A comprehensive risk appetite framework for banks
Contacts

Munich

Dr. Philipp Wackerbeck  
*Managing Director, PwC Strategy& Germany*  
+49-170-2238-659  
philipp.wackerbeck.@strategyand.de.pwc.com

What is risk appetite and why does it matter now?

**Definition and objective of risk appetite**

The global financial crisis has demonstrated clearly that many banks lacked a proper understanding of their true risk profile and realized too late that it was not in line with their desired risk profile. This forced senior management to explain losses that were a multiple of what shareholders had expected to face. The key lesson learned from this crisis is that financial institutions need to have a comprehensive risk appetite framework in place that helps them better understand and manage their risks by translating risk metrics and methods into strategic decisions, reporting, and day-to-day business decisions.

Risk appetite is considerably more than a sophisticated key performance indicator (KPI) system for risk management. It’s the core instrument for better aligning overall corporate strategy, capital allocation, and risk. Regulators, rating agencies, and professional investors are aggressively pushing banks to advance their risk management practices. A comprehensive risk appetite framework is the cornerstone of a new risk management architecture.
A comprehensive risk appetite framework is embedded in the corporate strategy and risk culture of the bank

Five elements of a risk appetite framework

Corporate strategy

Corporate risk culture

2

- Business portfolio decisions (strategic/non-strategic)
- Key performance indicators
- Corporate level risk tolerances

3

- Risk tolerances per risk category
  - Credit risk
  - Financial risk
  - Operational risk
  - Reputation risk
  - Other risk

- Risk limits/targets per risk category
  - Credit risk
  - Financial risk
  - Operational risk
  - Reputation risk
  - Other risk

Business unit level

Department/product level

4

Capabilities

Measurement infrastructure and indicators
Reporting and monitoring infrastructure
Policies and guidelines
Accountabilities and consequences

5

Set risk appetite
Embed risk appetite
Monitor risk appetite/mitigate risks
Revise risk appetite

Source: Strategy& analysis
Regulators and rating agencies now require banks to align various stakeholder objectives to better balance strategy, capital, and risk

Conversion of stakeholder objectives into KPIs

- **Shareholders**
  - Total return to shareholders
  - Earnings growth
  - Profitability
  - Dividends

- **Customers**
  - Customer experience
  - Competitive pricing
  - Reputation

- **Employees**
  - Reputation/values
  - Professional growth

- **Rating agencies**
  - Financial strength
  - Capital adequacy

- **Regulators**
  - Financial strength
  - Capital adequacy
  - Regulatory compliance

- **Community**
  - Philanthropy
  - Community reinvestment
  - Leadership involvement

In the past, alignment with stakeholder objectives centered on strategy and capital; now risk is also a key consideration.

Each stakeholder objective will have a different influence on the optimal trade-offs among capital, risk, and strategy.

KPIs translate stakeholder objectives into a metric that can be measured and managed.

Potential KPIs include: capital adequacy; earnings volatility, shareholder value (e.g., RAROC, EPA), reputation, and creditworthiness.

Source: Strategy& analysis
2. Corporate level

**High-level KPIs are defined and operationalized, with risk appetite and tolerances established for each**

### Key performance indicators

<table>
<thead>
<tr>
<th>Potential KPIs</th>
<th>Risk level</th>
<th>Illustrative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (1)</td>
<td>Medium (3)</td>
</tr>
<tr>
<td>Capital adequacy (e.g., Tier 1 capital/economic capital)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
<tr>
<td>Earnings volatility (e.g., % earnings at risk per annum)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
<tr>
<td>Shareholder value (e.g., RAROC or EPA)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
<tr>
<td>Creditworthiness (e.g., S&amp;P long-term debt rating)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
<tr>
<td>Regulatory standing (e.g., Camels)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
<tr>
<td>Reputation (e.g., reputation index)</td>
<td><img src="#" alt="Desired risk appetite" /></td>
<td><img src="#" alt="Within tolerance" /></td>
</tr>
</tbody>
</table>

Once a core set of KPIs are defined in alignment with stakeholder objectives, those KPIs must be translated into measurable categories. For example, capital adequacy can be measured by looking at these three ratios:

- Tier 1 common capital/risk-weighted assets
- Tier 1 total/risk-weighted assets
- Tier 1 total/economic capital

Next, risk appetite levels need to be set, and risk tolerances established, for the core KPIs.

Senior management and the board need to review and approve both risk appetite and tolerances for selected KPIs.

Source: Strategy& analysis
The desired risk appetite helps facilitate business portfolio decisions based on a comparison of risk/return profiles

For each business ask:
- Are there clear intentions (continue, review, or divest)?
- Should it be grown, contracted, or maintained?
- Should its risk be increased, decreased, or maintained?
- Should controls be increased, decreased, or maintained?

Note: Size of bubble indicates net profit (2008) of business unit. Lighter blue in bubble shading indicates medium-high-risk or high-risk businesses.

Source: Strategy& analysis
For specific risk management purposes, risk appetite and tolerances are defined for all major risk categories.

