significant unexpected costs
- *strategic risk:* risk associated with an entity's business model and how it wants to position itself strategically.

For superannuation funds, the most significant risks are likely to be market and investment risk (from exposure to losses from movements in share prices, real estate prices and interest rates), operational (record-keeping, management of outsourcing contracts) and trustee fitness and propriety and risk governance arrangements.

Strategic risk may also be important where funds are amalgamating or otherwise expanding rapidly, and regulatory risks can be significant given the complexity of the taxation, disclosure, retirement income and prudential requirements. Insurance risk can be important for funds offering death and disability cover.

Trustees must develop investment strategies in the context of risk and return, diversification, liquidity and cash flow requirements. The risk management plan for the fund must encompass relevant investment risks.

One of the features of the Australian superannuation system is the high degree of outsourcing of major business functions including fund administration. APRA, as the prudential regulator, does not have direct jurisdiction over service providers to trustees of superannuation funds. Instead, it monitors the effectiveness of the trustee's management and oversight of the service provider. APRA also has indirect access via prescribed conditions in the contracts between trustee and service provider. Those conditions provide for provision of information and documents to APRA and conduct by APRA of on-site visits in relation to the conduct of the affairs of the fund in question, and for independent audit of the activities which are the subject of the contract.

[12] Detailed definitions of these categories can be found via APRA's website www.apra.gov.au

APRA sees data integrity as a major administrative risk with availability of reliable data a necessary pre-condition to funds working out member entitlements such as tax, investment earnings, insurance and other costs.

APRA provides extensive risk management guidance,[13] including guidance on outsourcing.[14] The administration services sector in Australia is extremely concentrated, adding another dimension to administrative risk in the Australian system. APRA has been conducting a review of major service providers to gauge the extent and significance of the risk.

B. Systemic

APRA regularly reviews each industry it supervises and the general state of the macroeconomic environment for emerging issues and threats. These reviews may lead to actions relating to a specific regulated entity and/or lead to a revision of APRA's prudential requirements. Industry analysis provides supervisors with up-to-date information on industry developments and emerging issues or trends that may adversely impact regulated entities' risk profiles. Supervisors are responsible for developing an appropriate supervisory action plan to mitigate any risks or issues identified. Supervisory actions will vary by regulated entity and reflect APRA's risk-based approach.

On an annual basis, the internal Industry Groups consider and identify key emerging risks and supervisory issues for each industry with input from the frontline, technical, policy and statistics teams. These issues are aggregated into report form. A supplementary regular summary note is also prepared by Industry Groups for supervisors on a six monthly basis on the key supervisory issues within the industry and macroeconomic environment. The reports consider:

- emerging or existing issues that have the potential to alter the risk profile of a category of regulated entities;
- implications of the issue for regulated entities; and
- key areas and triggers where specific supervisory action may be required.

The identified risks and issues are further distilled into a 'top risks and issues' list for each industry that must be considered in setting supervisory action plans for all regulated entities. Supervisors should assess the impact of identified issues on the regulated entities within their portfolio and incorporate actions, as necessary, to address the risks in supervisory action plans. Other teams (e.g. specialist risk, research and technical teams) also provide active support to supervisors. Each of the top risks and issues identified in the report is allocated to an individual risk owner determined by the Executive Group. This person is responsible for developing suggested supervisory actions to ensure the issue/risk is adequately addressed by supervisors in the upcoming year. With support from across APRA, the issue/risk 'owner' is responsible for:

[13] For example Superannuation Guidance Note SGN120.2: Risk Management' http://www.apra.gov.au/Superannuation/upload/SGN-120-1-Risk-Management.pdf

[14] For example, Superannuation Guidance Note SGN130.1 Outsourcing http://www.apra.gov.au/Superannuation/upload/SGN-130-1-Outsourcing.pdf

- developing suggested supervisory actions, with agreement from the relevant Industry Group; and

- coordinating a group of staff from across APRA to ensure there are sufficient subject matter experts that are aware of developments in respect of the issue/risk. These staff are encouraged to:

  - facilitate communication across supervision and specialist teams on specific risk issues or concerns that are likely to affect desired supervisory outcomes;

  - work with key risk 'owners' to develop strategies for assessing and reporting on the top risks/issues;

  - provide specific assistance to other supervisors on issues related to their area of expertise;

  - ensure the supervisory action plans in relation to relevant regulated entities' adopt an issue/risk action;

  - ensure staff receive adequate information, support and training on the issue/risk; and

  - develop an aggregate report on the issue/risk by the end of the year, summarising the findings for the Executive Group and any recommendations arising from the year's work.

In addition to regular analysis of key industry risks and issues, *ad hoc* industry-based studies may also be conducted by Research, Statistics and other areas of APRA. For example, in response to the financial crisis of 2008/2009, APRA increased the monitoring of the liquidity of DC funds.

These reviews will have a clear summary, for internal purposes, of how the concepts examined are relevant to supervision and areas supervisors should consider in their analysis and assessment. Peer group financial analysis and other analytical support tools are also used. A regular review of financial information is conducted by Statistics and used to identify key trends within an industry sector and outlier regulated entities. Outliers will be referred directly to supervisory teams to review and potentially raise issues with the regulated entity.

3. Risk Indicators

A. Quantitative

Given APRA largely oversee a DC system, qualitative rather than quantitative indicators are used (see below).

