



Risk Appetite: Survey Results

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CRO FORUM



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The CRO Council is a professional association of chief risk officers (“CROs”) of leading insurers based in the United States, Bermuda, and Canada. Member CROs represent 30 of the largest life and property and casualty insurers in North America. The Council seeks to develop and promote leading practices in risk management throughout the insurance industry and provide thought leadership and direction on the advancement of risk-based solvency and liquidity assessments. The CRO Council shares its views through publications and papers that can be found on its website (<http://www.crocouncil.org>).

The CRO Forum is an association that was formed in 2004 to provide insights on emerging and long-term risks, to advance risk management practices in the insurance industry and to seek alignment of regulatory requirements with best practice in risk management. The CRO Forum member companies are large multi-national insurance companies headquartered across the world with a concentration in Europe. The CRO Forum shares its views through publications and papers that can be found on its website (<http://www.thecroforum.org/>).

Section 1: Introduction

The topic of risk appetite has exploded in recent years, especially since the global financial crisis. Risk appetite frameworks (“RAF”) and risk appetite statements (“RAS”) continue to evolve, and companies are at different stages of implementation. In December 2013, the CRO Council (“Council”) and the CRO Forum (“Forum”) published the paper “Establishing and Embedding Risk Appetite: Practitioners’ View”, to present a variety of sound practices that organizations use to establish and embed effective risk appetite frameworks. Because risk appetite frameworks are not one-size-fits-all, different approaches were discussed, indicating that the size, complexity, and nature of business operations weigh into determining the best approach for an individual company.

To gain further insight into the diversity of their members’ approaches to risk appetite, the Forum and the Council conducted a joint survey in 2014. The survey was intended to be broad, covering most key areas regarding RAFs. Questions were grouped into the following categories:

- Scope
- Cascading
- Risk Tolerances
- Governance.

Forty-eight members of the associations responded, representing circa 90% of total membership. Respondents have significant international business and approximately two-thirds have non-insurance business activities (banking, asset management, etc.).

The main purposes of this companion paper are to:

- Summarize survey results, which demonstrate variety and range of practices
- Highlight diversity of practices which are caused by factors such as regulatory environment, legal structure, size, risk profile, etc.
- Restate the principles from the published paper and tie results back to them.

The primary anticipated use of this paper is to enable companies to benchmark themselves against the diverse range of industry practices in order to improve their RAFs.

For data protection and confidentiality, individual responses remain anonymous. The underlying data is the property of the CRO Council and CRO Forum, has been and will be treated confidentially, and will not be shared except with the express authorization of the CRO Council and CRO Forum.

Section 2: Principles

The following principles, introduced in the original 2013 paper, are thought to serve as the basis for a sound risk appetite framework:

In establishing a risk appetite framework, companies should consider the following core principles:

- Establishing a comprehensive risk appetite framework is a complex endeavor, and should be crafted via an iterative process, which requires diligence, patience, collaboration, and flexibility;
- The diverse interests of parties relevant in achieving company objectives should be considered;
- Managing within risk appetites should be realistically achievable;
- The risk appetite framework should identify and quantify risk preferences for material risks;

- Risk appetites should be reassessed after significant events and reviewed by the Board at least annually.

When embedding risk appetite, companies should consider the following core principles:

- The risk appetite framework should be cascaded to business segments to ensure decisions are consistent with enterprise objectives, tolerances and limits;
- Measurements should be used to provide evidence of risk appetite and strategy alignment at the enterprise and business segment levels;
- For risks that are inappropriate to quantify, qualitative boundaries should be developed and assessed.

The following sections address the relationship of these principles to the range of practices reflected in the survey results.

Section 3: Scope

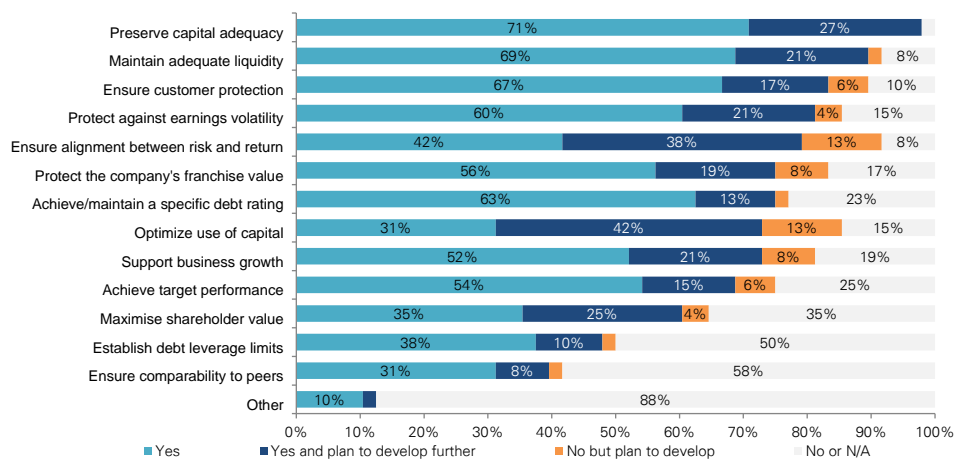
Questions regarding Scope addressed main objectives and goals, stakeholders, components and drivers of the risk appetite statement, and focal areas and related methods.

