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Risk-Based Supervision of Pension Funds in Australia

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Abstract

This paper examines the development of risk-based supervision of pension funds in Australia. The large number of pension funds has meant that since the inception of pension fund supervision in the early 1990's the regulator has sought to identify high risk funds and focus its attention on these funds. However, the regulator developed a more sophisticated risk-rating model, known as PAIRS/SOARS, in 1992 in order to apply a more disciplined and consistent ratings methodology. Four reasons are given for the move towards more sophisticated risk-based supervision: 1) creation of an integrated supervisor which allowed the use of techniques used in banking and insurance to be adopted for pension fund; 2) the need to better use available supervisory resources; 3) several pension fund failures; and 4) concerns about industry weaknesses. Supervisory techniques used particularly in the banking industry, such as universal licensing, 'fit and proper' assessment, and risk management requirements were adopted for the pension sector between 2004 and 2006. The paper provides an outline of the PAIRS/SOARS risk-rating model which was also adopted. It observes that the approach provides an analytical discipline to risk assessment, strengthens the link between risk assessment and supervisory response, and allows better targeting of supervisory resources.

This paper—a product of the Financial Policy Division, Financial Systems Department—is part of a broader project on risk-based supervision of pension funds conducted in collaboration with the IOPS - the International Organization of Pension Supervisors, and also part of a broader effort of the department to improve the performance of private pension systems. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The project coordinators may be contacted at rrocha@worldbank.org, gbrunner@worldbank.org, or rhinz@worldbank.org.

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Produced by the Research Support Team

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Preface

This report is part of a project on risk-based supervision of pension funds coordinated by the Financial and Private Sector Development Division of the World Bank, and initiated in response to a growing number of requests from member countries for assistance in the area of pension supervision. The project is being implemented in collaboration with the International Organization of Pension Supervisors (IOPS), and involves the identification of good practices in risk-based supervision of pension funds, based on a number of carefully selected country studies. These good practice guides are expected to benefit a large number of supervision agencies in developed and emerging countries, and contribute to a better performance of private pension systems.

The project will draw on the experience learned in countries that have implemented a risk-based supervision approach and apply this knowledge to assist developing countries. Models of risk-based supervision demonstrate benefits to be gained from moving away from a focus on individual transactions and strict compliance with a range of specific rules towards greater awareness of the risk profiles of supervised entities. A risk-based approach provides encouragement to supervised entities to place a greater focus on risk management in their daily operations, and promotes a safer and sounder financial system. It is expected that over time moving to a risk-based approach to supervision will create scope for supervisors to focus resources on areas of highest risk and, over time, result in a more efficient use of supervisory resources.

The Australian case provides a model of risk-based supervision which applies to both defined contribution and defined benefit pension funds, covers a broad range of institutions in terms of size and complexity, and applies to both open "public offer" funds and closed occupational funds. The Australian case provides a structured methodology for ranking pension funds according to the relative threat of failure and maps this to a supervisory response framework. The main focus is to ensure that all pension entities meet their "financial promises" to members and beneficiaries. Within the Australian model some additional focus is given to funds which offer defined benefits. The model makes a distinction between larger funds which are subject to detailed assessment and smaller funds which are subject to a streamlined and more automated assessment.

This report is a condensed version of a more detailed analysis of the Australian system undertaken by Graeme Thompson. The author is a consultant and former Chief Executive Officer of the Australian Prudential Regulation Authority. The author is grateful to Chris Gaskell, Juanita Hoare, Karen Kay, Charles Littrell, Darryl Roberts, Peter Vodicka and Melisande Waterford at APRA for their assistance and for Roberto Rocha for comments on earlier drafts. The condensed version of the report includes some minor changes to reflect developments since the original report was written.

I. Introduction

Australia's framework for prudential regulation of pension (or superannuation) funds originated in the early 1990s when the central government introduced a near-universal system of compulsory employer contributions. The framework relied heavily on the 'prudent person' approach, deriving from the fiduciary duties of the trustees who managed both employer and employee contributions in trust fund structures. This approach was consistent with the broad deregulatory philosophy that prevailed in Australia from the mid 1980s when interest rate and exchange rate controls were largely removed, along with quantitative restrictions on banks' asset portfolios. No restrictions were imposed on superannuation funds' investment composition other than rules to prevent gearing and the misuse of funds by employers.

There were several thousand supervised funds, including retail funds, industry funds associated with labor unions and funds sponsored by single employer companies. As a result of this industry structure and the limited supply of regulatory resources, prudential regulation was risk-based from the beginning in the sense of seeking to identify the higher risk funds and to focus more attention on those. This approach then guided the allocation of the regulator's time and effort.

Identification of high-risk funds relied on off-site analysis of statistical and other information submitted, external audit and actuarial reports and on-site supervisory reviews. In addition, certain categories of funds received closer attention than others. Retail funds - which tended to be bigger than other types and whose boards of trustees did not include employee representatives - were subject to licensing conditions and to more onerous ongoing attestation requirements. All large funds were required to submit statistical information more frequently than small funds. Regulators also conducted on-site reviews of large funds more frequently.

The regulatory framework has evolved a good deal over the past decade and refinements continue to be made. This evolution has been shaped by experience, by changes in industry structure and practice and by regulatory reorganization. Its main objectives have been to develop more sophisticated advance indicators of risk and to give regulators the resources necessary to interpret those indicators and act pre-emptively and effectively.

Basic reliance on the 'prudent person' philosophy has been retained, but regulation now describes in much more detail what a prudent person approach to managing superannuation contributions means in practice. This paper summarizes that evolution in Australia's regulatory framework and describes the present system.

II. Pension System

Australia's arrangements to provide post-retirement income for its workforce comprise three 'pillars':

- a means-tested indexed pension paid by the central government and funded from general taxation revenue

- compulsory employer contributions into superannuation funds that finance pensions or lump-sum payments on employees' retirement – this component has been significant only since 1992
- voluntary private savings, including employer and employee contributions to superannuation funds.

The government-funded pension under the first pillar remains a major source of retirement income, with approximately 54 percent of individuals of qualifying age – 65 years for men and 63 (this will increase to 65 years by 2014) for women – receiving a full pension and another 28 percent receiving a part-rate pension. The full pension is maintained at one-quarter of the average wage. The relative importance of the pension will decline gradually as the second retirement income pillar matures. However, the ageing of the population means the annual cost of the government pension will still rise as a proportion of gross domestic product from its present level around 3 percent.

The second pillar comprises the Superannuation Guarantee (SG), under which employers have to contribute a percentage of their employees' wages and salaries to a superannuation fund. The only exceptions are for employees earning very low amounts, part-time employees under 18 years of age and employees aged 70 and over. Around 90 percent of Australia's 12 million workers are now members of a superannuation scheme.

The SG percentage commenced at 4 percent (3 percent for small employers) in 1992 and increased progressively until reaching its present level of 9 percent in 2002. The SG system has been one reason for the strong trend toward defined contribution funds over the past decade. However, employer contributions to defined benefit funds established before 1992 count toward an employer's SG obligations and must meet the minimum 9 percent requirement.

Employer SG contributions are fully vested in the employee and must be preserved until retirement on or after age 55, a minimum age that will be increased gradually to reach 60 in 2025. With some exceptions, fund members are able to transfer their benefits between funds when they change employment – this applies both to defined contribution funds and to fully-funded defined benefit schemes (where a lump sum equivalent to the vested pension benefit will be determined and paid). Commencing in mid-2005, the rights of many employees to choose their fund at any time were extended.

The government's objectives with pillar two were to augment private savings so that they could supplement the age pension as a source of retirement income, thereby reducing the pressure on budget funding which would otherwise grow rapidly as the average age of the population increased.