### Corporate-level risk appetite and tolerances

<table>
<thead>
<tr>
<th>Risk categories</th>
<th>Risk appetite</th>
<th>Economic capital allocated (in % of total EC)</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit risk</strong></td>
<td></td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td><strong>Financial risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Market risk</td>
<td>60%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>- Interest rate risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Liquidity risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Counterparty risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operational risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Operational risk</td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>- Compliance risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Corporate security risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Technology risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reputation risk</strong></td>
<td></td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td><strong>Other risks</strong></td>
<td></td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>- Strategic risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Legal risk</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Risk appetite is usually expressed in risk measures (e.g., value at risk), nominal measures (e.g., $ amount of credit outstanding), or outcomes (e.g., capital level).

Efforts to manage risk appetite and risk tolerance will necessarily focus on those risk categories that have the highest percentage of total economic capital allocated to them.

Aggregation of risk tolerances ensures that the bank operates in line with its desired overall risk appetite.
Corporate-level risk appetite and tolerances are drilled down to business units with limits and targets for departments and products

Drill-down of risk appetite and tolerances

This example illustrates the trade-offs between capital, strategy, and risk. To meet the growth targets of their respective strategic plans, each business unit must pitch corporate for additional economic capital, incorporating a risk-based view.

Targets are set on the basis of desired risk/return profile and management’s capacity to manage each risk.

Limits help translate appetite and tolerances into practical constraints on business activity.

Examples of business unit–specific risk indicators

- Concentration limits
- Single name limits
- Asset quality
- Average rating score
- Credit bureau score
- Asset quality
- External credit rating
- Concentration limits
- Single name limits
- Asset quality

Source: Strategy& analysis
## 4. Capabilities

Specific capabilities are required to successfully implement and manage a risk appetite framework

### Capability requirements

| Measurement infrastructure and indicators | - At the corporate level, develop a comprehensive set of KPIs and high-level tolerances for all risk categories.  
- At the business unit and product level, develop risk tolerances for all relevant risk categories.  
- Ensure that all data for defined KPIs is readily available as needed. |
| Reporting and monitoring infrastructure | - Develop a high-level corporate risk appetite and tolerances dashboard for senior management and board as well as individual dashboards for major business units with detailed appendixes, covering all relevant risk categories.  
- Define monitoring responsibilities and frequencies within business units and the risk management function. |
| Policies and guidelines | - Risk appetite and tolerance adherence needs to be consistently embedded in all risk-related policies and guidelines.  
- Ensure that risk appetite statement is aligned with overall corporate risk philosophy and culture. |
| Accountabilities and consequences | - Define clear responsibility for setting, approving, and reviewing risk appetite and tolerances.  
- Establish and communicate escalation mechanisms and consequences for breaches of limits and tolerances.  
- Put in place good communication, understanding, and agreement across all organizational levels. |
5. Risk appetite process

Once the risk appetite is set, it needs to be embedded, and then continuously monitored and revised

Ongoing risk appetite process

<table>
<thead>
<tr>
<th>Set risk appetite</th>
<th>Embed risk appetite</th>
<th>Monitor risk appetite/mitigate risks</th>
<th>Revise risk appetite</th>
</tr>
</thead>
</table>
| Set desired risk appetite by considering:  
  – Business strategy  
  – Economic conditions  
Ensure alignment with business strategy.  
Obtain board signoff of risk appetite statement.  
| Cascade the risk appetite down through the bank:  
  – At the portfolio level  
  – At the BU level within portfolios (e.g., for retail, corporate, investment banking)  
Align compensation and culture with risk appetite.  
Embed governance.  
| Regularly monitor as-is risk profile against the risk appetite.  
Support monitoring with:  
  – Relevant infrastructure  
  – Appropriate processes  
Mitigate unwanted risks.  
| Review risk appetite in light of:  
  – Changing business and economic conditions  
  – Evolving group- and portfolio-level strategic priorities  
  – Changing competitive conditions |

Key activities

Output

Clearly defined risk appetite statement containing both qualitative and quantitative elements.

Risk appetite that is defined at the most granular level possible while still remaining actionable.

Buy-in from executives to run their businesses in line with the risk appetite.

Clear understanding of the risk appetite by all executives:
  – At the portfolio level  
  – At the BU level within portfolios

Risk profile reports containing:
  – Assessment of risk profile against risk appetite  
  – Mitigating actions to align risk profile with risk appetite  
  – Other key findings

Revised risk appetite statement.

Source: Strategy& analysis
Strategy& is a global team of practical strategists committed to helping you seize essential advantage.

We do that by working alongside you to solve your toughest problems and helping you capture your greatest opportunities.

These are complex and high-stakes undertakings — often game-changing transformations. We bring 100 years of strategy consulting experience and the unrivaled industry and functional capabilities of the PwC network to the task. Whether you’re charting your corporate strategy, transforming a function or business unit, or building critical capabilities, we’ll help you create the value you’re looking for with speed, confidence, and impact.

We are a member of the PwC network of firms in 157 countries with more than 208,000 people committed to delivering quality in assurance, tax, and advisory services. Tell us what matters to you and find out more by visiting us at strategyand.pwc.com.

This report was originally published by Booz & Company in 2009.