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ERM in the U.S. Life and Annuity Industry: 2015 Survey—Summary Report

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Milliman's 2015 Survey of Enterprise Risk Management (ERM) in the U.S. life and annuity industry highlights many positive developments around ERM since the global financial crisis of 2008 and 2009. In the current environment, insurers that prioritize ERM excellence clearly benefit from favorable regulatory, ratings, and market sentiment. But, perhaps even more importantly, a robust practice of ERM brings along the clarity and confidence needed to navigate organizations toward long-term financial success and stability, regardless of the current climate.

As interest rates look set to remain low for some time, insurers acknowledge that the financial consequences on the industry have far from fully crystalized. This theme especially elevates the urgency to advance ERM capabilities in order to determine and drive sustainable long-term strategies.

The industry now demonstrates strong risk controls and mature governance practices. But chief risk officers (CROs) must strive beyond the pure risk monitoring function and gain a voice in strategic business decisions. Ultimately, the success of ERM is measured by how well an insurer is able to execute on its risk strategy (and within its risk limits) to optimize long-term financial objectives.

BACKGROUND AND SCOPE

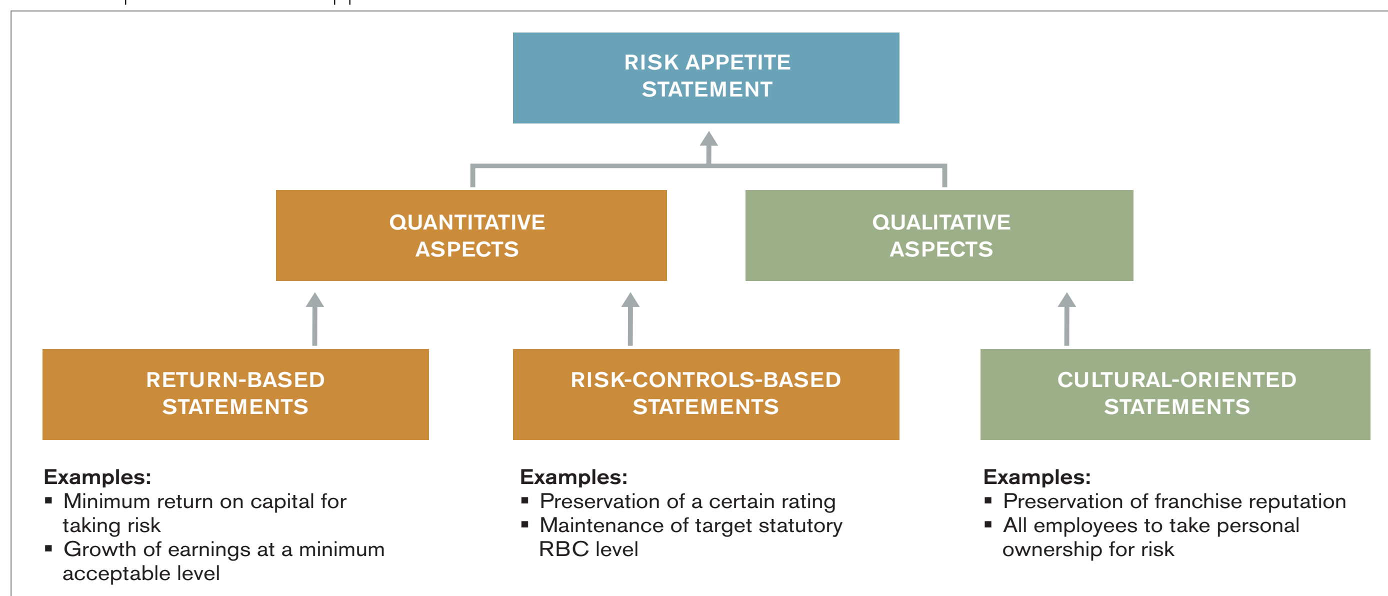
During June through October of 2015, Milliman interviewed senior management at 47 U.S. life and annuity writers[1] to establish how the practice of ERM has evolved in the industry in recent years. Our survey report presents the results of the survey interviews, examining best practices as well as those areas that still remain challenging.