Main objectives and goals

A majority of companies cite improving risk awareness and consideration in business and decision making as their main objective for having a risk appetite framework. Another key objective is usefulness in formalizing parameters for business strategy as well as overarching tolerance levels in a single policy-like document. Although not ranked as high, respondents also believe having a risk appetite is important in order to comply with regulatory requirements.

Companies have a number of goals for setting risk appetite, as summarized in the following chart, and they fall into two broad categories: protection and performance optimization. A majority of companies consider protection to be their primary goal, but performance optimization is also important – as cited by many of the same companies that place protection as their top priority. These broad goals raise the essential need to balance between different stakeholder priorities. For customers and regulators, protection is the main concern; for shareholders, performance optimization is the priority.

**Goals for Risk Appetite Framework
(In order of mention by Survey respondents)**



The highest ranked goals are preserving capital adequacy, maintaining adequate liquidity and ensuring customer protection. Capital adequacy is important to assure customer protection. Respondents plan to increase the goals of risk appetite, demonstrating that use of a risk appetite framework is an evolution for most companies. The goals with the most respondents planning to develop them further are a) ensuring alignment between risk and return and b) optimizing use of capital.

Stakeholders

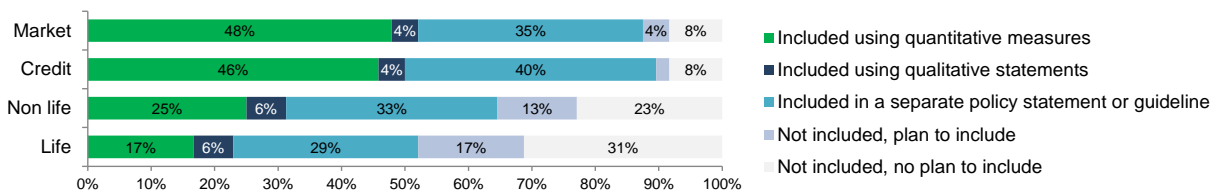
Policyholders are the most explicitly considered stakeholders, followed by shareholders, regulators, rating agencies and Board members. Other stakeholders that are considered but not as explicitly are debtholders, employees, business partners, and the general public, listed in decreasing order of consideration.

To balance the needs of multiple stakeholders, most companies try to find overall consensus in the goals; however, a significant number prefer to prioritize certain stakeholders over others or manage multiple boundaries relevant to the multiple stakeholders.

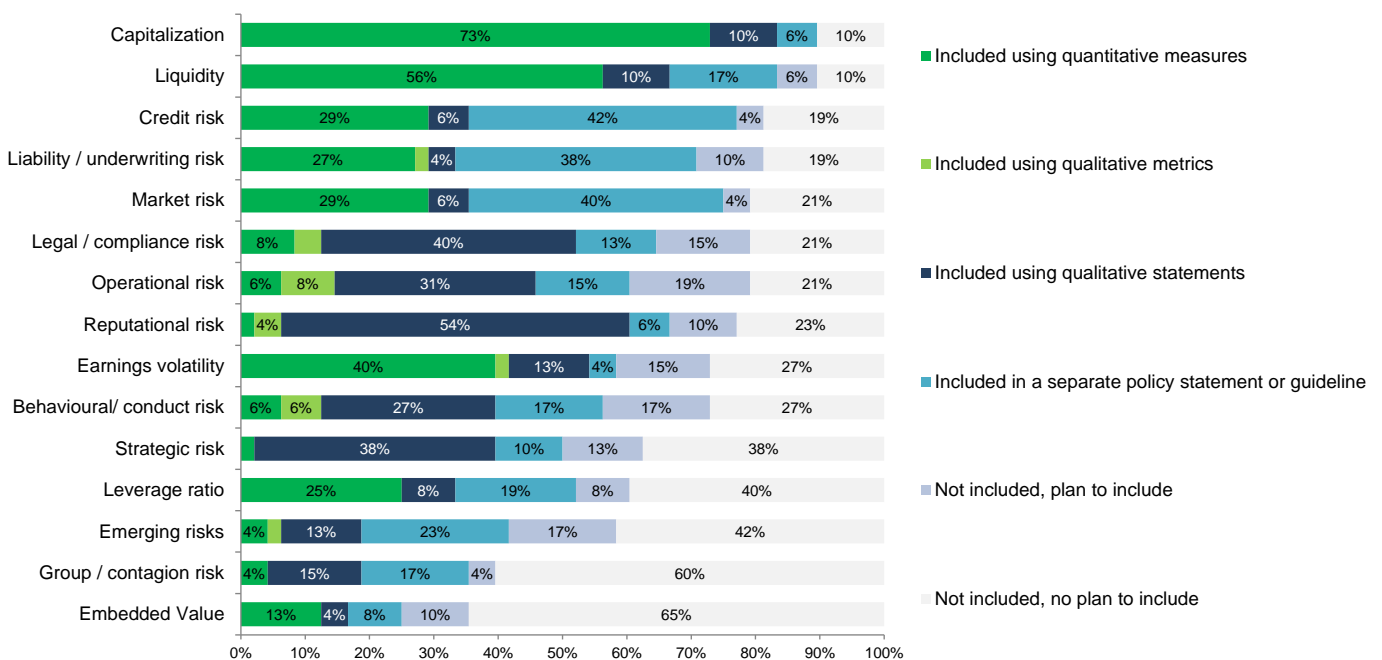
Components

Companies were queried on components specifically addressed in risk appetite, and if they are included explicitly or as separate policies or guidelines. The components fall into three categories: risk concentration limits, targets and other.