The third pillar of Australia's income retirement arrangements - voluntary saving - is encouraged by various taxation concessions. These have resulted in rapid growth over the past decade in self-managed superannuation by the self-employed, proprietors of small businesses and others with the time and financial acumen to manage their own investments.

Statistics do not differentiate between contributions and assets invested under the second and third pillars. Nor is the distinction between second and third pillar important for the prudential regulator, the Australian Prudential Regulation Authority (APRA). APRA

supervises the bulk of the superannuation industry and its prudential responsibilities are the same whether contributions are made voluntarily or under second pillar compulsion.

The value of assets in superannuation funds of all kinds at end 2005 was just under $A850 billion. This has increased strongly in real terms over the past decade and a half, having been a little over $A100 billion at the beginning of the 1990s. As an indicator of the social and economic importance of the industry, total funds invested now constitute about 45 percent of Australian households' stock of financial assets and they exceed Australia's 2005 gross domestic product of just under $A820 billion.

Of funds with more than four members in 2005, some 50 percent of assets were in accumulation, or defined contribution, funds and another 47 percent were in funds offering a combination of accumulation and defined benefits. Only 3 percent were in pure defined benefit funds, compared with 22 percent ten years before. While the importance of defined benefit funds has declined sharply in the past decade, the reported assets of defined benefit funds understate the present value of their future payment obligations because some large public sector schemes are not fully funded.

Most superannuation assets are managed under *trust* arrangements whereby the legal and beneficial ownership of assets are separated. The trustee legally owns the assets of the trust but is required by law to manage them in the interests of the persons nominated in the legal instrument, most commonly a trust deed, which establishes the trust.

Although they have a common basic legal structure, it is useful to classify funds into a small number of distinct governance types. *Retail, or public offer, funds* offer superannuation investments to the general public, including employers not wanting to establish occupational funds. The trustee is a corporation with a board of directors and is often associated with an insurance company or bank. They comprise 32 per cent of industry assets.

Industry funds draw membership from a defined industry segment (such as construction, retail or hospitality) and are generally associated with trade unions which have negotiated compulsory membership with employers; the relevant employers and unions must appoint equal numbers of trustees. In 2005 these funds held 16 percent of industry assets. *Corporate funds* hold 7 percent of industry assets. They are established by an individual employer for its employees – employer and employees each appoint half the members of the trustee board ('equal representation'). *Public sector funds* (17 percent of assets) are run by the central and state governments for their employees. *'Small funds'* are defined as those with fewer than five members – in these funds the members and trustees are identical and there is no need for prudential regulation. However, members who do not wish to operate these funds may appoint an APRA-regulated corporate trustee. There are approximately 320,000 such funds, with 23 percent of industry assets; most are regulated by the Australian Taxation Office, with APRA having responsibility for only about 6,700.

Leaving aside the 'small funds', there is considerable dispersion in the average size of funds, with the corporate funds generally much smaller than the others. Table 1 summarizes the current structure of the industry.

Table 1:Superannuation Funds: Type, Number and Size - December 2005

Fund type	Number of funds	Total assets ($Ab)	Average assets ($Am)
Retail	194	272	1,402
Industry	86	137	1,593
Corporate	681	56	82
Public sector	43	142	3,302
Small funds	319,492	194	
Other	127	45	
Total	320,623	845	

Source: APRA

All classes of funds (other than 'small funds') have been consolidating for some time. Corporate funds have been declining particularly rapidly in both number and share of industry assets as costs of administration increase and the early-1990s introduction of near-universal employer superannuation has eroded any competitive benefits from offering in-house superannuation. This trend has been given substantial new impetus recently by the introduction of more stringent prudential regulations, including for fund governance and risk management, and the requirement that all funds be licensed by the middle of 2006. As a result, the number of funds, excluding 'small funds', at end-June 2006 was 872, less than half than two years earlier.

Table 2: Superannuation Funds: Asset Allocation (percent)

Asset class	2004	2000	1995
Cash and deposits	8.3	6.5	6.8
Loans and placements	3.6	4.9	4.4
Interest-bearing securities	16.0	18.5	25.3
Equities and units in trusts	48.5	43.1	38.5
Land and buildings	5.2	5.3	6.9
Other domestic assets	1.8	2.7	4.1
Total domestic	83.3	80.9	86.1
Assets overseas	16.7	19.1	13.9
Total	100.0	100.0	100.0

Source: APRA

A new classification of investments was introduced for 2005 and shows: Australian equities (33 percent), international equities (23 percent), Australian fixed interest (13 percent), international fixed interest (5 percent), listed and unlisted property (8 percent), cash (7 percent) and other (10 percent).

There has been a trend toward investment in equities and overseas investments at the expense of domestic fixed interest securities. Forces driving this have included the move of Australia's central government budget into surplus, the growth of the equity market (and its strength over the past few years compared with many other equity markets) and the use by trustees of more sophisticated investment managers.

Outsourcing is a common and growing feature of the industry, encompassing fund administration, asset custodianship, and investment advice and management. In 2005, excluding the 'small funds', 74 percent of funds used an external administrator (compared with 67 percent in 2002), 38 percent used an external investment manager (30 percent) and 29 percent used a custodian (12 percent).

Another increasingly common feature of the industry is the availability of choice to members within a fund of an asset portfolio or portfolios. About two-fifths of funds (excluding 'small funds') offer choice their members – in 2005 retail funds offered an average of 59 options, while industry funds offered an average of seven options, public sector funds offered six and corporate funds had four.

The multiplicity and diversity of funds has created significant challenges for the regulatory system and necessarily influenced its approach. Supervision has also had to take account of the prevalence of outsourcing to third parties, itself a consequence of the smallness of many funds. On the other hand, the supervisory system has benefited from the relative sophistication of Australia's financial system, with strong standards of corporate regulation and accounting, and well-developed financial markets.

III. Prudential Regulation in the 1990s

Prudential supervision of Australian pension funds effectively commenced in 1993 following the introduction of the mandatory SG arrangements. The 1993 regime emphasized the fiduciary responsibilities of trustees for the prudent management of funds and deemed these to be included in the governing rules of each fund. As stated in legislation[1] these responsibilities were, inter alia, to:

- act honestly in all matters concerning the entity
- exercise, in relation to all matters affecting the entity, the same degree of care, skill and diligence as an ordinary prudent person would exercise in dealing with property of another for whom the person felt morally bound to provide
- ensure that the trustee's duties and powers are performed and exercised in the best interest of the beneficiaries.

The legislation buttressed these principles with specific prescriptions aimed at reducing the riskiness of superannuation investments, as well as dealing with retirement incomes policy (e.g. vesting, preservation and prompt payment), equitable treatment of members, financial accounts, information disclosure and various other matters. Statutory requirements with a prudential object included that funds should use the investments in their care solely to meet retirement incomes and should not borrow or give charge over

[1] *Superannuation Industry (Supervision) Act 1993*

assets. Others dealt with the conduct of trustee boards, including the requirement for equal employee and employer representation on employer-sponsored and industry funds.

Restrictions on investments aimed to prevent the gross misuse of funds. They included prohibitions on trustees or investment managers lending money to (or acquiring assets from) members, or making loans to (or investing in) employer-sponsors beyond a specified limit, and a requirement that all investments be made on arm's length terms. Where the trustee appointed an investment manager, it had to ensure that it received adequate information about investments and their performance.

Beyond that, in relation to investment, the legislation contained only a general requirement that trustees formulate and give effect to an investment strategy that took into account risk and return, diversification, liquidity the ability of the entity to discharge its existing and prospective liabilities.[2]

The regulator, at that time the Insurance and Superannuation Commission (ISC), supplemented this legislative requirement with a guidance circular that emphasized the need for trustees to have a well-articulated and documented investment strategy. There was no prescription of particular investment classes and no quantitative requirements relating to investment earnings. In the mid 1990s, amid general concern about the growth in derivatives markets, the ISC required that funds with derivatives exposures have a risk management statement that explained and limited such exposures. This policy did not restrict the use of derivatives, except that their use for speculative purposes was forbidden.