Milliman has prepared a detailed report documenting the findings from the survey, and any questions about the full report should be directed to the authors, whose contact details are shown below. Some of the highlights and "calls to action" for the industry coming out of the survey are also highlighted below.

RISK STRATEGY AND RISK APPETITE

There has been considerable strengthening in how companies formulate risk strategy and risk appetite. The risk appetite statement has emerged as a core part of an ERM program and is used to articulate the extent of risk that a company is willing to take on and the risk limits within which the business should be operated. However, insurers also need to link these limits to their financial objectives and hence have risk appetite statements that address "return-oriented" goals as much as "risk-oriented" goals. Moreover, some companies are including "cultural-oriented" goals in their risk appetite statements. Figure 1 summarizes these concepts and gives a few examples.

Figure 1
Core Components of a Risk Appetite Statement



As a best practice, for every financial goal or business objective, an insurer should have a parallel risk appetite statement; moreover, a good risk appetite statement should help forge the right internal communications around strategy and risk.

Companies also need to look at their business from a variety of financial perspectives, or lenses (capital, earnings, cash flows, etc.). In viewing their risks through multiple lenses, companies must articulate their risk appetites in ways that provide transparency about the role and evaluation of each significant lens. A strategy that may look attractive through one lens may be problematic through another. Increasingly, companies are paying more attention to the liquidity lens, as well as earnings and capital lenses, and also to the impact of strategy on enterprise value.

INSURER'S RISK TAXONOMY

The identification of key risk exposures and the monitoring and management of these risks is at the foundation of any ERM program, typically starting at the line of business level. A great deal of consistency exists in how companies are defining and organizing their risk taxonomies. Generally, they tend to be variations around the theme of categorizing risks as insurance risk, market risk, credit risk, and operational and strategic risks.

As part of the survey, we asked companies to provide feedback on what they viewed as their "Top 3"/"Top 4" risk exposures, and the results are summarized in Figure 2. Some provided responses on both a "gross" and "net" basis, i.e., before and after allowing for explicit risk mitigation strategies such as reinsurance for insurance risk, or hedging for market risk and credit risk. In the current low interest rate environment, interest rate risk remains a problem even where hedging is in place. Also, credit (default) scores very high whether viewed on a gross or net basis.

Operational and strategic risks are now widely recognized as being at least as material as insurance, market, and credit risks. However, we observe a wide range in the level and sophistication around identifying and quantifying these risk exposures. Bearing in mind that it is mainly operational failures that historically have led to financial services companies going out of business, this has to be an area that the life and annuity industry pays more attention to. In the years to come, we expect to see more rigor put in place both around capturing what comprises the full operational and strategic risk taxonomy, and in quantifying the potential financial impact of these risks.

Coming out of the survey we have identified key ingredients of a "best practice" operational and strategic risks program, as summarized in Figure 3.

Figure 2
Participants' Key Risk Exposures (Net of Risk Mitigation Strategies)

