

financial & private sector development

Australia: Risk-Based Supervision of DC Funds

Contractual Savings Conference

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THE WORLD BANK



Australia - system snapshot

- First Pillar with wide coverage providing benefit =25% of average wage financed from general government revenue
- Mandatory Second Pillar introduced in 1993, now with 9 per cent of salary going into pension funds
- Total assets of just over 100 per cent of GDP
- Funds can be occupational or open, but mainly DC
- 307 trustee entities with around 1000 pension funds

Australia - system snapshot

- System based on fiduciary responsibilities of trustees
- Supervisory focus has always been towards allocating scarce resources most to those funds assessed as requiring attention
- Formal risk-based model introduced in October 2002
- APRA responsible for supervising banking, insurance and pensions

Supervisory objectives

- Legislative objective ‘to make provision for the prudent management of superannuation funds’
- Supervision to ensure that, under all reasonable circumstances, financial promises are met
- What are the financial promises in a DC system
- It is a general responsibility of the 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

Recent Steps Taken to Strengthen the Risk-Based Policy Framework

- Revised framework introduced over 2004-2006:
- licensing of all trustees and registration of all funds
- introduction of five new prudential measures, supported by guidance notes, dealing with:
 - fitness and propriety of trustees
 - risk management strategies and plans
 - outsourcing of trustee functions
 - the resources available to trustees
 - capital adequacy
- expanded reporting obligations for fund auditors

Australia: Evolution of risk-based supervision

- Drivers of the evolution in regulation have included:
 - change in the organization of regulatory agencies
 - struggle to resolve the mismatch between the large number of pension funds and the limited resources
 - 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.

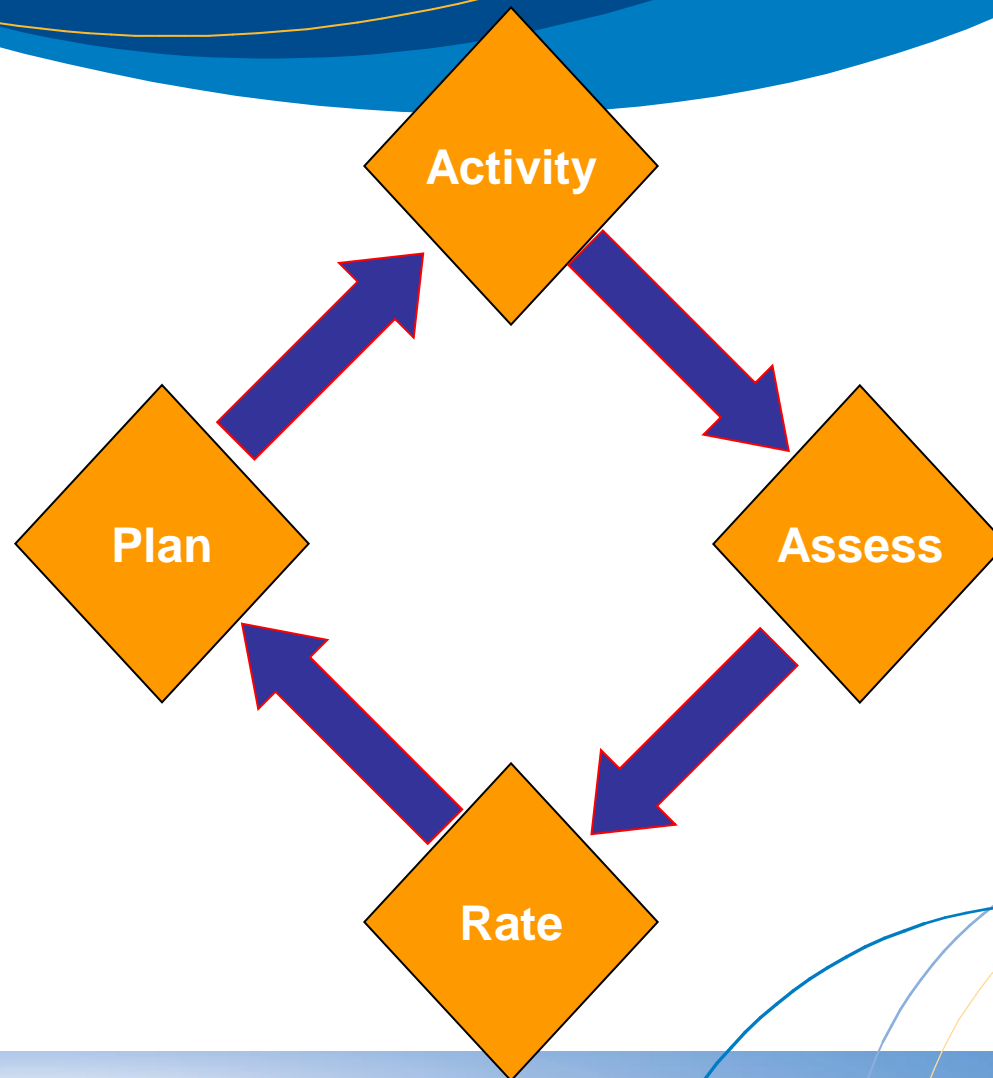
Australia: Main Elements of APRA's Risk Scoring Model

