A Leading Practice Approach to Formulate a Risk Appetite Statement

A Practical Guide to ERM

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Abstract

No longer fringe concept, Enterprise Risk Management is widely viewed as the premier approach to risk management, and is quickly becoming a core function for many organizations. A critical component of an ERM framework is an organization's understanding of its ability to take risk. While this idea of Risk Appetite, as it is commonly referred, is conceptually appealing, many organizations struggle to articulate it in a manner that is meaningful for day-to-day decisions. This paper presents a practical guide to creating a risk appetite statement that both reflects an organization's aggregate views towards risk, and also provides tangible governance for both large and small business decisions.

Keywords: Risk Appetite, Setting Risk Appetite, Risk Tolerances, Risk Limits, ERM

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It's difficult to forget the many startling headlines as fears of a new great depression swept financial markets and the press during the 'Global Financial Crisis' (GFC) of 2008. Thankfully, these fears have largely given way to the realization of *only* a "great recession." But as we reflect and rebuild we must ask the question, "Could the above events have been within our tolerance for risk?" Yet, our collective actions lead down a path where they were distinct possibilities, if not likely outcomes. Books, magazines, opinion columns, blogs and other outlets have, and will continue to opine about the causes of the GFC. This paper does not share the same goal. Instead, it intends to provide organizations with tools to better prepare for the unknown, understand their risk policies, develop their risk appetite, and ultimately, uncover intelligent risk taking opportunities while avoiding similar perilous situations.

The Bigger Picture

First, what are the terms and concepts an organization needs to prepare itself?

> ***Risk Appetite:*** *one or more statements that describe the levels of risk that company management deems to be acceptable in the pursuit of overall financial and solvency goals.*
> ***Risk Tolerance:*** *one or more statements that establish boundaries on how much variation away from expected financial return the entity is willing to accept.*

These documents are largely the product of several groups within an organization. Their roles with respect to risk management, and specifically risk appetite, are outlined below.

> ***Board of Directors:*** *The board is responsible for overseeing and ultimately approving risk governance practices in a manner that faithfully represents the interests of the broader shareholder group.*
> ***Executive****: Executives are responsible for the development of detailed risk management practices in congress with the board's attitude towards risk, presenting them to the board for approval, and overseeing their execution throughout the organization.*
> ***Business Units****: Business units are responsible for enacting the approved risk management practices and providing practical input at times of review.*

Generalized Risk Appetite

Conceptually, the ideas of risk appetite and tolerance introduced above are well understood. They have been readily accepted for risk management because they parallel our personal experience.

> *Is this a good bet?*

Does the potential reward compensate for the risk?
Can I afford to lose this money?

Though we are imperfect decision-makers, we each develop a sense of how much we are willing to risk. This process of weighing potential costs and benefits becomes so innate that extending it to an organization feels quite natural. However, because firm managers are bombarded with so many other complex issues, the practical obstacles to applying risk appetite to an organization, rather than to an individual, are sometimes overlooked.

Risk Appetite in Practice

Some organizations seem to lack the infrastructure to bridge the gap between understanding risk appetite theoretically, and ensuring it guides both strategic and day-to-day decisions. Approximately 37% of the financial institutions surveyed in the sixth edition of Deloitte's worldwide Global Risk Management Survey[1] reported that they either have no risk appetite statement, it is informal, or it is not approved by the board. Throughout this article, we describe how creating or improving a formal risk appetite statement is central for firms to better understand the risks they intend to take, and then to deliver on those intentions.

Why Create a Risk Appetite Statement?

Many companies use formal statements to explain their purpose and goals, but these statements vary in operational significance. Sometimes the statement is flush with lofty ideals and grand visions, but short on specific guidance. Such a document is primarily symbolic.

An effective risk appetite statement is a concrete guide for everyday operations. It should be a living document that codifies the attitudes of executives and the board towards the risk taking capacity of the organization. A formal written definition is recommended as verbal commitments are difficult to reference, can lack consistency, may gloss over misunderstandings or divergent opinions, and could therefore produce a disjointed approach to risk management.