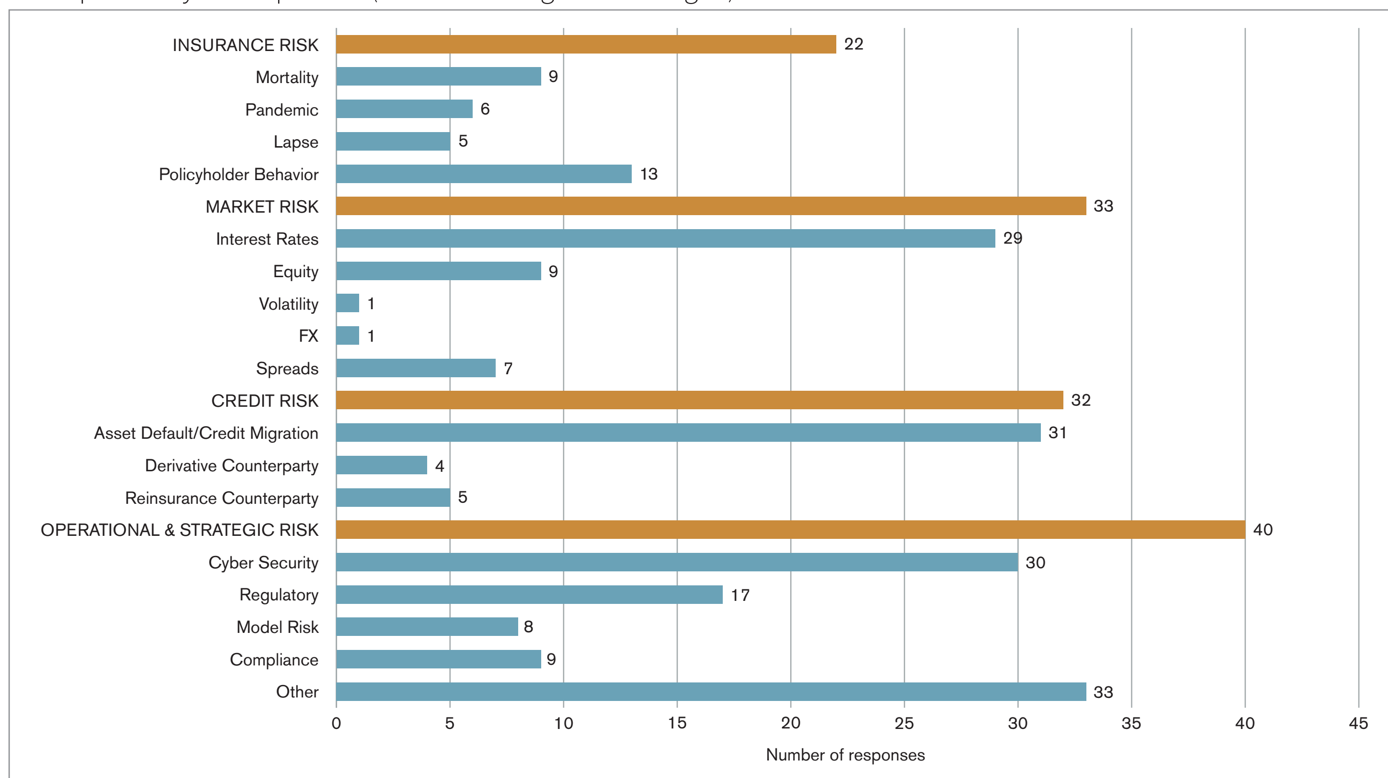


Figure 3
Key Ingredients to an Operational and Strategic Risks Program

1	Companies need to have a rigorous process in place to ensure that they have captured all the risk exposures in their operational and strategic risk spaces and are constantly monitoring those exposures.
2	Active, ongoing, internal dialogue across the company is an essential part of understanding operational and strategic risks. Having this dialogue is probably more important than trying to put a number on operational and strategic risks.
3	Retroactive operational risk reports showing loss amounts by different types of operational and strategic risk categories can be useful. But best practice companies have a formal process in place to record an operational or strategic risk "event" to carefully track the different circumstances that led to that event and to learn from this by implementing appropriate actions to minimize the chances that such an event will reoccur.
4	Operational and strategic risk stress testing is emerging as a valuable tool, i.e., looking at what events could bring about an operational risk stress. Such analysis can be extremely helpful in facilitating the internal dialogue around operational and strategic risks, in the absence of which such discussions can be somewhat nebulous.
5	The quantification of operational and strategic risk exposures, e.g., a determination of an amount of capital to hold in respect of operational and strategic risks, is still in its infancy, with most companies currently not attempting to put a number on operational and strategic risks for their internal capital evaluations, or just doing something approximate.