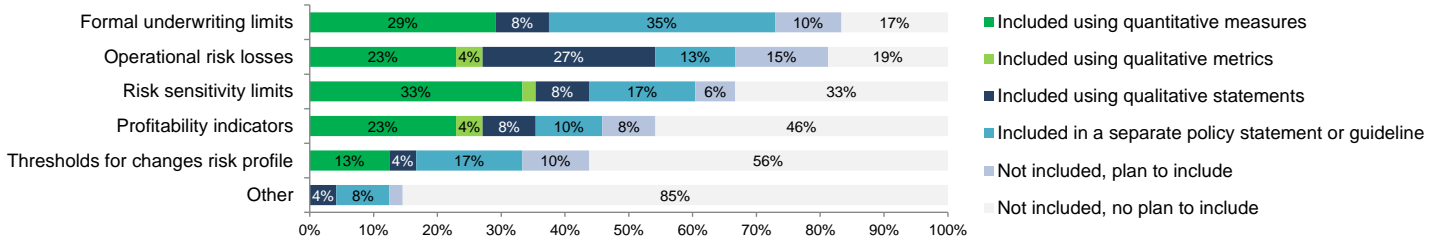
Risk concentration limits



Targets



Other



Unsurprisingly, the most commonly quantified components that appear in a RAS are capitalization and liquidity targets, although many respondents also include market and credit risk concentration metrics.

The components most expressed in qualitative statements are reputational, compliance, operational and strategic. Qualitative statements for strategic risk are almost exclusively provided by CRO Forum respondents.

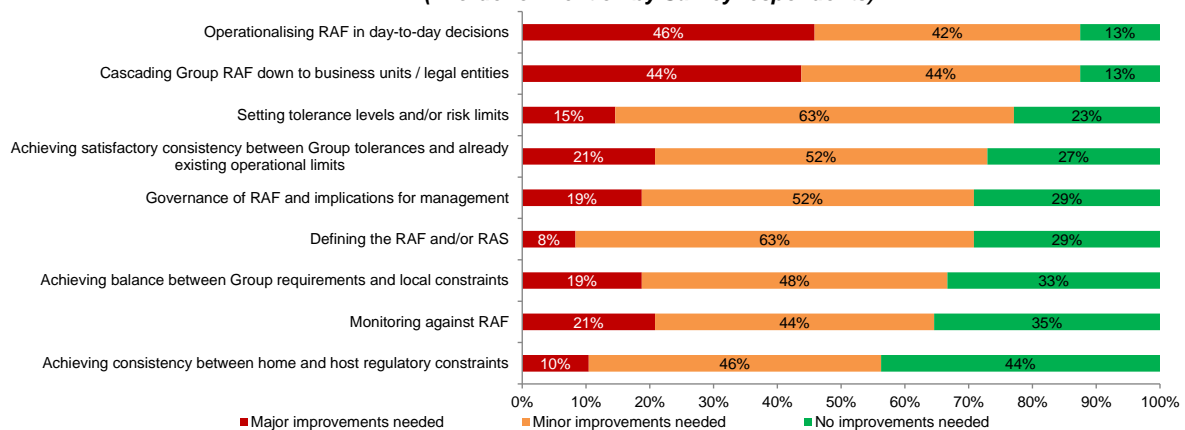
Development of a risk appetite statement is an evolution. Changes to risk appetite statements after initial formalization are driven in large part by the need to enhance it, followed distantly by the following reasons: new business plan, material changes in the external environment, regulatory request, and mergers and acquisitions. Key reasons cited for enhancing the risk appetite statement are to improve its use and value, and to improve underlying modeling.

Focal areas and related matters

All companies responding to the survey have formalized risk appetite statements. A majority have had a formal risk appetite statement in place for 3-5 years. Having a risk appetite is a regulatory requirement for slightly over half of the respondents; the proportion is higher for CRO Forum members. When Solvency II is in place, having a risk appetite statement will be a regulatory requirement.

Respondents plan for a number of improvements to their risk appetite framework. The areas thought in need of the greatest improvement are operationalizing it into day-to-day decision making and cascading it down to business units and/or legal entities.

**Improvements needed in company's Risk Appetite Framework (RAF)
(In order of mention by Survey respondents)**



Section 4: Cascading

Questions regarding Cascading addressed approaches used to cascade, components cascaded, treatment of diversification, and the maturity spectrum of risk appetite frameworks.

