



To Risk or Not to Risk

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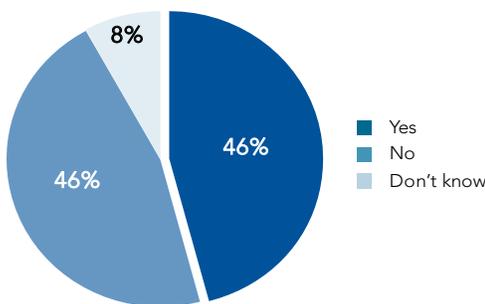
Putting a value on your organization's financial capacity to take risk

One of the key measures of a “mature” risk management practice is the extent to which a business has embedded a systematic thought process regarding risk awareness, analysis, and management into the organization's decision making at every level. To do this successfully, there must be some consistency in the methods used to define, identify, analyze, and measure risks. Equally important are consistently applied rules and guidelines used to weigh risk and reward tradeoffs when decisions are made.

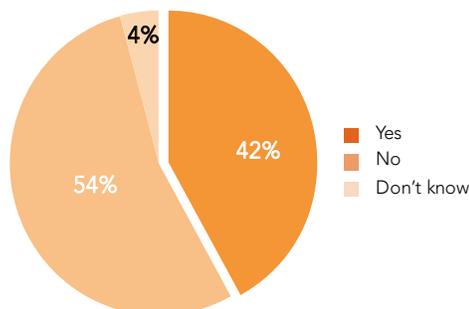
To establish such rules and guidelines, it is important to have a clear understanding of the organization's financial capacity to take risk, or risk-bearing capacity (RBC); management's tolerance for risk; and their appetite to use available RBC when opportunities arise.

However, original research USI did with select members of the Russell 2500 shows that less than half (46%) of survey participants formally define RBC and even fewer (42%) formally define risk appetite. When risk appetite is left to the subjective perspective of individual leaders, there will likely be a wide range of opinions, potentially leading to inconsistencies in decision making.

Company's risk bearing capacity formally defined

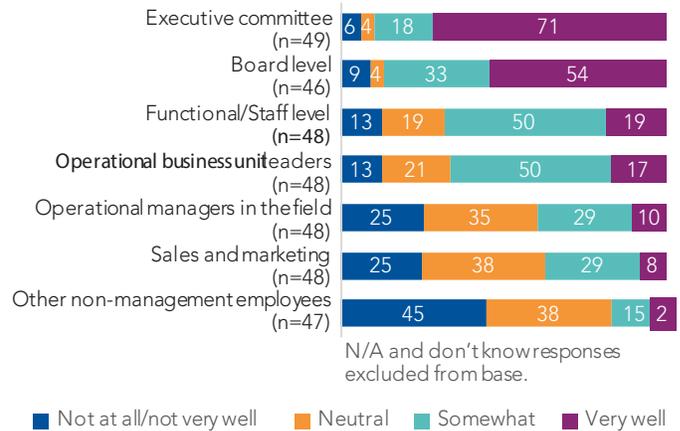


Company's risk appetite formally defined



While our research showed that most executive committee and board members understand risk appetite “very well,” this understanding diminishes greatly at other levels within the organization. This implies that the people making most of the day-to-day decisions about the business are doing so with a limited understanding of the organization's risk appetite.

Understanding of Risk Appetite (Base: Total Respondents)



To define these terms, you must establish a relationship between risk and value. Consider the following premises:

- Risk and opportunity involve value judgments applied to observed or anticipated uncertainty, randomness, or volatility. Such value judgments can only be made in the context of goals or objectives — i.e., a desired outcome that is in question.
- Therefore, risk and opportunity are always linked around specific goals and objectives.
- Without risk, there is no opportunity (risk is good).
- Taking risk is an essential need of every organization seeking to profit or achieve some objective of value.
- An organization's financial capacity to take risk is finite given its financial condition at any given time.
- As RBC is finite, it must first be allocated to those risks for which no risk transfer is possible and then to the opportunities that have the highest potential return to the organization.

This places a high value on an organization's financial capacity to take risk, as the organization cannot achieve any objective of value without taking risk, and the firm's financial capacity to take risk is finite given its financial condition.

