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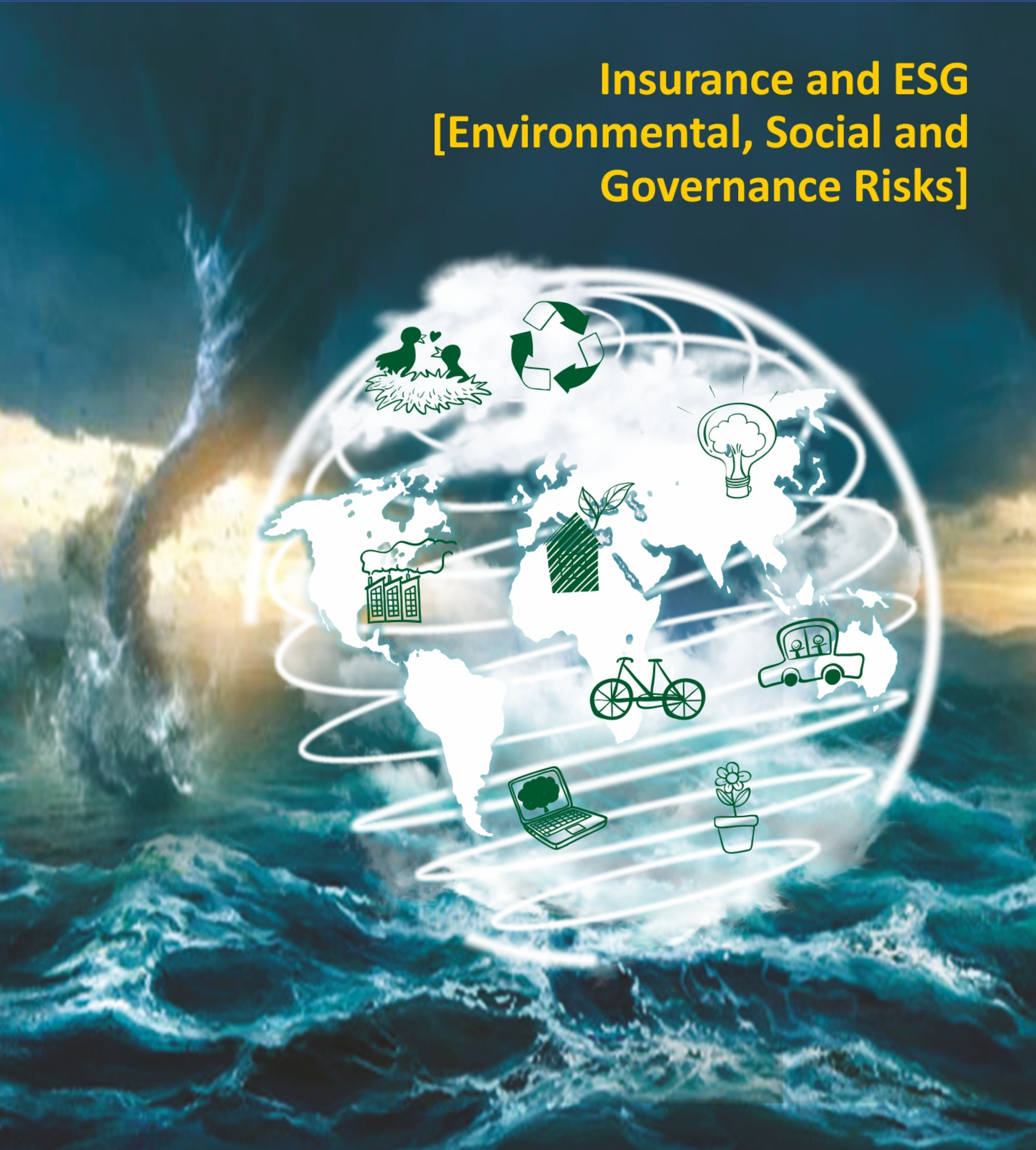
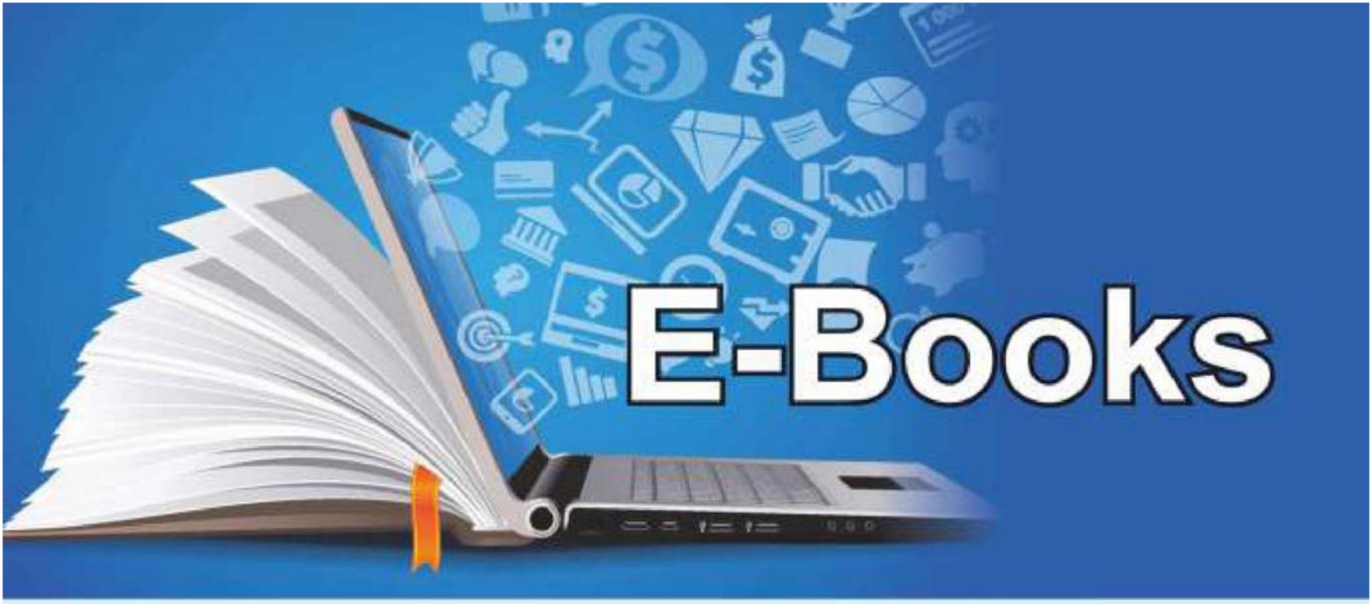
Insurance and ESG [Environmental, Social and Governance Risks]