Furthermore, numerous employees at various levels can significantly influence the risk profile of an organization. Risk managers for a fixed income trading desk of a brokerage firm, as an obvious example, must be risk-intelligent, but so should brand managers responsible for reputation risk in any industry. As such, a risk appetite statement is much more than a tool reserved for company elders. Instead, a thorough risk appetite statement is a natural vessel to disseminate information vital throughout an organization.

Finally, we call the risk appetite statement a living document because it should evolve over time in response to changes in firm strategy and business environment. Certain elements of risk appetite are more stable than others (e.g. tolerance for a rating downgrade) but there are many legitimate reasons beyond mere convenience why risk appetite must change. In essence, to remain relevant a risk appetite statement must reflect a firm's current vision rather than those of its founders.

[1] Deloitte's Global Risk Management Survey: Sixth Edition Risk management in the spotlight, 2009

What Should it Say?

A risk appetite statement is actually composed of many different risk appetites. At the highest level, the overarching risk appetite should be driven by the company's vision and business strategies , and consistent with the board's and the broader shareholder group's expectations. Discussions often begin and end with a firm-wide definition of risk appetite because, after all, that's where the action is (value to shareholders, drivers of compensation for most senior executives, ability of the firm to repay debts). However, as a practical tool, this 10,000 foot view of risk is ineffectual. A useful risk appetite statement should build this foundation into *tactical* risk appetites that assist in governing the day-to-day management of individual risks.

In addition, risk management is the product of many people throughout an organization working toward a common goal. Naturally, these individuals will feel more motivated if they share an understanding of the firm's goals, and can see how their work contributes. Therefore, we suggest a risk appetite statement begin with the firm's definition of risk appetite and tolerance, and a discussion of why it is important to the organization. For example:

> *As described in this document, risk appetite represents the desired amount of risk our organization seeks to take at any given time to achieve our business goals while maintaining financial viability. Risk tolerance represents an acceptable margin around this desired level of risk. As we all strive to meet our various objectives, monitoring the simultaneous contributions we each make to aggregate firm risk becomes very difficult. Therefore, we have established appetite guidance whichs govern the daily risk-taking activities of each business, in consistence with the firm's overall risk appetite and tolerance.*

Of course, the meat of the statement should describe the overarching risk appetite as determined by senior management and articulated by the board. Rather than providing vague guidance, ideally it will include a description of each metric (qualitative and / or quantitative) by which the firm's aggregate risk profile will be measured. Further, the statement should specify in some detail how each metric will be used. Consider the following example risk statements of varying quality:

Poor

> *Risk will be maintained at or below acceptable levels*

Improving

> *Economic capital and credit ratings will help assess risk*

Good

> *… will aim for an economic capital limit of $X and a credit rating of "AA"*

A best in class risk appetite document should also discuss why each metric was selected among common alternatives. This information will help those who were not directly involved in the formation of the holistic risk appetite statement understand how it impacts their day-to-day responsibilities, and all risk related personal further recognize how their efforts contribute to the firm's overall risk objectives. To that end, the statement should be written in language decipherable to a wider audience. While precision is required describing specific metrics, during general discussion sections think "comply with financial solvency regulations" instead of "maintain greater than 200% company action level RBC."

While the holistic risk appetite document should concentrate on defining the overall risk mission, it should also provide insight and guidance on risk appetite at the tactical level. Not all risk decisions are concentrated at the top of an organization, and business unit level (and lower) personnel require guidance in setting appropriate risk metrics that are consistent with the holistic risk appetite. It should not explicitly provide every detail of how to manage each risk, but the risk appetite statement should convey enough information to provide a business mandate to the managers and takers of each risk. For example, an organization that chooses capital-at-risk as an aggregate risk measure may choose to also assign analogous capital-at-risk metrics for each business unit. Of course, because this implies the daily management of many risks will occur at the tactical rather than overarching level, organizations must engage in risk aggregation to ensure the tactical risk appetites are consistent with the overarching risk appetite. The risk appetite statement need not specify all the technical details, but it should describe the process in general, and provide some reasoning behind the amount of aggregate risk allocated to each risk factor.