From 1997 the Insurance and Superannuation Commission required the approved trustees of public offer funds to submit to it a 'prudential management certificate', an attestation that the board is aware of its responsibilities for prudent management, that board and management has assessed the risks that could arise and has systems in place to manage those risks and to comply with their statutory responsibilities and that there were procedures in place to monitor the appropriateness and adequacy of business systems and that they are operating effectively.

External auditors of funds also had a prudential role. As well as reporting in the usual way on funds' financial accounts, after 1995 auditors were required to conduct an audit on each fund's compliance with the conduct provisions in the legislation. (This did not extend to the general investment provision described above.) The auditor was required to advise the trustees of any likely contraventions of the legislation or if, in its opinion, the financial position of the fund was, or might become, unsatisfactory. Only if trustees did not address such concerns adequately did the auditor need to inform the regulator.

As noted, only trustees of public offer funds were subject to regulatory approval before accepting superannuation contributions, and only they were required to observe a minimum capital requirement to absorb operational losses.

Trustees of defined benefit funds were required to commission an actuarial valuation every three years and to comply with resulting recommendations on the adequacy of the fund's resources to meet its liabilities. Subsequently the regulator was empowered to

[2] ibid., s. 52(f).

mandate more frequent actuarial valuations where it was concerned about a fund's financial strength. Actuaries had similar whistle-blowing obligations as those of auditors. Other regulatory tools used by the Insurance and Superannuation Commission included desk reviews and on-site visits and an array of enforcement powers.

Under this regulatory regime of the 1990s the incidence of serious problems with pension funds proved very low. However, the absence of entry tests for major segments of the industry, the large number of funds (relative to the regulator's resources) and the inadequacy of statistical data for risk assessment made effective oversight problematic. This was particularly so with small to medium sized funds, many of which were marked by lack of financial sophistication and demonstrated a poor understanding of trustee responsibilities.

IV. Evolution of Risk-Based Regulation

This section summarizes the main drivers for more sophisticated risk-based supervision and the significant enhancements recently introduced.

1. Drivers for Change

Drivers of the evolution in regulation have included:

- change in the organization of regulatory agencies
- continuing attempts to resolve the mismatch between the large number of superannuation funds and the limited supply of supervisory resources (both people and powers)
- a small number of failures among funds
- regulatory concern about incomplete compliance with conduct rules and poor governance practices, particularly among small and medium-sized funds.

1.1. Organizational change

Reorganization of Australia's regulatory agencies involved the creation of APRA in 1998, and followed recommendations of the Financial System Inquiry (also known as the 'Wallis committee' after its chairman) which an incoming government established in 1996. The reorganization brought together supervision of banks, life insurers, general insurers and most of the superannuation sector and provided the opportunity to use supervision techniques used in one sector across the whole financial system.

Other regulators with interests in superannuation are the Australian Taxation Office which regulates the great majority of small, self-managed funds that do not warrant prudential regulation and the Australian Investments and Securities Commission (ASIC), which is responsible for disclosure to members, market conduct and the member complaints arrangements (the Superannuation Complaints Tribunal).

1.2 Resources

The Wallis committee expected the creation of APRA to reduce the cost of prudential regulation. APRA's steps to unify employment conditions across the staff it had inherited from the predecessor agencies and to relocate all policy and research

functions to the one centre – along with attempts to achieve the cost reductions expected by the Wallis committee and government - meant that the number of regulatory staff declined. In mid 2000 APRA had total staff of 400, compared with approximately 550 engaged in prudential regulation before 1998.

In time, this reduction made even more obvious than previously the mismatch between numbers of superannuation funds, the tools available for effective risk-based supervision and the resources devoted to the task.

1.3 Fund failures

A third influence on supervisory evolution was the investment losses that emerged in small funds administered by two approved trustees around 2000. These losses, which amounted to some $A35 million and were due to the failure of speculative commercial investments, were tiny relative to the total superannuation sector but their impact on many of the individual beneficiaries affected was severe.

There was a strong community and government view that the regulatory system should have prevented – or at least mitigated – the losses of these fund members.

Although in the larger of the two failures there was evidence of fraudulent conduct and misrepresentation by trustees, and eventually investors were compensated under an industry-funded scheme designed for such situations, investigations found that a more aggressive regulatory approach could have reduced the losses. In particular, there were calls for APRA to take a closer interest in the investment strategies adopted by trustees and to pursue signs of problems earlier and more vigorously.

Around the same time as these episodes, a large APRA-regulated general insurance company (HIH Insurance) failed and prominent non-financial corporations collapsed in Australia and the United States.

1.4 Framework weaknesses

This background provided fertile ground when in 2001 APRA first proposed a significant strengthening of the risk-based supervision framework for superannuation. Its proposals drew on lessons from the two trustee failures and on accumulating experience of a widespread poor compliance culture among smaller and medium-sized funds.

APRA had become increasingly concerned about inadequate standards of trusteeship, particularly in corporate funds where abuses of the 'in house assets' and arm's length investment requirements were not uncommon. Other problems included poor understanding by some trustees of the rudiments of risk management and, associated with that, excessive reliance on third party service providers. It was also unhappy about the poor quality and timeliness of information provided by funds, such information having considerable importance when resource constraints made frequent on-site inspections impossible. Concerns in these areas were outlined in APRA's

1999 annual report.[3] In 2001 the focus was on investment strategies that did not appear to have been designed in the best interests of fund members.[4]

APRA regulators also questioned why key features of the standard banking/insurance supervisory model should not be adapted for use with superannuation - features including universal licensing to control entry to the industry more effectively, a more prescriptive approach to the minimum acceptable features of risk management systems, and the application of prudential standards on the fitness and propriety of industry participants and on outsourcing that were then under development for the other sectors. APRA's post-1999 organization structure that eschewed specialist industry divisions encouraged such questioning.

1.5 Superannuation inquiry 2002

Late in 2001 the government commissioned a report from a superannuation working group (SWG) on improving the safety of superannuation. The working group was chaired by a non-executive member of APRA's board and its report, completed late in 2002, concluded that it was an opportune time to review the existing prudential regulatory framework from a 'preventative maintenance' perspective.

The working group's recommendations were mostly adopted by the government and, when carried into legislation, became the basis for reforms recently introduced by APRA.

The revised supervisory framework strengthens APRA's powers over entry (licensing) and the fitness and propriety of persons in the industry, spells out in more detail what APRA expects in risk management plans and the resources available to funds and introduces tougher attestation and whistle-blowing rules. APRA also updated its statistical reporting framework to provide more powerful statistics for making risk assessments**.**

2. Strengthening the Risk-Based Policy Framework

The main elements of the revised framework introduced over 2004-2006 were as follows.

2.1 Licensing and registration

All trustees must now be licensed by APRA, and all superannuation funds with a licensed trustee must be registered. Previously, APRA licensed only trustees of public offer funds ('approved trustees').

Licenses are available to trustee corporations or, where the trustee board consists of individuals, to group/s of individual trustees. There are two main classes of license – public offer and non-public offer. Applicants for the former have to meet the capital requirements.

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[3] Australian Prudential Regulation Authority, *Annual Report 1999*, Sydney, p.20.
[4] Australian Prudential Regulation Authority, *Annual Report 2001*, Sydney, p.9.

The universal licensing regime brings superannuation funds into line with all other regulated financial institutions and permits APRA to identify, and to bar, problematic trustees before they have accepted any investments.