B. Qualitative

APRA tend to use qualitative rather than quantitative risk indicators. Each risk category is scored from 0 (low) to 4 (high). For example, in terms of investment risk, a fund receiving a 'very low' rating on inherent balance sheet/investment risk will have well-diversified investments spread across different investment products and markets, and limited exposure to volatility in returns. At the other end of the spectrum, a fund rated 'extreme risk' on this criterion will have a concentration of investments in one product or market, and high exposure to volatility. In between, a high-medium rating (1.6 to 2.0) is aligned with 'some

concentration' of investments in certain products or markets, and 'significant exposure' to investment volatility.

In order to derive this rating, APRA does not apply quantitative restrictions.[15] Instead APRA's supervisory approach is to determine whether a fund has a clear investment strategy; to assess whether that strategy is consistent with the trustee obligations; to make a judgment on whether the trustees, with service providers where relevant, are competent to carry out that strategy; and to assess whether they are capable of monitoring the strategy's implementation and adapting it to changed circumstances for either the fund or for markets. In other words, the trustee has full responsibility for the investment allocation and APRA's approach is to examine the policy of the trustee.

Nine guidance manuals are provided to assist analysts in their assessments, outlining risk indicators for each area and all significant statutory and regulatory provisions for which compliance must be checked. Good practice and common problems are also outlined. These cover the following topics that are relevant to a PAIRS rating:

- the board of trustees of the fund
- management
- risk governance
- strategy and planning
- liquidity risk
- operational risk
- market and investment risk
- insurance risk
- capital support

For example, the supporting guidance material on operational risk covering a superannuation fund's human resources policy, outsourcing, fraud prevention, administration, information technology systems, business contingency management, project management, and the introduction of new products and businesses. Summaries of the guidance provided on balance sheet/ investment risk and operational risks and capital support for DB funds can be found in the World Bank publication (Brunner 2008).

[15] The only legislative restrictions applied are on 'in house assets' (that is, investments in an employer-sponsor and related entities), the sole purpose test (investments must be for the purpose of delivering retirement income) and prohibitions on lending to members.

Operational risk examples

The PAIRS manual describes a superannuation fund with very low operational risks as having one of more of these features:

- Simple legal and organisational structure with clear reporting lines
- No reliance on related entities for core or complementary activities
- No outsourcing of material business activities
- Simple products and low transaction volumes
- Off-the-shelf IT systems that suit the needs of business, have no history of problems, and are adaptable for foreseeable changing needs
- Minimal disaster threat from external activities
- No reliance on a key person

In contrast, a fund with high operational risk will have:

- Complex structures and unclear reporting lines
- Extensive reliance for core or complimentary activities on related entities not wholly owned within the same group
- Outsourcing of material activities to unrelated third parties, with a history of unresolved problems
- Complex business with many products and high volumes of complicated transactions
- Information systems that are unable to meet business needs and /or many inherited / legacy systems
- Vulnerability to external disaster
- Heavy reliance on one person

Table 2: PAIRS risk categories and risk assessment indicators

Risk Categories	Principle determinant in APRA's assessment
Board	• Quality, skills, experience of all directors • Whether the Board meets composition and independence requirements • Whether the 'fit and proper' policy for the Board meets prudential requirements and how frequently the policy is reviewed • Whether directors individually and collectively meet the fit and proper requirements • Conflicts of interest and key person risk at the Board level
Management	• Composition and structure of Management including formal delegations • Whether the entity's fit and proper policy meets prudential requirements and how frequently the policy is reviewed • Whether members of the management team individually and

	collectively meet fit and proper requirements • Conflicts of interest and key person risk in the management team • The level of management turnover and succession plans in place
Risk Governance	• Board committees, including the Audit Committee • Compliance functions involved in setting policies and procedures for adherence to legal and regulatory requirements, the monitoring of compliance with those policies and procedures, and the reporting on legal and regulatory compliance matters to management and the Board • Internal and external audit functions charged with the responsibility for assessing the adequacy of and adherence to operational and organizational controls, risk management policies and procedures, and actual risk assessments, independent of management • The role and functioning of the Board, including the existence of a formal charter and renewal policy • How the Board sets and reviews the risk management framework and ensures that risks are defined, understood and properly managed • The committee structure in place and its effectiveness, including the role, composition and functioning of the Audit Committee • The compliance framework in place including roles, responsibilities and independence • The internal and external audit functions, including skills, experience and independence
Strategy and Planning	• The riskiness of the entity's strategy • The entity's current and intended future markets • Diversification of the business • The entity's competitive advantage • Expansion, acquisition and growth ambitions, or plans to exit certain business areas • Susceptibility to external influences including environmental or economic change • Entity's vulnerability to reputational and contagion risk
Liquidity Risk	• Nature of liabilities • Saleability of assets • The funding strategy to support the entity's current needs an future growth

	• Wholesale and retail funding mix and trends • Concentration mix of assets and liabilities by market, counterparty and maturity • Contingent/ off-balance sheet commitments • Intra-group funding arrangements
Operational Risk	• The size, sophistication, structure and complexity of operations • The complexity, level of change and vulnerability of the IT systems utilized. It is usual for entities that have a high degree of complexity within the IT systems environment and are undergoing or plan to undergo significant change within that environment to have higher levels of inherent operational risk • Vulnerabilities to business interruptions/ external events that may impact on the business. This is clearly influenced by geographical location of the entity's physical facilities and any history of similar events in those particular locations or others with similar characteristics. APRA sees it as important to understand the entity's operational and legal structure so as to assess the degree of vulnerability in these areas • Susceptibility to fraud (both internal and external)
Credit Risk	• Asset portfolio composition, including size and types of credit exposures • Lending strategy • Concentration of credit exposures, including the size of individual exposures relative to the size of the total portfolio and the extent to which separate exposures share common risk characteristics (increasing the likelihood of joint default). The more concentration the portfolio, the greater the potential loss that could result from any single default causing event • The likelihood of default, including the financial strength of borrowers or counterparties and their ability to meet commitments • The extent of loss should default actually occur. This is largely dependent upon the types and amounts of security, if any, held against exposures and the entity's bad debts/ arrears experience
Market and Investment	• The size, nature and complexity of market and investment activities • Assets and liability mismatch • Sensitivity to market risk • Balance sheet instruments, including derivatives and foreign currency exposure • Investment objectives and strategy (where applicable) e.g.