Finally, the risk appetite statement should document the process by which it can be changed. As mentioned above, no assessment of risk appetite, regardless of how detailed, is ever appropriate for an organization indefinitely. The risk appetite statement should describe who owns the process for revisiting risk appetite, how frequently a review should be performed, and the process to draft and approve a revised statement. It should distinguish between the process to change a major element of the overarching risk appetite, and that required for a less consequential part of a tactical risk appetite.

Creating a Risk Appetite Statement

Hopefully we have convinced you that creating or improving upon a formal risk appetite statement is a worthy objective. The next question on your mind may be, "How can I get it done?" We believe the following is a "leading practice" step-by-step process:

- Identify Stakeholders and their Expectations
- Define the Overarching Risk Appetite
- Define the Tactical Risk Appetites
- Reconcile Risk Appetite and Risk Profile
- Draft and Ratify the Risk Appetite Statement

Identify Stakeholders and their Expectations

Organizations have many stakeholders with different agendas and outlooks towards risk. Some concentrate on the downside (e.g. creditor, regulator) while others also benefit from the upside (shareholder, stock option compensated executive). Before determining risk appetite for an organization we must first answer the question, "whose risk?"

Broadly speaking, firms have two groups of stakeholders. The first group includes regulators, rating agencies, creditors, clients, etc, who are primarily concerned with the company's ability to honor its commitments, even in extreme downside scenarios. The second group, composed of shareholders, the board, senior management, and employees, is interested in the value of the company. To complicate matters, the two perspectives are interrelated. Extreme downside scenarios that jeopardize debt and claim/deposit payments also extinguish equity value, and even the mere possibility of such losses imposes deadweight costs on shareholders.

While both groups impact the organization, the former exerts its influence through regulations, borrowing costs, and other constraints, and direct control is held by the latter. Therefore, drafting a risk appetite statement is the responsibility of senior management and the board, but they must carefully consider the desires and power of the creditors, regulators, and rating agencies. The board should play a supervisory role, laying out broad risk management principals, reviewing and approving the appetite statement, but not actively drafting the content. This leaves senior management responsible for presenting a draft for approval. Ownership of this process usually rests with a CRO or sometimes CFO, and ultimate responsibility falling upon the CEO. Although setting risk appetite is a senior-level exercise, it also requires significant involvement of business unit leaders and their staff members to provide detailed insight on how each unit actually functions. Gathering a wide range of perspectives will help ensure that the risk appetite statement reflects both the firm-wide risk objectives and the realities of day-to-day business operations.

While accepting a frictionless agency model would simplify our analysis, we would be remiss to omit how this model breaks down in reality and potential misalignment of incentives may impact the process. For example, sometimes senior management has much of its wealth and reputation tied to the fate of the firm, and therefore has incentive to manage risk more tightly than shareholders would prefer. Because the risk appetite statement we propose is a tactical guide for business decisions, it would be counterproductive to articulate a statement which is consistent with board and shareholder incentives while executives to manage to a different standard. For the statement to be an effective decision making guide it must be consistent with the incentives of the management team as well. We don't present this as an argument to allow senior management to drive risk appetite, but rather to illustrate the need to carefully tailor the compensation structure of executives to produce behavior consistent with risk appetite.

