

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 1, February 2022

The Study on the Risk Management in the Insurance Sector

Neeta Sonkar¹, Pawar Radhika², Pol Rohan³

Asst. Professor¹ and TYBCOM^{2,3}

Uttar Bhartiya Sangh's Mahendra Pratap Sharda Prasad Singh College of Commerce & Science, Mumbai, Maharashtra

Abstract: In order to safeguard the interests of investors and their financial assets, general insurance companies have implemented extensive risk management measures over time. The Indian general insurance market's potential and the subsequent attention of participants on achieving business expansion are currently the most crucial considerations for the general insurance industry. The second factor is the continuous process of calibrated de-tariffing. De-tariffing has provided players with many options to access markets and may potentially result in further prospects in the future. However, it has also placed the onus of ensuring equitable pricing on the players themselves. As a result, players in the industry are now more adept at identifying risk indicators and determining the cost of products based on those risks. The players have reduced the prices, even in previously unprofitable businesses, as an initial response to the competitive environment of a free market. The general insurance market places significant emphasis on competent risk assessment and management due to the emergence of private players, regulatory changes, the existence of unprofitable books, and the erosion of capital caused by unsustainable claim ratios.

Keywords: Asset Liability Management, Enterprise Risk Management, General Insurance, Risk Assessment, and Risk Mitigation

I. INTRODUCTION

Every emerging sector faces a multitude of internal and external risks. Conversely, the primary risks in well-established sectors originate from the internal operations of the several entities involved. Rather than being concerned with internal operations, an industry that is undergoing change often encounters more risks due to competition and regulatory factors. In order to attain growth in a highly competitive market, it is essential to focus on increasing sales while rapidly expanding operations through the addition of new distribution channels and broadening the geographical scope. Placing greater importance on sales and expanding the company carries certain risks that can hinder financial performance. These hazards might potentially have an adverse effect on a company's performance or even jeopardize its survival. General insurance enterprises are involved in both insuring others and being insured themselves due to the nature of their operations. It is crucial for the performance of the general insurance business industry to comprehend the external and internal risks associated with it, as well as the tactics employed by insurers and insured parties to effectively mitigate these risks.

II. REVIEW OF LITERATURE

General insurance companies are exposed to operational and financial risks, both for themselves and for the organizations they insure. This is because their business involves providing coverage for the risks faced by other corporate and social entities. The accurate recognition of structural functions, their capacity to be insured, adequacy, and economic feasibility are crucial for achieving success in effectively managing the associated risks. Risk sharing through microinsurance pooling, accurate measurement, and precise estimation of results can help lower the risk associated with an underwritten threat. The understanding of risk transfer in the risk management process is crucial for effectively mitigating and adapting to risks within core business operations. By integrating innovation, certification will enhance the instruments' depth. In order to enhance the reach of general insurance and mitigate the continuously increasing claim ratio, it will be essential to promote collaborations between the public and private sectors, and establish a robust financial, legal, and political structure. In their study, Mendoza and Ronard (2009) propose the Asian





International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 1, February 2022

Rice Insurance Mechanism (ARIM) as a regional risk-sharing framework. This framework might potentially serve as a sustainable solution to address the issue of food security in the Asian region. By providing better support to countries in the region in handling the uncertainties related to the production and trade of rice, which are influenced by variables such as increasing and evolving food demand, ARIM might potentially function as a beneficial resource for the entire region. Lubken et al. (2011) have also addressed the relationship between environmental risk and social, scientific, economic, and cultural processes in their examination of environmental risk, risk management, and uncertainty. They propagate the fallacy that natural disasters are primarily influenced by previous patterns of resilience and vulnerability. In their study, Kunreuther et al. examined how the insurance business helps reduce the impact of global warming and the challenges faced by insurers and reinsurers in adapting their risk management strategies to climate change (2007). The study has focused on the issues of attribution and insurability by specifically examining natural disaster insurance. Phelan et al. (2011) analyzed the efficacy of insurance measures in addressing climate-related risks. They also provided new critiques of the insurance system's response to climate change and the associated political economic viewpoint. Based on a comprehensive understanding of complex adaptive systems, the most effective approach to address climate risks in the medium and long term is through ecologically suitable mitigation strategies. This applies to both the insurance system and human communities as a whole. Akter et al. (2009) have investigated one additional critical factor related to the feasibility of commercial success. The study's findings indicate that the crop insurance market structure in Bangladesh is not homogenous. It emphasizes the importance of thoroughly assessing the socioeconomic characteristics of rural farm communities and the specific disaster risks that farm households encounter when developing an insurance strategy. Mauelshangen& Franz (2011) conducted a study on the attributes of adaptation and decision-making within the insurance industry. They have established correlations between the historical evaluation and contemporary concerns over global warming and strategies for adapting insurance to encompass associated damages. Erdlenbruch et al. (2009) conducted an examination of the impact of the French Flood Prevention Action Programme on the distribution of risk in France. The survey's findings indicated that the proposed regulations may lack commercial feasibility. Next, other feasible risk-sharing alternatives are examined, such as insurance schemes, governmental intervention, and local institutions. Implementing a microinsurance scheme that combines resources from different geographical areas could reduce the amount of money required. Meze-Hausken et al. (2009) conducted a study that suggests spatial pooling could be a beneficial option for micro-insurers when creating index-insurance schemes. This approach should be carefully examined on a case-by-case basis. In addition, Botzen et al. (2009) examined how insurance can mitigate the uncertainty associated with individual losses caused by climate change. Based on the estimation results, there is potential for a profitable flood insurance business, and the sale of flood insurance may become even more lucrative due to climate change. Rohland & Eleonora (2011) have analyzed risk management and risk quantification in the aftermath of fire in both the Swedish and worldwide reinsurance sectors. The report argues that by disregarding the natural causes of fire and the associated risks, classifying fire as solely a man-made hazard distorts its total level of risk.