	aggressive, conservative • Diversification across asset classes and asset allocation • Nature of assets valuations
Insurance Risk	For superannuation entities that undertake self-insurance, the level of inherent risk will be influenced by: • the extent of self-insurance in relation to the size of the overall fund • the availability of self-insurance to new members • the membership profile of self-insured benefits (DB, DC) • the diversification of risk retained • Level and amount of reinsurance

Source: APRA PAIRS Manual[16]

4. Risk Mitigants

The controls or *mitigants* of the inherent risks are classified as:

- quality of the governing board/trustees: covers their understanding of responsibilities, their experience, competence and integrity and the presence of conflicts of interest;
- the quality of senior management: its experience, competence and integrity
- effectiveness of operational management: this is defined to include human resource policies (recruitment and training) and, where relevant, management of outsourced operations by trustees
- a fund's information systems and financial controls: capacity to produce timely and reliable information for regulators and members
- adequacy of risk management systems: quality of arrangements for determining risk appetite, identifying and measuring risk, setting limits, monitoring compliance with those, and reporting
- a fund's compliance culture and procedures: relates to compliance with laws and regulations and involves assessment of the competence, integrity and independence of responsible staff, as well as a fund's information systems
- the adequacy of independent review: this relates to internal and external audit and actuarial review, and requires assessment of both competence and independence.

Where a fund has largely outsourced its operations, the supervisor needs to assess the systems of the external parties as well as the protections that the fund has under its contracts with these parties.

One challenge upon the introduction of the revised PAIRS model is the differential assessment of risk and control for certain categories including Strategy and Planning, Liquidity Risk, Credit Risk, Operational Risk,

[16] Available via APRA's website www.apra.gov.au

Market and Investment Risk and Insurance Risk. Some supervisors have found it difficult to differentiate between risk and control. APRA has attempted to assist with this process by developing extensive guidance material and training programs and holding regular benchmarking sessions to discuss PAIRS assessments prepared for similar institutions.

Quality assessment scores are applied to each PAIRS category from a continuous scale of 0 to 4, 0 being the best and 4 the worst. The expected granularity of quality assessment scores is to the nearest tenth (0.1, 0.2 etc.). For the Board, Management and Risk Governance Categories, supervisors derive a quality assessment score at the Net Risk level. For the Strategy and Planning, Liquidity Risk, Operational Risk, Credit Risk, Market and Investment Risk and Insurance Risk categories, supervisors derive a quality assessment score for the inherent risk in that category and a separate quality assessment score for the management and controls relevant to that risk. The net risk position of each category is a simple average of the two quality assessment scores.[17]

Risk management examples

APRA's guidance[18] notes that a fund rated 'very strong' on risk-management, for example, will have the following:[19]

- a board that understands all major risks and exercises strong stewardship;
- an effective, disciplined risk management framework that is regularly reviewed and endorsed by the board;
- a dedicated risk management function with a direct line of communication to the board to ensure that the framework is up to date and being complied with;
- clear senior management delegations;
- proactive risk identification and control systems;
- a strong risk culture throughout.

[17] Quality assessment scores and significance weights are not individual assigned by supervisors to the three capital support categories for entities in the following peer groups: RSE licensees – non-public offer; public offer funds – accumulation only; non-public offer funds – accumulation only; EFRs; and PSTs. For entities in these peer groups, the risk assessment process ceases at the net risk level.

[18] APRA (2004), „Superannuation Guidance Note SGN120.2: Risk Management" http://www.apra.gov.au/Superannuation/upload/SGN-120-1-Risk-Management.pdf

[19] Although a centralized risk management function is not mandated, APRA will give higher marks to a fund that has an area of management charged with identifying all inherent risks and their mitigants, that the mitigants are working effectively, and that this risk management framework is up to date, and that reports are made periodically to the board of trustees. In a large retail fund this function might not cover the entire risk management framework itself but would coordinate the necessary inputs from relevant areas, such as operations and investments. Ideally this area would also have some authority to monitor and enforce compliance with the risk management policies endorsed by the board of trustees.

Risk governance examples

In the context of its risk-based supervision approach, APRA's assessment of an institution's risk governance is a major determinant of the supervision stance adopted in respect of the institution. An institution would be rated as having a strong risk governance approach if, among other things,

- The role and responsibilities of the Board is clear.
- There is strong evidence demonstrating that the Board provides clear direction and leadership for the entity and that they take their obligations to their beneficiaries seriously.
- There is strong evidence that the Board is functioning effectively in key areas.
- A robust Risk Management Framework (RMF) is in place, is regularly reviewed and exceeds minimum requirements in key areas.
- The Committee structure is well established and strong evidence that Committees are functioning effectively.
- An audit Committee is well established, exceeds prudential requirements and there is strong evidence that it is functioning effectively.
- The performance of Board and Committees is regularly reviewed.
- Strong internal audit, external audit and, where applicable, actuarial functions exist. There are clearly independent, high quality staff, adequately resourced and effective.
- There is a strong compliance framework/ function that is independent, adequately resourced, with high quality staff, clear identification and resolution processes.

