AN ECONOMIC PERSPECTIVE TOWARDS SPECIFICITIES OF RISK MANAGEMENT IN INSURANCE SECTOR

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Abstract - Increasingly, insurers are facing a variety of strategic risks—emerging threats that could undermine assumptions at the core of a company's value proposition and foundational business model. Innovative technologies and new competitive paradigms are impacting nearly every area of business—rapidly and radically. Armed with a strategic risk management (SRM) framework, insurers can proactively navigate these rough waters as the tides change. The potential for companies and industries to be disrupted and perhaps even displaced by transformational trends in technology, the economy, and consumer preferences is on the rise in today's rapidly evolving, increasingly digitized economy. Insurance is facing such strategic risks—emerging threats that can undermine the core assumptions of a company's value proposition and operations. Unlike most other industries, risk management is already a core function of insurance companies and many carriers have already adopted enterprise risk management (ERM). However, these programs are not traditionally designed to address strategic risks that are disruptive to an insurer's value proposition or business model, and which are generally difficult to foresee, measure, and minimize. To more effectively cope with game-changing technologies and new competition from nontraditional sources, insurers should consider adopting strategic risk management (SRM) as a holistic framework to not only help them manage the potential downside of disruptive risks, but also perhaps achieve faster growth by better preparing them to capitalize on the resulting opportunities. While the disruptive threats carriers face may be transformational, a transition to SRM actually represents a natural next step in an insurance company's risk management maturity curve.

Keywords - Risk Management, Insurance Sectors, Strategic Risk Management, Technology

I. INTRODUCTION

The potential for individual companies and entire industries to be disrupted and perhaps even displaced by transformational trends in technology, the economy, and consumer preferences is on the rise in today's rapidly evolving, increasingly digitized economy.

Insurance is one of many sectors facing such 'strategicrisks'—which Deloitte Advisory1 defines as emerging threats that could conceivably undermine assumptions at the core of a company's value proposition and foundational business model.[1] However, there is also a more positive flip side to strategic risks, as those that anticipate and adapt in time may have an opportunity not just to survive but to thrive in the new environment. On the other hand, those that fail to detect disruptive risks on the horizon, or ignore the warning signs, might be hard put to remain competitive against more proactive players.

The heightened pace of change in today's economy and society should prompt more insurance industry leaders to move out of their comfort zones and prepare to transform the way they develop, underwrite, and price products, as well as how they target prospects, service customers, and recruit appropriately skilled talent.

To more effectively cope with game-changing technologies and new competition from nontraditional sources, insurers should consider adopting Strategic Risk Management (SRM)as a holistic framework to not only help them manage the potential downside of disruptive risks, but also perhaps achieve faster growth by better preparing them to capitalize on the resulting opportunities.

While the disruptive threats carriers face may be transformational, a transition to SRM—rather than being aradical departure—actually represents a natural next step in an insurance company's risk management maturity curve.

The financial crisis of 2008 exposed important vulnerabilities in the banking sector. In its aftermath, considerable academic effort has been devoted to better understanding banking risks, and policymakers around the world are developing new regulations to contain those risks. Insurance industry is always dealing with the maximum risk , challenges, including disruptive new technologies, a changing competitive field and ongoing regulatory revisions. The flip side to every one of these challenges is opportunity. And opportunity is the value inherent in risk.

To effectively manage risk and seize the opportunity within every challenge, institutions must manage a variety of business dimensions. The answer is to focus on maximizing digital capabilities, building ongoing expertise, driving fluid collaboration, developing top-notch analytics and fostering a culture that can withstand disruptive change Entrepreneurs at new businesses often have a number of responsibilities on their shoulders. They are charged with hiring new employees, identifying and selling their products or services to new customers, finding sources of financial backing, looking for workspaces

[1] Deloitte Development LLC, "Deloitte on disruption: Changing course in a disruptive world," October 2014.

that can accommodate their needs and many other tasks.

As such, it's no secret that small and nascent companies often have difficulty with risk management. This is especially the case if entrepreneurs happen to be young, such as Facebook founder Mark Zuckerberg, who found his college venture blowing up into a global phenomenon within just a few years. Young people tend to be even more unaware of business risks due to their lack of experience, which can make the prospect of keeping a company safe even more complicated.

