Risk Appetite

The cornerstone of the ORSA

29 September 2011

Risk appetite - What is it?

A risk appetite statement describes the risks an enterprise is willing to accept in order to achieve its objectives

- Other definitions
  - **Risk capacity** – the amount of risk an organisation can feasibly accept given its resources and environment
  - **Risk tolerance** – the amount of risk an organisation is willing to accept
  - **Risk Limits** – granular policies that limit the amount that specific risk-related activities are undertaken
Stakeholders and governance

- **Shareholders** make investment decisions based on the risk appetite of the enterprise.
- **The Board**, (The risk committee of) is informed and in control.
- **Senior Management** is responsible for guiding the business within risk appetite, empowered and aligned.
- **Management** is required to make decisions that reflect the risk appetite.
- **Regulators** are interested in how the business is run.
Components and measures

Which of the following measures of risk are used in your risk appetite/tolerance statement?

- Regulatory capital or buffer on regulatory capital: 64%
- Economic capital: 62%
- Rating agency capital: 16%
- Risk of rating agency downgrade: 33%
- Risk of breach of regulatory capital threshold: 33%
- Risk of loss of GAAP or IFRS equity: 23%
- Risk of loss of embedded value or economic value: 20%
- Risk of regulatory intervention: 7%
- Capital to support specified insurer claim-paying rating: 13%
- Capital to support specified corporate debt rating: 9%
- Risk of reduction in stock price: 7%
- Other balance sheet-related measures: 4%
- GAAP or IFRS earnings volatility: 16%
- Risk of reduction in GAAP or IFRS earnings: 14%
- Risk of reduction in return on equity: 12%
- Risk of reduction in stock price: 7%
- Other earnings-related measures: 6%

Source: Towers Watson ERM Survey

Components and measures

- How much risk?
  - Capital at risk
  - Stress tests
  - Earnings at risk
  - Earning volatility

- Which risks?
  - Required/Target return on capital
  - Risk segmentation
  - Where?

- EC
- IFRS
- Statutory

[Diagram showing relationships between risk, cost, and choice]
Choosing the levels

- Do you work bottom up or top down?
- Are these targets or limits?
- Consider corridors
e.g. Expense ratio
  - No expenses
  - Low expenses
  - High expenses

- Time horizon

Using it

Key Interfaces
- Planning
- Remuneration
- Risk Limits
- Subsidiary statements

All involve translating from 'lagging' to 'leading' measures
Planning

- Calculate risk measures on your planned basis
- The risk profile implied by the plan should remain in appetite
- This may involve a significant change to the focus of planning work

Risk becomes a driver to the planning process

Risk Limits

- Limits may be based on
  - Existing limit systems
  - Business plans
  - Direct appetite measures
- Document the linkage to appetite
- Prefer leading measures
Subsidiary appetites

Risk Appetite

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Risk Limit

Risk Limit

Risk Limit

Risk Limit

Disclosure

Source: HSBC
Report & Accounts
31/12/2010
<table>
<thead>
<tr>
<th>Categories</th>
<th>Components</th>
<th>Statement/Trigger</th>
<th>RA Profile 2010</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>1. Earnings &amp; share price</td>
<td>Economic profit</td>
<td>Generate sustainable EP over invested capital and achieve EP spread within range of x% to x%</td>
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<td></td>
<td>Return on equity</td>
<td>-</td>
<td></td>
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<tr>
<td></td>
<td>Earnings volatility</td>
<td>-</td>
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<tr>
<td></td>
<td>Share price volatility</td>
<td>-</td>
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<td></td>
<td>Profit growth</td>
<td>-</td>
<td></td>
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<td>2. Capital &amp; liquidity</td>
<td>Capital and leverage ratios</td>
<td>-</td>
<td></td>
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<td></td>
<td>Liquidity and funding</td>
<td>Ratio of net liquid assets to customer liabilities within x% to x%</td>
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<td></td>
<td>Securitisation</td>
<td>Total assets of HSBC’s off-balance sheet securitisations should not exceed 4% of total on-balance sheet assets (U$y BN)</td>
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<td>Risk benchmarks for capitalisation</td>
<td>Group to be solvent at: 99.9% for regulatory capital (RC), 99.95% for economic capital (EC)</td>
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<td>3. Impairments, provisions and expected losses</td>
<td>ULC and other credit risk provisions</td>
<td>Loan impairment charges should not exceed x% of operating income</td>
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<td></td>
<td>Expected Losses</td>
<td>EL to exposures to be at most x% above ROP projections</td>
<td></td>
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<td>4. Segmentation</td>
<td>Region &amp; Customer Group</td>
<td>-</td>
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<td>5. Strategic investments</td>
<td>Market value of investments</td>
<td>-</td>
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<td>6. Stress testing</td>
<td>Stress testing scenarios</td>
<td>Stress – capital position post mitigation in line with Tier 1 ratio &lt;4% to x%</td>
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**Learning points**

- Measures are much more meaningful with numbers
- Flexibility is essential
  - But the right kind of flexibility
  - Expect to review regularly
- Be upfront about work in progress
  - But don’t avoid it
Challenges

- Consolidation
  - Homogenising multiple entities and portfolios
  - Structural FX risk
- Conflicting requirements
  - Simplicity / applicability
- Conflicting measures
- Calculation difficulties and delays
- Treatment of expected capital movements

Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.
The views expressed in this presentation are those of the presenter.