

# Integrating Risk and Value for Improved Decision Making in Indian Insurance Sector

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## ABSTRACT

*The increasingly competitive and constantly changing nature of the financial services industry is beginning to drive many insurance companies to move beyond traditional profitability measures to more sophisticated value models based on cash flows and modern portfolio theory. At the same time, increased volatility in the global financial markets has spurred significant efforts to improve risk management practices. In most insurance companies, however, these two developments are occurring independently, without co-ordination and often with inconsistent and potentially conflicting approaches. This article explores the integration of risk management with managing for value. It discusses how a risk measurement and management framework can be integrated with value analysis to improve management decision-making. It also presents an approach for incorporating these risk and value management concepts into an insurer's day-to-day business operations. This framework is a practical guide to assist public service employees in their decision-making. At the organizational level, it will help departments and agencies to think more strategically and improve their ability to set common priorities. At the individual level, it will help all employees to develop new skills and will strengthen their ability to anticipate, assess and manage risk.*

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## Introduction to Risk

Risk is unavoidable and present in virtually every human situation. It is present in our daily lives, public and private sector organizations. Depending on the context, there are many accepted definitions of risk in use. The common concept in all definitions is uncertainty of outcomes. Where they differ is in how they characterize outcomes. Some describe risk as having only adverse consequences, while others are neutral. While this Framework recognizes the importance of the negative connotation of outcomes associated with the description of risk (i.e., risk is adverse), it is acknowledged that definitions are evolving. Indeed, there is considerable debate and discussion on what would be an acceptable generic definition of risk that would recognize the fact that, when assessed and managed properly, risk can lead to innovation and opportunity. This situation appears more prevalent when dealing with operational risks and in the context of technological risks. For example, Government On-Line (GOL) represents an opportunity to significantly increase the efficiency of public access to government services. It is acknowledged in advance that the benefits of pursuing GOL would outweigh, in the long term, potential negative outcomes, which are foreseen to be manageable.

## Creating Value

Creating **Value** is the central task of any manager, but it requires a strong understanding of financial

management. You need to know where value comes from in your enterprise and understand the strategic factors that build value or erode it. Every strategic decision you make has implications for value creation. But to understand these strategic implications, you need to gain a deeper understanding of finance.

*Creating **Value** through Financial Management* will help you understand the latest corporate financial policies and practices. Instead of spreadsheets and accounting, this program takes a broader perspective on finance. You will explore issues such as capital structures, cost of capital, diversification, risk, capital budgeting, financial policy, the financial implications of nonfinancial decisions, and how to earn the minimum acceptable rate of return on an investment. You'll also examine the nonfinancial factors that contribute to value and learn how to evaluate the financial consequences of your decisions.

## Concept of Integrated Risk

The Integrated Risk Framework advances a citizen focus by strengthening decision-making in the public interest and placing more emphasis on consultation and communication. Similarly, it respects core public service values such as honesty, integrity and probity at all levels, and contributes to improved results by managing risk proactively. Integrated risk management also supports a whole-of-government view grounded in rational

priority setting and principles of responsible spending.

The need for more affordable and effective government combined with trends towards revitalizing human resources capacity and redesigning service delivery are dramatically affecting the structure and culture of public organizations. The faster pace and need for innovation, combined with significant risk-based events from computer failures to natural disasters, has focused attention on risk management as essential in sound decision-making and accountability. The increasingly competitive and constantly changing nature of the financial services industry is beginning to drive many insurance companies to move beyond traditional profitability measures to more sophisticated value models based on cash flows and modern portfolio theory. At the same time, increased volatility in the global financial markets has spurred significant efforts to improve risk management practices. In most insurance companies, however, these two developments are occurring independently, without co-ordination and often with inconsistent and potentially conflicting approaches. This article explores the integration of risk management with managing for value. It discusses how a risk measurement and management framework can be integrated with value analysis to improve management decision-making. It also presents an approach for incorporating these risk and value management concepts into an insurer's day-to-day business operations.

## **Integrating risk and value**

- At PricewaterhouseCoopers (PwC) LLP - **Limited Liability Partnership** we have observed that insurers are faced with a strong and immediate imperative to enhance existing risk and value measurement systems to bring them on par with those employed within other sectors of the financial services industry such as banking and capital markets. As shown in diagram 1, current management reporting is focused on historical information but does not support forward-looking decision making. At the other end of the spectrum lie institutions that have adopted such models based on projected cash flows, but many of these do not adequately consider the risks taken to generate those cash flows.
- Given the inextricable link between risk management and value creation, insurers need to acknowledge and address the interdependent issues pertaining to methodology, practice and implementation. Only then are these institutions likely to derive the full benefits of risk management and value creation programmes and ultimately meet their overarching objective of increasing the wealth of corporate owners.
- Risk management is the process of identifying, acknowledging, communicating, measuring and managing all risks associated with day-

to-day business activities. An effective framework for managing risks ensures full identification and awareness of significant risks, which are then measured in a consistent manner across asset classes and businesses. A proper set of management controls for non-quantifiable risks should also form part of this framework. Furthermore, it should link risk-taking activities to capital consumption and performance evaluation at various levels – product, customer, profit centre, business unit and enterprise.