As Risk Management Monitor noted, there are a lot of obvious risks for any new enterprise and business owners may be savvy enough to mitigate them. However, there are many more that may not be immediately obvious to entrepreneurs. Unfortunately, these are the threats that may take the heaviest toll on an organization. On top of some deft risk assessment and identification programs, young business owners may also want to consider purchasing insurance as a way to mitigate damage that these unforeseen threats can cause.

II. A CLOSER INVESTIGATION OF STRATEGIC RISK MANAGEMENT IN INSURANCE INDUSTRY

The insurance industry's core business is to understand, manage and carry risk. Through risk prevention and risk reduction and by sharing risks over many shoulders, the insurance industry helps protect society, fosters innovation and underpins economic development. As risk managers, risk carriers and investors, the insurance industry has a vital interest and plays an important role in fostering sustainable economic and social development.1

The risk management process in insurance spans a continuum of activity—from identifying, assessing, preventing and reducing risk—to pricing, carrying and diversifying risk. When unexpected losses arise, insurance helps communities cope with the financial hardship associated with them.

The risk management process in insurance mirrors the continuum of activity in disaster risk management—from understanding, assessing preventing and reducing disaster risk—to disaster response and relief, disaster recovery, and disaster risk financing.

For this reason, the insurance industry is actively involved in managing disaster risk, whether it stems from natural hazards (e.g. cyclones, earthquakes, floods, droughts), biological hazards (e.g. epidemics, animal and insect infestation) or technological hazards (e.g., industrial pollution, factory explosions, transport accidents). This includes disaster risk from a combination of hazards (e.g. natural and technological hazards).

The insurance industry plays a critical role in providing financial protection and security toat-risk communities to support, and preserve the gains of, social and economic development.In 2015, global economic losses due to natural disasters amounted to USD 131 billion, which represents almost 2% of GDP, with USD 37 billion of these losses being insured. The insurance industry is finding new ways to respond to the diverse needs of individuals, government and commercial enterprise.

The fundamental objective of any risk management discipline is to anticipate future threats and prevent or at least minimize potential losses. Risk management is already a core function of insurance companies since, unlike most other industries; carriers are in the business of assessing and covering potential worst-case scenarios. Indeed, to cope with the increasingly complex business environment, insurers have continued to enhance their internal risk management practices by incorporating more sophisticated data-analysis tools and technologies to better support underwriting, pricing, and claims management, as well as to hedge investment risks.

However, traditional risk management among insurers primarily focuses on

1. The risks they are underwriting;
2. The adequacy of their reserves and reinsurance to cover potential losses; and
3. Managing risks in their investment portfolio.

To overcome the limitations of traditional risk management and expand their loss control capabilities, in recent years many carriers (along with a good number of their clients) have adopted Enterprise Risk Management (ERM), encompassing a much wider range of exposures and stakeholders. According to Deloitte To uche Tohmatsu Limited's (DTTL) 2015 Global Risk Management survey, 95 percent of insurance company respondents either have an ERM program in place or are in the process of implementing one.[2]

ERM goes beyond individual business units to enable carriers to develop a comprehensive mechanism to identify, measure, and mitigate organization-wide exposures, such as currency fluctuations, political and reputational risks, and compliance challenges.

However, with the traditional or ERM approach, the goal is to protect the company against tangible, knowable, and measurable risks that might arise during the normal course of business, relying on historical data to develop future mitigation strategies. Such traditional loss-control programs are not designed to address strategic risks that are disruptive to an insurer's essential value proposition or fundamental business model, and which are generally difficult to foresee, measure, and minimize. This is borne out by the findings of DTTL's 2015 Global Risk Management survey, in which about four in 10

[2]"Global risk management survey, ninth edition," Deloitte University Press, May 13, 2015.

insurance respondents said they found identifying and managing new and emerging risks extremely or very challenging.[3] This could be one of the primary reasons why strategic risks have fallen between the cracks at many insurers.

In addition, ownership of such exposures is often not clear. Do they come under the purview of those responsible for setting strategy? Is it the responsibility of senior management and the board, or line-of-business managers to scope out strategic risks and prepare the company to respond? As we discuss later in this paper, adding an SRM mindset and implementation structure is essential for insurers to answer such questions and deal with potentially disruptive threats.