Approaches used to cascade

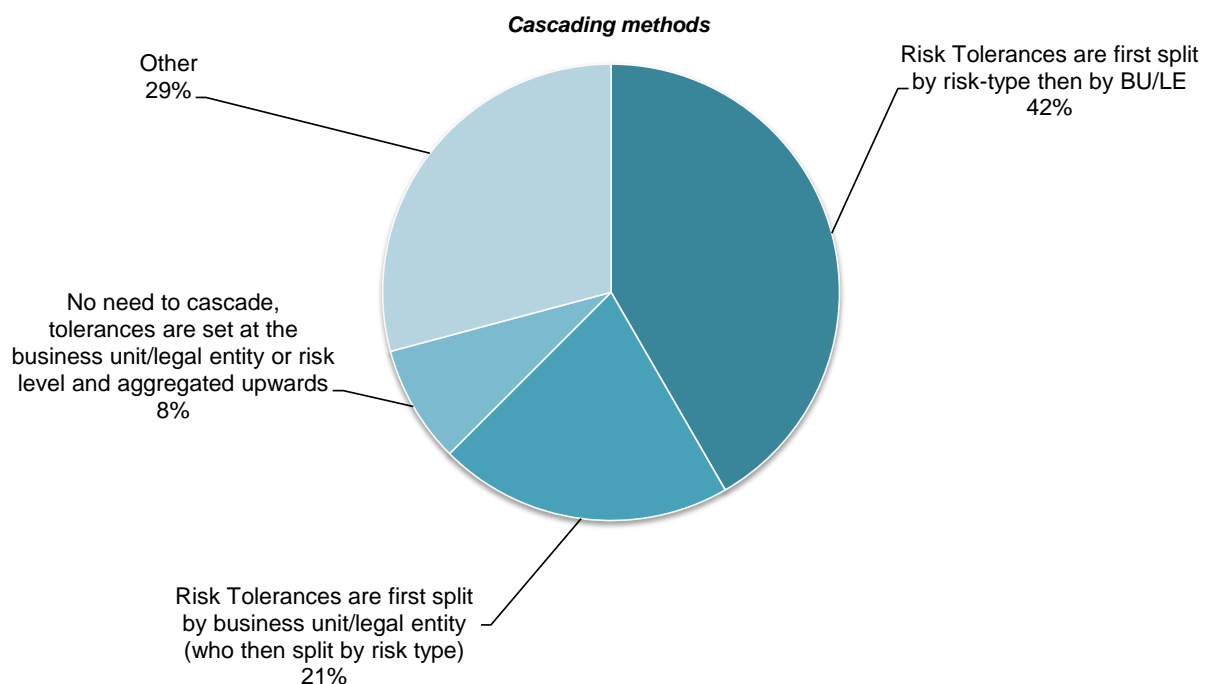
An overwhelming majority of companies, regardless of size and nature, recognize the need for improvements in cascading, as discussed in the prior section, even though they apply risk appetite frameworks to different types of business within a group in the same way. Of interest, even companies with a decentralized governance model tend to apply the risk appetite framework to the entire group in the same way. Also of note is that cascading practices for companies with non-insurance activities are similar to those of companies predominantly with insurance activities.

Respondents were fairly evenly split regarding the influence materiality has on risk appetite allocations. A little more than half allocate risk appetite only to business units and entities designated as material, whereas a little fewer than half do not use materiality as a basis for allocation.

A variety of approaches are used to set risk tolerance levels. The most common approach appears to utilize an iterative dialogue in setting risk appetite between the group and business units or legal entities. For a good proportion of companies though, risk tolerances are independent at the business unit or legal entity level, but they check for consistency with the group-level risk appetite statement. For another sizeable number of respondents, risk appetite is determined by the group; then, either approvals at the local level occur or inconsistencies between group and local level are addressed.

A clear majority cascade group risk tolerances down and the most common approach is to split by risk type first, then by business unit or legal entity. Even so, a variety of approaches is noted, as summarized in the following chart. Some of the “other” responses are:

- Cascade by both business unit and legal entity
- Cascade by business unit/legal entity and risk type at the same time
- Cascaded to business unit or legal entity, depending on specific situation
- Risk tolerances are the same for all businesses.



Components cascaded

Capital and liquidity are the main quantitative metrics cascaded, with earnings, underwriting limits, and profitability indicators not far behind. Quantitative metrics least cascaded are leverage and embedded value. The quantitative metrics most often cascaded to the product level are, unsurprisingly, profitability indicators and underwriting limits. For capital and earnings, companies are about evenly mixed in cascading them to the product or legal entity level. Liquidity is generally cascaded only to the legal entity level.

Treatment of diversification

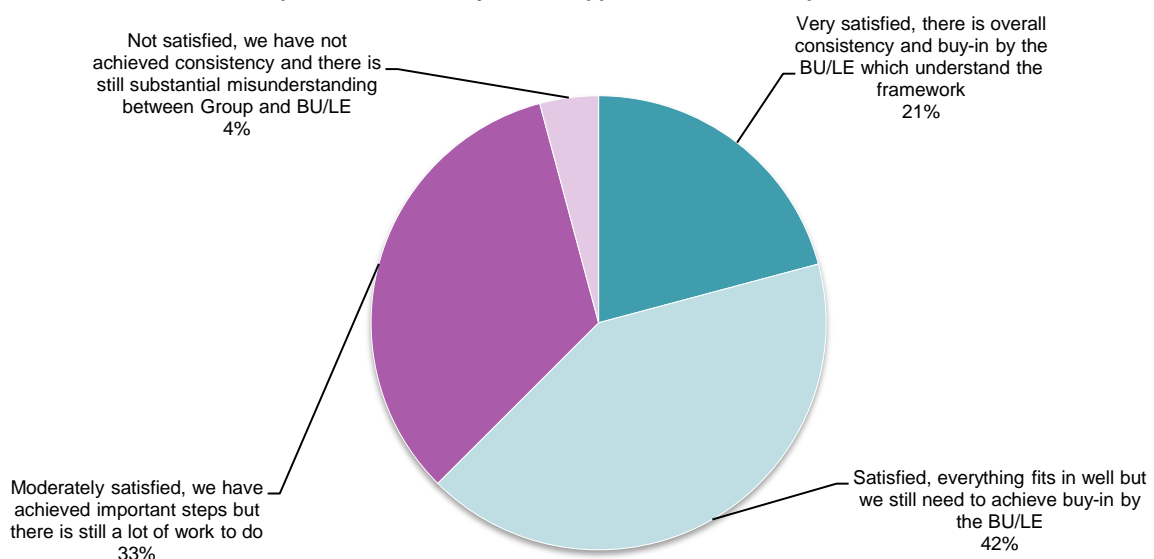
Diversification benefits are kept at the group level for half of the respondents, and they are partially or fully allocated for the other half. If allocated, a significant variety of approaches are used. One approach is to use proportionality methods with the goal of improving the competitive position locally. A few allocate based on risk-adjusted profitability. Other ways to allocate diversification benefits are:

