Integrating ERM into strategic planning
Jan Lubbe
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Content

1. Strategic planning process and ICAAP
2. Risk appetite
3. MTP/STP and scenario process overview
4. Scenarios
5. Risk Executive Dialogue
6. Stress testing
7. Some basic lessons
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1. Strategic planning process & ICAAP

GOVERNANCE

- Strategy and risk appetite setting
- Risk identification and measurement

DATA, IT AND MODEL INFRASTRUCTURE

- Monitoring, management and communication
- Capital adequacy planning and stress testing
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## 2.1 Risk appetite: A key component of strategy

### Governance

Board and senior management ownership; control frameworks; clear lines of responsibility and segregation of duties; expert resources; centralised capital management function; independent review

<table>
<thead>
<tr>
<th>Strategy and risk appetite</th>
<th>Risk identification and measurement</th>
<th>Planning and stress testing</th>
<th>Monitoring, management and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish strategic direction;</td>
<td>• Identification of key risks;</td>
<td>• Forecasting, projection and stress testing of capital;</td>
<td>• Monitor &amp; report;</td>
</tr>
<tr>
<td>• Formulate risk appetite; translate risk appetite into limits and guidelines;</td>
<td>• quantification of risks;</td>
<td>• development of capital plan;</td>
<td>• monitoring of capital plan levers;</td>
</tr>
<tr>
<td>• Annual (and ongoing) review of risk appetite.</td>
<td>• understanding of differences between internal capital and regulatory capital;</td>
<td>• management of capital based on conservative target levels.</td>
<td>• management;</td>
</tr>
<tr>
<td></td>
<td>• management of non-quantified risks.</td>
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<td>• communication.</td>
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</table>

### Data, IT and model infrastructure
2.2 Risk Appetite Framework

Absa framework consists of two categories, “Financial Volatility” and “Mandate and Scale”.

Financial Volatility

“The level of losses Absa is prepared to sustain at relevant parts of the risk profile”

- To assess Financial Volatility, the risk profile is examined at four points:
  - Expected loss i.e. Losses in a “Business as Usual” scenario
  - “1 in 7” loss i.e. the worst level of losses out of a random sample of 7 years
  - “1 in 25” loss i.e. the worst level of losses out of a random sample of 25 years
  - Economic capital as a measure of extreme stress loss to maintain an A credit rating.

Mandate and Scale

“Additional measures and limits Absa requires to ensure that no concentrations in the risk profile exist that might result in losses out of line with expectations.”

- Mandate defines whether our shareholders expect us to hold an exposure: E.g. are our shareholders comfortable with us lending in Afghanistan?
- Scale dictates how much of the exposure we can hold: E.g. what is the maximum exposure to the commercial property sector with which we and our shareholders would be comfortable?
### 2.3 Risk Appetite Monitoring - Utilisation vs parameters

#### Financial Volatility measures:

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>PBT</th>
<th>Return on Equity</th>
<th>Impairment</th>
<th>Free Cash Flow</th>
<th>Capital Adequacy Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STP / Business as usual</strong></td>
<td></td>
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<tr>
<td>1 in 7 losses</td>
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<td>1 in 25 losses</td>
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3. MTP/STP and scenario process overview

- **July strategy review**
  - Agree new scenarios

- **November Audit Committee**
  - **Risk Executive Dialogue**
  - Present and approve new budget
  - Illustrate impact of stress scenarios on budget
  - Determine deviations from base case and mitigating management actions

- **November Risk Committee**
  - Utilise scenarios to refine risk appetite
  - Refine mandate and scale
  - Develop mitigating management actions to deal with deviations in stress scenarios

- **December Board**
  - Approval of Budget

- **Ongoing tracking to Risk Appetite and Budget vs stress scenarios**
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4. Scenarios

Fragmented, uncoordinated regulation with local discretions, but still with significant capital and liquidity impact

Scenario 1: Positive outlook vs Budget

Scenario 2: MTP / STP (Budget)

Scenario 3: Mild recession
- Global impact
- SA specific impact
- Regulatory impact

Scenario 4: Deep Recession
- Global impact
- SA specific impact
- Regulatory impact

Further shocks resulting in double-dip recession

Aggressive global ‘one size fits all’ regulatory approach
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### PROFIT GENERATION

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<tr>
<th>Figures in Rm, unless otherwise stated</th>
<th>RAF</th>
<th>MTP</th>
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<td>2010</td>
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- **Revenue**
- **Net Interest Margin**
- **Costs**
- **Operating Profit**
- **Impairment**
- **Loan Loss Rate, bps**
- **Associates, JVs, and Exceptionals**
- **PBT**
- **EP**

### CAPITAL CONSUMPTION

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- **Gross Loans and Advances**
- **Credit Risk Loans**
- **Total Financing limits**

### RWAs

- **Credit Risk RWA**
- **Non Customer Asset RWA**
- **Market Risk RWA**
- **Op Risk RWA**
- **Total RWA**

### EL

- **Credit Risk EL (EL + ELBE)**
- **Op Risk EL**
- **EL Deductions**

### Spot EC

- **Net Credit Risk EC**
- **Op Risk EC**
- **Non-traded Market Risk EC**
- **Other EC**
- **Total EC**

### RISK DRIVERS

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### Review and Challenge

**Balance Sheet and Income statement is evaluated to understand the risk estimates forecasted as part of the planning process.**
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6.1 Stress testing process - Scenarios

**Ongoing:** Major forecast updates once a quarter after SARB QB release. Regular interim updates. Forecasts are constructed independently.