- Risk-adjusted performance measurement (RAPM) links the business mission and corporate objectives of the insurer to the results of its risk-taking and forms the basis for reaffirming or redefining insurers' strategies. Risk identification and measurement are not limited to a single measure. Rather, an organization uses multiple measures that allow for comprehensive and consistent risk assessment in the context of the objectives, volume and complexity of the activities being conducted. However, consistency is a key attribute of RAPM and risks should therefore be aggregated meaningfully within and across risk types and organizational levels.
- Value-based management is a decision making process based on corporate financial

analysis of cash flows. It enables management to make decisions focusing on the maximisation of the risk/return relationship and long-term value creation. Value creation is measured by comparing a business' return to its cost of capital on a risk-adjusted basis.

- Value-based management, on the other hand, is forward looking. It focuses not only on what the business looks like today, but also what it is projected to look like in the foreseeable future. The integration of value-based measurements with traditional RAPM establishes a framework to support a wide range of managerial decisions, ranging from everyday operations to major strategic initiatives. Value drivers are identified, defined and measured, which, in aggregate, are used to allocate resources, reward performance and develop strategic plans. The value-based process provides a basis for management to answer questions about maximizing its overall value. For instance:
  - I. Which parts of the businesses add value?
  - II. What return is acceptable given the risks encountered?
  - III. What key measures should be employed to assess and monitor performance?
- Value-based management provides a mechanism to understand the operational and financial value drivers that matter most

to value creation. Value is determined by the discounted value of all future free cash flows. These cash flows are linked to measurable financial value drivers that can be evaluated at the enterprise level. The cash flows can also be “drilled down” to risk and performance measures by line of business, product and issue year. The discount rate must incorporate internal and external risk factors affecting the company, which, in turn, determines the risk premium required over the risk-free rate. The value of each business unit is mapped by comparing its value to the risk capital that is required to support it.

- By integrating value-based management through the attribution of risk capital to future cash flows, senior management has a tool for measuring both past performance and future business opportunities using a consistent methodology that considers both risk and return. Drilling this down to the business unit level through a capital attribution and allocation process enables an insurer to differentiate “value-creating” and “value-destroying” business activities and adjust their investment and compensation decisions accordingly.

#### **Highlighting value creation through risk transfer pricing**

- Integrating risk into a value management framework seems easy enough at a

conceptual level, but, in reality, there are many complexities that make it difficult to implement in the daily operations of an insurance company. Risk transfer pricing is one method that insurance companies can use to deal with these complexities.

- The fundamental precept underlying an insurance contract is risk transfer. In an insurance contract, the insured pays premium to the insurer in exchange for transferring the risk associated with the occurrence of a claims-related event. The insurer, in turn, attempts to generate an adequate return on its investment through a combination of appropriate pricing policy, effective investment and expense management, and the law of large numbers. As such, the key to success for insurers, as well as any other financial intermediary, is the optimization of the spread between the price received from customers and the cost of the risk assumed. A critical step in achieving this optimization is the understanding of the dynamics of the price and cost for risk.
- Transfer pricing is a concept that has been employed, albeit to a limited extent, by insurers to monitor the sources and uses of funds generated from risk transfer and management. It is an internal cost allocation/

profit sharing mechanism that attempts to align risk and return within and across business units. Its purpose is to provide detailed information on profitability that can be used for decision making. In an insurance company, many insurance products can be likened to deposit funds that are provided to a clearing house that buys assets from the investment managers. Based on the insurance product risk characteristics, investment parameters are provided to the asset managers. Assets and liabilities are monitored by the clearing house to ensure funding characteristics remain within the transaction parameters for the life of the deposit fund liability. Thus, insurance funds are monitored and managed on a matched funded basis.

- Applying this concept to an insurer unites the asset/liability management and risk management functions in a central organizational unit that provides better information for value-based decision making, as well as reducing volatility with respect to expected cash flows.
- The focal point of the analysis is the spread between the income earned on assets and the cost of liabilities. On a relative basis the spread can be viewed as net margin – the net spread divided by average earning assets.

Net margin provides a basis for managing spreads and identifying the source of incremental profits.

- This equates to an insurance company monitoring its performance on a spread basis, evaluating both investment performance and operating expenses against desired results. The key to effectively implementing this approach is the risk clearing house function. It ultimately tracks all risk and value related performance information in a central and consistent fashion.
- The risk clearing house concept can be applied to monitoring both risk and value. It provides strategic decision support to financial projections, strategic planning and capital allocation as well as business decisions. The clearing house holds data on asset/liability management, product pricing, performance and risk monitoring. The risk information and value components are reported to the clearing house through a matrix of operating and investment risk controls that include policies, procedures and systems. The benefit is a risk communication system that uses a clearing house to communicate risk between operations and senior management. The risks that most influence value are identified and closely monitored, allowing senior management to

focus on and communicate the elements of their business that have the most positive impact on value.

## **Conclusion**

Integrated risk and Value can go a long way towards satisfying stakeholders' decision making around risk management, performance, and capital management and the overall transparency of results. Companies can effectively apply risk and capital management tools to enhance the realization of the business strategy and embed it in performance management. Such an approach is preferred by stakeholders, and is arguably a good way to run the business. Internally, it emphasizes the importance of people and leadership and the need for departments and agencies to more clearly define their roles. The Framework provides a tool that helps organizations communicate a vision and objectives for management of risk based on government values and priorities, lessons learned best practices and consultation with stakeholders. The Framework is a fundamental part of the federal management agenda and Modern Comptrollership. It is designed to support the optimization of resource allocation and responsible spending, paramount for achieving results. It also builds on public sector values, knowledge management and continuous learning for innovation. The Integrated Risk and Value Framework is the first step in establishing the

foundation for more strategic and corporate integrated risk management in departments and in government. In the future, the Framework will be supported by tools and guidance documents as well as complemented by other risk management initiatives.

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