- Via strategic dialogue
- Based on both proportionality and performance targets
- Via provision of lower targets to business units, implicitly considering diversification
- Only for risk-based performance management and pricing decisions
- Depending on risk-adjusted profitability.

The maturity spectrum of risk appetite frameworks

When asked how satisfied companies are with the appropriateness of their risk appetite framework for both the group and lower levels, respondents provided a range of responses as demonstrated in the following chart. This represents the maturity spectrum for the use of risk appetite frameworks. Most suggest more work is necessary.

Perspectives on maturity of Risk Appetite Framework implementations

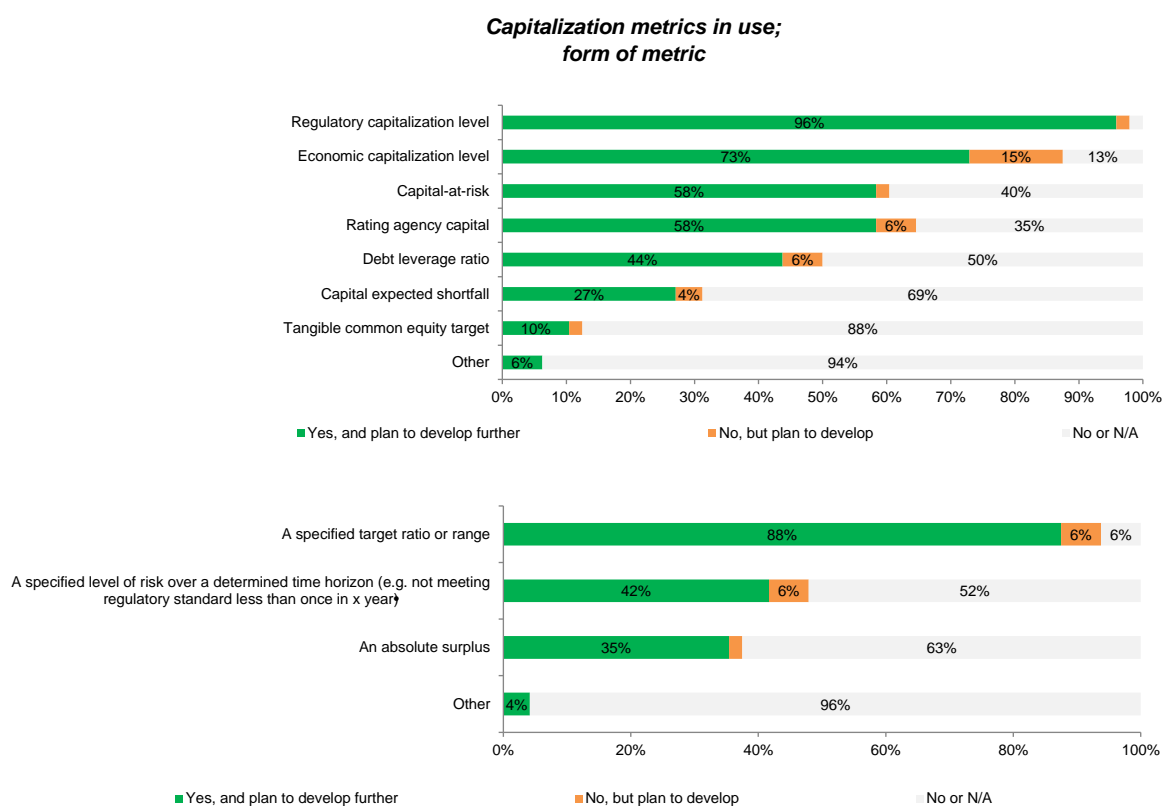


Section 5: Risk Tolerances

Questions regarding risk tolerances addressed key metrics used in their setting, and use of stress testing.