- A common methodology covering all types of regulated financial institutions (banks, insurers and pension funds)
- Addresses both the magnitude of the potential impact, as well as the probability of occurrence, of financial failure
- Employs a consistent, logical approach to selecting, rating, and weighting the factors which determine the overall probability of failure

Preconditions for Risk-Based Approach

- Risk-based approach requires judgement by supervisors
- But judgement must be exercised within a framework of constrained risk-taking to ensure a degree of rigour and consistency (also helps guard against supervisory capture) - what is high/low risk? Must have common definitions
- Framework needs to provide:
 - supervisory tools
 - minimum expectations/standards
 - common assessment methodology

Supervision Cycle



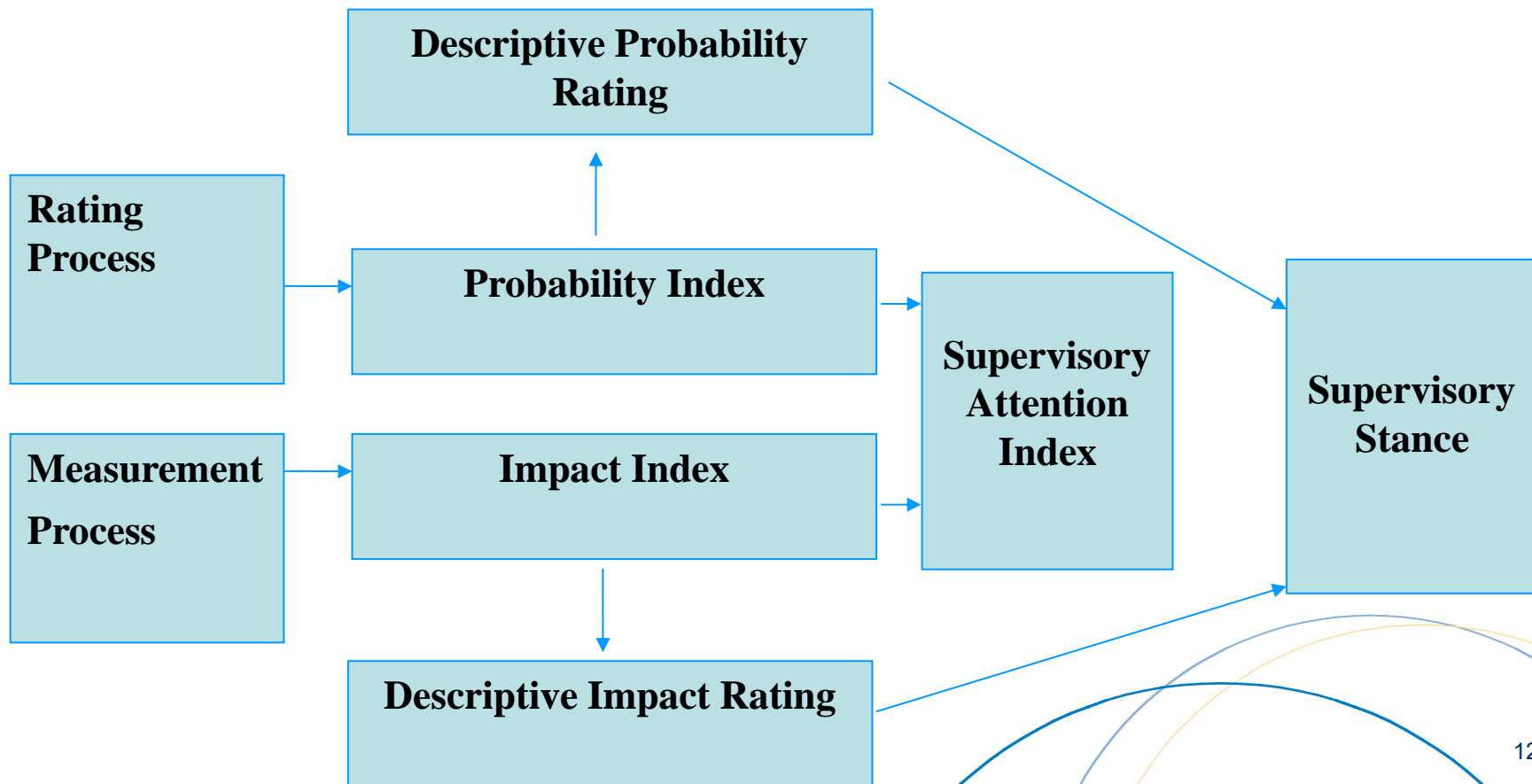
Supervisory Tools

- On-site reviews
- Off-site reviews
- Third party reviews (eg by auditors)
- Financial reports and statistical returns
- Face-to-face discussions
- Information gathering:
 - Market-based information (eg share prices, spreads)
 - External ratings (but beware circularity)
 - Market intelligence

PAIRS and SOARS

- Probability and Impact Rating System
- APRA's central risk assessment model
- Aims to identify regulated entities that have a higher risk of failure or will have a large impact if they do fail
- Supervisory Oversight and Response System
- Used to determine how supervisory concerns based on PAIRS risk assessment should be acted upon
- Supervisory interventions are targeted and timely

PAIRS Ratings Framework



PAIRS Methodology

- Based on building block approach



- Applied to all banks, insurers and pension funds

New PAIRS model (January 2008)

PAIRS Category	Inherent Risk	Management and Control	Net Risk	Significance Weight
Board	SW applied to 'Net Risk'		(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	'Net Risk' is the simple average of Inherent Risk and Management and Control		(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)	

Inherent Risk

- Any uncertainty in relation to the business operation of an entity which has the potential to affect the financial position of the entity
- The nature of the inherent risk is determined primarily by the types of products and services offered
- The level of risk is a function of its risk appetite as determined by the Board and Management
- Inherent risk is assessed independently of controls and the level of capital available to absorb losses

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Management and Control