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CONTENTS

Theme

Non-Theme

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EDITORIAL

We are living in times of ‘Deep Uncertainty’ - not only are we less sure of our morrows but even the knowledge and information that we have, is too meagre to enable us to predict what will happen and prepare for it. In a sense, we are getting a true measure of what Heraclitus wrote several centuries ago, “the only thing constant is change.” The wave

economic crisis from which we are still recovering and the one in a century Pandemic that we are living through at present - all these are unprecedented events bordering on what has come to be called ‘Black Swan’ occurrences. These are not risks that the insurance industry can cover - they are systemic rather than idiosyncratic, and they are catastrophic in their consequences. While they might have seemed highly improbable in yesteryears, on hindsight, they appear as part of a pattern which involves diverse forces at work that are entangled in a chain of causation.

Welcome to the world of ESG {Environmental, Social Governance] Risks. The United Nations Environment Program Finance Initiative (UNEP FI) has, for nearly a decade, sought to awaken insurers around the globe to this subject through its ‘Principles of Sustainable Insurance’ [PSI] programme. Insurance Institute of India has been recognized as a supporting institution in this venture, and in 2013, it had convened a conference on the subject in association with UNEPFI. While companies and insurance practitioners may have gone back to ‘business as usual’, time and tide has not remained still. As nature continues to rip us and disrupt our organisations, institutions and systems, insurers need to look inward and come face to face with the question : How well are we adhering to the ‘principles of sustainable insurance?’

Insurance contracts can but play a small role in addressing the vulnerabilities faced by individuals and communities who are exposed to non-idiosyncratic risks with catastrophic consequences. But the Principle of insurance - which is founded on Mutuality or collective Co-operation, can serve as a bedrock for building resilience. The task today is to mobilise the collective will and power [resources as well as resourcefulness] of multiple players - individuals, communities, enterprises and the state, towards this end. The insurance industry and its stakeholders can play a yeoman role in this regard. Will it do so? Only time can tell.

In this issue, we have brought together a collection of articles that were received on the theme of ESG Risks. It is a modest effort compared to what needs to be done by all of us. It is hoped that the theme would stimulate discussion and kindle an awareness and interest in doing something about the realities looming before us today.

The next issue of the journal will be mainly devoted to Prize Winning Articles received in our various competitions conducted by the institute. We would be happy to also publish a few other articles that are rich in content and of high interest.

We herewith announcing the theme for January - March 2022 - ‘Challenges of reducing protection gap in the hinterland’ and for July - September 2022 - ‘Changes in Insurance business post Covid 19’.

Editorial Team

Assessing ESG Risks: A Crucial Endeavour for the Insurers of Bangladesh towards Sustainable and Responsible Business

Farzanah Chowdhury
Chartered Insurer
Managing Director & CEO,
Green Delta Insurance Company Limited,
Green Delta Aims Tower,
51-52, Mohakhali C/A, Dhaka-1212,
Bangladesh.
farzanah@green-delta.com

Abstract

This Review Article provides a comprehensive summary of various research works done on the concept of Environmental, Social and Governance (ESG) principles and how the world is seeing ESG as a major key to attaining sustainability through shaping their outlook of viewing business operations, collaborations and responsible investing. This paper shows how major economies are transforming themselves towards sustainable and responsible investments, credits and risks assessments, and changing their way of doing businesses while boosting green financing and transformations towards becoming green businesses.

This paper also describes what are the opportunities, scopes and benefits for Bangladesh insurance industry if they adopt ESG principles successfully. This paper also demonstrates that though government and Bangladesh Bank are greatly concerned about sustainable transformations through green investments there are significant gaps in developing regulatory frameworks, implementations of guidelines and sustainable planning focusing on the insurance industry of Bangladesh to introduce resilience in long run.