2.2 Fitness and propriety standard

Trustees need to satisfy tests of both fitness and propriety at licensing, and meet these on an ongoing basis. This extends the previous provisions whereby APRA could disqualify or remove individual trustees on grounds of misconduct, certain criminal convictions and bankruptcy, or if they had been associated with breaches of superannuation law, or were otherwise deemed to be not fit or proper.

As to fitness, APRA does not mandate any minimum requirements for skill, education or experience. However, trustees must possess a basic understanding of investments, and be aware of key regulatory requirements, including their duties and responsibilities as trustees. They must also develop their own policies on acceptable standards of fitness and propriety taking account of the size and complexity of their operations. These should provide for training of trustees to ensure their knowledge is up to date, and must also explain how a trustee board will manage conflicts of interest.

2.3 Risk management standard

Under this standard, licensees must have policies and procedures (at both trustee and individual fund level) to identify, measure, monitor and manage all material risks. These policies and procedures, which must be submitted to APRA, must be supported by a formal methodology and be clearly documented.

APRA's guidance note on risk management advises trustees to use a well-structured process to identify and assess risks, possibly using a facilitated risk workshop. A checklist approach may be sufficient for the least complex funds, provided the trustee could demonstrate that it had covered the field adequately; however, the use of more advanced techniques is recommended.

APRA will need to be satisfied with risk management plans before granting a license. Licensees must subsequently ensure that their plans are up to date and are reviewed at least annually; material changes must be notified to APRA. They must also notify APRA of any breaches, and it is an offence not to report a breach. The external auditors of funds must audit their risk management strategies and plans annually and attest to APRA that these have been implemented and are working effectively.

These requirements for risk management plans replace, and substantially expand, the previous provisions for a prudential management certificate (that applied to approved trustees of public offer funds only) and for risk management statements in relation to the use of financial derivatives.

2.4 Outsourcing standard

Outsourcing is widespread in the superannuation industry and can be a significant source of risk. The outsourcing standard aims not to restrict trustees' use of service providers – predominantly administrators, investment managers and custodians - but

to ensure that all material outsourcing arrangements are covered by robust and enforceable agreements.

Licensees must have procedures to select and monitor the performance of service providers. Termination and default provisions must allow for cancellation of a contract without prejudicing the interests of fund members. In addition, the terms of service agreements with related entities, including employer sponsors, must be on arm's length terms. Service agreements must also provide that APRA may have access to documents and the premises of the service provider, and may request an audit of the provider.

2.5 Trustee resources standard

This standard specifies that trustees must have adequate resources – financial, technical and human – to manage members' funds prudently. It recognizes that benchmarks for adequacy will vary from fund to fund, and will depend importantly on the extent of outsourcing.

Where trustees' expenses are met from fees or from earnings, they must prepare operating budgets to demonstrate that they will remain solvent and have sufficient liquidity to meet payments. Where expenses are met by an employer, APRA would take into account the likelihood of the employer's continuing support. Demonstrating sufficiency of resources will also require appropriate disaster recovery and business continuity plans. Where functions are outsourced, trustees will have to satisfy themselves about a service provider's resources, including for disaster recovery and business continuity.

2.6 Net tangible assets standard

A trustee with a public offer license must have $A5 million in net tangible assets or a guarantee (or a combination of both) unless the assets under its trusteeship are held by a custodian who meets these requirements.

The capital requirement has three objectives: a buffer against operational risks; evidence of a trustee's commitment to its superannuation business; and an incentive for the trustee to manage that business well. It may also provide funds to satisfy member actions against trustees for liability where professional indemnity insurance is inadequate.

2.7 Auditors

The revised regime gives a significant role of the external auditors of funds. Auditors must audit the annual statistical returns that funds provide to APRA. They must also conduct annual audits of risk management strategies and plans, stating an opinion as to whether the trustee has complied with these strategies and plans and whether it has adequate systems in place to ensure future compliance. They must refer any identified weaknesses or contraventions to the trustee regardless of materiality. The auditor's annual report, augmented by these changes, must be completed and provided to APRA within four months of the end of the financial year.

Statutory whistle-blowing provisions require auditors to inform APRA *at the same time* as they notify trustees of any material contraventions of legislation that may

have occurred, may be occurring or may occur in the future, or if they believe the financial position of the fund may be, or may become, unsatisfactory. Another recent provision allows auditors (and actuaries of defined benefit funds) to give information to APRA if they think it would help the regulator perform its statutory responsibilities, and it protects the auditors from any action, claim or demand by, or liability to, any other party where such information is provided in good faith. In addition, persons providing information will have qualified privilege against self-incrimination.

APRA must approve auditors to carry out their responsibilities for superannuation funds, with tests relating to their professional qualifications.

V. Risk-based Supervision Today

This section describes APRA's current strategic objectives, its organization structure and its supervisory methods.

While its objectives are well-established and its organization structure is evolving gradually, the agency's tools and methods are very much in transition. The revised legislation and new operating standards described above became effective only in mid-2004 and the universal licensing of existing funds was only completed at end-June 2006.

1. Strategic Framework

The main law dealing with regulation of the superannuation sector, the Superannuation Industry (Supervision) Act, has as its objective 'to make provision for the prudent management' of superannuation funds. APRA's purpose under the Act is for their supervision.

APRA's own stated 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' (emphasis added). It describes its supervisory approach as 'forward-looking, primarily risk-based, consultative, consistent and in line with international best practice' and as recognising that the 'management and boards of supervised institutions are primarily responsible for financial soundness'.[5]

The 'financial promises' made by trustees of defined contribution superannuation funds are harder to define than the promises made by banks, insurers or trustees of defined benefit funds which can be represented by amounts of money, even if only approximations (as with, for instance, insurance liabilities).

For defined contribution superannuation funds, the promise essentially draws on the general responsibility of trustees to manage the money of others - with the objective of funding their retirement incomes – honestly and as prudently as they would manage their own, and on the additional undertakings made in the rules and trust deeds of individual funds.

APRA aims to plan its supervisory activities over a rolling three-year period, but its funding - and therefore detailed business plan - is determined annually. This funding

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

is primarily on a cost-recovery basis from levies on regulated industries, with the levy rates determined at the beginning of each year by the responsible minister of government. The minister strikes levy rates for each industry sector with the objective of raising funds sufficient to cover APRA's planned activities in relation to that sector in the year ahead. Industry groups can make representations to the government about these plans before levy rates are determined. The government has also, on occasion, given APRA special funding for particular projects.

APRA is ultimately accountable to Australia's federal parliament, but not to the provincial governments, and it must report annually to parliament on its activities. External scrutiny of the agency's performance occurs through a variety of channels, including standing and ad hoc parliamentary committees and performance audits by the national audit office. The Financial Sector Advisory Council, comprising senior representatives of industry, reports annually to government on the working of the regulatory system. Before making changes in its regulations or standards APRA must lodge a Regulatory Impact Statement with government, explaining the rationale for change, summarizing the estimated costs and benefits and describing its consultation with affected parties.

2. Organization of APRA

APRA is a corporate body established by legislation in 1998. From 1998 to 2003, a nine-person board comprising people with industry experience, representatives of other government agencies and a chief executive officer headed APRA. Since 2003, three full-time executives - one of whom is designated as chair – have governed the organization. The government appoints these people for terms of up to five years, and there is provision for another two appointees who may be part-time. A person may not be a member of this governing group if he or she is also a director, officer or employee of a body regulated by APRA.

Below its governing group, APRA has five main divisions[6]. Resources devoted to superannuation supervision are dispersed through the agency, rather than being concentrated in one area.

'Front-line' supervisory staff in the Specialized and Diversified Institutions Divisions are assigned a number of institutions, usually from more than one (but not more than two) industry sectors – the number of entities will depend on their size and complexity, and the staff member's experience. These people, called analysts, are the primary contact point between APRA and regulated entities and are the people primarily responsible for their routine supervision, including both off-site analysis and on-site reviews. They are organized in branches or divisions headed by a senior manager who reports ultimately to the executive general manager of Specialized or Diversified Institutions Division.