- Encapsulates how an entity identifies, measures, monitors and controls its inherent risks
- Capability to manage and control risks determined by policies, practices, systems and controls established
- Controls should be commensurate with the level of risk.
- Should capture existing and new risks

Significance weights and capital support

- Significance weights show the importance of the PAIRS category to the overall business profile of the entity
- Capital support is also assessed

PAIRS Methodology

- Each building block supported by an Assessment Module
- Module provides guidance as to coverage, plus practice notes on good and bad practice
- Completion of Module usually requires combination of on-site and off-site activity
- Focus is on quality of outcome, not compliance with 'one size fits all' approach

The Board and Management

- Quality, skills and experience of trustees
- Meets relevant composition and independence requirements
- Meets the fits and proper requirements
- Deals with conflicts of interest
- Management turnover
- Key person risk
- Succession plans

Risk Governance

- Focuses on the functioning and effectiveness of internal and independent governance arrangements
- The Board should understand the business environment and major risks
- Set a risk management framework
- Determine risk management strategy and major policies
- “Risk Culture”
- Includes assessment of risk committees, compliance functions and internal and external audit functions, actuary

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PAIRS Methodology

- Inherent risks are rated and weighted against benchmarks, and then combined with control and capital assessments to produce an overall risk of failure rating
- Broad descriptive ratings are used to describe a non-linear scale:

Descriptor	Rating	Index	S&P Equivalent
Low	0-1	0-1	AAA to AA-
Low-Medium	1-1.5	1-5	A+ to A-
High-Medium	1.5-2	5-16	BBB+ to BBB-
High	2-3	16-81	BB+ to B+
Extreme	3-4	81-256	B or below

PAIRS Methodology

- Impact is largely based on simple asset measures at present, with some degree of management overlay
- An area for further work

Impact Rating	Size
Low	<\$400m
Medium	\$400m - \$4b
High	\$4b - \$40b
Extreme	>\$40b

Supervisory Response

- APRA is not only striving for a consistent assessment of risk, but also a consistent supervisory response
- APRA's Supervisory Oversight and Response System (SOARS) complements PAIRS
- Provides guidance to supervisors on the expectations of APRA when faced with a particular risk/impact profile
- Forces action and limits forbearance