Table 3: PAIRS risk categories and risk mitigant indicators

Risk Categories	Principle determinant in APRA's assessment of Management and Control
Strategy and Planning	• The overarching strategic and planning practices • Involvement development and monitoring of strategy by the Board and management • Reasons for changes to the strategy and how changes are controlled and monitored • Underlying assumptions and scenarios/ stress tests that support the strategy, including reliability of information sources • Processes around the implementation of the strategy • Resources required and the ability to execute strategy • Monitoring of performance against strategy
Liquidity Risk	• Awareness of liquidity risk by the Board • Liquidity management functions and committees (ALCO) in place • Policies and procedures relating to liquidity risk management

	• Limits in place and how they are reviewed and monitored • Scenario analysis and models used, including dependability of information sources • Reliability and extent of intra-group funding and standby facilities • Contingency arrangements in place, including any contributions to multilateral liquidity support arrangements
Operational Risk	• The awareness of operational risk by the Board • Operational risk management functions and commiteess • Policies and procedures • Controls in place across the IT environment • Management of operational issues including administration, outsourcing arrangements, new products, project management and fraud • Business continuity and disaster recovery plans, including testing processes in place and back up arrangements such as data files, documentation, regularity of file recovery and off-site location (and testing of such arrangements)
Credit Risk	• The awareness of Credit Risk by the Board • The credit risk management framework, systems and delegations in place • Origination, security and collateral structures and valuation practices • Credit-related policies and procedures • Problem asset management including compliance with prudential requirements • Information systems and portfolio management • The role and functioning of independent credit review process
Market and Investment Risk	• The awareness of maker an investment risk by the Board • Trading and investment functions, including segregation of responsibilities • ALCO and /or investment committees in place • Delegations and limits in place and how they are monitored and controlled • The process of reviewing and monitoring trading and /or investment strategies • Investment management and asset valuation practices • Market and investment policies and procedures including those relating to unit pricing • Models used, including underlying assumptions and stress analysis • The strength of management information systems • Independent review functions

Source: APRA PAIRS Manual www.apra.gov.au

5. Risk Weightings

To calculate a PAIRS rating for a superannuation fund, APRA analysts make two assessments against each of the risk categories and mitigants listed above.

The *quality* of each characteristic is rated – i.e. the extent to which each contributes to (for the inherent risk areas) or reduces (for the management and control areas) the overall riskiness of the fund. Each category is rated on a scale from zero to 4. For risk categories these range from 'very low' (0 to 0.5) to extreme (3.1 to 4.0); for risk mitigants or control elements they range from 'very strong' (0 to 0.5) to 'extremely weak' (3.1 to 4.0).

In addition to rating each risk category and mitigant for its strength, an assessment is also made as to the *significance* of the category for the particular fund – i.e. each category is weighted for its importance. For instance, a retail fund that is part of a diversified financial group and that relies heavily on other members of the group for outsourced services would have a relatively high weight assigned to 'Strategy and Planning' regardless of any assessment of the strength of those entities or the measures in place to protect the fund's interests.

For Board, Management, Risk Governance, Strategy and Planning, Liquidity Risk, Operational Risk, Credit Risk, Market and Investment Risk and Insurance Risk categories, the significance weights add up to 100%.

Where appropriate, supervisors also then derive a quality assessment score and significance weight for each capital support category. The significance weight for each of the three capital support categories adds up to 100%. For the capital support categories, significance weights for all entities in most peer groups are assumed constant at 50%, 25%, 25% respectively (with some exceptions).

The weighted assessments of the risk categories and control mitigants are combined into an overall net riskiness score – ranging from 0 to 4.

Table 4: PAIRS Summary of PAIRS Scoring

PAIRS Category	Inherent Risk	Management and Control	Net Risk	Significance Weight
Board			(0-4)	%
Management			(0-4)	%
Risk Governance			(0-4)	%
Strategy and Planning	(0-4)	(0-4)	(0-4)	%
Liquidity Risk	(0-4)	(0-4)	(0-4)	%
Operational Risk	(0-4)	(0-4)	(0-4)	%
Credit Risk	(0-4)	(0-4)	(0-4)	%
Market and Investment Risk	(0-4)	(0-4)	(0-4)	%
Insurance Risk	(0-4)	(0-4)	(0-4)	%
Net Risk Total			(0-4)	100%
Coverage / Surplus			(0-4)	%
Earnings			(0-4)	%
Access to Additional Capital			(0-4)	%
Capital Support Total			(0-4)	100%
Overall Risk of Failure			(0-4)	

Source: APRA

6. Probability

These scores are then converted to probably ratings which incorporate 2 elements:

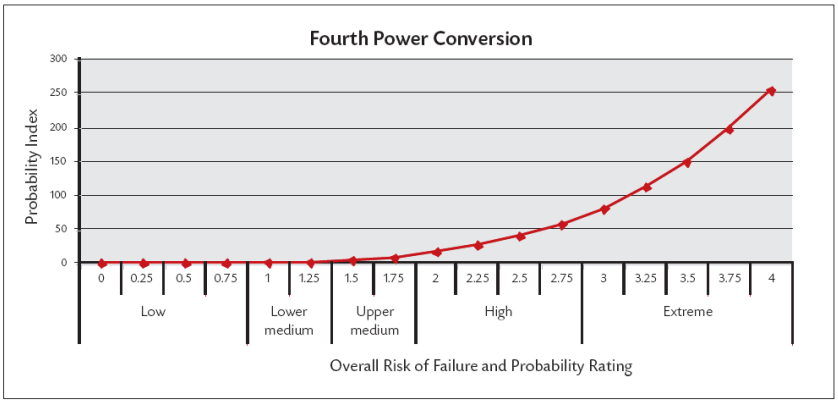
- The *Probability Rating* – a descriptive assessment of the likelihood that a regulated entity could fail. The descriptive probability scale consists of five ratings – Low, Lower Medium, Upper Medium, High and Extreme.

