Risk Based Supervision: Impact, Effects and Next Steps

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14 April 2018
Agenda
1. Key principles of RBS
2. RBC in East Africa
3. QIS 1 (Kenya)
4. Qualitative Effects
5. Next Steps
Introduction
What is risk based supervision?

• Risk based supervision (RBS) requires supervisors to review the manner in which insurers are identifying and controlling risks.
  – A risk based supervision approach assesses the probability and severity of the material risks to which insurers are subjected to.
  – It assesses the effectiveness of the controls in reducing the probability of risk events occurring or the severity if they do occur.

• contrasted with *rules-based regulation* or compliance-based supervision,
  – is a method of regulation which involves checking for and enforcing compliance with rules – legislation, regulations or policies – that apply to an entity.
RBS

• A prerequisite for good RBS is knowledge of the institution, its industry and operating environment.

• These can all be observed by creating a risk profile of an institution:
  – institution’s activities
  – risks in those activities
  – quality of risk management (day-to day management and Oversight)
  – capital required to support operations
Insurance Core Principle 16

ERM for Solvency Purposes

- Focuses on the link between risk management and the management of capital adequacy and solvency
- Does not prescribe a specific aspect which is to be applied compulsorily.
ICP 16 – ERM for Solvency Purposes

• Requires insurers to address or relevant and material risks
• Recognises the importance of an ERM framework in underpinning robust insurance legal entity and group-wide solvency assessment
• ERM that follows this principle is expected to enhance confidence in assessing the insurer’s financial strength

ORSA / ICAAP

1. Determine overall financial resources required given risk tolerance and business plans
2. Base risk management decisions on consideration of economic capital, regulatory capital requirements & financial resources
3. Assess quality and adequacy of capital resources.
Established at a sufficient level so that in adversity, an insurer’s obligations to policyholders will continue to be met as they fall due & requires that insurers maintain capital resources to meet regulatory capital requirements.

A total balance sheet approach ought to be used in the assessment of solvency:

- to recognise interdependence between assets, liabilities, regulatory capital requirements and capital resources and
- to require that impacts of relevel material risks are appropriately and adequately recognised.
ICP 17… ctd.

• Solvency controls
  – PCR
  – MCR

• Regulatory capital requirements ought to be established in an open and transparent process
  – Objectives and bases ought to be explicit
Solvency II

3 pillars and a roof

Group wide supervision

**Pillar 1:**
- Sets out the minimum capital requirements that firms are required to meet.
- It specifies valuation methodologies for assets and liabilities.

**Pillar 2:**
- Includes the supervisory review process, systems of governance and risk management.
- An Own Risk and Solvency Assessment (ORSA) which requires each insurer to identify the risks to which it is exposed, including those not covered under Pillar 1, to identify the risk management processes and controls in place, and to quantify its ongoing ability to continue to meet the MCR and SCR.

**Pillar 3:**
- The disclosure and supervisory reporting regime, under which defined reports to regulators and the public are required to be made.
### African Trends – RBS

<table>
<thead>
<tr>
<th>Country</th>
<th>Current Approach</th>
<th>Intended date</th>
<th>Regulator</th>
<th>Key Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>Three pillar SAM approach (based on solvency II)</td>
<td>July 2018</td>
<td>FSA</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>RBC is legislated but not fully functional</td>
<td>2020</td>
<td>IRA</td>
<td>Group supervision Pillar II</td>
</tr>
<tr>
<td>Uganda</td>
<td>Use of rules based regime with intention to move to RBC</td>
<td>IRA Uganda</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>Use of rules based regime with intention to move to RBC</td>
<td>TIRA</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>Use of rules based regime with intention to move to RBC</td>
<td>Reserve Bank of Rwanda</td>
<td>TBA</td>
<td></td>
</tr>
</tbody>
</table>
## African Trends - RBS