Another factor hindering recognition and response efforts is that while insurers have gained considerable expertise in managing and monetizing insurable risk, the exposures they generally deal with are largely those arising in the normal course of business, with the maximum downside potential generally measured in terms of achievement of planned profitability goals. What about the risks that emerge from outside their lines of business or even their industry, in terms of changes in the way their products or services are conceived, sold, accesssed or maintained?

Such disruptive developments could end up undermining or perhaps destroying the value of a particular insurance company's core function and business model. They might even threaten the viability of an entire subset of the industry.

These existential threats fall within the emerging discipline of SRM. There have been many instances in various industries illustrating the potential consequences of failing to recognize and manage strategic risks. One prime example is the disruption of the video rental business, culminating in the dramaticcollapse of Blockbuster, once the industry leader. Blockbuster achieved rapid growth due to its differentiated strategyof offering a wide selection of films at large retail outlets, including localized movie catalogues based on neighborhooddemographics. Blockbuster dominated the video rental market until Netflix found a way to change the game by allowingcustomers to choose movies online and then delivering selected DVDs directly to a customer's home via the US PostalService. As Michael Raynor, director at the Deloitte Center for Integrated Research, notes in his chapter in a new bookabout ERM,[4] "Blockbuster is no more not because it failed to grapple with the risks associated with its internal context,but because it failed to assess correctly a specific risk in its external context, specifically the risks of and to its strategy."

Later on, Netflix overcame its own strategic risks by streaming movies and TV shows directly to consumers over the Web, as well as by producing its own content rather than just distributing the work of others.

The Blockbuster example highlights the nature and sources of strategic risks and illustrates how SRM differs fromoperational and enterprise risk management in two fundamental ways.

- For one, SRM primarily addresses potentially disruptive changes in society, technology, and/or the economy, posingpotentially overwhelming competitive threats.
- The second and perhaps most important distinction with SRM is that traditional risk management and ERM generally don't address the potential upside of risk, while strategic risks usually have a "flip side," in that they often come with an opportunity to achieve significant growth and differentiation if accounted for effectively and in time.

The question for insurance carriers is whether they are prepared to recognize the presence of similar existential threats arising in their own industry, as well as respond quickly and effectively once they do. Insurance carriers should be scanning and reacting to "what if" scenarios that may be taking shape in their business landscape, undermining assumptions about how they design their products, engage with customers, and/or deliver their services.

III. LACK OF INSURANCE

Although it's easy to perceive insurance as a cost, in reality, it's probably one of the biggest value adds to any business. Devastating events such as natural disasters can single-handedly bring a business to its end, quickly and without any prior warning. Insurance can effectively minimize the damage cause by these unforeseen events, which in some instances can mean saving a company from having to close its doors – that's a tremendous amount of value.

However, many small businesses and young companies are often underinsured. As NBC News notes, this is for two reasons: First, they may not have the capital to acquire all the insurance they need to cover their bases. Second, they are unaware of what they need to insure and don't take stock of their insurance needs regularly, so their companies outgrow their coverage.

"One of the biggest lapses is in the area of business interruption insurance," Clair Wilkinson, vice president at the Insurance Information Institute, explained to the news source. "This kind of coverage, which you might need to buy separately from a standard business insurance package, can be critical after a natural disaster, fire or power failure that shuts

[3] Ibid.

[4] Michael E. Raynor, "The Risks 'of' and 'to' a strategy: The case of Blockbuster and the need for strategic flexibility," Enterprise Risk Management: A Common Framework for the Entire Organization, Butterworth-Heinemann; 1st edition (September 2015).

your business down. Business interruption insurance covers lost profits and operating expenses, such as salaries, that must still be paid even when a company can't operate."

The Perks of Insurance to Risk Management

For young businesses, insurance should be a crucial cornerstone in risk management programs because it brings so much to the table. Risk Management Monitor recently discussed some of the core benefits of risk management:

Protection from financial loss – For young businesses, a multitude of things can go wrong, from natural disasters to theft and burglary. Insurance can be a key tool in preventing financial losses in the early stages of the game. When companies have small budgets, even having to buy a new laptop because a thief stole one from the office can be devastating.