- The *Probability Index* – a quantitative measure of the approximate relative likelihood that a regulated entity could fail. It is a continuous curve whose function is the fourth power of the overall risk of failure.

Probability ratings rise exponentially, based on the fourth power, as the measure of financial strength falls. A net risk score of 2 will convert to a PAIRS rating of 16, while a score of 4 converts to the maximum of 256. This non-linear feature mirrors the structure of commercial credit ratings and is aimed at ensuring that the riskier entities are given particularly high profile with APRA staff and, consequently, the requisite more intense supervisory attention.

The numerical ratings are based on the 4 point scale (from less than 1 = low risk/ to 4 = extreme risk). Taken to the 4th power to give probability of failure index (from 1= very low probability of failure to 256= high probability of imminent failure). Basis of calculation is that the probability of failure does not increase in a linear fashion, but increases exponentially. The 4^{th} power calculation is an approximation and simplification of exponential formula.

Figure 3: PAIRS probability rating



Source: APRA

Table 4: PAIRS ORF and Probability Index against Indicative External Ratings

Overall Risk of Failure		Probability Index	Indicative External Rating
Very Low	0.25	1	AAA
	0.5	1	AA+
Low	0.75	1	AA
	1.0	1	AA-
Lower Medium	1.17	2	A+
	1.33	3	A
	1.5	5	A-
Upper Medium	1.67	8	BBB+
	1.83	11	BBB
	2.0	16	BBB-
High	2.25	26	BB+
	2.5	39	BB
	2.75	57	BB-
	3.0	81	B+
Extreme	3.33	123	B
	3.67	181	B-
	4.0	256	CCC

Source: APRA

In determining probability, supervisors undertake a range of activities. For the bulk of the pension sector these primarily include:

- Prudential reviews (on-site visits) to review governance, risk management, operational risk, market and investment risk and other factors.
- Analysis of financial data and other information including audit reports submitted to APRA. For all pension funds with assets greater than $50m, financial information is received on a quarterly basis. For those with less than $50m in assets financial data is received annually.
- Reviewing institutions that have been identified in internal exception reports designed to flag outlier institutions from the financial data received.
- Reviewing actuarial reports for defined benefit/ hybrid pension funds.
- Review of other regulatory and market information.

If supervisors find key areas of risk or weaknesses in risk management processes when performing these activities, PAIRS risk assessments are adjusted upwards and supervisory responses become more targeted and timely focussing on the areas in need of attention.

7. Impact

After the probability rating of a fund is calculated, an impact rating is introduced, incorporating two elements:

- *The Impact Rating:* a descriptive assessment of the potential adverse consequences that could ensue from the failure of a regulated entity. The descriptive impact scale consists of four ratings –

Low, Medium, High and Extreme. The potential adverse consequences of failure encompass not only the direct financial impact on the depositors, policyholders or fund members of a regulated entity but also the potential for indirect damage to the industry concerned and the broader economic system.

- *The Impact Index:* derived with reference to each entity's total resident Australian assets.[20] It has been calibrated to produce a relative index range similar to that derived from the relative Probability Index.

While the impacts or consequences of serious financial problems or failures of financial entities depend on many factors, APRA currently uses total assets as a simple proxy. For licensees/trustees, total assets include the assets of all pension funds under the licensee/trustee. Its impact index is a linear function of assets with a floor of $A80 million set on the basis that any failure, no matter how small, is likely to damage the public's confidence in the financial system and its regulation. Medium impact entities have assets of at least $A400 million, high impact from $A4 billion and extreme impact from $A40 billion. About 50 superannuation funds are rated as high and the remainder as medium or low. There are no extreme impact funds.[21]

Asset ranges	$0 ≤ x < $400m	$400m ≤ x < $4b	$4b ≤ x < $40b	x ≥ $40b
Impact Rating	Low	Medium	High	Extreme

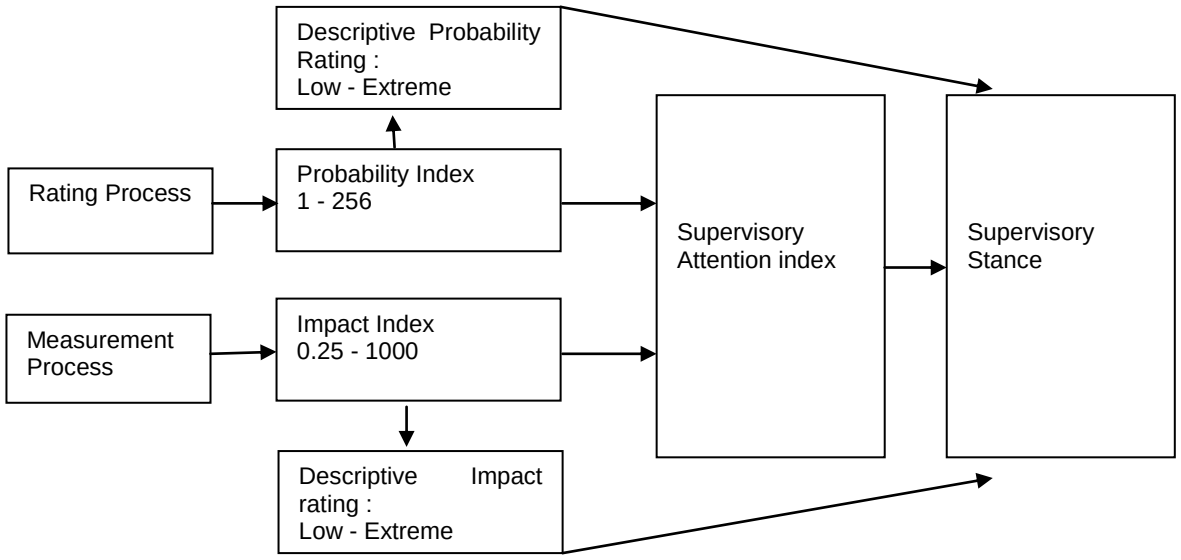
In some cases APRA may move an impact rating into a higher range if the failure of the entity would have an impact disproportionate to its assets. In rare circumstances, APRA may adjust an impact rating downward, where a regulated entity does not take money from the public and where the impact of failure is disproportionately low compared to asset levels.