(INSERT SIDEBAR ON COMPENSATION)

Define the Overarching Risk Appetite

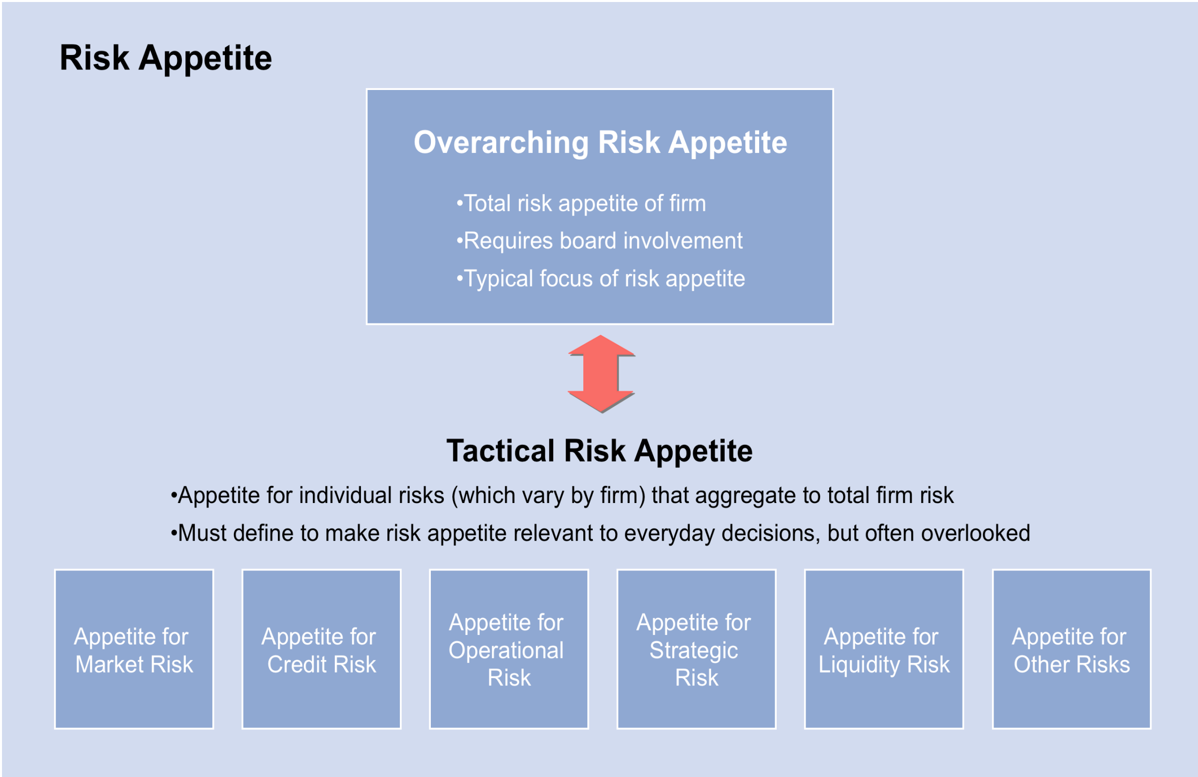
Just as individuals have varying levels of risk aversion, firms operating in different industries, or even within one industry, can bear different amounts of risk. For example, a hedge fund may satisfy investors by pursuing an aggressive strategy seeking high returns, while many bond insurers dependent upon "AAA" ratings who struggled during the financial crisis would have been wise to take more conservative approaches. A firm's "brand" often explicitly or implicitly communicates appetite for risk to customers and the financial markets. For example, reassuring marketing messages such as Prudential's Rock of Gibraltar logo, Travelers' red umbrella, or Allstate's "You're in good hands" communicate the safe and secure image many insurers promote. In contrast, the Lexus commercial showing their machine racing to beat a car falling from the sky has little to do with conservatism. By understanding business environment and considering all the incentives and constraints they face, firm managers and the board should determine where the organization falls on the risk-reward frontier.

Developing a general sense if an organization is aggressive or conservative is a necessary first step, but to drive decision making the firm-wide risk appetite must be expressed through a set of measurable metrics. It is often helpful to begin with qualitative metrics (such as a desire to prevent creditors and customers from losing faith in the organization), but where possible they should be translated into quantifiable metrics (such as maintaining a certain credit rating). Although care must be taken to avoid a false sense of precision, quantifiable metrics are preferable because they provide an explicit assessment of risk profile versus appetite.