With these premises in mind, we can offer the following definitions:

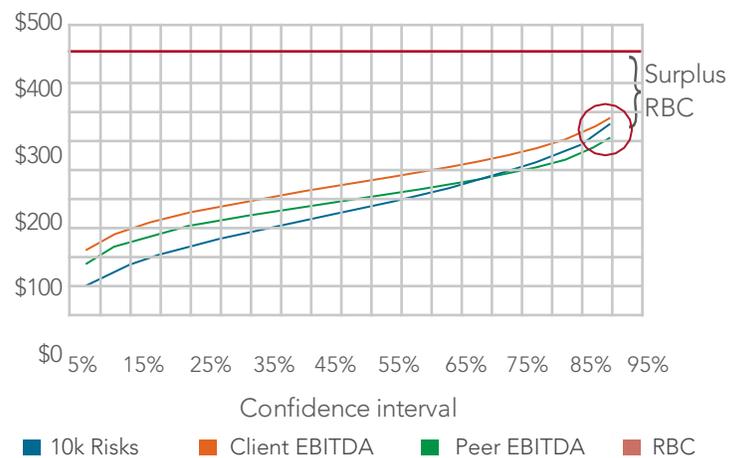
- **Risk-bearing capacity (RBC):** An organization's financial capacity to take risk regardless of tolerance or appetite.
- **Risk tolerance:** The maximum limit of RBC within which management wishes to operate the business.
- **Risk appetite:** Management's willingness to use financial capacity to take risk within the organization's risk tolerance.
- **Impact of strategic and uninsurable or uninsured risk:** The aggregate effect of such risks to the organization in any given fiscal period, estimated at both expected ("mean") and at a high confidence interval.
- **Surplus risk bearing capacity:** The difference between the potential effect of strategic and other uninsured risks and the company's risk tolerance (if such difference is positive).
- **Intrinsic risk value:** The cost to retain a given risk, including the cost of capital required to support taking the risk versus the cost of other available options. It reflects the value to the business of using "surplus risk bearing capacity."

So, how do you determine an organization's RBC and risk tolerance?

Looking at a series of benchmarks (hypothetical amounts of loss) that would result in well-defined business consequences if experienced in a given fiscal period often helps frame the discussion for senior leaders. It is helpful to begin with the amount of financial loss that would put the organization on the brink of insolvency. This reinforces the idea that RBC is finite. Then, you can examine other benchmarks — such as violating loan covenants, a downgrade in credit rating, loss of investment grade, or being unable to fund strategy as planned. With this continuum of benchmarks and clear business consequences, a company's senior executives are better able to agree on a level of risk tolerance within which to manage the business.

Additionally, management must have a reasonable estimate of the likelihood and potential effect of existing strategic and other uninsurable or uninsured risks, as these risks must be supported by the organization's balance sheet and consume some portion of the organization's RBC. As illustrated in the chart below, understanding how much of the company's RBC is consumed by such risks and how much is left determines whether the company has surplus capacity to take other risks. This enables management to make better judgments about how to value risk and reward tradeoffs, and make better decisions about other risk-transfer or hedging solutions that may be available.

Loss estimate by confidence interval versus RBC



One useful way of thinking about risk appetite or valuing risk and reward tradeoffs is to imagine placing such risks in a virtual captive (VCap). A VCap exists only on paper as a risk management device. In essence, once a company has established a value for its surplus RBC, this value would be assigned to the VCap as its underwriting capacity. No capital actually moves; capital remains invested in the business. New risks are then evaluated through the intrinsic risk valuation (IRV) process as follows.

The intrinsic value of each risk, or layer of risk, is defined as the company's internal cost to retain or self-insure the risk at breakeven over time. IRV is calculated as follows:

Mean (expected) loss + risk charge (based on the difference between a high-confidence-interval estimate of the risk and the mean) + a charge for surplus + other out of pocket costs related to assuming the risk.

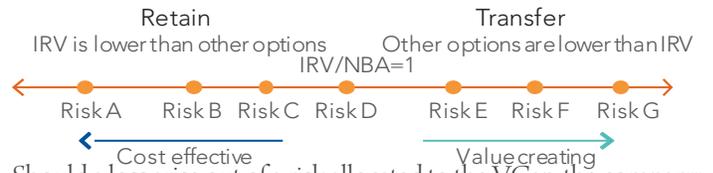
The charge for surplus RBC is based on the amount of capital a captive insurer would have to reserve against the risk at issue multiplied by the rate of return the organization would expect for that capital. The rate of return would depend on the company's weighted average cost of capital (WACC) and the return available from all other competing uses of that capital available to the company.