SOARS 'Supervisory Oversight and Response System'

Impact rating

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

Low

low Medium

high Medium

High

Extreme

Probability rating



Supervisory Response

- Normal
 - Routine supervision
- Oversight
 - No material risk of failure, but closer examination of emerging issues required. Increase in information collection and on-site visit frequency
- Mandated Improvement
 - While failure is not imminent, some aspect of operations is unacceptable. Entity to devise action plan and demonstrate improvement in relatively short timeframe, or be subject to APRA direction
- Restructure
 - APRA enforcement action

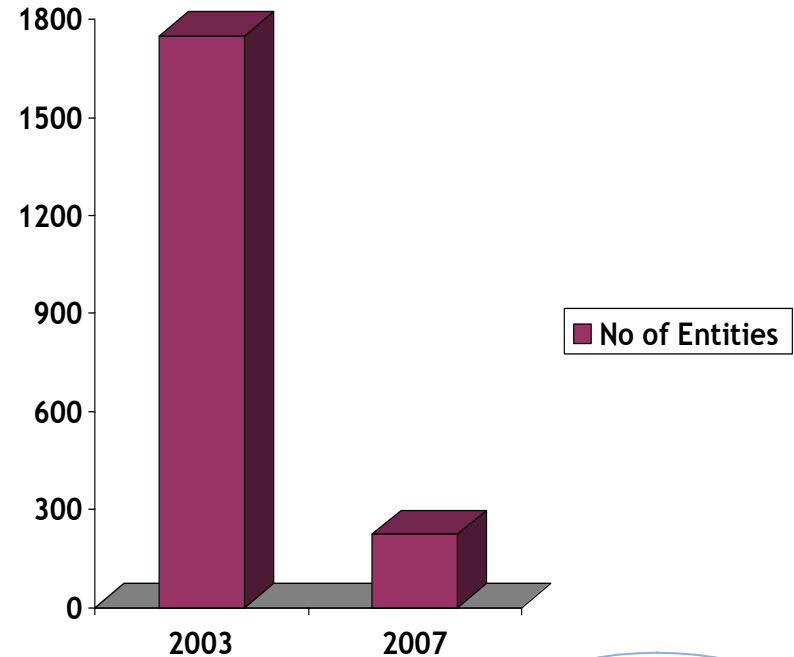
Application of PAIRS to pension funds

- Adaptation of PAIRS to DC pension funds:
 - No solvency issues/specific promises to fund members in DC funds, therefore assessment of the net risk is limited to inherent risk and management and control.
- In the case of DB funds, capital support is relevant:
 - Involves an assessment of surplus or deficit position of the fund
 - It incorporates an assessment of support from the employer sponsor

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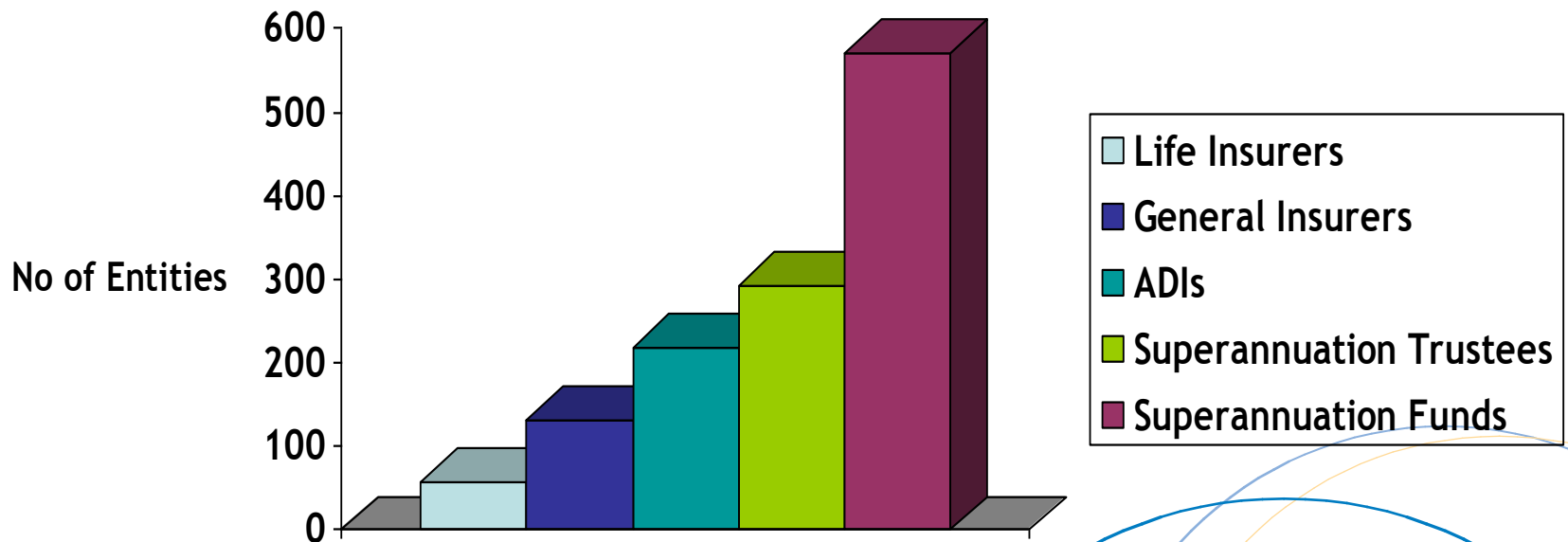
PAIRS for small funds