In their supervisory and analytical work, the analysts call on the various Supervisory Support teams where the depth of specialist technical expertise is greater. People from these teams also participate in routine or special-purpose on-site reviews.

[6] See Appendix 1

The enforcement teams, with support from legal services, will take primary responsibility when a fund has been classified as 'mandated improvement' in PAIRS/SOARS (see below) or is in serious difficulty and is required to restructure. The reasons for having a separate enforcement unit are to concentrate specialist skills in the use of APRA's statutory and regulatory powers, to introduce staff without historical relationships with funds' trustees and management that might cloud regulatory judgment, and to send a clear message to an entity that APRA regards its current situation as unacceptable.

Meanwhile, the Policy, Research and Statistics division works on improvements in supervision policy - as expressed in law, regulations and operating standards - and is the central collection point for quantitative research and for collecting and distributing statistics on regulated entities.

In addition, a dedicated unit for fund licensing directed and coordinated the licensing of all existing funds in the run up to the June 2006 licensing deadline.

Cross-divisional groups of middle/senior management have been formed for superannuation and the other main industry sectors to establish an APRA-wide consensus on the application of policies and help ensure consistency of application. They also seek to identify emerging supervisory issues, partly through acting as a sounding board for industry participants and representative groups, and referring those as necessary to other parts of the agency including its senior policy-making fora. In March 2006 APRA had staff of 608 one third of whom are engaged in the supervision of superannuation funds.

3. Methods and Procedures

APRA's supervision of superannuation funds combines off-site analysis and on-site review in a continuous cycle of risk assessment, supervisory action (where necessary) and fund response.

Risk assessment draws upon the regular statistical information provided by funds, their risk management strategies and plans, audit and actuarial reports, discussions with trustees, direct on-site observation and member complaints. For large funds, public information such as media reports and investment ratings is also monitored. Where APRA has requested additional information or explanation, or has required that remedial action be effected by trustees, the quality and timeliness of trustee response will also be taken into account in a fund's risk assessment.

3.1 The PAIRS/SOARS model

APRA applies the same broad supervisory model to superannuation funds as to banks, other deposit-takers and insurance companies and has done so since late 2002.

The basic framework for the first part of that model – risk assessment – is shown below:

Inherent risk *minus* Management and control *equals* Net risk Net risk *minus* Capital support *equals* Overall risk

Some variation in use is required for defined contribution superannuation where, as discussed, trustees have broad responsibilities to the members of a fund but do not make specific promises about performance. An assessment of capital support is, therefore, irrelevant (except for public offer trustee companies) and 'overall risk' is the same as 'net risk'. [7]

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. This regard for entity size is consistent with the risk-based approach to regulation.

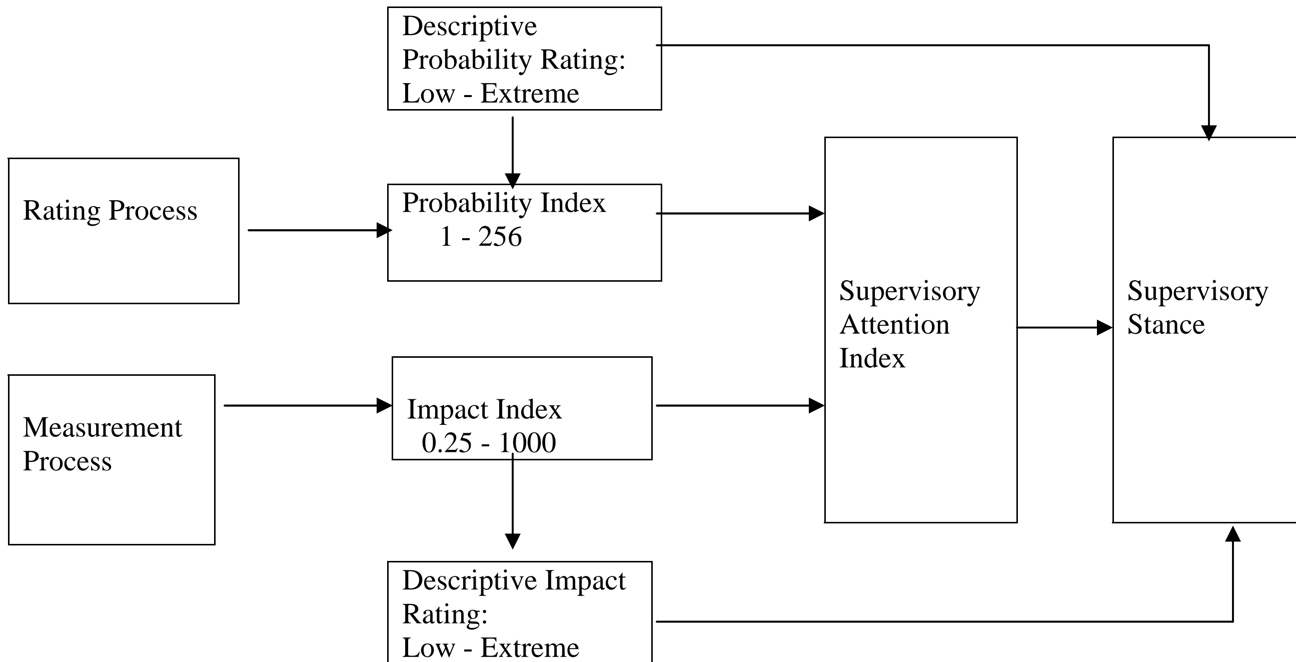
For a defined contribution superannuation fund, the combined model involves the following steps:

- Assessing a fund's *gross inherent riskiness*
- Assessing its *net* riskiness, after allowing for the presence of various risk controls or *mitigants*
- Assigning a *descriptive probability* or *risk rating*
- Measuring the fund's assets – a proxy for its importance or *impact*
- Assigning a *descriptive impact rating*
- Combining the *probability and impact rating* (PAIRS)
- Mapping from the PAIRS rating to a *supervisory attention index*
- Adopting a *supervisory stance* and consequential *supervisory action plan.*

This process is illustrated in Diagram 1.

[7] B.Allen, 'APRA's risk rating of superannuation funds', *APRA Insight*, First Quarter 2004, pp. 19-30.

Diagram 1: Risk Probability/Impact Rating Framework



Source: APRA

The combined model is known as PAIRS/SOARS, referring to the Probability and Impact Rating System and the Supervisory Oversight and Response System.

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). In this case 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.

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.

For all APRA-regulated entities, the PAIRS assessment of *gross inherent risk* considers:

- counterparty default risk: risk of losses from failure of a counterparty to meet its obligations
- balance sheet and market risk: risk of losses due to movements in interest rates and other market 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 internal processes, people and systems – whether these are internal to the regulated entity or in a service provider
- liquidity risk: the risk that an institution will not be able to meet its payment obligation as they fall due without excessive cost
- legal and regulatory risk: the likelihood of adverse consequences arising from failure to comply with all relevant laws and regulations
- strategic risk: risks to the continued viability of an entity as a result of change in the operating environment, including internally driven change such as merger or introduction of a new product line
- contagion and related party risk: risks to an entity's business as a result of close association with another entity – the risks may be direct through financial exposure or indirect through reputation damage.

For superannuation funds, the most significant risks are likely to be balance sheet/market (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. These priorities are reflected in the five new operating standards for superannuation funds that were discussed earlier.

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, while contagion risk can be significant for employer-sponsored funds, especially if they offer defined benefits.

The controls or *mitigants* of these gross risks are classified in PAIRS 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.