Also, the industry has now taken early steps to categorize emerging risk as its own bucket of risk and to begin work on identifying and monitoring those risks. Sometimes this can get into something of a hazy area (e.g., regulation), where there may be some blurring in distinction between what is "emerging" and what has "emerged."

RISK MANAGEMENT STRATEGIES

While variable annuity writers have evolved their product and risk management strategies over time in response to market volatility, strategies for other products have been slower to adjust and the clouds loom on the horizon as more years of low interest rates look inevitable. Insurers must respond to the low rate environment as aggressively as the variable annuity writers have responded to market volatility. So far, the search for incremental yield revolved around lowering of portfolios' credit quality and a shift toward a more diverse investment paradigm to include commercial mortgages, private equities, infrastructure, and other alternative investments.

But more will be called for as the locked-in yields of yesteryear disappear, and effective ERM, or its subset, corporate asset-liability management (ALM), is going to play a critical role in the success of life and annuity writers in the years to come. In particular, holistic or "macro"-based risk management strategies are emerging as companies become better equipped to aggregate risk across the enterprise and across risk lenses. The best practice companies are investing significantly in building out ERM tools and capabilities with scale and efficiency to enable ERM to be more tactical and strategic. Once the tools are in place, the ERM function will be better equipped to drive strategy analysis forward by producing timely and comprehensive data for management discussion.

With regard to insurance risk, one area of challenge often cited is policyholder behavior risk, which covers policyholder actions as a function of market performance (and would cover excess lapses that are due to changing market environment). The issue is particularly relevant in the context of trying to gauge the very real possibility of a sudden interest rate spike, and how it may impact a deferred annuity portfolio with surrender options. Outside of this area, insurance risk is monitored and managed very well by the industry. Some feedback from participants on this topic is shown in the sidebar below.

Participant Feedback

"It is extraordinarily important to think about how policyholder behavior links to market risks."

"We believe our mature, long-standing reinsurance relationships stand us in very good stead for continued, long-term effective management of our mortality exposures."

"We are looking very carefully at using Predictive Analytics, as a supplement to our traditional experience studies, especially in the context of helping us to better understand our exposures to anti-selective policyholder behavior."

"We are in the process of revisiting our dynamic excess lapse functions to get increased comfort that they represent the tails of the distribution better, especially in the context of extreme and sudden upward interest rate movements."

"In the absence of credible recent history of how policyholders may react in a spiked rate environment, we are relying more on stress testing as a means of assessing what our tail risk exposures are. For example one extreme stress we use is to look at the performance of the business assuming 60% lapse over a 3-year period."

CAPITAL

Internal capital is a valuable tool in the ERM toolbox. It provides an opportunity to demonstrate discipline and expertise around own risk assessment and serves as a foundation for risk-informed decisions and achieving risk efficiencies.

As summarized in Figure 4, a variety of methodologies, e.g., one-year value-at-risk (VaR) versus run-off, are in use in the industry and there are good justifications for their existence, reflective of different corporate structures, philosophies, and what companies view as important. Having an "internal view" of capital, and using this as part of the strategic decision making process, will help ensure a company makes decisions that bring about outcomes that are in line with what is important for the company and genuinely creates enterprise value.