Possible risk metric candidates include:

- maximum acceptable dollar amount of loss
- maximum allowable volatility of earnings
- maximum amount of capital at risk

Metrics will vary by industry, corporate culture, and quantification capabilities, but they should always provide a consistent and comprehensive description of the firm's risk bearing capacity.



Define the Tactical Risk Appetites

While the ultimate goal of managing risk is to maintain an appropriate firm-wide risk profile, an organization that only understands its risk desires at this high level will find itself handcuffed by the difficulty of determining how one decision will affect the aggregate risk profile of a firm. Understanding how the many decisions made concurrently combine to affect risk profile is harder still. To address this problem, firms typically identify the individual risk factors important to the organization, allocate a certain amount of aggregate risk appetite to each, and then manage them independently. The amount of total risk-taking capacity allocated to each individual risk depends on the strategy of the firm, the business environment, and how the risks interrelate. Firms often find this process challenging, but it is necessary to consistently define risk appetite.

How does an organization begin to understand its appetite on risks to which it has material exposure? Interviews and workshops with managers intimately involved with the firm's daily operations are often effective tools. It is important to both identify risks that have established management functions, and those that impact the organization but may not yet be monitored as carefully. Because the models used to aggregate these individual risks are almost always too cumbersome to run in near real-time, tactical risk appetites should be documented at the level risks can be managed day-to-day. Metrics and procedures for these tactical appetites should be defined analogous to the overarching risk appetite. While different types of risk may better lend themselves to different metrics, ideally they should be chosen to allow comparison among risk factors.

Reconcile Risk Appetite and Risk Profile

Understanding risk appetite is essential, but it is risk profile that eventually impacts the bottom line. Ensuring that risk profile is appropriate requires reconciling the current risks taken with the appetite for those risks. This occurs on two levels. Firms first compare tactical risk appetite to their risk profiles. Next, they translate the individual risk profiles into an aggregate risk profile, and compare to the overarching risk appetite.

In light of these comparisons, some firms will be forced to adjust their risk exposure to realign their risk profile with appetite. In some cases however, the comparison might highlight a flaw in the risk appetite. In some cases, choosing which to alter is not obvious. When initially setting risk appetite, senior management and the board could have defined certain aggregate risk objectives, only to realize they are unrealistic given the risk profile the firm has been operating under in the recent past. Maybe the competitive environment demands a more aggressive strategy to achieve the desired results, or maybe the goals can be achieved with materially less risk than anticipated. Alternatively, examination of risk profile may reveal excessive risk taking, or additional risk taking capacity. Because an unsustainable risk appetite statement is only marginally more valuable than no statement, risk appetite should be somewhat flexible during the reconciliation process based on the realities of the business environment. However, reassessing major elements of overarching risk appetite should not be taken lightly or done out of convenience. Once risk appetite is finalized and approved by management and the board it should be treated as a strong governor of risk profile. Any discrepancies should be identified and the causes researched.

In addition to reconciling risk appetite and profile, this phase is another opportunity to re-evaluate how individual risks are combined into the aggregate risk. New information since aggregate risk appetite was last allocated to each risk factor may indicate a different allocation structure is optimal. By no means is this a straightforward process. However, it is imperative that companies make their best effort to understand total risk exposure, and produce overarching and tactical risk appetite statements that are internally consistent. We have observed that some companies hit roadblocks, ranging from the quantification of strategic risks to the evaluation of correlations, and struggle to complete aggregation. We discuss some of those difficulties in greater detail below.

Formalize and Ratify a Risk Appetite Statement

With risk appetite thoroughly defined, recording it in a formal statement is the final step. Operationally, ownership of drafting the statement should be taken by the head of risk management, the CEO, or shared jointly among the senior management team. Care should be taken to include all the necessary elements described above. Once completed, if the statement was drafted by an individual or small group, it should be reviewed with the entire senior executive team involved with setting the risk appetite. After consensus is reached withing this group, in most situations the statement should be subject to approval by the board. After approval, whoever took the primary role in drafting the statement will own the document and make changes as necessary. Any change to the overarching risk appetite, and significant changes to the tactical risk appetites would be subject to re-approval by the board. Again, changes to risk appetite should be deemed necessary when they reflect real changes in the company's strategy or business environment, not because they are the easiest way to bring risk profile in line with risk appetite.