<table>
<thead>
<tr>
<th>Item</th>
<th>South Africa</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital requirements are sensitive to all the risks being run</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Advanced risk management requirements</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Three lines of defense model and control functions</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ORSA/FCR is required by the framework</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Regulatory internal models are allowed</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Disclosure to stakeholders</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>Boards and senior management show an understanding of risks in depth</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
SAM (Solvency Assessment and Management)

Free Assets

Assets Covering Technical Provisions, MCR & SCR

SCR Reflects Risk of the Total Balance Sheet
- Market Risk
- Counterparty Default Risk
- Life Underwriting Risk
- Non-life Underwriting Risk
- Health Underwriting Risk
- Operational Risk

A - MCR
B - Risk Margin
C - Market consistent valuation for hedgeable risk components
D - Best Estimate

B & D are for non-hedgeable risk components

Technical Provisions

SCR Structures

Stakeholders participating in the SAM Forum Structures

- Insurance & Reinsurance Companies
- The South African Insurance Association (SAIA)
- Association for Savings & Investment SA (ASISA)
- Actuarial Society of South Africa (ASSA)
- National Treasury
- The South African Institute of Chartered Accountants (SAICA)
- South African Revenue Service (SARS)
- IRBA
Insurance Capital Development in Kenya

1900s
- Kenya insurance act was enacted and operational by 1984 and 1987 respectively

2006
- Insurance amendment act including minimum capital requirements

2010
- RBA launched its risk-based supervision model

2013
- Implementation of RBS in insurance began
- FCR requirements
- Draft Guidelines issued
- IRA adopted a new RBC model and practice began
- QIS 1
- GPV for Life insurers

2016
- IRA revises the Insurance Capital guidelines
- Actuarial sign off for General Insurance valuation

2017
- Gazettement of RBS
- IRA revises the Insurance Capital guidelines
- Actuarial sign off for General Insurance valuation
Capital Adequacy Computation – KE model

Tier 1 capital

Tier 2 capital

Deductibles

Available Capital

SCR

MCR

Required Capital
Required Capital

Minimum Capital Requirement (MCR)

Absolute Minimum Capital Required

Risk Based Capital Computation

Volume of Business Computation

Credit Risk Capital Charges
- Foreign Govt & Corporate Bonds
- Loans & Mortgages
- Reinsurance Assets
- Premium Receivables
- Assets Under Management

Market Risk Capital Charges
- Equity
- Property
- Interest Rate
- Diversification
- Currency

Non-Life Insurance Risk Capital Charges
- Claims
- Unexpired Premium
- Catastrophe Risk

Life Insurance Risk Capital Charges
- Mortality
- Longevity
- Morbidity
- Expenses
- Lapses
- Catastrophe Risk
- Diversification

Diversification

Operational Risk Capital Charges
## Industry Participation

### Participants’ Market share
*(Based on IRA Industry statistics at 30th June 2016)*

<table>
<thead>
<tr>
<th>KE - Life &amp; General QIS 1 : Response by Category of Insurer</th>
<th>General Insurers</th>
<th>Life Insurers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submitted</td>
<td>23</td>
<td>20</td>
<td>43</td>
</tr>
<tr>
<td>Pending</td>
<td>13</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Total Companies</td>
<td>36</td>
<td>26</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KE - Life &amp; General QIS 1 : Response by GWP &amp; NAV</th>
<th>General Insurers</th>
<th>Life Insurers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Written Premium</td>
<td>78%</td>
<td>91%</td>
<td>84%</td>
</tr>
<tr>
<td>Net Assets</td>
<td>79%</td>
<td>92%</td>
<td>86%</td>
</tr>
</tbody>
</table>
Industry Participation

