Ross Jones – President IOPS
Deputy Chairman, Australian Prudential Regulation Authority

IOPS/OECD MENA Workshop- February 2nd 2009
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

<table>
<thead>
<tr>
<th>Risk-based approach</th>
<th>Compliance-based approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identifies potential risks</td>
<td>• Focus on compliance with eg. tax and labour laws and (often) quantitative investment rules</td>
</tr>
<tr>
<td>• Assesses mitigating factors</td>
<td>• All funds get same degree of attention</td>
</tr>
<tr>
<td>• Seeks proper management of all risks</td>
<td></td>
</tr>
<tr>
<td>• Allows scarce supervisory resources to be targeted at funds seen as most at risk</td>
<td></td>
</tr>
<tr>
<td>• Forward looking and principles-based legislation</td>
<td>• Detailed, often rigid, rules that are difficult to change to meet urgent regulatory needs</td>
</tr>
<tr>
<td>• Flexible</td>
<td></td>
</tr>
<tr>
<td>• Incentives for institutions to strengthen risk management practices</td>
<td>• Institution’s focus is on compliance with rules, not risk management</td>
</tr>
</tbody>
</table>

- Risk-based approach:
  - Identifies potential risks
  - Assesses mitigating factors
  - Seeks proper management of all risks
  - Allows scarce supervisory resources to be targeted at funds seen as most at risk

- Compliance-based approach:
  - Focus on compliance with eg. tax and labour laws and (often) quantitative investment rules
  - All funds get same degree of attention
  - Forward looking and principles-based legislation
  - Flexible
  - Detailed, often rigid, rules that are difficult to change to meet urgent regulatory needs
  - Incentives for institutions to strengthen risk management
  - Institution’s focus is on compliance with rules, not risk management
## Risk-based v. compliance-based approach

<table>
<thead>
<tr>
<th>Risk-based approach</th>
<th>Compliance-based approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Supervisors use judgement to assess risk and quality of management</td>
<td>• Point in time focus</td>
</tr>
<tr>
<td></td>
<td>• Overlooks major risk areas</td>
</tr>
<tr>
<td></td>
<td>• No early warning system</td>
</tr>
<tr>
<td>• Compliance checks done by audit etc, removes duplication of work</td>
<td>• Duplicates work of auditors etc</td>
</tr>
<tr>
<td>• Supervisor can benchmark institutions and assess overall industry</td>
<td>• Difficult to get meaningful comparisons</td>
</tr>
<tr>
<td>• Attention directed to emerging problems</td>
<td>• Penalises past breaches of rules</td>
</tr>
</tbody>
</table>
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...

<table>
<thead>
<tr>
<th>The Basic Risk Management Architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For the institution:</strong></td>
</tr>
<tr>
<td>- Risk management strategy</td>
</tr>
<tr>
<td>- Board committees</td>
</tr>
<tr>
<td>- Risk management functions</td>
</tr>
<tr>
<td>in the managerial structure</td>
</tr>
<tr>
<td>- Internal controls</td>
</tr>
<tr>
<td>- Reporting responsibilities</td>
</tr>
<tr>
<td><strong>For the supervisor:</strong></td>
</tr>
<tr>
<td>- Regulations, including</td>
</tr>
<tr>
<td>minimum risk management</td>
</tr>
<tr>
<td>standards</td>
</tr>
<tr>
<td>- Risk-based solvency rule</td>
</tr>
<tr>
<td>- Risk scoring model guiding</td>
</tr>
<tr>
<td>supervisory actions</td>
</tr>
<tr>
<td>- Internal organization of the</td>
</tr>
<tr>
<td>agency, with specialist risk</td>
</tr>
<tr>
<td>units</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Impact Rating</th>
<th>Low</th>
<th>Lower Medium</th>
<th>Upper Medium</th>
<th>High</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Probability Rating

- Normal
- Oversight
- Mandated Improvement
- Restructure
APRA – Supervision process

- Supervisory Strategy
- Supervisory Activities
- Risk Assessment
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

<table>
<thead>
<tr>
<th>Asset ranges</th>
<th>$0 - &lt; $400m</th>
<th>$400m - &lt; $4b</th>
<th>$4b - &lt; $40b</th>
<th>≥ $40b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Rating</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Extreme</td>
</tr>
</tbody>
</table>

- 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.