

# Risk-based Supervision

## IOPS Work and APRA Experience

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# Outline

- Introduction
- IOPS Principles of Private Pension Supervision

*Principle 5: Risk orientation - pension supervision should seek to mitigate the greatest potential risks to the pension system*

- Risk-based v. compliance-based supervision
- IOPS work on risk-based supervision
- Example - APRA's PAIRS/SOARS model

# What is Risk-based Supervision?

- first developed for banking supervision, then insurance supervision;
- **objective:** institutions adopt sound risk management practices and capital is commensurate with risk;
- quantitative and qualitative assessment
- many IOPS members have been or are planning to introduce a similar risk-based approach to pension supervision

# Risk-based v. compliance-based approach

Risk-based approach	Compliance-based approach
<ul style="list-style-type: none"> <li>• Identifies potential risks</li> <li>• Assesses mitigating factors</li> <li>• Seeks proper management of all risks</li> <li>• Allows scarce supervisory resources to be targeted at funds seen as most at risk</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on compliance with eg. tax and labour laws and (often) quantitative investment rules</li> <li>• All funds get same degree of attention</li> </ul>
<ul style="list-style-type: none"> <li>• Forward looking and principles-based legislation</li> <li>• Flexible</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed, often rigid, rules that are difficult to change to meet urgent regulatory needs</li> </ul>
<ul style="list-style-type: none"> <li>• Incentives for institutions to strengthen risk management practices</li> </ul>	<ul style="list-style-type: none"> <li>• Institution's focus is on compliance with rules, not risk management</li> </ul>

# Risk-based v. compliance-based approach

Risk-based approach	Compliance-based approach
<ul style="list-style-type: none"> <li>• Supervisors use judgement to assess risk and quality of management</li> </ul>	<ul style="list-style-type: none"> <li>• Point in time focus</li> <li>• Overlooks major risk areas</li> <li>• No early warning system</li> </ul>
<ul style="list-style-type: none"> <li>• Compliance checks done by audit etc, removes duplication of work</li> </ul>	<ul style="list-style-type: none"> <li>• Duplicates work of auditors etc</li> </ul>
<ul style="list-style-type: none"> <li>• Supervisor can benchmark institutions and assess overall industry</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to get meaningful comparisons</li> </ul>
<ul style="list-style-type: none"> <li>• Attention directed to emerging problems</li> </ul>	<ul style="list-style-type: none"> <li>• Penalises past breaches of rules</li> </ul>

# IOPS Work on Risk-based Supervision

- Prominent feature of IOPS program of work
- 2005 to 2007 supported and complemented World Bank study of RBS for pension funds
- IOPS Working Paper No 4 *“Experiences and challenges with the introduction of Risk-based Supervision for Pension Funds”* (August 2007)
- 2008 and onwards - “Toolkit project”
- Regional assistance such as this workshop

# World Bank Project: Experience of early adopters

## Architecture similar...

### **The Basic Risk Management Architecture**

#### **For the institution:**

- Risk management strategy
- Board committees
- Risk management functions in the managerial structure
- Internal controls
- Reporting responsibilities

#### **For the supervisor:**

- Regulations, including minimum risk management standards
- Risk-based solvency rule
- Risk scoring model guiding supervisory actions
- Internal organization of the agency, with specialist risk units

#### **Market Discipline:**

The contribution of the actuary, auditor, fund members, rating companies, and market analysts to sound risk management

# World Bank Project: Experience of early adopters

## ...But application differs

**Table 3: Main Components of Risk-Based Supervision in the Four Countries**

	<b>Requirements for the Internal Risk Management Architecture</b>	<b>Risk-Based Solvency Rule</b>	<b>Risk Scoring Model</b>	<b>Role of Market Discipline/ Disclosure</b>	<b>Organization of Supervision Agency</b>
Netherlands	Internal review of Board's management of long term risks. Risk management plan in fund's business plan (Abtn)	Fully developed risk-based solvency rule	Fully developed and unified framework, considering quantitative and qualitative aspects; Applied to all financial institutions with relevant adaptations	Low; Possibly higher in some cases through single employer balance sheet	Integrated agency; Specialized pension units and specialized ALM and Legal units.
Denmark	Board of Directors required to issue risk management guidelines	Hybrid rule: solvency margin + risk-based traffic light system	Partially developed	High	Integrated agency; Specialized pension units and specialized risk units
Australia	Risk management strategy and plan required for licensing	No formal solvency rules for DC plans <sup>1</sup>	Fully developed and unified framework considering quantitative and qualitative aspects; Applied to all financial institutions with relevant adaptations	Medium	Integrated Agency. Lead supervisors and risk/technical specialists
Mexico	Very specific and detailed architecture laid out in a regulation issued by the supervisor	No formal solvency rules for DC plans; However, VaR ceilings to limit downside risk	Partially developed: Elements of risk scoring for operational risk and financial risk	Medium/ High	Single-purpose entity, with specialized operational and financial risk units