### Number of participants by category

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>General Insurers</th>
<th>Life Insurers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Medium</td>
<td>7</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Small</td>
<td>25</td>
<td>14</td>
<td>39</td>
</tr>
<tr>
<td>All</td>
<td>36</td>
<td>26</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry Participants</th>
<th>General Insurers</th>
<th>Life Insurers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Medium</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Small</td>
<td>13</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>All</td>
<td>23</td>
<td>20</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participation Rate</th>
<th>General Insurers</th>
<th>Life Insurers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Medium</td>
<td>86%</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>Small</td>
<td>52%</td>
<td>64%</td>
<td>56%</td>
</tr>
<tr>
<td>All</td>
<td>64%</td>
<td>77%</td>
<td>69%</td>
</tr>
</tbody>
</table>
Key Findings

- Capital adequacy has dropped significantly
  - General: 220% to 131%
  - Life: 292% to 124%
- Increase in capital to achieve 100% CAR
  - General: KES 2.8Bn
  - Life: KES 1.5Bn
- Increase in capital to achieve 150% CAR
  - General: KES 9.9Bn
  - Life: KES 6.3Bn
Key Findings

• Capital deductions were more than 10%
  • General: 18%
  • Life: 14%

• Insurers are not using Tier 2 Capital.

Heavy reliance is placed on the accuracy of the submissions provided for the study.
Life Insurance Results
Financial Impact

Required Capital increased from KES 10b to 21b

Life Insurance: Financial Impact of Risk Based Capital Regulations (KES Millions)

- Previous Capital Requirement: Required Capital
- Previous Capital Requirement: Required Capital, and Abs. Minimum
- Insurance Risk Capital Charge
- Market Risk Capital Charge
- Credit Risk Capital Charge
- Operational Risk Capital Charge
- Risk-Based Capital Compliance
- Current Minimum Capital Requirement (includes Additional Margin)

Diversification: -8.078
The average required capital as per the RBC computation is KES 0.9b compared to KES 0.5b in the previous regime. Large & medium insurers have seen a more significant impact from the proposed calculation.
Capital Adequacy Ratio

Life Insurers: Capital Adequacy Ratio

CAR Reduced from 292% to 124%
Risk Based Capital Computation

The highest charge relates to failure of credit & market risk.
Available Capital Computation

On average 88% of the capital is available for capital adequacy because of deductibles of KES 3.5b
General Insurance Results
Financial Impact

Required Capital increased from KES 11.3b to 33.8b
Financial Impact

Surplus decreased from KES 13.7b to 10.3b
Financial Impact

<table>
<thead>
<tr>
<th>KES Millions</th>
<th>Average RBC Computation</th>
<th>Average Previous Capital Requirement</th>
<th>Impact of RBC (KES)</th>
<th>Impact of RBC (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>1,398</td>
<td>493</td>
<td>905</td>
<td>183%</td>
</tr>
<tr>
<td>Large</td>
<td>3,677</td>
<td>1,073</td>
<td>2,603</td>
<td>243%</td>
</tr>
<tr>
<td>Medium</td>
<td>1,613</td>
<td>516</td>
<td>1,097</td>
<td>213%</td>
</tr>
<tr>
<td>Small</td>
<td>598</td>
<td>304</td>
<td>293</td>
<td>96%</td>
</tr>
</tbody>
</table>

The average required capital as per the RBC computation is KES 1.4 Bn compared to KES 0.5 Bn in the previous regime.
Capital Adequacy Ratio

CAR Reduced from 220% to 131%
The highest charge relates to failure of counterparties.
Available Capital Computation