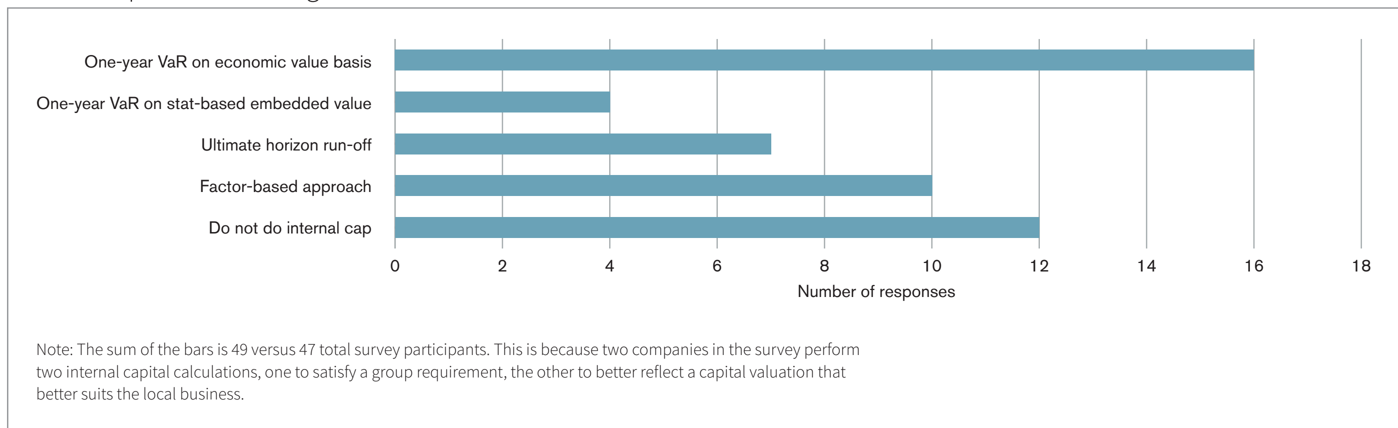
A recurring message from CROs is that they would like to see more sophisticated internal capital analytics produced much more quickly, e.g., on-demand stress testing of capital. We see this as a fast developing area for ERM in the next few years, with advances in making the internal capital production process more efficient and hence making the delivery of numbers more timely, which in turn facilitates broader usage of internal capital in driving management decisions.

As a second line of defense, ERM functions require their own tools and technology to be effective. Moreover, the strategic role of ERM means that tools need to extend beyond having a pure risk monitoring function and into support for strategy analysis. For example, a truly effective tool might enable a company to test alternative product or investment strategies for

different risk/ return metrics, including economic capital (EC) and a variety of constraints, all done in a timely enough fashion to be useful.

A number of companies surveyed are in the process of reviewing their system requirements around ERM but acknowledge it may take a number of years to get where they ideally need to be. That said, the developments are encouraging for the industry in terms of the new technology emerging and the investments being made in this area.

Figure 4
Internal Capital Methodologies



Note: The sum of the bars is 49 versus 47 total survey participants. This is because two companies in the survey perform two internal capital calculations, one to satisfy a group requirement, the other to better reflect a capital valuation that better suits the local business.

STRESS AND SCENARIO TESTING

Stress and scenario testing is an essential component of the ERM arsenal and has the advantages of relative simplicity and transparency, which aids communication. Companies identify such analysis as being invaluable for senior management's understanding of risk issues and general buy-in to ERM matters.

Federal Comprehensive Capital Analysis and Review (Fed CCAR) stress-testing requirements have driven the systemically important financial institutions (SIFIs) to raise the bar on stress testing. However, there is also overwhelming evidence that the remainder of the industry is following suit to expand analytics in this area. Indeed, many insurers are now examining the financial implications of the Federal Reserve's scenarios, even though they have no regulatory obligation to do so, and going well beyond in terms of the variety of stress and scenario tests.

Stress and scenario tests are often used to set risk appetite and establish appropriate limits for a business. Looking ahead, improvements can be expected in the areas of formalizing the stress testing process and wider usage in strategic decision making. We can also expect to see more analysis done around operational risk stresses, reverse stress testing (i.e., identifying the types of situations that could lead to risk tolerance breaches or a certain amount of financial pain), and combination stresses (e.g., pandemic in combination with severe recession).

GOVERNANCE AND COMMUNICATION

Best practice firms ingrain a deep risk culture throughout the corporation and establish risk processes that facilitate communication of risk information across the business. A successful ERM program is founded on a risk culture that starts with board buy-in, hence setting "the tone from the top," and runs right through the organization, "down to the call center."