Better reputation – New businesses are always looking for financial support, whether it's from angel investors or banks. Having insurance reflects well on the company and makes the owner look responsible, which can help secure that necessary loan or investment.

Improve liability – General liability insurance protects entrepreneurs against unforeseen everyday threats, whether it's someone slipping on their floors or getting their fingers jammed in the door on the way out. There are only so many things businesses can prepare for, liability insurance helps entrepreneurs prepare for the rest.

Implications for Insurance Regulation

A common theme of our work is that regulation has major effects on all important functions of the industry, including pricing, underwriting, reinsurance, product design and investment activity. Therefore, regulation is not only important for our understanding of insurance markets; it must be properly designed to ensure both efficient function and future stability of the sector. Two institutional features of the insurance sector introduce unique challenges to its regulation.

First, insurance companies can take significant risk on the liability side, as demonstrated by the rapid growth of variable annuities and captive reinsurance over the past 15 years. These risks developed due to accounting standards and capital regulation that are less developed and more inconsistent than the asset side of the balance sheet. Much improvement is necessary with respect to accounting standards and capital regulation for guaranteed investment products and captive reinsurance.

Second, life insurance liabilities are not prone to runs in most countries. Therefore, capital requirements that apply to banks, especially short-term risk constraints designed to prevent runs, may not be appropriate for insurance companies. In fact, short-term risk constraints can actually increase the long-term risk of insurance companies, if asset markets are mean reverting (i.e., high returns follow low returns, on average). We believe that insurance companies should be evaluated based on long-term value-at-risk measures that are extensions of short-term measures for banks.

Of course, measurement of long-term risk is challenging and potentially sensitive to reasonable variation in modeling assumptions. A fundamental problem with the insurance industry is that no one knows the market value of liabilities, and the data necessary for doing such a calculation are far from complete in the public financial statements. We see the recent trend toward captive reinsurance as a step in the wrong direction. Complete and transparent financial statements are essential for rating agencies, investors and academics.

Finally, we would like to see more active discussion between academics and regulators on the costs and benefits of regulation. Tighter capital regulation reduces the likelihood of failure, but it also raises prices and shrinks the size of consumer financial markets. These effects can be large. For example, we estimate that in the absence of shadow insurance, life insurance prices would rise by 18 percent and the life insurance market would shrink by 23 percent (Koijen and Yogo 2014). We hope that our findings will contribute to the current policy debate on whether to ban shadow insurance as well as impose new capital requirements for systemically important insurance companies under the Dodd-Frank Act.

Implications for Global Insurance Markets

The same risk factors that we have identified in the United States are present in other countries. Life insurers in continental Europe (e.g., Germany and Italy) and Japan have sold large amounts of guaranteed investment products. The low-interest-rate environment poses a severe challenge for these life insurers.5 Since their liabilities are not marked to market, neither the existing losses nor future risks are immediately transparent.

The European reinsurance market is large, but the data necessary for measuring the size of the shadow insurance sector are not publicly available. Under the 2005 Reinsurance Directive, reinsurers can domicile anywhere in the European Union and can assume reinsurance from any other country. For capital and tax reasons, many reinsurers are domiciled in Luxembourg and Ireland. It is not yet clear how Solvency II, the new European regulation planned for 2016, will address potential loopholes in capital regulation.

CONCLUSION

Being proactive rather than reactive in dealing with strategic risks has become an imperative in this rapidly evolving economy and culture. At a minimum, the radical pace at which innovative technologies and new competitive paradigms are penetrating and disrupting nearly every area of

business is likely to challenge the fundamentals and standard operating procedures of the insurance business more than ever before.

Insurers, therefore, should be preparing to respond to such strategic-risk events with a non-traditional approach. They can start by establishing an SRM discipline throughout their organization.

By building SRM capabilities, insurers can institutionalize processes to spot and manage strategic risks in time to make a course correction, while improving the odds of not only catching a disruptive trend before the competition does, but also before it threatens to overwhelm their business model. Meanwhile, SRM changes the mindset from defense to offense, by identifying opportunities to grow rather than just fend off emerging threats.

The alternative is to deal with strategic risk on an ad hoc basis, which could result in a carrier being caught unaware of a potential existential threat on the horizon, or at least undermine an insurer's ability to respond in a systematic way—not only to ward off the challenge, but to capitalize on it.

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