- Entities with total assets <\$50m
- Rigorous superannuation licensing regime
- Discontinue PSS model with the introduction of PAIRS III
- No model differentiation based on size

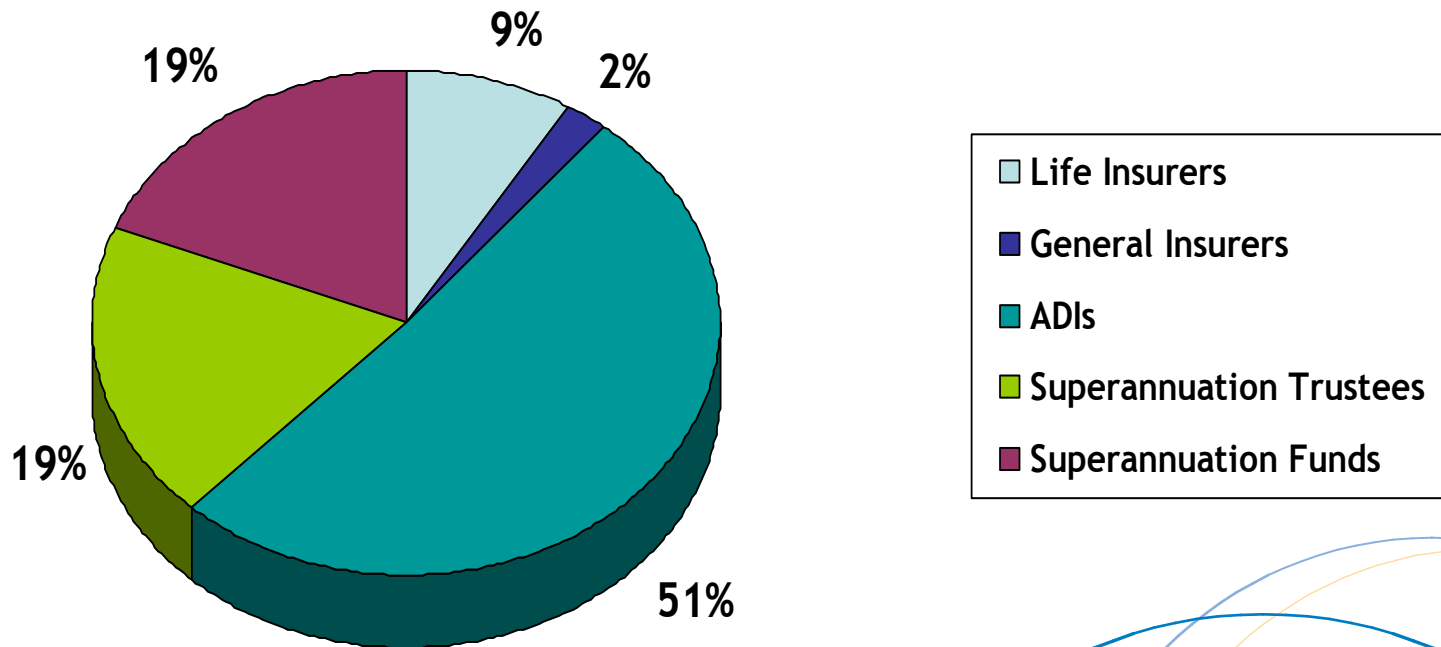


PAIRS entities

Distribution of Entities by Industry



Distribution of Assets by Industry



Benefits of Risk-Based Approach