<table>
<thead>
<tr>
<th>KES Millions</th>
<th>Tier 1 Capital</th>
<th>Tier 2 Capital</th>
<th>Deductibles</th>
<th>Available Capital</th>
<th>Impact of Deductibles</th>
<th>Proportion of Tier 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>48,486</td>
<td>4,895</td>
<td>(9,347)</td>
<td>44,034</td>
<td>(21%)</td>
<td>91%</td>
</tr>
<tr>
<td>Large</td>
<td>20,927</td>
<td>2,027</td>
<td>(2,439)</td>
<td>20,516</td>
<td>(12%)</td>
<td>90%</td>
</tr>
<tr>
<td>Medium</td>
<td>13,888</td>
<td>1,888</td>
<td>(2,908)</td>
<td>12,868</td>
<td>(23%)</td>
<td>91%</td>
</tr>
<tr>
<td>Small</td>
<td>13,671</td>
<td>980</td>
<td>(4,000)</td>
<td>10,651</td>
<td>(38%)</td>
<td>94%</td>
</tr>
</tbody>
</table>

The impact of deductibles is more significant for smaller insurers compared to the market.
Key Impacts on Insurers

Positive

1. Improved credit risk management (75%)
2. Elevated view of capital management and solvency (58%)
3. Better understanding of risk profile and drivers for the business (58%)
4. Increased prudence in balance sheet management (50%)
5. Improved governance and risk culture (25%)
6. Improved reinsurance management (17%)
7. Provides comfort to customers in terms of how business is being done (8%)
8. Change in employee value proposition to include company’s capital position (8%)
9. Focus on quality of business and profitable growth (8%)

Neutral

- Rethinking product and business strategy based on levels of capital requirements (67%)
- Influence on IPS and ALM (25%)
- Changes in intercompany lending culture (17%)
- Stricter reinsurance terms and reinsurer involvement in pricing (8%)
- Increased supervision and scrutiny from the regulator (8%)

Negative

- Apprehension especially at the initial stages (25%)
- Increased costs of running business (17%)
- Challenges in business acquisition through imposing cash and carry (8%)
- Change in the view of stability of the organisation where solvency was adequate in the previous regime (8%)
Changes resulting from RBC / RBS

- Balance sheet restructuring related to property (83%)
- System adjustments and/or upgrades (67%)
- Enhanced expense management (58%)
- Capital raising activities (42%)
- Changes in investment strategy relating to equities & corporate bonds (33%)
- Staffing changes (33%)
- Change in dividend policy and culture (33%)
- Changes in pricing models (25%)
- Changes in process & systems to enhance collections (8%)
- Changes in modelling assumptions (8%)

14 April 2018
Key challenges encountered

1. Lack of operational discipline
2. RBC being viewed as a compliance item rather than a business tool
3. Pushback from clients and brokers
4. Changes in dates frustrates efforts of early adaptors

Strain on the investment options available

1. Strain on the investment options available
2. Inadequate capital in the market to support a non-credit environment to support business growth
3. Lack of available directors and senior management training
4. Lack of adequate resources or need to reallocate resources and focus
5. PCR seems like an unattainable target & is not yet a key focus
6. Management efforts seem to have a relatively low impact on CAR
7. Lack of understanding of the model from staff

67% 33% 25% 17% 8% 25% 17% 17% 8% 8% 8%
Key challenges encountered

1. Two different templates are running for solvency reporting purposes (67%)
2. Lack of clarity on some calculations and changes therein (33%)
3. Inadequate Communication from the IRA (25%)
4. The regulator seems to be ahead of the industry’s capacity (17%)
5. Lack of uniformity of application of the model changes in the industry (33%)
6. Lack of guidance on transitionary measures for the industry (8%)
7. Model’s measurement of operational risk is not reflective (25%)
8. Impact of proposed yield curve risk margin for life insurers (17%)
9. The model’s treatment of Deferred Tax Liabilities (17%)
10. The model’s treatment of life insurance participating business risk charges (8%)
11. Model’s treatment of unit trust investments for non-life insurers is not clear (8%)
12. Internal models aren’t allowed therefore flexibility is lacking (8%)

Regulator

Technical
Next Steps for RBS
How can the industry be strategic in its efforts

- Views from some practitioners… (small panel discussion)
- Collaboration between stakeholders
- Ongoing QIS
  - Focus on parameterization and business response to key gaps and potential threats
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