3.2 Calculating PAIRS ratings

To calculate a PAIRS rating for a superannuation fund, APRA analysts make two assessments against each of the 15 characteristics listed above.

The first is an assessment of the proportionate *significance* or relevance of the characteristic for that fund, considering the nature of its structure and operations. 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 'contagion and related party risk' regardless of any assessment of the strength of those entities or the measures in place to protect the fund's interests. For both inherent risk and control factors, the significance weights add to100. Each control element must have a weighting of at least 10 percent.

The second assessment relates to the *quality* of each characteristic. Quality is 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 element of inherent risk is assessed on a scale from zero to 4, ranging from very low risk to extreme risk. To guide their assessments and help ensure consistency in rating an individual fund, analysts refer to benchmark (rolling average) ratings for that fund's peer group. The assessment of control factors also uses a scale from zero to 4, ranging from very strong to extremely weak.

The weighted numerical assessments of the various inherent risk and control elements are combined into an overall net riskiness score – ranging from 0.25 to 4 - with the summary inherent risk rating and the summary control rating accorded equal weighting.

These scores are converted to PAIRS ratings that rise exponentially, based on the fourth power, as the measure of financial strength measure 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.

3.3 Impact

After the PAIRS rating of a fund is calculated, an *impact index* is introduced .

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. Its impact index is a linear function of assets with a floor of $A50 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 $A250 million, high impact from $A2.5 billion and extreme impact from $A25 billion. About 50 superannuation funds are rated as high and the remainder as low. There are no extreme impact funds.

3.4 Supervisory stance (SOARS)

The supervisory attention index is the geometric average of the riskiness/probability index and the impact index. Supervisory attention increases with both riskiness and impact, but the composite index recognizes that there are economies of scale in the level of extra supervisory effort required in response to marginal increases in both riskiness and size.

Table 3: Supervisory Attention Index

Probability rating/index (PAIRS)						
		Low 1	**Medium**		**High 81**	**Extreme 256**
			Low 5	**High 16**		
Impact Index	**Extreme 125 +**	22	50	89	201	358
		16	36	63	142	253
		11	25	45	101	179
	High 12.5 +	4	8	14	32	57
	Medium 1.25 +	1	3	4	10	18
	Low 0.25 +	1	1	2	5	8

Source: APRA

A score on the attention index maps to a ‘supervisory stance’ and action plan under the Supervisory Oversight and Response System (SOARS). The mapping, step H above, is illustrated in Table 4.

Table 4: Supervisory Stance (SOARS)

		Probability rating (PAIRS)				
		Low	**Medium**		**High**	**Extreme**
			Low	**High**		
Impact	**Extreme**	Normal	Oversight	Mandated Improvement	Restructure	Restructure
	High	Normal	Oversight	Oversight	Mandated Improvement	Restructure
	Medium	Normal	Normal	Oversight	Mandated Improvement	Restructure
	Low	Normal	Normal	Oversight	Mandated Improvement	Restructure

Source: APRA

There are four generic categories in SOARS, as shown in the table:

- **Normal**

  In the normal supervisory mode APRA collects and analyses the standard statistical and other information and conducts routine on-site reviews, with a minimum interval of two years.

- **Oversight**

  This category involves more intense monitoring with more frequent meetings with trustees, meetings with auditors and collection of additional information - and a readiness to step up supervisory or enforcement action quickly if there is any further deterioration.

- **Mandated Improvement**

  When a fund is rated in this category, APRA will direct trustees to develop and implement plans to correct the weaknesses it has identified. These may originate in management, asset composition, operational controls or the trustee board itself. APRA may accept legally enforceable undertakings from trustees in regard to their remediation plans. It may also issue a 'show cause' notice requiring trustees to explain why the regulator should not take more severe action.

- **Restructure**

  At this point, the fund has encountered serious financial difficulty or is at risk of this, or members' investments are considered to be in jeopardy from improper use by trustees. There may be significant breaches of the gearing prohibition or the 'in-house' investment restrictions.

APRA will consequently apply its stronger enforcement and remedial powers. For superannuation funds these include appointing an investigator; suspending and replacing individuals; and issuing directions to restrict fund operations. Its primary objective is to ensure that members' funds are safeguarded as far as possible. Where appropriate, these funds will be transferred to another trustee. Following investigation, disciplinary actions against the trustees, auditors and actuaries will be considered. Punitive actions include disqualification from further involvement in the superannuation industry, referral to professional bodies in the case of auditors and actuaries, and prosecution in the courts.

As well as rating all funds (other than those with fewer than five members) under PAIRS, APRA rates approved trustees. These are exposed to operational and legal/regulatory risks and their capacity to manage these is important to the funds they administer. The more diverse and complicated their operations the greater are these risks. In their case the risk assessment includes an assessment of capital support, given trustees' potential liability for operational and compliance failings.

The front-line analysts/supervisors in Specialized and Diversified Institutions Divisions are primarily responsible for producing initial PAIRS ratings. Depending on a fund's complexity, the ready availability of all relevant information and an analyst's experience, a rating may take between a day and a week to complete.

Because consistency among funds and across the two divisions is extremely important, and because there is inevitably a large subjective element in assessments, a number of checks and balances are also built into the system. These arrangements are designed to strike a good balance between the knowledge and judgment of front-line analysts/supervisors and the need for consistency and rigor in supervision across all APRA-regulated entities.

Initial ratings are checked by a reviewer and the analyst's line manager who subsequently 'owns' the rating. Staff from Supervisory Support Division may question (but not change) ratings and may elevate significant disagreements to APRA's governing group. When confirmed, the rating fixes the SOARS position on the basis of which supervisors then construct the appropriate action plan. A PAIRS rating that sets a SOARS position of 'mandated improvement' or 'restructure' may only be overridden by the governing group. The PAIRS assessments for entities ranked as high and extreme impact are also reviewed by a panel comprising the responsible line manager, relevant risk specialists, an industry specialist and representatives of the various cross-divisional committees and chaired by a PAIRS expert. Other checks and balances include a specialized PAIRS team that regularly analyses the data and follows up on outliers and summary reports, with analysis by industry, by peer groups and over time provided to all analysts and management.

APRA does not publish its PAIRS/SOARS ratings of individual funds and does not permit the funds to do so because of a concern that public reaction to negative ratings could hinder remediation actions and a desire to avoid supervisory ratings being used as a competitive device.

3.5 Guidance for analysts

As previously described, the information to assess a fund is assembled predominantly from statistical and other statutory returns filed by all funds, from audit and actuarial reports and from intelligence gathered by APRA staff during periodic on-site reviews of funds. Other sources include media reports, member complaints and information supplied under memoranda of understanding with other regulatory agencies.

APRA staff use this material to make risk assessments, the major input to PAIRS/SOARS ratings, with the assistance of guidance manuals. These deal with various key aspects of an institution's risk profile – competence of the board, strength of management, financial position etc. For superannuation funds there are presently eight such manuals or modules.

These cover the following topics that are relevant to a PAIRS rating:

- the trustees of the fund
- the managers and staff of the fund
- a fund's strategy
- a fund's structure and relationships with other entities
- capital (relevant for defined benefit funds and trustees of public offer funds)
- a fund's risk management policies and capacity
- a fund's operational risk, including outsourcing
- balance sheet and investment risk.

Each module summarizes the various criteria relevant to supervisory assessment of an area, and all significant statutory and regulatory provisions for which compliance must be checked. It advises on 'what to look for', lists documentation that the analyst should request from the fund, describes good practice and provides examples of common problems or poor practice. It also provides a template for the supervisor's written findings for the review and explains how these should feed into a new or revised PAIRS rating.