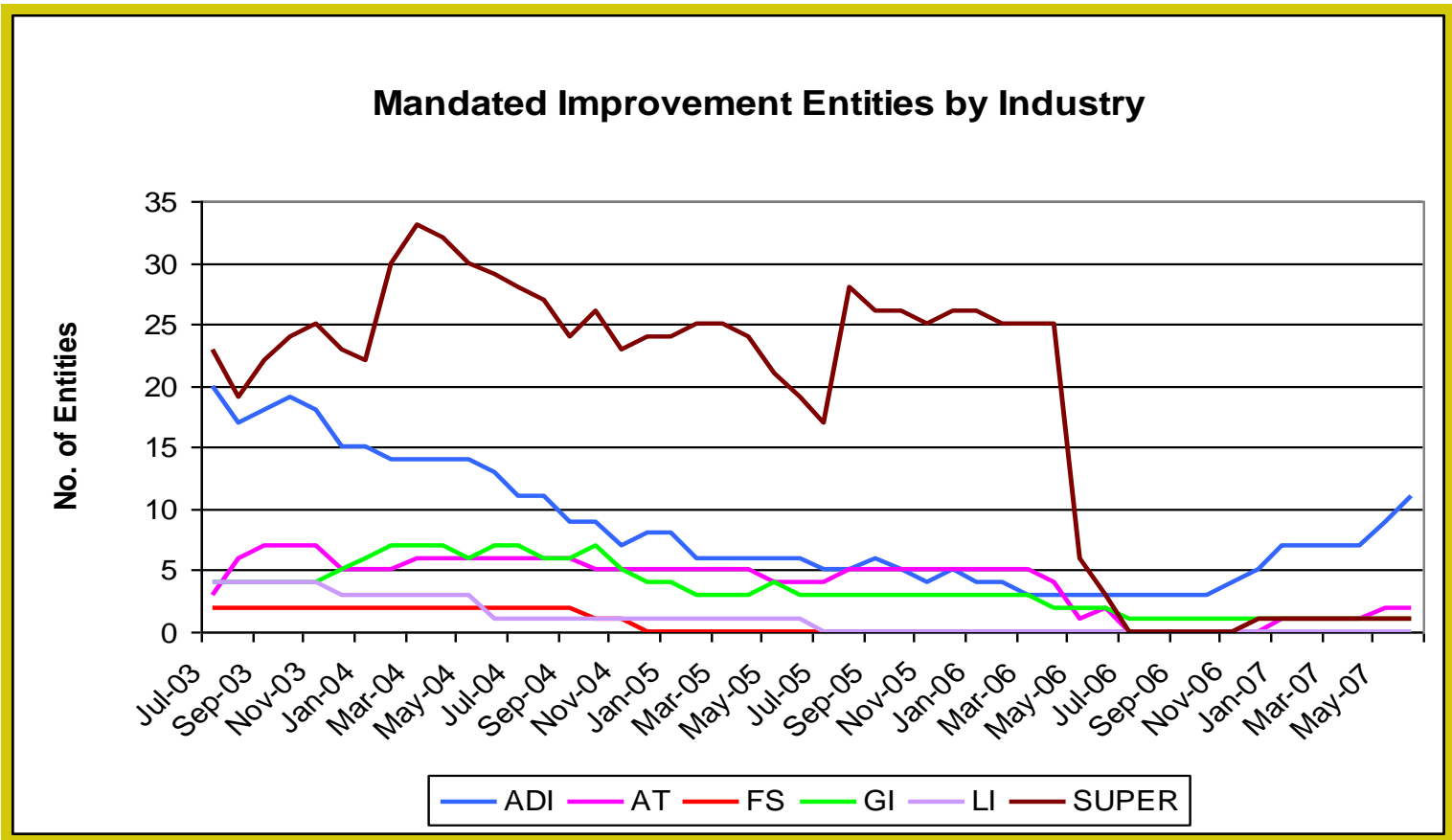
- Provides a common language (particularly important for integrated regulators) and facilitates communication
- Enforces analytical discipline
- Supports scarce resource allocation and facilitates resource planning
- Reflects non-linear risk relativities
- Links response to risk assessment