As part of developing the next generation of PAIRS, APRA will be looking to improve the way in which the impact of failure is measured.

[20] Except for general insurance, where APRA considers the face value of total resident Australian assets understates the true impact of a failure of a general insurer. As a result, in determining the impact rating and index for general insurers, total assets are multiplied by three before applying relevant formulae.

[21] The impact ranges were revised in 2008. The previous impact ranges had lower threshold ranges. For example, a low impact institution had assets between $0 and $250m and so on. The main reasons why APRA changed the asset ranges in 2008 were to: take into consideration the industry consolidation that is occurring in the Australian market – APRA is seeing more financial institutions merging; asset growth since the original PAIRS and SOARS models were introduced; and to reassess the impact distribution particularly those institutions considered to have a High or Extreme impact of failure.

Figure 4: Risk probability/Impact rating framework



Source: APRA

8. Quality Assurance

Under the Australian PAIRS system, the individual supervisor inputs scores for risk categories and risk mitigants and decides upon the weightings these should be given depending on the institution being analysed. Initial ratings are checked by a reviewer and approved by a line manager with the adequate level of seniority to approve the assessment as specified by PAIRS sign-off protocols. Staff from supervisory support divisions may question ratings (and even raise disagreements to senior management) but cannot change ratings. To ensure consistency these scores are then checked in various ways.

Since the introduction of PAIRS, a number of oversight functions have been progressively implemented to ensure the quality and consistency of PAIRS assessments and ratings, as these are ultimately subjective, albeit determined within a disciplined work process. The quality and consistency framework for PAIRS and SOARS comprises four levels:

- *Support foundations* to aid supervisors in the PAIRS risk assessment and SOARS strategy setting process. The support foundations include four key components –Supervisor Training, Guidance Material, Validations and Sign-off Protocols;

- *Decision Support Tools* focusing on analytical tools and procedures with forward looking capacity. This includes predictive analysis covering Early Warning Tools and External Predictors including data from external ratings agencies;

- *Portfolio reports or Watch List* reports designed to keep close watch on riskier and higher impact entities and risk profile shifts from a portfolio perspective; and

- *Hindsight review* and assessment to evaluate the consistency and accuracy of current supervision practice and make changes where necessary. This level consists of Peer Group Benchmarking Sessions and Peer Reviews.

Each level is represented by a mix of challenge and control elements. It is the combination of all four levels that lead to better risk assessments and strategy setting practices in APRA and overall improvements in supervisory judgment.

Significance weight reference points have been established as an additional tool to assist in determining the importance of various categories of assessment and help ensure consistency. The reference points have been established for different peer groups and are designed to reflect the significance weights of a 'typical' entity within a particular peer group, say defined benefit/hybrid funds – i.e. they take relativities into consideration. At the time a supervisor makes an assessment of an individual entity in PAIRS, the reference points are available as guidance to assist with the determination of the percentage significance weights for that entity.

Superannuation peer group examples

RSE licensees
Extended public offer
Non-public offer
Public offer

RSE funds
Public offer fund – accumulation only
Public offer fund – defined benefit and hybrid
Non-public offer fund – accumulation only
Non-public offer fund – defined benefit and hybrid
Eligible rollover funds (ERFs)
Pooled superannuation trusts (PSTs)

APRA also utilize a Supervisory Framework team (SFT), which is a single team across APRA dealing with all the different industries, and which is responsible not only for the maintenance and development of the risk framework and supporting systems, but monitoring supervisory activity across the whole of APRA, training supervisors and producing guidance for them.

The reference points are centrally controlled by the SFT. They are reviewed annually and in the interim if significant events or issues arise that alter the risk profile of institutions in relevant peer groups. The reference points facilitate a coordinated way of increasing the importance of particular categories of assessment across one or more peer groups or the entire rated population if required. For example, if APRA considers the significance or importance of Liquidity Risk is increasing, the reference points can be centrally adjusted upwards so that supervisors make their individual assessments with the higher weights in mind. The reference points go through a number of layers of review including initial consultation with supervisory experts, ratification by the relevant industry group in APRA and final approval by APRA's Senior Executives.

A 50-page manual guides staff in allocating ratings to funds, advising them on what characteristics to look for and which rating should follow from an observed set of characteristics. It admonishes supervisors to avoid a 'checklist approach' - one of attempting to force a fund to meet every listed characteristic - but rather encourages them to apply judgment and commonsense.