Key Metrics: Capital Adequacy

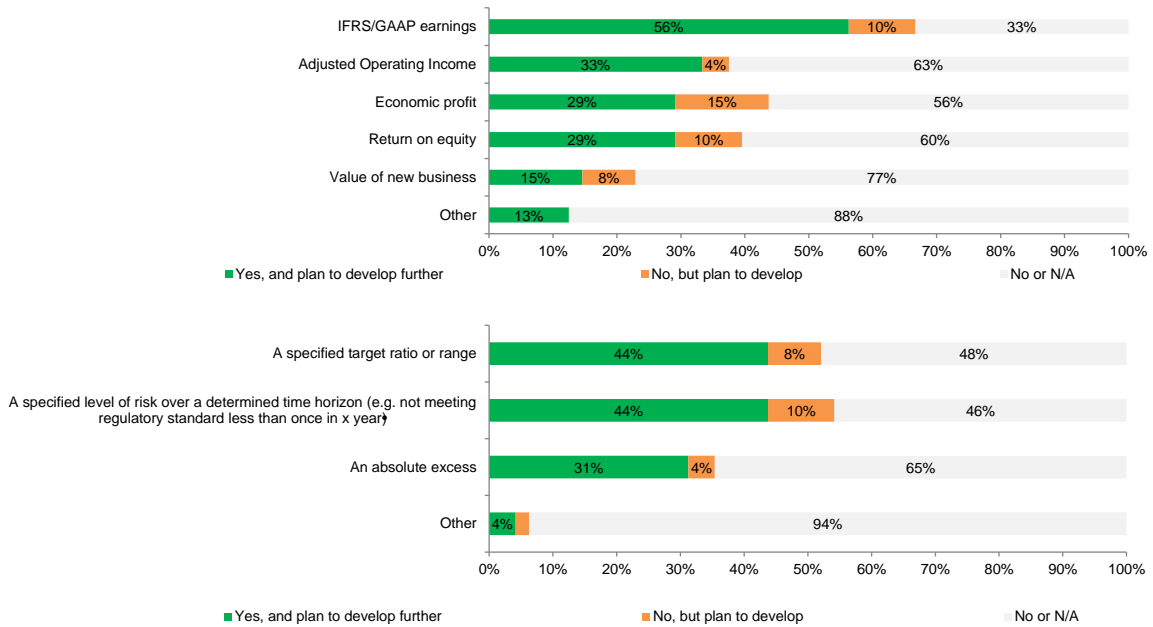
Regulatory and economic capitalization levels are the most broadly used metrics for capitalization targets. As observed from the chart below, a number of other metrics are used although not as commonly. Capitalization targets are most frequently expressed as a specified target ratio or range. Other ways to express them, although not as common, are as a specified level of risk over a determined time horizon, and as an absolute surplus.



Key Metrics: Earnings-at-Risk

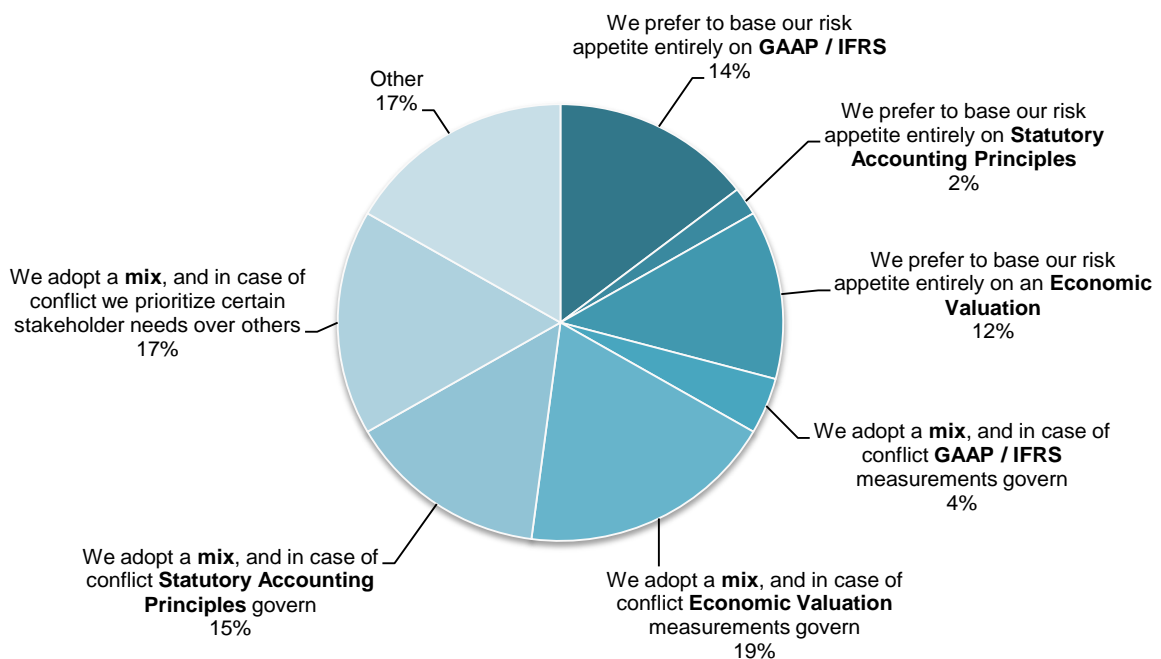
IFRS or GAAP earnings are the most widely used metrics, with economic profit coming in second if including those companies who plan to utilize it. Other metrics cited are: risk adjusted return on capital (RAROC), cash generation, pricing profitability targets, after-tax catastrophes, and after-tax net investment income. Earnings-at-risk targets are most commonly expressed as a specified target ratio or range and as a specified level of risk over a determined time horizon.