Keywords

■ **ESG Principles:** Environmental, Social and Governance Principles

- **SDG:** Sustainable Development Goals
- **PRI:** Principles for Responsible Investment
- **AUM:** Assets Under Management
- **UNEP FI:** United Nations Environment Programme Finance Initiative
- **PSI:** Principles for Sustainable Insurance
- **IFC:** International Finance Corporation
- **Green Bonds:** A green bond is a fixed-income instrument designed specifically to support specific climate-related or environmental projects.

1. Introduction and Context

The fundamental activities of the insurers, investors and risk managers evolve around identifying, assessing, quantifying, mitigating and managing potential risks that can arise from a wide range of factors starting from natural disasters to any discrepancy in business operations or malfeasance. The investors' community from worldwide has addressed many other risk factors than just the mainstream ones for a few years now, but the insurance industry from every part of the world is yet to completely transform its way to look at risks. While adapting different global sustainable policies like UN Sustainable Development Goals (SDGs), Paris Agreement on Climate Change, and Sendai Framework for Disaster Risk Reduction in 2015, and the upcoming Post-2020 Global Biodiversity Framework, the investors are now analyzing risks ascending from an extensive range of sources covering environmental, social and governance issues (PSI Project Team Members, June, 2020). To strengthen the global initiative to build a more sustainable, resilient and inclusive the investors have increasingly focused on the Environment, Social and Governance (ESG) issues which have provided a framework and a guideline to assess risks from these dimensions while investing. As the investor community has progressively evolved their assessments based on ESG criteria, the insurance companies are becoming increasingly aware of ESG risk factors, their impacts on their investment portfolio and lending policies (Moorcraft, 2021).

Environment, Social and Governance (ESG) risks associates risks that are related to all the possible stakeholders of a business entity, including the insurers, beneficiaries, communities, society, partners, related businesses, government and environment while inspiring the companies to be more sensitive towards environment i.e. climate change issues, pollution and ecosystem degradation, society at large, establish collaboration and introduce innovation (PSI Project Team Members, June, 2020).

ESG issues are often termed as sustainability issues which are not only focused on compliance with the principles, but also ensures that the business operates in a way that ensures resilience through long term structured survival framework.

The world had faced an economic loss of $210 billion US dollars in 2020 from natural disasters alone whereas the insured loss was only $82 billion US dollars. Increasing natural hazards including severe floods in China, major wildfires causing by drought in the United States and the severe hurricane season led to 30 storms which are a cause for great concern. In 2019, the worldwide economic loss from natural disasters was $166 billion US dollars, of which $57 billion US dollars was insured which make 2020 a significant year due to record natural disasters in the past year (Jeworrek, 2021). This is only one of the notions that the relevant communities should be concerned and take actions collaboratively towards a better place to live in through collaboration and innovation while ensuring sustainability and resilience.

2. The Rise of the Concept of ESG

The beginning of ESG practices was started back in 1950-60s when the different worker groups started to invest or disinvest in developing affordable housing projects and health facilities in

United States. Later in the 1970s, the worldwide abhorrence of the apartheid regime in South Africa led to selective disinvestment along with ethical lines and this practice later reflected in adjustments in the legal framework of businesses doing business with South Africa at that time (Wikipedia, 2021). By 1990s, 200 US companies had decreased their operations with South Africa. A later similar concept was responsible for restricted state pension fund investment in Sudan and Burma. In mid 90s, the European companies also developed their corporate codes of contacts which outlines many business practices and responsibilities in line with ethical parameters throughout the global value chain.

To establish ESG issues through a thorough framework, the United Nations started an initiative back in 2005 to develop the Principles of Responsible Investment (PRI) where the world's largest institutional investors and experts in investments joined hands to develop six principles to align investments in line with the ESG issues. Later in 2006, "The Principles" were launched at the New York Stock Exchange which addressed different ESG issues like climate change, human rights etc. to mainstream investments and assessments of such assets. At that time, 63 investment companies adopted these principles and signed with $6.5 trillion in Assets Under Management (AUM). In June 2019, there were 2,450 signatories who represented over $80 trillion Assets Under Management (AUM) (Atkins, 2020). ESG funds seemed to have notable growth year after year. For instance, in 2018 the inflow under this fund was $5.4 billion in 2020 the inflows grew about ten folds and stood at $51 billion. And in the first quarter of 2021 raked $21 billion under this fund. Experts suggest that by the end of 2030, ESG investment will stand at $1 trillion considering the global trends and awareness. (Gurdus, 2021)

The initiative to have sustainable insurance came into an actionable framework after 2005, when the United Nations Environment Programme Finance Initiative (UNEP FI) started to conduct a series of research studies in 2006 and that carried up to 2009. From 2009 to 2011 UNEP FI had undergone an extensive procedure to develop a set of draft Principles for Sustainable Insurance (PSI) which were finalized through a consultation meeting held by UNEP FI which engaged over 500 senior representatives from the global insurance industry, governments, regulators, intergovernmental organizations, NGOs, business associations, academia and science communities. Later in 2012, UNEP FI launched the Principles of Sustainable Insurance (PSI) during the UN Conference on Sustainable Development (Rio+20) which has given birth to the greatest collaboration between the UN and the insurance industry. (PSI Project Team Members, June, 2020)