**MTP/Stress test baseline:** Specific forecast date is “locked-down” and used.

Absa Economic research receives global scenarios from Barclays Group and Absa Group

Scenarios go through a review and challenge process and is finally approved and signed off by Exco and the Board. From there it filters through into the rest of the stress testing process.
6.2 Stress testing process

Absa’s approach to stress testing

Business Environment – business as usual
Establish variables that influence risk parameters:
Examples include:
- GDP
- 10 Year SA government bond Yield
- M3 money supply
- Indices (consumer price, production price, all commodities, etc)

Stress event (e.g. recession)

Risk Parameters – business as usual
These would normally include:
- Point-in-time (PIT) probability of default (PD)
  (coverted to a throught-the-cycle PD)
- Loss given default (LGD)
- Exposure at default (EAD)

Relationship
Establish relationship between macroeconomic variables and risk parameter(s)

Business Environment – stressed conditions
Establish values of relevant economic variables in stressed conditions. These are the ‘stress scenarios’.

Calculation
Use the relationship between the economic variables and risk parameter(s) to establish stressed levels for the risk parameters

Financial Results – stressed conditions
Use stressed risk parameter(s) to derive stressed financial results (e.g. impairments, Regulatory capital, etc). Apply advance growth predictions (as per stress scenario) to adjust advances accordingly.

Once the results are obtained, the following is done at Group level:
- Review and challenge results
- Apply management actions
- Aggregate balance sheet, income sheet and P+L variables
- Provide RWA to Group Treasury to calculate capital adequacy for Internal Capital Adequacy Assessment Process (ICAAP) purposes
- Analyse, interpret and explain in the results in a report to senior management.
### 6.3 Summary of stress output

<table>
<thead>
<tr>
<th></th>
<th>BASELINE</th>
<th>Positive outlook</th>
<th>Mild recession</th>
<th>Deep recession</th>
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<tbody>
<tr>
<td></td>
<td>MTP 2 2010</td>
<td>Pre-management actions</td>
<td>Post-management actions</td>
<td>Pre-management actions</td>
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<td></td>
<td>2011</td>
<td>2011</td>
<td>2011</td>
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<tr>
<td><strong>P + L</strong></td>
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<tr>
<td>Net interest income</td>
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<td>Non-interest income</td>
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<tr>
<td>Impairment losses on loans and advances</td>
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<tr>
<td>Net operating costs</td>
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<td>Share of results of associates and JVs</td>
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<tr>
<td><strong>PBT</strong></td>
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<tr>
<td>Taxation</td>
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<td>Effective Tax Rate</td>
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<td>Profit after tax</td>
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<td>Profit attributable to minority interests</td>
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<tr>
<td><strong>Attributable profit</strong></td>
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<td>Cost To Income Ratio</td>
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<tr>
<td><strong>Balance Sheet - Actual Balance</strong></td>
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<td>Loans and advances to customers</td>
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<tr>
<td>Loans and advances to banks</td>
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<tr>
<td>Customer Accounts</td>
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<tr>
<td>Deposits from banks</td>
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<tr>
<td>Gross IRB credit RWAs</td>
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<tr>
<td>Total securitisation</td>
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<tr>
<td><strong>Net IRB credit RWAs</strong></td>
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<tr>
<td>Gross standardised credit RWAs</td>
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<tr>
<td><strong>Net total credit RWAs</strong></td>
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<td></td>
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<tr>
<td>Gross total credit RWAs</td>
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<td>Operational RWAs</td>
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<tr>
<td>Market RWAs</td>
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<tr>
<td>Non-customer assets RWAs</td>
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<tr>
<td><strong>Total external RWAs (net of securitisations)</strong></td>
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</tbody>
</table>

Output is calculated per scenario and management actions evaluated to ensure proactive management for changes in economic conditions.
### 6.4 Stress testing summary

<table>
<thead>
<tr>
<th>Purpose / Management use of results</th>
<th>Pillar 1</th>
<th>Pillar 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Stress being tested to determine impact of stress per risk on financial statements and capital adequacy.</td>
<td>▪ Impact of capital adequacy and bottom line tested, considering all risk types and business growth and strategy.</td>
<td></td>
</tr>
<tr>
<td>▪ Management to use information to evaluate business strategy and impact</td>
<td>▪ Management actions determined in order to limit impact of downturn event / scenario.</td>
<td></td>
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<tr>
<td>▪ Evaluate management actions per cluster</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Frequency</th>
<th>Annually.</th>
<th>Annually.</th>
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</table>

<table>
<thead>
<tr>
<th>Level of detail</th>
<th>3 year view.</th>
<th>3 year view.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk, Market risk (Equity, Insurance, Interest rate, Traded Market risk) Operational risk, cluster level</td>
<td>Holistic framework considering scenarios incorporating all risk types and evaluating impact on Bank Capital</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>View</th>
<th>3 year view.</th>
<th>3 year view.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Business involvement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business involvement to assess and evaluate strategy per cluster. Management actions are then considered where appropriate. Impact evaluated on RWA, EC and financials and aggregated to a Group view to evaluate overall strategy.</td>
<td>Impact on Group Capital and Board limits.</td>
<td></td>
</tr>
</tbody>
</table>
7. Some basic lessons
(aka the “non-rocket-science-but-very-important” bit)

• Not enough risk is also bad
• Risk managers need to understand the business
• Don’t be afraid to ask the silly question (sometimes again and again) – this sometimes add the value we are looking for
• Common sense is not that always common
• Let’s learn from mistakes
  – “Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so”
  – Douglas Adams