Earnings-at-risk metrics; form of metric



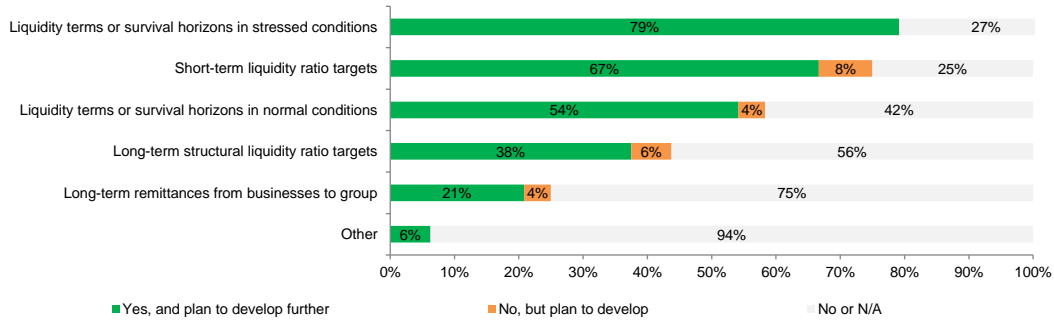
As noted in the following chart, a significant mix of valuation or measurement frameworks are used, as well as a mix of solutions for dealing with conflict between them. For CRO Council respondents, statutory accounting principles more often govern in the case of conflict. A fair number of companies use a mix of frameworks and opt to prioritize needs of certain stakeholders over others in the case of conflict.

Prioritizing earnings-at-risk metrics



Key Metrics: Liquidity

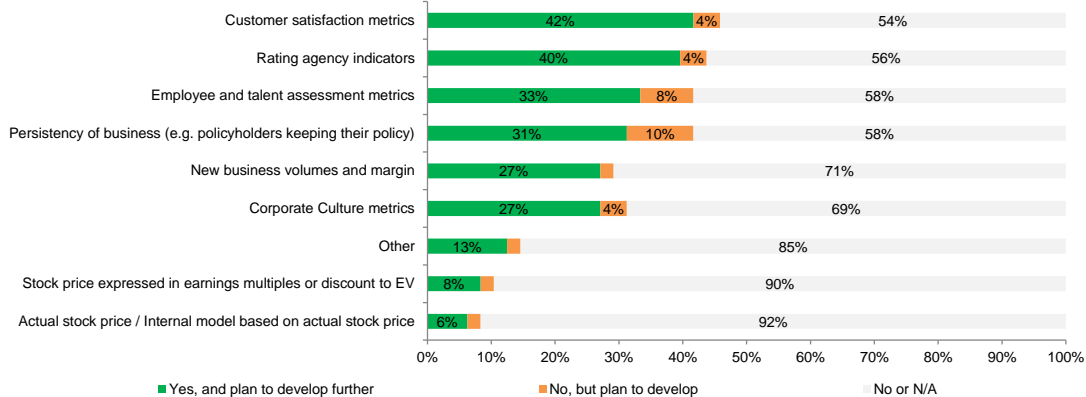
Liquidity terms or survival horizons in stressed conditions and short-term liquidity ratios are the most common way of expressing risk tolerance for liquidity, as noted in the following chart.



Key metrics: Franchise value

For assessing franchise value, customer satisfaction and rating agency indicators are the most common metrics used. The time horizon considered is varied, ranging from a point-in-time assessment to multiple years (up to 5), with the most common time horizon being a point-in-time.

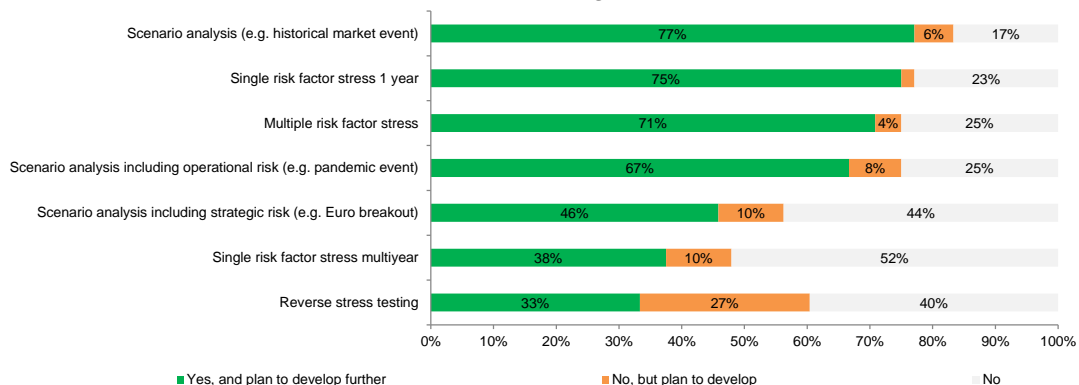
Franchise value metrics



Use of stress testing

Stress testing is widely used (by nearly 80% of the respondents) in setting risk tolerances, including single factor 1 year stress tests, multiple risk factor stress tests, and scenario analysis that include both financial and operational risk events (e.g. pandemic events). Many companies plan to increasingly use reverse stress testing.

Stress testing used



The greatest use of stress testing is to confirm the appropriateness of risk tolerances. Some companies use stress testing to define additional thresholds at which the risk profile is thought to be under stress and/or to define additional thresholds acceptable in a time of stress.

Section 6: Governance

Questions regarding Governance addressed key governance aspects, monitoring and frequency of reporting, breach of risk limits, and roles and responsibilities. The overarching finding is that further development of governance is necessary, which is indicative of the maturity spectrum of risk appetite frameworks.