3. How ESG Can Drive Insurers Towards Sustainability

In June 2020, the United Nations Environment Program released the first ESG guide for the global insurance industry to support the Principles for Sustainable Insurance initiative. The principles will eventually lead the global insurance industry towards sustainability through a global roadmap which will allow the industries to establish innovative risk management and insurance solutions. The changes in practices will address renowned issues like renewable energy, food security, resilient communities, better adaptability towards disasters, climate change etc. through long term sustainable developments As the ESG extensively focuses on environmental, social and governance factors- the growing appetite of financial sectors across the world to adopt ESG to change the contemporary pattern of how they invest, analyze risks, manage risks arising from ESG factors and operate their businesses is noteworthy as they realize their relevance with improved performance. The global insurance industry is also highly impacted by the ESG factors and can play a crucial role to change the investment behavior of major markets to move towards a more sustainable economy. For the insurance industries to remain competitive, to ensure long term sustainable investments and to safeguard better returns, it is essential for them to comply with Principles for Sustainable Insurance guidelines.

3.1 Key Principles of ESG for Insurers

The principles and guidelines for sustainable insurance developed by the UNEP FI present a detailed view of the strategies, actions and themes to guide the insurance industry to approach ESG risk managements, ensure accessibility of information for assessment and materiality issues while communicating the practices and strategies with the stakeholders, investors and governments. Study results show that, the signatories operating in a more concentrated market have attained positive results from adopting the ESG principles resulting from stability through associations, especially from environmental and social pillars (Laura Chiaramonte, 2020). Thus these results give hope for the insurance industry operating in Bangladesh can respond to the global trend while adopting ESG practices and principles through the right policy reformation and implications.

The Principles developed by the UNEP FI has evolved around four overarching themes; which are:

a) Addressing Environmental, Social and Governance issues in the decision making process of the insurance companies.

b) Collaborating with the stakeholders i.e. partners, clients and related businesses to create an ESG portfolio to detect, assess and solve ESG issues.

c) Incorporating efforts of government, regulators, and other authorities/ stakeholders to promote diverse actions across the society on ESG issues.

d) Embracing the practice of disclosing progress and implementations of ESG Principles to promote transparency and accountability.

The guidelines proposed by UNEP FI have mentioned eight specific detailed areas to be covered by the underwrites to adopt ESG practices into their operations starting from developing an ESG approach to incorporating such principles into decision making. It is expected that the guidelines will bring consistency in the initiatives taken by the insures to establish ESG practices throughout their business operations.

3.2 Considerable Strategies and Actions for Sustainability

There is a list of selective factors which are priorities from each of

Environmental Issues	Social Issues	Governance Issues
➢ **Impacts of Climate Change:** Carbon emissions, carbon footprints, frequent natural disasters etc.	➢ **Human Capital-** Company human resource management policy, managing manpower, health and safety of employees etc.	➢ **Corporate Governance** i.e. board structure, executive management, pay, transparency etc.
➢ Proper allocation of **Natural Resources-** Raw material sourcing, Water supply	➢ **Product Liability** such as privacy, data security, safety, health risks, and quality etc.	➢ **Corporate Behavior** i.e. Business ethics, tax transparency, anti-competitive practices etc.
➢ **Pollution and Waste-** Air, Water and Land pollution or resource depletion	➢ Market competition issues like **Stakeholders' Opposition**	
➢ Innovation enabled **Environmental Opportunities-** Clean Energy, Renewable energy, Green Environment	➢ **Social Opportunities** like scope of providing access to mass healthcare, finance, credits and Communications	

Table 1: ESG Issues to Focus for Insurers, Source: (Claire Booth, July, 2020)

the ESG categories – Environmental issues, Social Issues and Governance Issues. The key factors comprise of the ESG index and determines the ESG rating methods for insurers. Morgan Stanly Capital International (MSCI) is one of the world renowned investment research firm located in America which provides ESG Indices and Rating Systems for the investors and the insurers who wish to adopt ESGs. According to MSCI, the factors of ESG issues that are relevant to the insurers the most are as following:

In line with the principles, the insurers, intending to approach to ESG practices need to strategize their actions establish consistency and comparability between plans and practices. These strategies can be different for companies depending on the thresholds they define to work on. World renowned rating agencies, fund providers and insurers have focused on these issues arising from environmental, social and governance factors as they found the global insurance industry is exposed to high risks and extensive vulnerabilities due to recent issues. As the global insurers cover only 25% of the worldwide assets the global trends are showing that the insurers need to integrate ESGs at a large range to meet their financial issues (KPMG, 2019). For the insurers, the PSI project team with association with Allianz launched a guide namely, "The First Guide to Managing Sustainability" in 2019, for the insurers to explain and aid the due diligence processes of ESGs. The detailed guidelines allow the insurers to focus on the right parameters to drive the core business activities and decision making processes to approach ESGs. The paper aims to unify the insurers' ideas to identify their opportunities and benefit the industry's business model. Insurance market players need to focus on the following, as guide addresses:

i) The insurers need to identify their approaches and need to determine that they will comply with the issues.

ii) An extensive internal analysis needs to be done to determine their appetite for risks.

iii) Need to decide about integrating ESG issues in their core business operations and engagement with stakeholders.

iv) Insurers need to detect the risks they will work on and analyze them thoroughly adopting new frameworks and standards.

v) Need to address ESG issues in the decision making process to have an efficient outcome.