Benefits of Risk-Based Approach

- Identification of shifts between categories on important management signal
- MIS provides for quick identification of risk changes

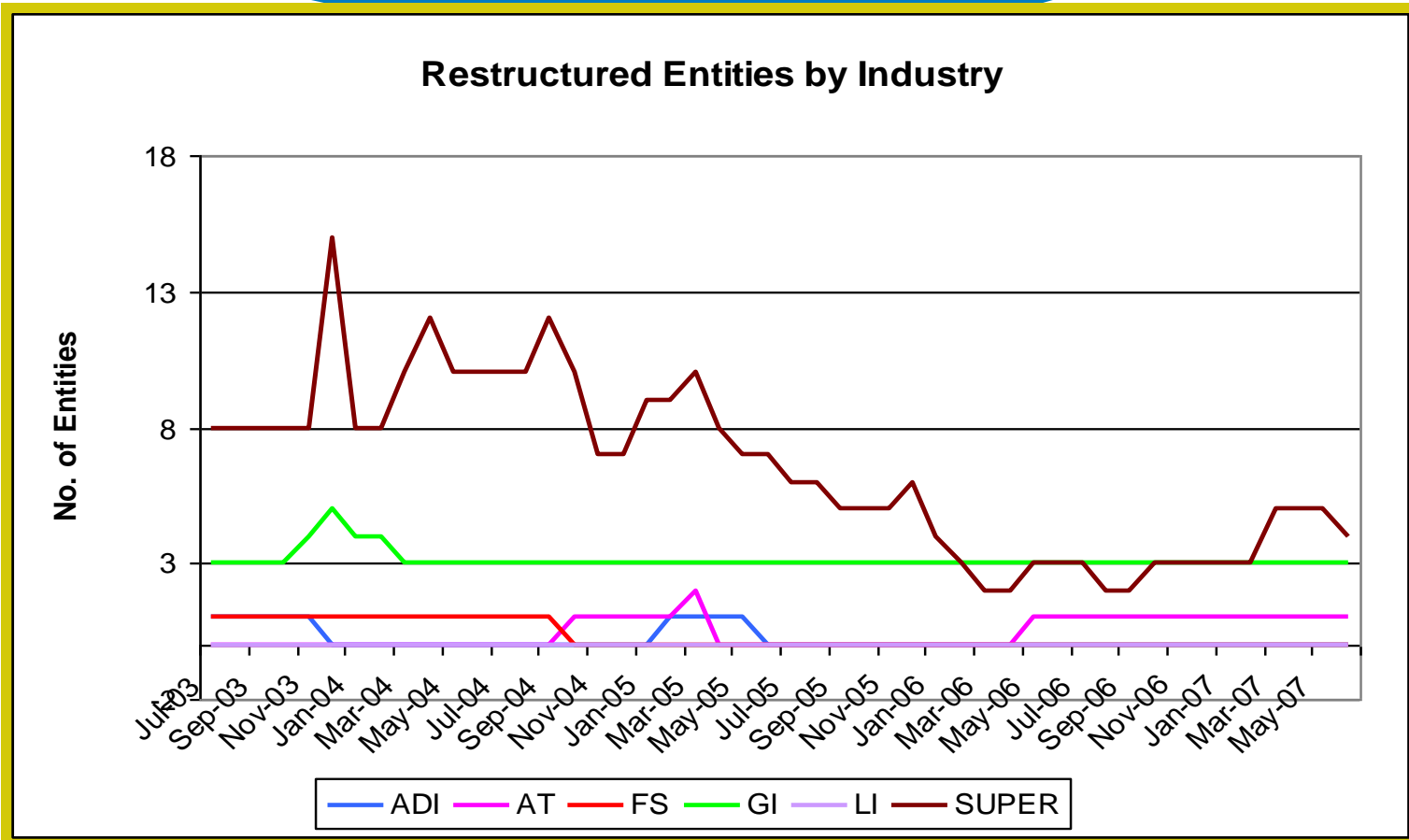
From/To	Normal	Oversight	Mandated Improvement	Restructure	Exit	Failure
Normal	73%	12%	1%	0%	15%	0%
Oversight	14%	74%	2%	0%	11%	0%
Mandated Improvement	0%	33%	22%	0%	44%	0%
Restructure	0%	0%	0%	50%	50%	0%

Mandated improvement data



Note: Superannuation data is indicative only.