Participant Feedback

"How many people do we have working in ERM? Well, we have an independent risk function of 20 people, but actually we have thousands of people actually working in ERM. Risk management simply runs throughout the fiber of the organization. We are all practicing ERM, every day."

It is common for insurers to discuss ERM as part of a three-lines-of-defense model, as depicted in Figure 5. However, ERM needs to be viewed as a lot more than part of a defensive strategy, and the successful companies of the future will be giving ERM much more of a strategic role.

Figure 5
The Three-Lines-of-Defense Model

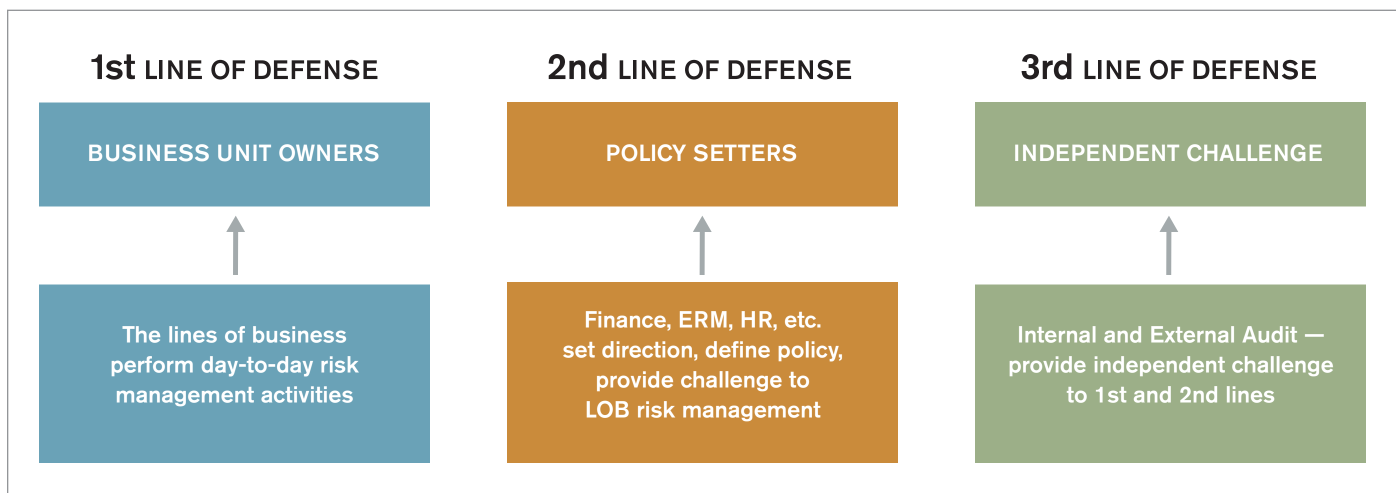
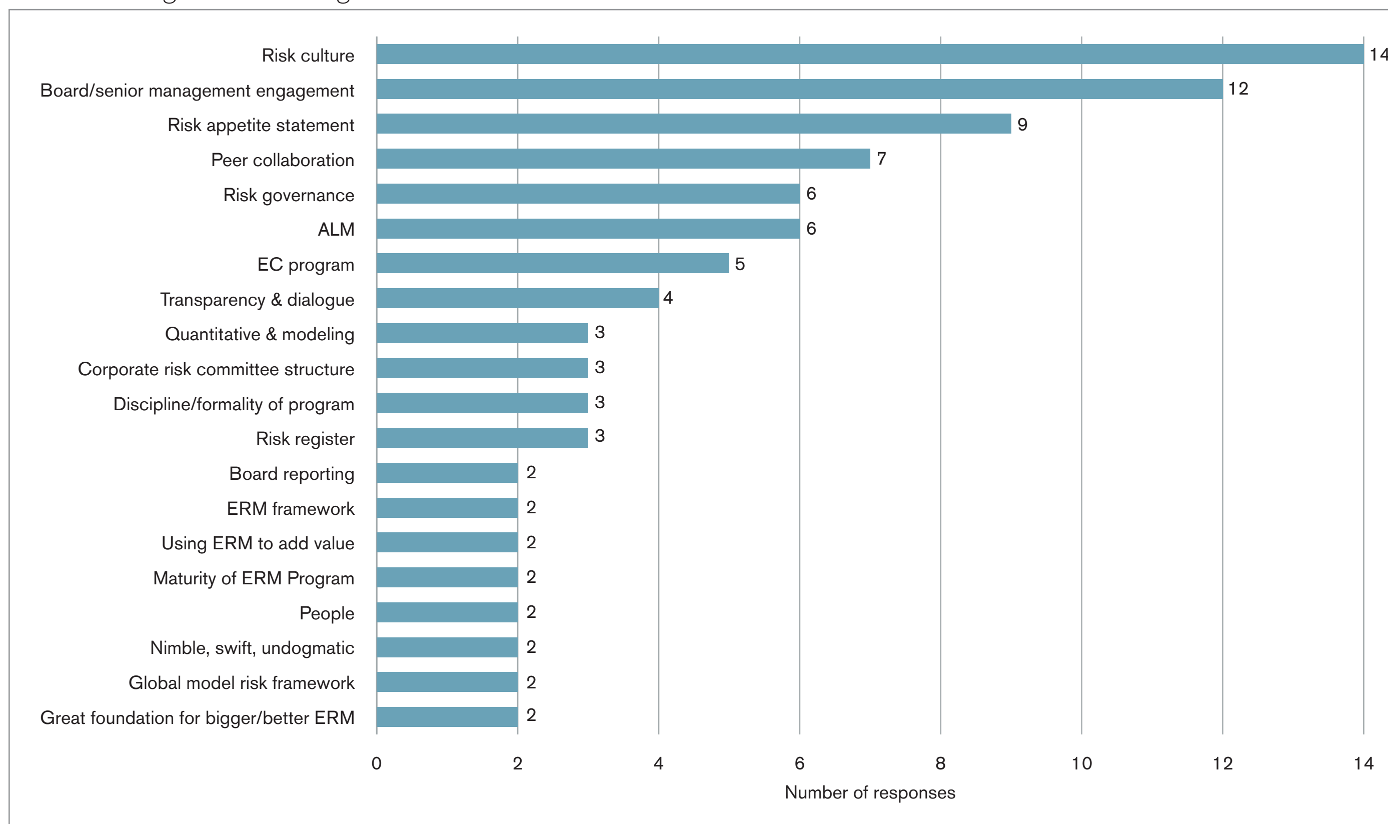