Only determining the internal framework is one part of approaching ESGs, but the insurers also need to take actions to rethink the policies that regulate the insurance industry which needs a vital reformation. To have a better competitive edge, the insurers need to anticipate future regulatory changes and take actions accordingly to address investors' demand and develop sustainable products.

4. Opportunities for Insurers from Approaching ESG

The insurers who address and adopt ESG issues into their core business and decision making while collaborating with partners including regulators are anticipated to have significant returns in long term with ensured sustainability in business and products. Numerous analysis results that show that ESG can reflect higher returns for the investors ranging from 25% to 200% (Devevoise and Plimton, 2021). For insurers, considering ESG issues can reduce portfolio risks, provide better exposure to healthy competitiveness and increases the chances for gaining greater opportunities from third party investments.

Despite having a wide range of benefits and opportunities, only one-third of the reinsurers have taken actions regarding their underwriting arrangements to address ESG factors i.e. exempting certain products from product lines. The impact on reinsurers can reflect in their selection of businesses or customized pricing of products according to their risk exposure. As the reinsurers have started to change their outlook towards risks, and that is causing the insurers to adopt ESG practices as well. Except for the financial returns and better risk portfolios, the ESGs can turn a business into a sustainable and resilient one while being responsive towards its customers, partners, industry players, regulators and governments.

The ESG makes an insurance business have a **Good Reputation** as the insurers address customer concerns and preferences while designing products which ensures customers' satisfaction. ESG also lets insurers design their internal practices in such a way that they can eliminate their own business practices that are controversial. Also, the insurers can avoid goodwill issues that arise from supporting controversial activities done by their clients.

Approaching ESG turns a business into **Good Business** by ensuring sustainability through injecting improvised idealism into their core senses. ESG lets insurers design their risk management process in a way that there are new opportunities to imply innovation in product designing while keeping their risk exposure low. Thus, ESG mitigates the survival risks for insurance businesses around the world while making them sustainable and resilient for a future unpredictable world.

By adopting ESG can make insurers **Good Corporate Citizens** while binding their activities in a certain framework to be responsible towards their stakeholders as professionals. This new concept of being responsible also leads them to reduce negative impacts from the society and to contribute more through their positive activities followed by their decisions.

5. Glimpse of Current Global Practices of ESG

Experts are assuming that, the world economy will see major shifts by the year 2030 as countries tend to move towards ESG investing. Countries that are struggling to manage their economy efficiently will lead the global economy by 2030, experts believe. Tomorrow's global economy is more focused on capitalizing in and productively rooting in today's emerging economy. The emerging economies are concentrating more on adapting sustainability and ESG as basic criteria for investing. And as they move forward to build

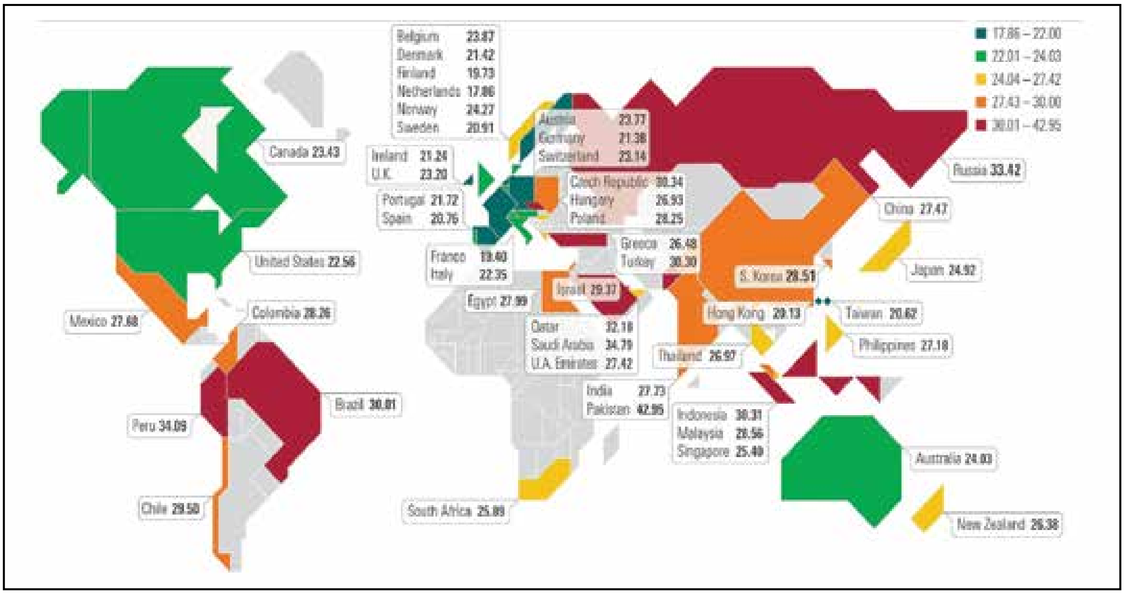

Figure 1: Country Index's Portfolio Sustainability Scores (Source: Morningstar Direct, Stata as of February 28, 2021)

more sustainable investments, these economies are experiencing more profound societal changes as the middle-income population is spending more to bring change in their lifestyle. While responding to these recent developments, other vital components like economical, political, and societal infrastructures are under extreme pressure to match the speech of these changing behavior of the granular components.