Restructure data



Note: Superannuation data is indicative only.

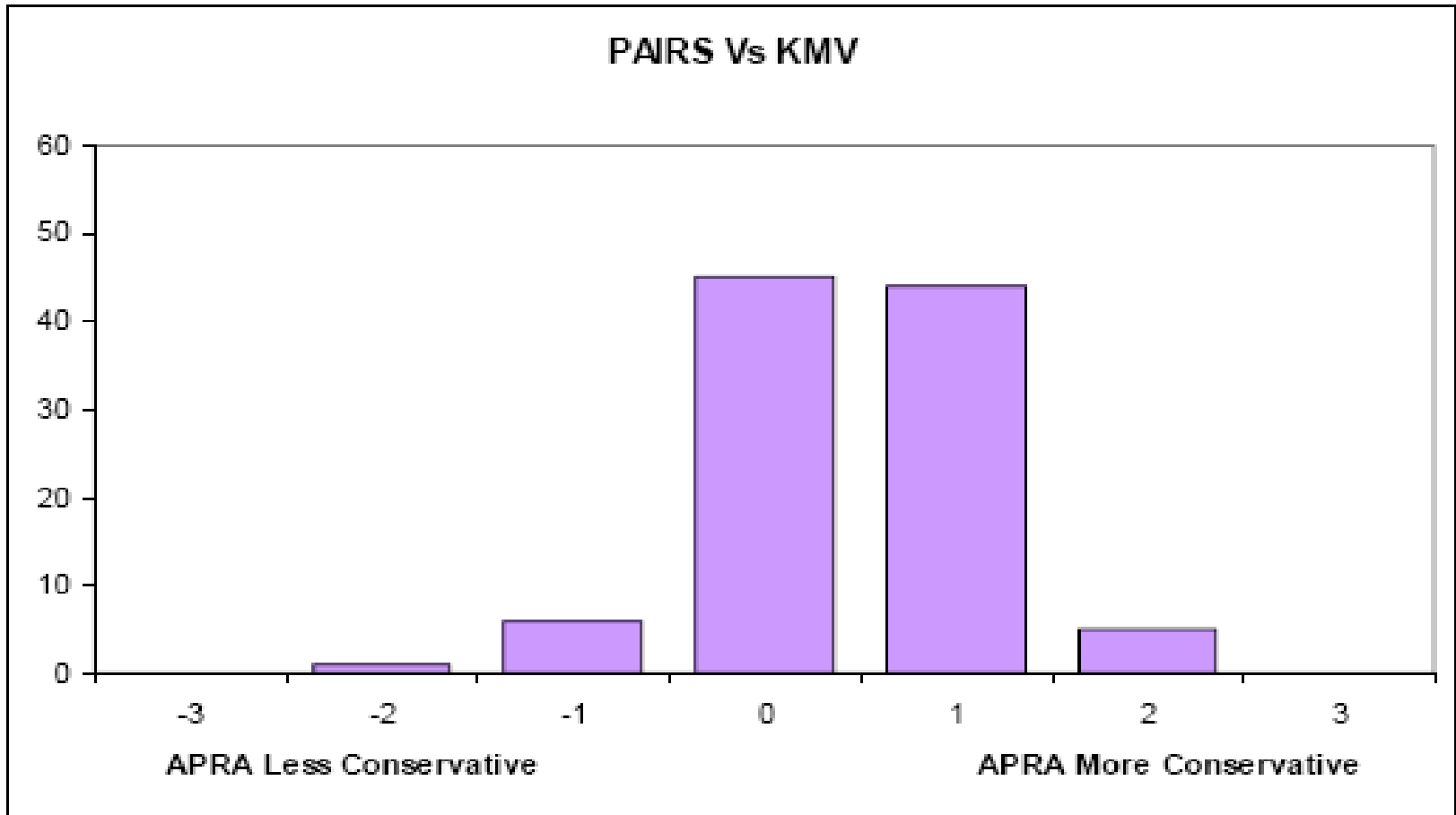
But some issues

- Complexity
- Subjectivity
- Consistency
- Validation

Model validation

- Internal versus external?
- Reasonableness of PAIRS mathematical arrangements
- Reasonableness and accuracy of our approach to setting probability of failure via mapping to ratings agencies
- Opinions will be reviewed and incorporated into our models where considered appropriate i.e. not binding

PAIRS versus KMV



Overall Risk of Failure

Overall Risk of Failure (All Entities)