Figure 6
Relative Strengths of ERM Program



The U.S.-specific version of Own Risks Solvency Assessment (ORSA), now required in 2015 by the majority of state regulators, is generally viewed by the industry as a very positive regulatory development. For many, in practice, ORSA has been simply a documentation consolidation exercise, to capture the ERM work of the organization in one place (which indeed many companies were already doing before the regulators required it of them).

But for other companies, ORSA has helped focus attention on ERM, and especially demanded that companies think carefully about how to view their businesses on an aggregated basis. Even for those companies that may have already been on top of the issues, the benefits of formalizing the processes and having a single reference has proved tremendously useful. In particular, for many, ORSA has proved to be an invaluable internal educational tool, helping get a broader understanding of ERM across the firm and hence fostering a strong corporate risk culture.

LOOKING AHEAD

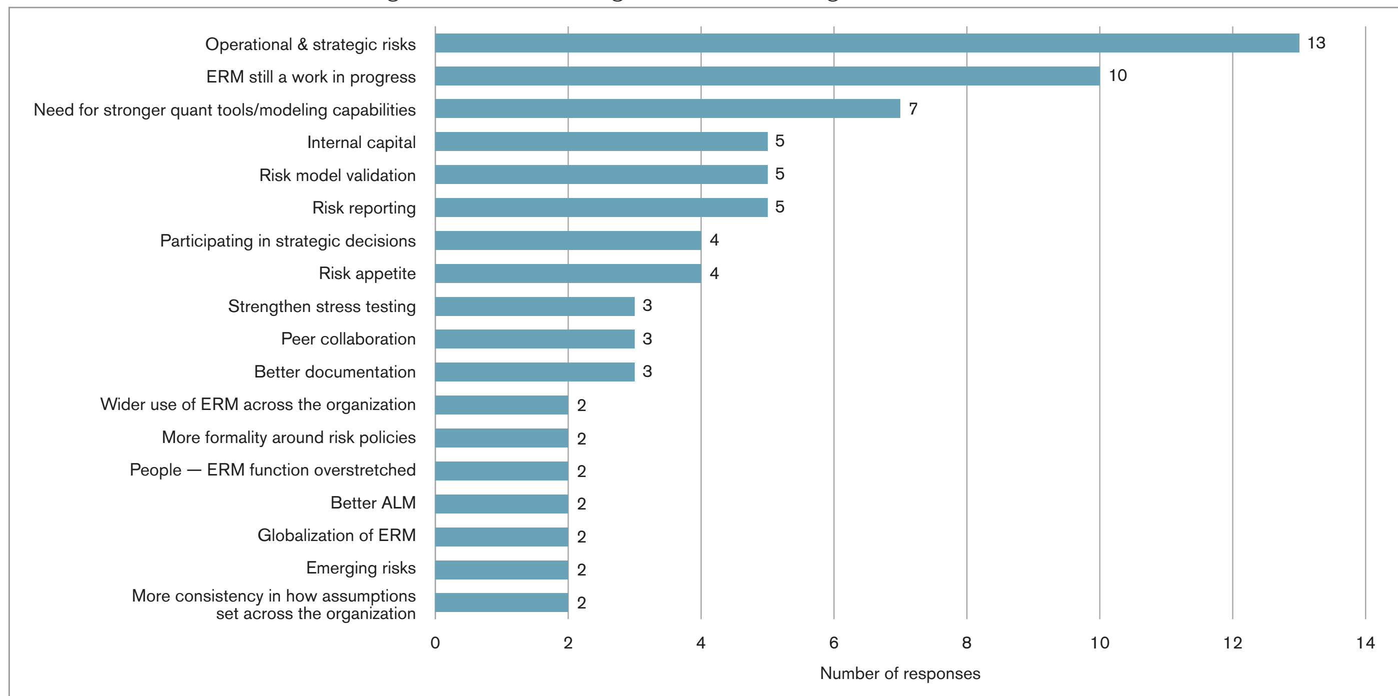
Survey participants were asked to discuss what they perceived to be strengths and weaknesses of their current ERM programs. A number of recurring themes emerged in response, and the charts in Figures 6 and 7 summarize some of those common themes.

As a general point, a number of companies specifically mentioned that their ERM programs were "still a work in progress," reminding us that ERM remains an area of practice in the U.S. insurance industry that is still in fledgling form.

Reference to "Peer Collaboration" in the charts (for seven companies a highlighted strength and for three companies a highlighted weakness) refers to ERM working collaboratively with other parts of the company, and the extent of buy-in to ERM around the organization.

For a copy of the full research report, please contact the authors. ■

Figure 7
Relative Weaknesses of ERM Program: Areas Looking to Enhance Going Forward



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ENDNOTE

[1] The 47 companies participating in the survey represent a broad spectrum of types of insurer across the industry: from very large to very small; companies with some overseas business versus U.S.-only; U.S.-owned versus international owned; life & annuity only versus multiline; public listed versus mutual; and direct writer versus reinsurer. Therefore, the survey reflects a good representation of the state of ERM in industry overall.