*Notes:* 1/ Australia imposes basic technical solvency requirements for the remaining DB funds. The size of solvency buffer is assessed as part of PAIRS



# Challenges in moving to risk based supervision

- Difficulties in adapting existing models
- Re-organisation of the supervisory authority
- New data collections
- Changing the mind set of supervisory staff
- Industry understanding and acceptance
- Appropriate powers

# IOPS WP4: Lessons Learnt

## *Adaptation of Models*

- Look at a range of available models - consult widely and adapt carefully;
- Consider adapting models created for the insurance sector for pension funds with guarantees;
- Allow flexibility when applying a standardized model to various financial products;
- Built in flexibility to upgrade models and systems on a regular basis;
- Use pilot schemes and avoid a 'big bang' roll out across the entire pension industry at the same time.

# IOPS WP4: Lessons Learnt

## *Reorganisation of Supervisory Authority*

- Allow plenty of lead time and do not underestimate the amount of change required by the authority;
- Start to move to a risk-based approach whilst the supervisory authority has capacity, and before pension industry growth accelerates;
- Build any new administrative structures gradually and allow flexibility/ time to adapt;
- Begin to build risk-based methodology into existing rules-based systems;
- If possible, introduce risk-based supervision at the same time as other pension reforms, and make sure other legislation is in line;
- Consider the following structures: cross-sectoral evaluation /separate departments analyzing and leading interventions on different risk categories.

# IOPS WP4: Lessons Learnt

## *Data Collection*

- Make sure data collection is given proper place in the planning process when devising a risk-based supervisory approach;
- Use existing data where possible to minimize costs;
- Make sure have powers (legal requirements) to obtain data from pension funds (but consider persuasion, incorporating into risk-based analysis etc. rather than fines and sanctions);
- Consider rolling out the data collection process in stages (e.g. starting with larger pension funds first);
- Consider slim-line reporting requirements for small funds;
- Make data submissions electronic where possible;
- Explain clearly to all involved parties why the data is requested and to what use it will be put.

# IOPS WP4: Lessons Learnt

## *Staff*

- Make sure training is provided for all staff - covering the *philosophy* as well as the process;
- Rearrange existing staff where possible to minimize costs;
- Use international expertise / ask for international training assistance;
- Hire or second some experts from 'risk-aware' sectors in the supervisory authority or private sector;
- Use 'lead-teams' to drive the reform process;
- Leverage internal expertise for training where possible;
- Make training on-going so staff understand how the approach and models are adapting, how they are fitting with industry developments etc.;
- Leave plenty of lead time and flexibility and do not neglect basic management during reform process;
- Provide training for trustees, fiduciaries or other key stakeholders.

# IOPS WP4: Lessons Learnt

## *Industry*

- Explain the risk-based supervision externally, to pension industry + wide group of stakeholders;
- Issue guidance notes explaining requirements of various stakeholders +standards expected of them;
- Use informal discussion groups / road-shows to enlist feedback, take views on board and ensure „buy-in“ with the new process;
- Ensure that communication is on-going, with pension funds understanding the new relationship with the supervisor, as well as just the information supplying requirements;
- Use secondees to take the message of the new process back into industry;
- Work closely with other professional bodies such as accountants and actuaries;
- Ensure good communication between regulators and supervisors;
- Make sure that ‘whistleblowers’ understand their role in the process (both what they should and should not tell the supervisor);
- Communicate with the public to avoid major repercussions when future problems occur.

# IOPS WP4: Lessons Learnt

## *Powers*

- Make sure the legal powers are in place to enforce the new risk-based supervisory system;
- Make sure the powers are flexible and framed in such a way as to allow for a proportionate response;
- Use persuasion / build non-compliance into risk-based score and supervisory response;
- Charge risk-based levies;
- Where fines / sanctions are imposed make sure these fall on the responsible parties (clarify role of the administrator) and do not harm pension beneficiaries unfairly;
- Explain what funds should do to avoid a heavy supervisory response to build compliance culture.