APRA also use peer review processes. APRA began with PAIRS panels. These were panels of senior management, and they would go through two or three risk assessments in depth with the supervisors, challenging them to ensure accuracy and consistency in assessments across the organisation. However, experience showed this was a relatively cumbersome process in practice, and so APRA has moved to PAIRS forums. This is a more group wide approach to the benchmarking process.[22] The forum is comprised of the individual supervisors of specific institutions, SFT representatives, other supervisors and appropriate risk specialists. Between 6-10 entities are selected by the SFT for benchmarking. The forum discusses with the supervisors how they arrived at their scores in order to check for anomalies and discus the criteria that supervisors are assessing against. The forum does not have the power to change the rating; APRA considers it important that the final decision lies with the supervisors, though supervisors are likely to change the score if it has been successfully challenged in the forum. The outcomes of each benchmarking session are circulated to participants and then more widely within APRA so that supervisors across the organisation can take into consideration the issues discussed when next making risk assessments of similar entities.

APRA stress that PAIRS assessments are intended to be dynamic. Risk assessments are updated after completion of on-site prudential reviews but will also be revisited where significant events, issues or other analysis indicates a need to alter APRA's judgment on the risk profile of an entity, or warrant inclusion in the PAIRS assessment.

PAIRS has been a significant step forward for APRA, as an integrated risk-based regulator, because it formalises a common language and common approach across each industry and between industries – even though the detailed supervisory activities differ because of specific industry characteristics and practices. It imposes a stronger analytical discipline to a still largely judgmental process and provides an audit trail to analyse or explain supervisory decisions and actions.

The PAIRS/SOARS framework has also strengthened the link from risk assessment to intensity of supervision, and from there to the allocation of resources within APRA. It also provides a statistical record of trends in the riskiness of the financial system and its component sectors over time, and may indicate where statutory and regulatory requirements should be tightened or otherwise changed. There are also potential pitfalls. The rating process is complex and remains susceptible to a checklist approach to supervision. The requirement that analysts justify each assessment in writing is intended to mitigate this risk. There is also the risk that a fund has significant weaknesses that are not captured in the PAIRS taxonomy and might therefore be overlooked.

[22] The main objectives of benchmarking sessions are to: facilitate common practices across supervisors; perform comparative consistency checks on PAIRS scores and assessments in an interactive and supportive environment; discuss supervisory action plans and ensure a consistent response to identified risks, including the purpose of planned activities, the proportionality of supervisory activities to the level of risk assessed and the documentation of plans; consider other potential activities to address risks or issues identified; identify systemic issues that need to be addressed or analysed further from a supervisory or policy perspective; recognise emerging risks and trends and how these are being addressed; and provide supervisors with an opportunity to learn from and network with each other.

Finally, the rating process unavoidably remains largely judgmental. This means that validation will always be difficult, that achieving consistency will be a challenge and that the quality of the ratings will rely heavily on the experience and skill of the people compiling and reviewing them.

9. Supervisory Response

The Supervisory Overview and Response System - SOARS - was developed to determine how supervisory concerns based on PAIRS risk assessments should be acted upon and to ensure that supervisory interventions are targeted and timely.

APRA notes that SOARS has stood the test of time. Although there were changes to PAIRS, there was no change to the supervisory response system. To date, APRA is satisfied with the performance of the model, particularly with the effect that shifting stances has on regulated institutions. It is an effective response tool from the supervisory authority's point of view.

Unlike PAIRS, there is no differentiation of the SOARS grid for superannuation entities. The only difference may lie in some of the response tools that APRA may use to deal with issues identified, which could depend on the response options available under the legislative framework that may vary from one industry to another.

All APRA-regulated pension institutions including licensees/trustees and funds are assigned a SOARS stance except for Small APRA Funds (SAFs) with less than five members. In these cases, a SOARS stance is assigned to the licensee/trustee and a sampling approach is adopted when reviewing the SAFs with the review of market and investment risk performed for all SAFs sampled. The selection of the SAFs for review would be based on a number of factors and is primarily up to the responsible supervision team in APRA to determine which ones should be reviewed – essentially based on the range of qualitative and quantitative information received in relation to SAFs, and identifying outliers which may need closer scrutiny. The sampling may also take into account whether the SAF has been reviewed in the past and whether there are issues that need to be followed up. Once the SAF has been reviewed (which is usually undertaken at the same time as the review of the RSE Licensee), the PAIRS assessment and SOARS stance for the RSE Licensee would be updated.

In APRA, the PAIRS risk assessment is the single input into determining the SOARS stance. Supervisors form an opinion on the risk profile of a regulated institution based on a variety of supervisory activities.

The Supervisory Attention Index (SAI) is calculated as the geometric average of the probability index and the Impact Index. That is the SAI is the square root of the product of the two indices. Each dimension is equally weighted in the process. This implies that the relative Probability and Impact of failure are considered of roughly equal importance.

The SAI is designed to assist in the assessment of the size of APRA's supervisory task; identify individual entity and sector priorities; and assist APRA's planning for, acquisition of and allocation of supervisory resources.