4. Assessing a Fund's Riskiness

As described above, APRA staff produce a risk rating for a fund by assessing its structure, operations and balance sheet against a number of criteria. Each criterion is rated on a scale of 0 to 4, with six grades – for risk elements these range from 'very low' (0 to 0.5) to extreme (3.1 to 4.0); for mitigants or control elements they range from 'very strong' (0 to 0.5) to 'extremely weak' (3.1 to 4.0).

The various ratings are based on qualitative, rather than quantitative, measures. A 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', attempting to force a fund to fit into every listed characteristic, and encourages them to apply judgment and commonsense.

The following sections summarize the guidance given on the two most prominent *inherent risks* for defined contribution superannuation funds - *balance sheet/investment risk* and *operational risks*. The following sections look at risk management generally and at capital support for defined benefit funds.

4.1 Balance sheet/investment risk

There are no quantitative restrictions on funds' asset portfolios, other than the restrictions 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 mentioned earlier.

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.

A well-run fund will have a clearly stated investment strategy (or strategies) that is consistent with the broad statutory requirements for prudence and appropriateness. The strategy will take into account objectives for risk and return and will specify policies on asset allocation, liquidity needs, valuation, administration and custody. It will be reviewed periodically to ensure it remains suitable to the needs of fund members. Other things equal, a fund with a higher risk portfolio will get more supervisory attention under PAIRS.

Strategies will vary from fund to fund depending on such factors as the age profile of members, the likelihood of large-scale departures (for instance, due to retrenchment), the expressed risk preferences of members and the design of benefits.

Broad objectives should be clearly stated. They may be for an absolute rate of return, or for a return with a certain margin above the rate of price inflation, or a margin over a benchmark rate. Objectives should also include a level of risk tolerance and the time period over which performance will be measured.

Trustees should set allocation targets for the main asset classes consistent with the broad strategy or strategies adopted; these should be expressed as proportions with a range to allow managers some flexibility in responding to market changes and to avoid frequent insignificant breaches of investment mandates. The higher a fund's target rate of return and its tolerance of volatility, the greater will be the allocation to growth assets and acceptance of relatively low diversification. The lower the tolerance of volatility and occasional negative returns, the greater will be the allocation to income assets.

Asset portfolios must be reasonably diversified to satisfy statutory responsibilities for prudence, but there are no quantitative diversification targets set in regulation. APRA

accepts that modest investment in high risk assets can reduce overall portfolio risk. As noted, asset allocation strategies must be consistent with the fund's objectives for growth and volatility, and its members' needs; as an extreme case, a heavy weighting of unlisted equities would not be consistent with an ageing membership and the objective of steady income. Asset allocation must also cater for payment needs, with an appropriate proportion in cash or highly liquid fixed interest investments.

When a fund portfolio has invested in particularly high risk or complex investments, such as derivatives or hedge funds, APRA's supervisors expect trustees to have performed additional due diligence on the risks involved and to have sought expert independent advice on the risks and appropriateness of those investments for the fund's investment aims.

APRA provides specific guidance to its analysts on three asset classes – derivatives, direct lending and foreign investments.

A fund investing in *derivatives* must have a specific risk management statement (a requirement since the mid 1990s) explaining how their use is consistent with the fund's overall objectives and setting limits on usage. The supervisor will check on compliance with this statement, including:

- the level of understanding of the risks demonstrated by the trustees
- how the use of derivatives is consistent with the fund's overall strategy
- whether there are limits on usage
- adequacy of segregation of dealing and settlement
- adequacy of procedures for monitoring and for re-evaluating risks
- extent of stress testing
- frequency of reporting to trustees, including any breaches of limits.

Where derivatives investment is indirect through another party, the trustees must have conducted an assessment of that party to see whether its risk management controls would meet comparable standards. Derivatives must not be used to effectively gear the fund.

Funds may engage in *lending* directly or indirectly, via investment in mortgage trusts where the underlying assets are loans to third parties. Direct lending should be governed by documented procedures for making the loans (including interest rates, loan-to-valuation ratios, valuation practices and security) and for monitoring, for provisioning and for write-offs. Lending to members is not permitted.

Supervisors also scrutinize *foreign investments* closely to determine whether trustees have identified all of the risks and are capable of managing those. There must be clear policies for controlling exposures, including hedging strategies against exchange risk, for counterparty selection and limits, for adjusting portfolios in response to changing country risk and so on. APRA expects that a well-run fund's asset allocation policy will be clearly documented and that trustees will closely monitor compliance with policy, whether investment is conducted in house or is outsourced.

Where investment is outsourced, APRA expects a well-managed fund to take considerable care in selecting, instructing and monitoring managers. Selection should be by competitive tender. Investment mandates from trustees to managers should encompass objectives for rate of return and liquidity, allowable and non-allowable asset classes, the use of derivatives, allocation limits, portfolio duration, fees, performance benchmarks and reporting. Trustees should review the performance of managers periodically against pre-agreed objective measures that are consistent with the fund's investment aims, and should be able to change managers without disruption to the fund.

There is no regulatory requirement for credit or investment committees but for large complex funds, or those with a component of high risk investments, that would be regarded as good practice.

Documents consulted by APRA in assessing investment risk include balance sheet data, including statistics submitted quarterly (by large funds) and annually; cash flow statements and projections; investment mandates for external managers; investment manager reports; tender and evaluation documents relating to manager selection; and regular reports to the trustees.

A fund receiving a 'very low' PAIRS rating on inherent balance sheet/investment risk will have well-diversified investments spread across different investment products and markets, and no 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.

The aspects of the guidance summarized above that deal with discipline in investment processes, such as limit-setting, monitoring and reporting, will feed into the 'management and control' rating.

The widespread availability to members of choice among a number of investment portfolios is complicating the meaning of trustee responsibility for managing investment risk beyond the need for clear strategies and properly managed execution. APRA has taken the view that trustees retain responsibility for the prudent structure of a fund in aggregate (taking into account particularly the need for diversification and liquidity) and that they need to ensure that this is not compromised by the sub-portfolio choices made available to or selected by members. It also requires that trustees provide appropriate advice and warnings to members about the risks to their own retirement savings from choosing only sub-portfolios that are highly concentrated or risky for other reasons.

4.2 Outsourcing and other operational risks

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

- a simple legal and organization 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’ information technology systems that suit the needs of the business, have no history of problems and are adaptable for foreseeable changing needs
- minimal disaster threat from external events
- no reliance on a ‘key person’.
- In contrast, a fund with extreme operational risks will have:
- complex structures and unclear reporting lines
- extensive reliance for core or complementary activities on related entities not wholly owned within the same corporate group
- outsourcing of material activities to unrelated third parties, with a history of unresolved problems
- a 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.

The supporting manual on operational risk covers a superannuation fund’s human resources policies, outsourcing, fraud prevention, administration, information technology systems, business continuity management, project management and the introduction of new products and businesses. Given the widespread use of service providers in the industry, outsourcing is the most significant of these for many funds. Consequently, it is the subject of one of the new operating standards described earlier.

Trustees must undertake a full due diligence of any potential outsourcing partner, covering both its technical capacity, risk management systems and financial capacity. They should look at track record and consult referees. Once they are appointed by formal contractual arrangement, the performance of outsourced providers must be monitored closely and their mandates reviewed and updated as necessary.