As a response, many countries are extensively promoting and focusing on ESG investments to bring balance to the economy and take it forward towards sustainability and equity. For example, Chinese developments in their economy are more energy intensive and their development plans are more focused to reduce carbon intensity and energy wastage. Indonesia is also increasing its investments in geothermal and renewable energy (ksapa, 2019). Accordingly, organizations have a duty to imagine new models of improvement and utilization: making foundations with a low natural impression, creating schooling frameworks fit for preparing masses rapidly and for a minimal price, growing new utilization designs influencing low-pay populaces, or empowering the working classes to diminish their ecological impression. This is the way into the achievement of organizations that are appropriately and genuinely considering establishing their quality in the business sectors that are forming the eventual fate of the worldwide economy.

Engaging with the stakeholders to comply with the sustainability criteria, the companies are realizing the importance of having to know about the realities and local context to consider efficient investments in emerging economies. This gives them a better mapping and understanding of the realities which can have a direct impact on the company's competitiveness. Western companies are still clustered around central headquarters but experts are suggesting that to have efficient returns on investments and to have better management approaches. Moving from to polarized management approach, companies should definitely work on changing their management system towards **multi-polarized** approach so that they get to best use resources to ensure better returns and successful investments. For example; in Brazil, the consumption pattern is more dependent on stronger civil society and their innovation. In China, the government focuses on improved performance of economic forces which in turn reflects through environmental changes and better returns of investment. There is a major shift in the mindset of the population of India. They have different opinions and perceptions about foreign industrial companies who are operating in India that those companies will have a higher sense of social responsibilities, especially after the Bhopal disaster. There are thousands of examples, which can give us a better understanding of the activities undertaken by the successful companies in the forms of utilizing their autonomy to reshape their managerial approach, rethinking integration and utilizing local dynamics of the markets they operate in. Sustainability, surviving and becoming a driving force of the modern economy, depends on the steps taken by the companies these days as a strategy for defeating future challenges.

5.1 ESG Investments in Asia-Pacific

The amount of ESG investments has increased in the Asia Pacific Region as the impact of COVID-19 became more visible in the investment portfolios. Many of the governments are promoting ESG investments along with Hong Kong (SAR) and Singapore Chief (KPMG, 2021). To comply with ESG investment issues, the government of Hong Kong is looking forward to developing a city which will work as a regional hub to home sustainable banking and green financing. Hong Kong's Stock exchange regulator has undertaken initiatives to introduce transparency, corporate governance and updated reporting guidelines to incorporate ESG focused requirements.

Following Hong Kong's initiatives, Singapore has also taken steps towards establishing ESG practices. The country's Monetary Authority has planned to invest US$ 2 billion to develop the country as a green finance hub and sustainable financing. In Japan, Government's Pension Investment Fund has started functioning while keeping the ESG principles at its core. Indonesia and Taiwan have also changed their jurisdictions to promote green products and financing in line with ESG principles. In India, the government is facing pressure to revolve along ESG to aid the market with green bonds from the large corporations operating in the country.

ESG is a way to establish a common language for the investors who are investing in the global market. The Taxonomy for sustainable business published by the European Economy, is one of the initiatives which will set a similar tone in screening activities across eight sectors to have uniformity and will attract investments from major economies in this region. This common language will make the work of asset managers for welcoming, screening and utilizing funds easier.

In this current climate, investee organizations can't move toward ESG observing and detailing as a container ticking exercise. Organizations need to convey itemized data about their ESG system and execution to agents, financial backers and resource supervisors, and guarantee they can clarify the realities fundamental to their ESG execution. Progressively educated partners would already be able to see when an organization's divulgences are quite shallow, and an absence of validity on ESG matters will stop financial backers, hurt corporate notorieties and annihilate investor esteem.

Driving organizations are unifying their ESG information assortment, correspondence and effort inside a solitary capacity. These groups have the information to address extreme new inquiries concerning, for instance, how they oversee hazards, regardless of whether they are adequately expanded, how their stock chains are overseen, and how well senior administration draws in with governments and industry on approach improvement. They additionally go about as a specialist asset to the organization's lines of business. With an expanded spotlight on supportable and sustainable money, markets will remunerate organizations with solid ESG records upheld by excellent exposures. Against this setting, resource supervisors will be the ones where the board and senior authority of the firm lead a social shift to install ESG not just in the association's center speculation measure and across the resources they oversee, yet in addition by the way they deal with the resource the executives business as a corporate endeavor.

Though there is a surge of actions that has evolved around overall ESG investments in this Asia Pacific region, but the practices of ESG specifically in the insurance industry focusing on the guidelines are yet to be established in this region. The insurance industries of the United States, European Countries, EU countries and China has been seen to deploy ESG practices to a remarkable extent and successful in aligning regulation, underwriting guidelines, and product development of insurance industries.