# IOPS Toolkit

- Module 1 ‘Supervisory Management Issues’
- Module 2 ‘Regulatory Framework’
- Module 3 ‘Obtaining Information’
- Module 4 ‘Qualitative Assessment of Risk’
- Module 5 ‘ Risk Scoring Models’
- Module 6 ‘Supervisory Responses’



# APRA – PAIRS/ SOARS

- 2002 - introduced new risk assessment and supervisory response tools
  - Probability & Impact Rating System (PAIRS)
  - Supervisory Oversight & Response System (SOARS)
- 2008 - updated

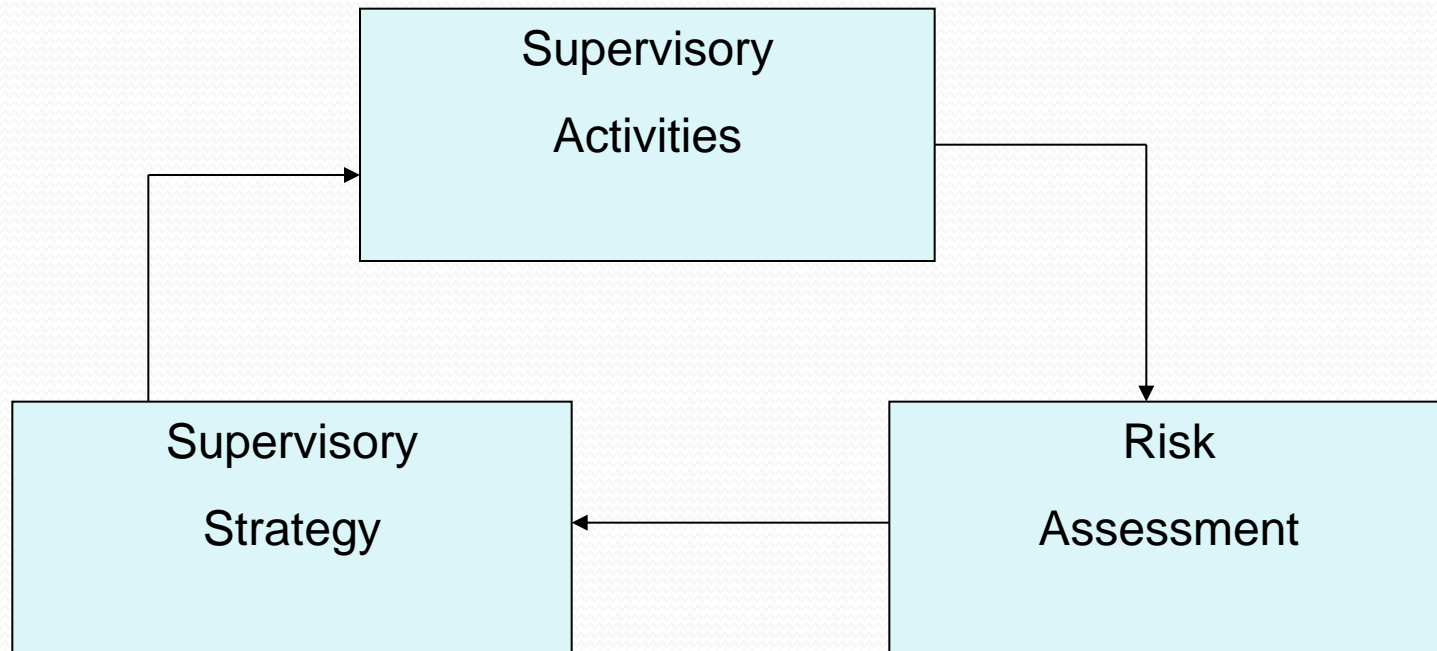
# APRA – PAIRS/ SOARS

Impact Rating	Probability Rating				
	Low	Lower Medium	Upper Medium	High	Extreme
	Extreme				
	High				
	Medium				
	Low				

	Normal
	Oversight
	Mandated Improvement
	Restructure

# APRA – Supervision process



# APRA – Probability rating

- Determination of probability of failure is based on information gathered in a range of activities:
  - On-site visit - review range of risk areas (*governance, operational, liquidity, credit, market & investment, insurance, capital*)
  - Analysis of financial and other data
  - Actuarial reports
  - Other regulatory, industry and market information
- PAIRS risk assessment determines SOARS stance

# APRA – Impact rating

- Impact rating
  - Determinant for pension funds is total assets

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

- Impact rating drives frequency of review
- Impact rating determines whether specialist risk experts join supervision staff in review of institution

## APRA - PAIRS and SOARS for pension funds

- Trustee operates one fund - PAIRS assessment for trustee and for fund
- Trustee operates more than one fund - PAIRS assessment for trustee and for each fund
- DB and hybrid funds - capital support (coverage, earnings, access to additional capital) is assessed
- DC funds - no assessment of capital support

# APRA - PAIRS and SOARS for pension funds

## Quality and consistency

- Dedicated support unit for supervisors
- Predictive analysis tools
- Portfolio reports and watch lists
- Peer review and assessment

Combination of these four support levels leads to better risk assessments and strategy setting practices in APRA and overall improvements in supervisory judgements.