By regulation, outsourcing agreements must have the following elements:

- service monitoring arrangements, with clear description of services to be provided, quality standards to be met, and agreed measurement methods and penalties for non-performance
- fee schedules and payment arrangements
- procedures for monitoring, including access to the provider for the fund’s internal and external auditors
- access for both the fund and APRA to relevant documents and other information of the service provider

- access for both the fund and APRA to the service provider's premises to investigate any matter relevant to the outsourcing arrangement
- a provision giving the fund and APRA the right to require that the provider have an independent audit of its activities
- assurances about the business continuity plans of the service provider (in the event of power failure or systems crash), including security of data, the maximum time for restoration of normal operations, emergency arrangements and plans for communications with members; there must also be provision for the fund to retain access to critical information and functions if the provider ceases to operate because of insolvency or other cause
- termination arrangements, including triggers and notice periods
- default arrangements, specifying default events and how and over what time these are to be rectified (and indemnity)
- transition arrangements, so that where outsourcing arrangements are terminated for whatever reason, agreements deal with access to records and software, and to otherwise protecting the interests of fund members during the change from one provider to another
- dispute resolution procedures, including resort to arbitration where necessary
- liability and indemnity provisions that specify the extent of liability of each party and whether liability for negligence is limited, and indemnity and insurance arrangements; trustees must know about the service provider's measures to limit trustee exposure to an adverse event, including its insurance cover and internal audit
- confidentiality and security of information about the fund and its members.

Importantly, outsourcing agreements must ensure that the terms of any sub-contracting agreements contain equivalent provisions to those that would otherwise apply to the service provider itself. Where outsourcing contracts are with members of the same financial group, the terms including fees must be on an arm's length basis.

4.3 Risk management

The guidance module on risk management deals first with the overall inherent risk profile of a fund, and then with several key aspects of risk management: the role of the board of trustees, the development and implementation of a risk management framework, the risk management strategy and plan, the fund's compliance function, management information systems and financial control, internal audit, external audit and the role of the actuary in a defined benefit fund. It therefore overlaps substantially with various other parts of the regulatory framework, in particular the new regulatory standard on risk management summarized in section 4.2.

In relation to inherent risk, the guidance emphasizes that the two main sources of risk for superannuation funds are balance sheet/investment risk and operational risks including poorly managed outsourcing (discussed above).

It notes that, apart from the risks from outsourcing, operational risks can be greatest when processes are not properly documented and monitored, when management structures and intra-group relations are complex, when computerized information systems have become dated, when trustee boards do not understand their responsibilities, when funds are merging, when funds have to cope with unusually large transaction volumes, when there is significant change in products offered to members, or when there is a lot of change in regulation.

Among the seven *risk mitigants* in PAIRS ratings, two particularly important ones are a fund's general risk management framework and its operational management.

A fund rated 'very strong' on risk management will have:

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

A fund with none or few of these features will be rated extremely weak in risk management. APRA has not mandated a centralised risk management function, but it will give higher marks under PAIRS to a fund that has an area of management charged with identifying all inherent risks and their mitigants, ensuring that the mitigants are working effectively and ensuring that this risk management framework is up to date - and reporting periodically on all this 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 - operational, investment etc. Ideally, this area would also have some authority to monitor and enforce compliance with the risk management policies endorsed by the board of trustees. One of APRA's practice notes emphasizes that staff responsible for monitoring and enforcing compliance with risk policies should have authority independent of the units they oversee.

In the area of operational management, a very strong rating would flow from:

- business line managers with significant experience and expertise, operating effectively as a team
- low turnover of experienced staff
- an effective management structure with clear delegated responsibilities and reporting
- normal succession planning.

4.4 Capital support

This is a critical input to PAIRS ratings of banks and insurance companies, but it is not relevant for most superannuation funds which are defined contribution in structure. An assessment of capital support is however made for trustees of public offer funds and for defined benefit funds.

For trustees, the rating takes into account the current capital coverage relative to the regulatory minimum, earnings and access to additional capital if needed.

Defined benefit funds are rated as having 'very strong' capital coverage with a solvency ratio of at least 1.5 and 'extremely weak' if that ratio is below 1. They are also rated on current earnings and on the availability of additional capital, if needed, from their employer-sponsors. The latter assessment takes into account the extent to which an employer is legally required to ensure the fund meets it obligations to members, the extent to which the sponsor has demonstrated that commitment in the past and the financial capacity of the employer.

4.5 Small funds

To expedite the initial PAIRS rating of superannuation sector APRA has adopted an abbreviated process for the large number of funds with assets less than $A50 million. These funds represent about 60 percent by number of all APRA-regulated financial institutions requiring a rating, but they hold less than one percent of the assets.

In line with APRA's broader risk-based approach to prudential supervision, it is using a streamlined and largely automated rating for these entities. The building blocks of the PAIRS model are condensed and the prudential returns submitted by these small funds subjected to automated analysis under a series of decision rules.

A draft PAIRS rating is then provided to the responsible analyst, with information on the basis for the rating. Analysts can accept or amend the rating based on any additional knowledge of the institution that they might have.

5. Usefulness of PAIRS

PAIRS has been a significant step forward for APRA, as an integrated risk-based regulator, because it formalizes 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 analyze 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. In the future PAIRS ratings could be used in determining risk-based levies to fund APRA or risk-based premia for industry-funded protection schemes.

There are also potential pitfalls. The rating process is complex and could encourage 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.

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 them.

6. Statistics

In view of the large number of funds, APRA's supervision - including constructing the PAIRS ratings - relies heavily on statistical and other information supplied by funds.

Funds with assets of $A50 million or more must provide information quarterly, while all APRA-regulated funds must submit an audited annual return within four months of the end of the year. These returns are submitted electronically by a system which lets funds enter data, validate the information entered and then digitally sign and submit the information in an encrypted form.

6.1 Annual attestation

Trustees of these superannuation entities are required to submit each year a signed attestation that information provided to APRA accurately shows the fund's financial position and transactions, and that the trustee has adequate reporting systems and internal controls supporting preparation of its financial information.

7. Human Resources Policies

APRA aims to have a mix of staff with industry experience (who may stay with the agency for a few years) and staff who intend to make a career in prudential regulation. It recruits junior supervisory staff on graduation from university, primarily with degrees in finance, commerce, accounting, economics and actuarial studies. It recruits people into middle and senior management roles who have experience in the finance sector – from both regulated industries and sectors such as accountants and actuaries.

APRA's remuneration rates are related to movements in finance sector market rates but the agency's budget constrains it to a benchmark well below the median market rates. As a result, APRA has some difficulty in attracting and retain as many high quality supervisory staff as it would like to employ. Many of the best professionals with two or three years' experience are attractive to commercial employers in the finance sector, particularly regulated entities.

Apart from on-the-job learning, training for APRA's staff includes in-house general and specialist tuition in prudential regulation and attendance at external seminars and conferences. Staff shortages and concerns about confidentiality of information have limited the use of short-term secondments to industry as a training device. APRA has also had a policy to rotate staff among its front-line and supervision divisions as a training tool, but staff shortages and work pressures have hampered its implementation.

8. Evaluation of Effectiveness

Before the introduction of PAIRS and SOARS APRA applied only very crude means of determining its supervisory priorities for superannuation funds based largely on size and very clear evidence of problems. The risk-based framework has allowed much better targeting of resources to higher risk to assessing and remediating higher risk funds. It is too early to do a comprehensive assessment of the impact the risk-based framework has had on the effectiveness of supervision. As experience with the PAIRS risk model had accumulated, APRA has been assessing its diagnostic value by tracking the 'migration' of institutions between the different supervisory stances. Since the model was introduced, for example, a much higher proportion of institutions in the 'Mandated Improvement' stance were upgraded rather than downgraded to 'Restructure'; a significant number also exited the industry in an orderly fashion. This provides some confirmation that the PAIRS/SOARS framework has helped to improve the timeliness and effectiveness of APRA's intervention.

In future APRA will also be able to use outputs from the PAIRS/SOARS model to produce indicators of the prudential standing of the industry at points in time, and trends in that over time. These are, of course, only very approximate indicators of the contribution made by prudential regulation. Some more useful measures of supervisory effectiveness will also be available – for instance, the speed with which funds that fall into the 'restructure' category are returned to 'oversight' or 'normal' as a result of APRA's actions.

Appendix 1

APRA: ORGANISATION STRUCTURE 2005