6. The Case for Bangladesh: Scope for Implementing ESG Principles in The Insurance Industry

As 57% of the investors in the Asia Pacific region are expecting to incorporate ESG issues in the investment analysis and decision making process to a large extent by the end of 2021 and after the outbreak of COVID-19 79% of the investors have increased their ESG investments in 2020 which is slightly higher than the previous year of 77% (Bala, 2021). ESG is important for insurers for understanding potential investment risks arising from many environmental, social and governance factors. Besides there is a global pressure to integrate ESG issues into the insurance industry, Bangladesh for its benefits and better returns of investments. Recently in 2020, Bangladesh Bank has developed a policy for sustainable financing which will lead the banks and other financial institutes towards green financing with a view to increasing financial flows from banking, micro-credit, insurance and investments from public, non-profit organizations towards sustainable development agendas. Bangladesh Bank has announced many forms of green financing to reduce the negative impact of social, environmental changes including sectors like agriculture, renewable energy, alternative energy, liquid and solid waste management, recycling goods, green establishments etc. towards a sustainable green environment in the long run. For this initiative to make feasible, the central bank has planned to develop **Green Bonds** which will be treated as green equity when issued by banks and other financial institutions. As per the authority, green financing is a huge growth area, especially after 2020. Besides these, investors can invest in impact funds, developed guidelines to green the polluting industries, took initiatives to reduce carbon footprint and provoke carbon financing, introduced technological advancements arising from green activities and green growth (Md. Humayun Kabir, 2020).

Bangladesh has always been a vulnerable country to climate change. Every year, natural disasters like floods, excessive rain, drought, unseasonal rain, an anomaly in traditional temperature pattern, salinity in water, rise in sea level, air-water-land pollution and tsunami have caused damages to environment, natural balance, food security, agriculture products and the economy overall. Compared to the natural losses, amount of relief, credits and loans are increasing to support the adaptation and defense mechanism of the population. Domestic credit has already surpassed 45% in 2019 and the total assets of banks and non-banking financial institutions stood at 17,147.8 billion taka as of June, 2020. At the same time, experts comment that, the capital market is gaining efficiency in mobilizing capital in Bangladesh (Uddin, 2021). In 2011, Bangladesh Bank had issued Environmental Risk Management and Policy Guidelines for Green Banking for financial institutions aiming to restrict bank and non-bank financial institutions. Bangladesh's effort to comply with green financing and investment issues is praised in the international platforms as International Finance Corporation (IFC) recognize the plans and actions that Bangladesh has taken to establish green establishments and infrastructure aiming towards sustainability.

Recently the global movement towards uprising activities that promote sustainability through addressing ESG issues has been prominent in many parts of the world as the outbreak of COVID-19 took place in December 2019. Many countries have made climate-related disclosures mandatory and many are planning to strictly comply with the ESG principles and make necessary regulatory changes to do so.

Incorporating ESG issues is important for the insurers of Bangladesh as they have to deal with increased risks arising from climate changes, supply chain mis-managements, often denied employee/worker facilities, poor societal protections and inadequate governance initiatives. Not implementing ESG issues thus can increase financial risks manifold and can cause undervaluation of securities derived from underlying financial reality. Yet, in Bangladesh, these global issues are not taken very seriously and any of the companies are not willing to disclose their status related to green financing. Experts are indicating that, the unwillingness can arise from the lack of awareness, right kind of knowledge at the operation level can cause Bangladesh to lag far behind than the other same rank countries.

7. Opportunities and Challenges of Implementing ESG in The Insurance Industry of Bangladesh

There is a wide range of **opportunities** that can come from implementing ESG into insurance industry. If the insurance industry can set the standard for investment managers, they can develop long term products which might be increasingly profitable and sustainable while catering the need of their customers in the most efficient ways. Also there is an increased possibility to design products for ensuing proper healthcare security of the mass population while being responsive to societal issues imposed by ESG.

Implementing ESG can also help the insurance industry to design environmentally responsive products and save the agriculture sector at large from decreasing their output as they are increasingly pushed towards greater risk exposures. Besides having many benefits in terms of designing innovative products, being socially responsible and responding to the clients' needs properly, the ESG issues also help the companies to establish better governance within the company and establish transparency throughout by implementing better accounting and taxation standards.

There are a number of **challenges** as well that exists while implementing ESG practices within the insurance industry in Bangladesh, which are as follows:

i) The first challenge is to develop a structure throughout the organization to follow the integration efforts. For developing such structures, the board, senior management and the employees need to have an extensive understanding of the ESG issues.

ii) The second challenge from an organizational perspective is to develop standards to support the transformations of the organization.

iii) Another challenge is to create awareness among the industry leaders to make ESG a common practice for all the industry players. Many ESG factors are immaterial and hard to define in terms of money and need to be defined in terms of company's very own credit profile.

iv) Creating a cross industry comparison standard for long term sustainability while integrating partners' effort is also crucial for the insurance industry.

v) A huge regulatory reformation is required to support the integration of the ESG principles in the organizations' basic structure to facilitate credit risk analysis and the rating process.

8. Actions to Accelerate the Transition Towards ESG in Bangladesh's Insurance Industry

There are a few immediate actions and strategies that need to be undertaken by the insurance industry players and the regulators to establish and accelerate the transitions towards a sustainable insurance sector in Bangladesh. The immediate actions that can be taken immediately are as follows:

i) Proper guidance to bind the insurance industry to follow a standard disclosure of their sustainable investments and activities, there should be a standard reporting guidance declared by the authorities to be followed by the insurers.

ii) Companies should maintain a standard to analyze their risks which need to be determined by the authorities, insurers and asset managers.

iii) Standardization in ESG reporting across the corporate sectors needs to be done to demonstrate their ESG footprints and enable reinsurers to assess the companies efficiently.

iv) Uniform analytical methods including data and rating techniques should be declared to regularize such services provided by the consultancy firms.

v) Underwriting, claims management, client management, product development should get the highest priorities while designing the standards to be followed by the insurers.

vi) The regulators and authorities should promote incentives, rewards and benefits to insurers who will follow the principles and the guidelines in an efficient way to motivate other players functioning within the industry.