It is readily apparent from the grid below that the Supervisory Attention Index covers a very wide range. Extreme values at the intersection of high impact and high probability are likely to be rare but their potential threat to APRA's beneficiaries would be significant. Scores of 100 or above will only arise for a small number of particularly high probability and/or extreme impact entities. The bulk of the regulated

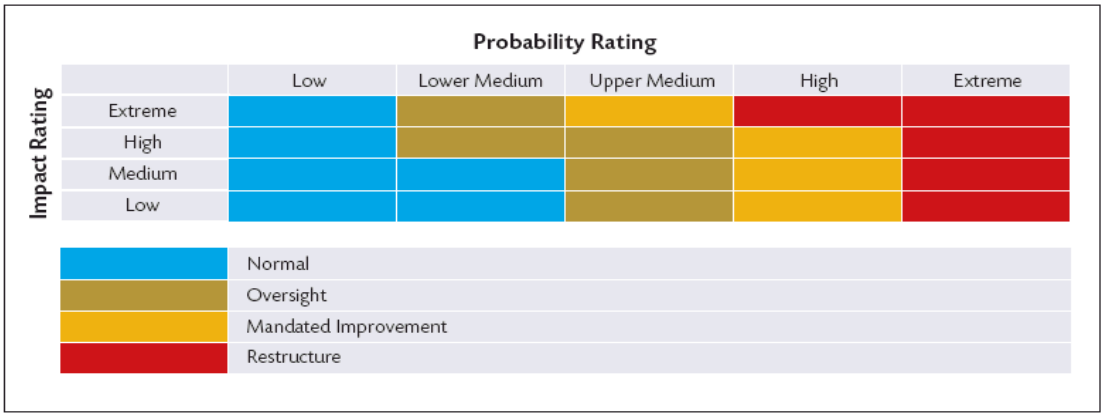
population is likely to fall within the medium / medium intersection with a Supervisory Attention Index of 4 or lower.

Table 5: Supervisory attention index

Impact rating	Impact index	Supervisory Attention Index				
No Limit	500	22	50	89	201	358
	250	16	35	63	142	253
Extreme	125	11	25	45	101	79
High	12.5	4	8	14	32	57
Medium	1.25	1	3	4	10	18
Low	0.25	1	1	2	5	8
Probability rating		Low	Lower Medium	Upper Medium	High	Extreme
Probability index		1	5	16	81	256

SOARS comprises four supervision stances (*Normal, Oversight, Mandated Improvement and Restructure*), which are derived from the combination of the PAIRS Probability Rating and Impact Rating as illustrated below.

Figure 5: APRA scores



A range of supervisory response tools are available depending on the nature of the issues identified. The use of APRA's enforcement powers is usually provided for under relevant legislation for institutions in the Mandated Improvement and Restructure SOARS stances. A suasion approach is generally effective for entities in Normal and Oversight.

The SOARS grid highlights that for larger institutions in the Upper Medium probability rating category, the SOARS stance is Mandated Improvement whereas for all other institutions it is Oversight. Similarly, where there is a large institution with a High probability of failure, the SOARS stance is Restructure whereas for all other institutions it is Mandated Improvement. Essentially, for Extreme impact institutions, APRA take a more intensive approach much earlier than for other institutions. This is in recognition that these institutions are systemically important and as such, there is a higher degree of reputation and systemic damage that could ensue if a failure was to occur.

Table 5 provides activities usually considered by supervisors for each SOARS stance.

Table 5: SOARS supervisory activities

SOARS Stance	Typical Supervision Activities
Normal	• Prudential reviews • Analysis of data received on a monthly, quarterly and/or annual basis • Other supervisory activities as required or at discretion of the responsible supervisory team
Oversight	• More frequent and/or more targeted prudential reviews by the supervision and risk/technical specialist teams • More frequent and more detailed collection and analysis of data and reports • Communication with auditors and actuaries • Special investigations by external experts (e.g. auditors, actuaries etc.) • Requests for revised business plan • Assessing the rectification plans put in place by the entity • Expressing concerns to the responsible persons of the entity • Expressing views/ concerns to relevant overseas regulators where applicable
Mandated Improvement	• Requiring rectification plans and monitoring milestones • Requiring revised business plans • Increasing capital requirements • Issuing directions • Enforcing acceptable undertakings, often undertakings to exit the business by finding a new and sounder owner • Engaging external resources (special investigator, actuary etc.) to report to APRA • Consideration of fit and propriety issues • Placing prohibitions on acquisitions
Restructure	• Withdraw licenses • Replace persons and /or service providers • Merge entities • Run-off existing businesses • Restrict business activity • Quarantine assets • Appoint an inspector, judicial manager or provisional liquidator • Issue directions or sanctions • Place the company into receivership/ liquidation

Most regulated institutions in the pension sector fall into the Normal and Oversight stances however there are a small percentage of pension institutions in the Mandated Improvement and Restructure stances.

The frequency of prudential reviews is driven by the impact rating of a regulated institution. For example, the target cycle for reviewing Low and Medium impact institutions is 36 months whereas the target timeframe for prudential reviews of Extreme impact institutions is every 12 months.

APRA will inform a regulated entity of its PAIRS rating in the interest of engaging openly and directly about any concerns APRA may have and to allow the entity to respond appropriately. APRA does inform institutions of their 'SOARS stance' that is, the range of supervisory activities to which they will be subject in the coming period, in the interests of open and direct engagement and for planning purposes.

However, APRA does not publish publicly the ratings arising from PAIRS assessments or its SOARS stance. Using its statutory confidentiality powers, APRA requires regulated entities not to make PAIRS ratings available to the public. This is to ensure that adverse PAIRS ratings and associated SOARS stances, or changes in ratings /stance, do not provoke a market over-reaction or lead to an unwarranted loss of confidence in the entity on the part of its beneficiaries. However, entities need to have regard to any continuous disclosure obligations and may need to disclose matters relating to supervisory intervention, particularly more intrusive interventions such as being placed in run-off or having a license suspended or withdrawn.