III. RISKS TO THE INSURANCE SECTOR

Participants in the general insurance industry are susceptible to various financial and non-financial risks, such as capital risk, enterprise risk, asset liability management risk, insurance risk, operating risk, and credit risk, due to the characteristics of their industry and the socioeconomic environment in which they operate.

3.1 Economic risk refers to the potential for financial losses or negative impacts on the economy due to various factors

As the insurance industry is primarily a financial sector, it faces various financial risks such as those related to capital structure, capital adequacy, exchange rates, interest rates, investments, underwriting, catastrophic risk, reserve risk, pricing, claims management, reinsurance, policy holders and brokers, claims recovery, and other debtors. The insurance industry employs diverse strategies to mitigate financial risk, such as interest rate hedging and reserving, which rely on financial modeling. However, these methods are subject to "model risk" as financial models may not accurately forecast actual outcomes within an acceptable margin of error.





International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 1, February 2022

3.2 Non-financial risk refers to the potential for negative outcomes or events that are not directly related to financial factors

The significance of non-financial risk management has grown in recent years due to several factors: a rise in operational losses,

the industry's growing dependence on advanced financial technology, which entails occasional failure risks, the rapid changes in the deregulated insurance system, and

the entry of foreign players facilitated by globalization. In addition to the aforementioned risks, the insurance industry also faces the non-financial risk of "volatility," which can affect the future cash inflows and overall value of the general insurance business.

The reason for this is that the worth of an insurance firm is determined by calculating the current value of its anticipated future cash inflows, taking into account the risks it assumes. Research has indicated that the company's operational activities, rather than financial risks, are a major cause of instability. Hence, the operational risk can arise from either insufficient or inefficient external occurrences such as external fraud and physical asset impairment due to natural catastrophes or other uncontrollable incidents, or from internal procedures such as employment practices, workplace safety, and internal fraud.

IV. RISK MANAGEMENT PROCEDURES OF GENERAL INSURANCE

Within the general insurance sector, the insured's approach to managing risk is commonly referred to as "enterprise risk management," whereas the insurer's strategy normally revolves around "risk-based capital management" and "reserving."

4.1 The insured has executed a risk management strategy

Every organization must diligently strive to mitigate the potential for loss arising from unexpected events such as earthquakes, floods, fires, theft, and similar occurrences. The policyholder must actively implement an efficient risk management initiative to ensure the establishment of a system that reduces and mitigates risks. Enterprise risk management refers to the approach that the insured can employ to effectively handle and control such risks.

4.1.1 Enterprise Risk Management (ERM)

Enterprise Risk Management (ERM) involves the systematic coordination, guidance, and administration of an organization's operations to mitigate the negative effects of risk on its assets and revenue. Enterprise Risk Management (ERM) is rapidly emerging as a prevalent business strategy for effectively handling risk, as regulatory bodies and global markets assess organizations based on their ability to successfully manage risk.

Supervision and documentation of potential hazards

Continuously monitoring risks over time is crucial for evaluating their management and adapting to evolving trends. This is a vital aspect of Enterprise Risk Management (ERM). Comparing them is relatively less important than establishing a consistent baseline that can be used for future reporting periods. The insured must consistently remind others that even if a risk cannot be precisely quantified or compared to others, it should not be disregarded or excluded from the ERM strategy. While it may be difficult to measure the exact financial consequences of a risk, its presence can nevertheless be seen and monitored. A mitigation plan is established after assessing the relative severity and probability of different risks. Under certain circumstances, the implementation of a risk reduction strategy can inadvertently increase the likelihood or severity of another hazard. In such cases, it is crucial to carefully evaluate the trade-off involved.

The primary goal of ERM is to provide optimal protection against adverse occurrences, despite the potential for increased reserve or liability coverage needs for a corporation. An Enterprise Risk Management (ERM) framework might potentially reduce expenses by avoiding the duplication of risk assessment efforts conducted in previous risk management programs. Under ERM, a broader spectrum of risks is expected to be considered.