With the intrinsic value established for each risk, companies can evaluate the full range of risk solutions available. If a solution is found that is less costly than the intrinsic risk value, it would add economic value to the business to implement that solution.

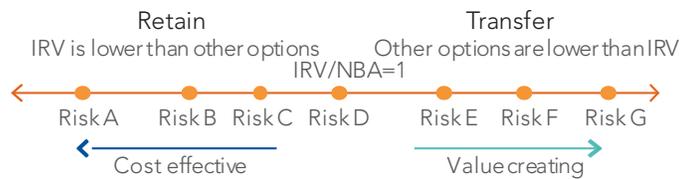
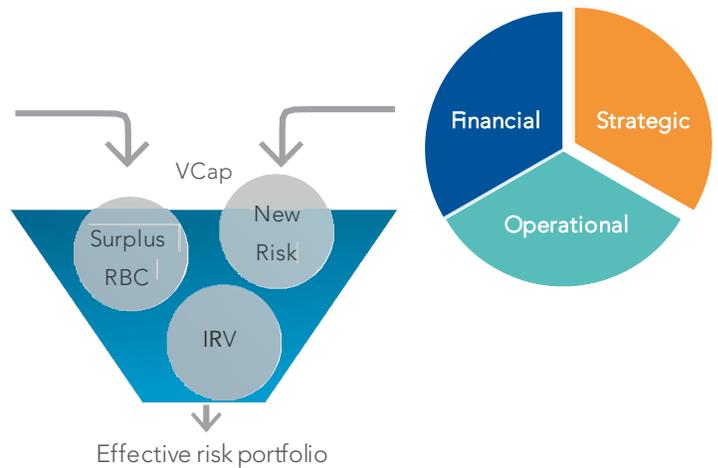
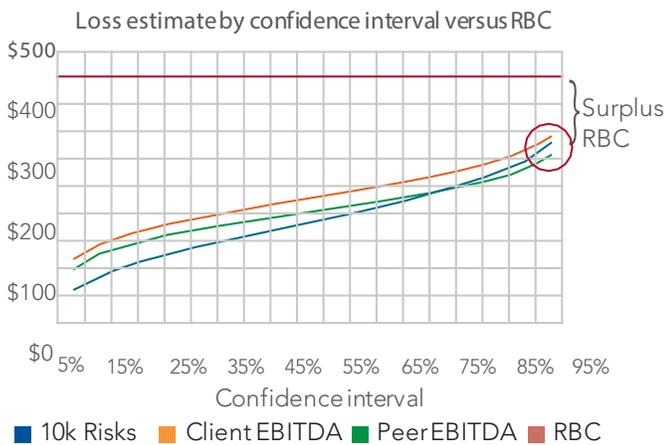
If all the solutions are more expensive than the intrinsic value, and the VCap has surplus RBC available to assume the risk, that will be the most cost-effective solution.

Making risk finance decisions based on the entire portfolio of risks for which a risk finance or transfer option exists helps derive the greatest value from the company's surplus RBC.

of IRV to the next best alternative (NBA) so that risks where the NBA is less than IRV are retained until the surplus capacity is exhausted. This enables the creation of an efficient risk portfolio that optimizes surplus RBC and minimizes cost.



Should a loss arise out of a risk allocated to the VCap, the company must pay it out of available funds. With a VCap, there is no tax case to be made, no need to post Letters of Credit (LOCs) or pay in capital as with a real captive insurance company. There is no formal entity or regulator involved. The process can be managed with a very simple ledger or spreadsheet. The VCap technique may prove useful even if the company has an existing captive.



Summary

While no amount of quantification or analysis can transform uncertainty into certainty, most people agree that risk analysis is important when making decisions involving risk and reward tradeoffs; understanding financial capacity, tolerance, and appetite for risk; creating an efficient risk portfolio; and prioritizing resources to the risks of greatest concern. Analytical techniques enable us to navigate the risk universe. They provide useful estimates of exposure to risk and capacity for risk assumption, which is helpful to people at all levels of the organization making decisions about what risks may potentially create value as well as to professionals making decisions about transferring or retaining necessary risks.

How can we help?

For more information regarding this topic, please contact your USI consultant, or visit us at www.usi.com.

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