The survey indicates that over half apply a “strategic controller” type governance model, whereby decision making authority is largely delegated but specific areas of control are retained at the group level - as opposed to centralized (decision making authority at group/holding company level) or decentralized/federated (decision making authority at the business unit/legal entity level) governance models.

Key governance aspects

Many respondents indicate that risk appetite is embedded into risk culture and that risk management is consistently managed across their organization. RAFs are thought to provide common frameworks for organizations to measure consistently across their organization.

For many companies, risk appetite is well understood and articulated by senior management and managed with clearly defined roles and responsibilities. For most companies, open relationships exist between the board, CEO, CRO, CFO, business lines and internal audit, allowing for candid discussion of risk appetite. Risk appetite assessment is included in their Board’s strategic discussions, and they hold senior management accountable for the integrity of the risk appetite framework. More than half have documented the alignment of major projects and decisions with their risk appetite statement; nevertheless, a handful of companies do not intend to do so. Even so, for all of the above, a significant number also believe these governance aspects need to be developed further.

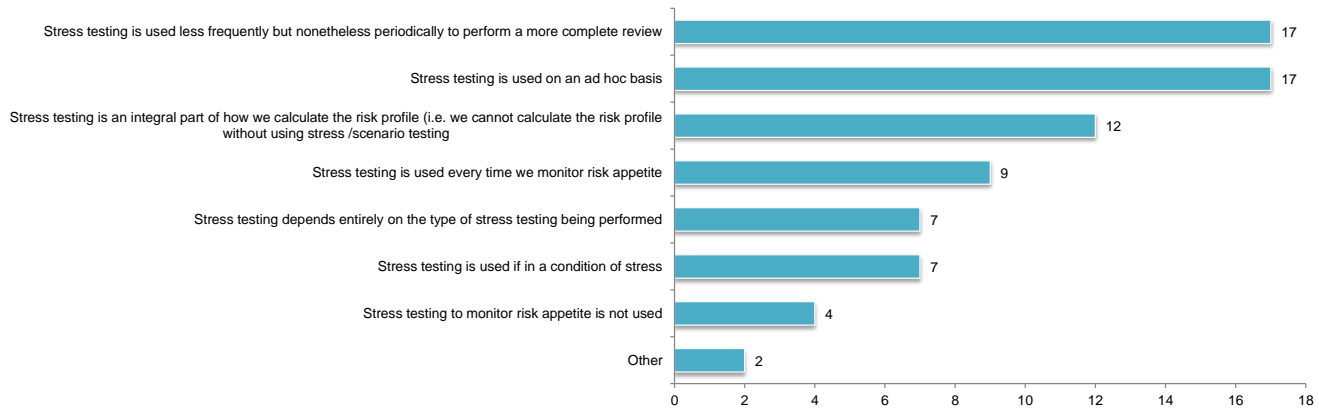
Companies are varied in their response to whether their risk appetite framework has been or is assessed by an independent third party, such as an external auditor. About one-half have done so, another one-quarter plan to do so and another one-quarter do not believe this needs to be done. Many, but not all, companies discuss risk appetite with regulators. All believe they eventually should.

Monitoring and reporting

A majority (60%) indicate that they monitor and report on risk appetite quarterly. Other companies report monthly, bi-annually or at a frequency that varies by risk. In addition to reporting retrospectively on actual experience, many companies use projections (under both normal and stressed conditions), demonstrating the importance of forward looking expectations for risk appetite monitoring to help with business decisions. For those companies which use projections, a range of time horizons are considered, including months, years and multiple time periods. When completing projections, a near-equal amount of companies either redefine all parameters to perform them or redefine parameters for only the significant risk factors.

The following chart reflects the frequency of stress testing for monitoring risk appetite. Stress testing is significantly used. For some, it is integral to calculating the risk profile or is used every time risk is monitored. For many companies, it is used periodically or on an ad hoc basis.

Use of stress testing to monitor risk appetite



Breach of risk limits

Most respondents believe risk tolerances can be breached for a certain period of time provided a cure period is defined during which the risk profile must return to within stated risk tolerances, or some variation of this (multiple thresholds with one serving as early warning, anticipation of a breach before it occurs, increased dialogue upon breach to determine course of action). Approximately one-third believe risk tolerances should not be breached and that immediate action must be taken to return to within stated risk tolerances.

Almost half of the respondents believe risk limits should not be breached and that local management should set early warning triggers (“soft” limits). Even so, a large number of respondents (42%) believe risk limits are set to promote discussion if they are breached.

Roles and responsibilities

A strong majority believe the CRO is responsible for monitoring adherence to the highest levels of risk tolerances. The responsibility for actual adherence is thought to be split amongst the CRO, CEO, business line or segment heads, and the CFO. The highest level of the organization that material violations are required to be reported to is the full Board or Board-level sub-committee.

Section 7: Conclusion

As noted from the results of the survey, a variety of approaches to establish and embed risk appetite frameworks are used and a range of practices followed. RAFs risk appetite statements continue to evolve, and companies are at different stages of implementation and along various points of a maturity spectrum. Risk appetite frameworks vary according to size, complexity, and nature of business operations. The survey results highlight the diversity of practices caused by factors such as regulatory environment, legal structure, risk profile, and so forth.

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