ISSN 2581-9429 IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 1, February 2022

4.3 Risk mitigation techniques employed by the insurer

The risk management technique utilized by insurers in the general insurance market can be separated into two fundamental categories: "risk-based capital management" and "reserving". The "risk-based capital management technique" category encompasses the management role, capital and solvency margins, and risk-based capital. On the other hand, the "reserve" category of risk management techniques includes unearned premium reserves, unexpired risk reserves, outstanding claim reserves, incurred but unreported reserves, catastrophe reserves, and claims equalisation reserves.

V. CONCLUSION

The objective of the study is to assess the hazards encountered by both the insured and the insurer, specifically in India, and to analyze the strategies employed to efficiently mitigate these risks. The study demonstrates that in India, both the insured and the insurer commonly encounter various types of risks, including both financial and non-financial risks. The financial risks of both entities can be categorized as capital risk, asset/liability management risk, insurance risk, and credit risk. Enterprise risk and operational risk are the classifications for the non-financial dangers they face. Capital structure risk and capital insufficiency risk are components of overall capital risk. Exchange risk, interest rate risk, and investment risk are components of asset liability management risk. Credit risk includes reinsurance risk, risks associated with policyholders and brokers, risks related to claims recovery, and risks associated with debtors. On the other hand, insurance risk consists of underwriting risk, catastrophe risk, reserve risk, and risks related to claims management. The operational risk encompasses several types of risks such as regulatory risk, business continuity risk, IT obsolescence risk, process risk, regulatory compliance risk, and outsourcing risk. Similarly, the enterprise risk includes reputation risk, parent risk, and competitors risk.

Enterprise risk management is a widely used risk management technique in the general insurance market. It involves planning, tracking and reporting risks, implementing tools, and managing risks for the insured. For the insurer, managing risk-based capital and reserving involves several components. Risk-based capital includes the management role, capital and solvency margins. Reserving, on the other hand, encompasses unearned premium reserves, unexpired risk reserves, outstanding claim reserves, incurred but not reported reserves, catastrophe reserves, and claims equalisation reserve.

REFERENCES

- [1]. Akter S, Roy B, Choudhury S & Aziz S (2009), "Is there a commercially viable market for crop insurance in rural Bangladesh" Mitigation & Adaptation Strategies for Global Change, Vol. 14, Issue 3, pp.215-229.
- [2]. Botzen W J, Wouter, Van den Bergh & Jeroen C. J. M. (2009), "Bounded Rationality, Climate Risks, and Insurance: Is There a Market for Natural Disasters?" Land Economics, Vol. 85, Issue 2, pp.265-278
- [3]. Cottle & Phil (2007), "Insuring Southeast Asian commercial forests: Fire risk analysis and the potential for use of data in risk pricing and reduction of forest fire risk" Mitigation & Adaptation Strategies for Global Change, Vol. 12, Issue 1, pp.181-201,
- [4]. DeMeo, Ralph A E, Carl U, Leslie A, Scruggs & Lynn S. (2007) "Insuring against environmental unknowns" Journal of Land Use & Environmental Law, Vol. 23 Issue 1, pp.61-86.
- [5]. Dlugolecki, Andrew, Hoekstra & Erik (2006) "The role of the private market in catastrophe insurance", Climate Policy (Earthscan), Vol. 6, Issue 6, pp.648-657.
- [6]. Erdlenbruch K, Thoyer S, Grelot F, Kast R & Enjolras G (2009), "Risk-sharing policies in the context of the French Flood Prevention Action Programmes" Journal of Environmental Management, Vol. 91, Issue 2, pp.363-369.
- [7]. Kunreuther, Howard C, Michel K & Erwann O (2007), "Climate change, Insurability of large scale disasters and the emerging liability challenge" University of Pennsylvania Law Review, Vol. 155, Issue 6, pp.1795-1842.
- [8]. Lubken, Uwe, Mauch & Christof (2011), "Uncertain Environments: Natural Hazards, Risk and Insurance in Historical Perspective"Environment& History, Vol. 17, Issue 1, pp.1-12.





International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 1, February 2022

- [9]. Mauelshagen& Franz (2011), "Sharing the Risk of Hail: Insurance, Reinsurance and the Variability of Hailstorms in Switzerland, 1880-1932" Environment & History, Vol. 17, Issue 1, pp.171-191.
- [10]. Mendoza & Ronald U (2009), "A Proposal for an Asian Rice Insurance Mechanism", Global Economy Journal, Vol. 9, Issue 1, pp.1-31.
- [11]. Meze H, Elisabeth, Patt, Anthony, Fritz & Steffen (2009), "Reducing climate risk for micro- insurance providers in Africa: A case study of Ethiopia" Global Environmental Change Part A: Human & Policy Dimensions, Vol. 19, Issue 1, pp.66-73.
- [12]. Owen R, Baxter D, Maynard T & Depledge M (2009), "Beyond Regulation: Risk Pricing and Responsible Innovation" Environmental Science & Technology, Vol. 43, Issue 18, pp. 6902- 6906.
- [13]. Phelan, L (2011), "Managing climate risk: extreme weather events and the future of insurance in a climatechanged world" Australasian Journal of Environmental Management, Vol. 18, Issue 4, pp.223-232.