Industry Roadblocks

So why are 37% of companies surveyed in Deloitte's most recent Global Risk Management Survey still lacking a formal and board-approved risk appetite? There are numerous hurdles to the practical implementation of risk appetite, but we will focus on two common roadblocks we have observed.

Technical

In order to quantify overarching risk appetite and profile, firms must sum the contributions of individual risk factors. While the concept may seem logical, rigorous implementation requires advanced technology and risk modeling capacity, and in particular, a solid understanding of risk correlations.

First, it is difficult to begin aggregation if risk owners and experts throughout the firm measure tactical appetite inconsistently. For example, combining interest rate risk measured in terms of an earnings volatility target, and credit risk in terms of maximum allowable loss is not straightforward. While coordination by a centralized risk management function should promote the use of compatible metrics, some risks will present a challenge. Because risks can vary significantly in nature, it can be quite difficult to find metrics that are both appropriate for a given risk, and consistent with those chosen for others. For example, many insurance companies have developed detailed models to quantify financial risks, but may lack the data and experience to measure operational and strategic risks similarly. Alternatively, many manufacturers employ methods to quantify operational risks that manifest in product defects, but are less likely to have similarly developed methods to measure financial risks that may impact their costs of materials or markets for their products.

Beyond maintaining the technology and skills to measure different risks consistently, determining their combined impact on an organization presents theoretical challenges. As you probably guessed, the "+" sign on a calculator is not sufficient to sum different risks. In fact, risks can only be directly added if they always occur in tandem, which is rarely the case. In reality, there is little reason to believe a hurricane in the Gulf of Mexico will necessarily be accompanied by a wave of home foreclosures nationwide. Still, they could be related if property damage reduces prices in the affected region, which then spills over into the national market. Studying how frequently different risks occur together – i.e., their correlation - is the most common method of adding together portions of each risk. But what are the correlations among different risks? How stable are these relationships over time? Progress has been made revealing these relationships, and even modeling variable correlations, but unfortunately, answering these questions with confidence remains elusive.   Quite possibly, the most important modeling challenge is accepting that models will never be perfect reflections of reality. Therefore, considerable resources devoted to producing marginal improvements in predicting frequency and severity of loss may be better spent planning how to react if such losses occur.

Culture

Not all hurdles are technical, however. Culture also plays an important role in implementing risk appetite. A risk appetite statement is created as a safeguard against risk, but is void of significance if breaches are not mitigated. In other words, if the rule changes with the “crime”, there is no rule. This may sound obvious, but when a breach occurs it may be tempting to believe its causes are temporary when they may actually be lasting. In addition, if risk appetite is defined when the world runs smoothly, it may be different when material risks are materializing. For example, larger losses may be acceptable when credit is easily available than when it is not. It is also possible that the cost of remediation changes with the environment, and at times, may actually exceed the benefit of remaining within appetite. When capital is scarce, accepting the consequences of a ratings downgrade may be preferable considering the cost of capital necessary to maintain AAA. Thus, the line between a good and sound reason to modify appetite, and changing the rule with the “crime”, is not always clear. The dangers of voiding the rule, on the other hand, are obvious. Both underlie the need to continually review risk appetite.

What to do?

Contrary to desires of many actuaries, risk appetite is not all technical. Sorry to disappoint the internal auditors, monitoring controls is not the sole answer either. Nor is it all about closely assessing the risks that organizations accept (oops – lost the underwriters, reinsurance purchasers, and investment managers), or capital and capital security (there goes the accountants and controllers).

Risk appetite requires input from all areas of an organization that are affected by risk. Each area must get involved in the development or a holistic risk appetite document. The first step is recognizing this and bringing the right team to the table.