9. Conclusion

Looking ahead in the insurance industry of Bangladesh, it is certain that there is a huge possibility to integrate ESG issues into its regular practices. It is proven that the ESG issues can bring better investment returns for the insurance industries and also can reduce their exposure to bigger risks while monitoring their assessments while investing. As Bangladesh is facing increasing risks arising from natural disasters every year, it is essential for the insurers to ensure that their activities are transparent and standardized to ensure sustainable investments from national and international investors. Once the industry can reach the highest level of transparency and standardize its actions, while keeping the environmental, social and governance issues into their supreme priority, it can be said that the time is not far away when the insurance industry will be sustainable and resilient boosted with advancements and innovation. TJ

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Insurance and ESG Accountability- A Commentary

Sayanti Sarkar
Deputy Manager
HDFC ERGO General
Insurance Company Ltd.
sayanti.sarkar27@gmail.com

Introduction

The insurance business revolves around risk analysis and indemnification. Insurance underwriting looks into assessing, mitigating, and managing the potential risk hazards arising due to human mortality and wrongdoings to natural disasters and commercial functional failures. It has become imperative for insurers to anatomize each risk factor basis environmental, social and governance (ESG) issues at varying levels and scales. Insurance business has an intrinsic relationship with several environmental, social, and governance (ESG) factors.

The United Nations Environment Programme Finance Initiative[1] has made a detailed reconnoiter of the likelihood of including sustainability principles in the underwriting process of global insurance industry. Such inclusions can bring about exemplary changes for underwriting and accountability in insurance business. Considering ESG factors in risk analysis and loss mitigation can be beneficial to insurers trying to create their ground in the accountability towards a sustainable future. At present, insurance companies who has delved into incorporation of ESG factors in risk management, have been lauded by ESG firms. Insurers

[1] *2012, Principles for sustainable insurance, UN Environment Programme's Finance Initiative*

promoting sustainability tend to be more empathetic towards emerging risks and have more dynamic underwriting norms. Such dynamic approach towards the ever emerging ESG factors can prevent adversities and eventualities which the normal underwriting could not have identified. Furthermore, insurers having even better data analytics when combined with sustainability can do more good.

Comparative Analysis of ESG Factors in Insurers in EU, UK and USA

In the European Union, the Non-Financial Reporting Directive (NFRD) mandates insurance companies to publish reports on the policies they implement in relation to environmental protection social responsibility, respect for human rights and anti-corruption and bribery. Furthermore, insurance companies offering insurance-based investment products (IBIPs), as well as insurance intermediaries providing insurance advice with regard to IBIPs regardless of the design of the financial product and the target market, to publish written policies on the integration of sustainability risks and ensure the transparency of such integration[2]. In spite of United Kingdom's exit from the European Union, the former has chosen to vehemently commit their policies to the development of ESG disclosure. UK's Task Force on Climate related Financial Disclosures (TCFD) has held up its motive to make TCFD-aligned disclosures mandatory across the economy by 2025. UK also commands that all insurers are to be made accountable for mandatory disclosures of ESG practices. UK has further intended to enforce a Green taxonomy i.e. a common framework for determining which activities can be defined as environmentally sustainable. It desires to make use of the scientific metrics and threshold used in the EU taxonomy as its basis and a UK Green Technical Advisory Group will be established to review these metrics to ensure they are right for the UK market[3]. The United States on the other hand does not have any standardized ESG disclosure regime. The New York Department of Financial Services (DFS) regulates the incorporation by insurance companies of environmental factors into the insurance risk analysis. As set forth in the newly[4] issued Circular Letter 15 the DFS will now expect insurers to integrate financial risks related to climate change, including analysis of how climate change is affecting the insurers' investments, liquidity, operations, reputation, and business strategy into their risk management frameworks.

ESG and Indian Insurance

Indian insurance market has been moved by various environmental and social factors in recent times. From predictive factors such as water scarcity and livelihood to CO2 emissions and meeting demands to create renewable sources of energy, such ESG indicators have paved way for efficient and empathetic insurance underwriting. According to the Climate Risk Index 2013, India is among the top 3 most exposed countries in the world regarding its exposure to extreme weather events[5]. This has been a significant factor in reconciling agricultural insurance portfolios in the line of ESG indicators. Agricultural Insurance risk analysis in India shall definitely consider the oncoming of efficient irrigation technologies, adoption mobile phone-based information services, to improving transport and logistics. Coming to more social factors like poverty and rural masses, Indian Insurance sphere has seen

2 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector will not be applicable in the UK as a result of the UK's withdrawal from the EU.

3 Proposals to enhance climate-related disclosures by listed issuers and clarification of existing disclosure obligations, accessible at: https://www.fca.org.uk/publication/policy/ps20-17.pdf (last accessed: 24 December 2020).

4 https://www.jdsupra.com/legalnews/alert-new-york-state-department-of-3975116/

5 'Global Climate Risk Index 2014', Germanwatch, 2014.

the Government coming up with mobile-based, low-cost distribution models as fundamental to expand insurance to currently underserviced low-income populations. The Indian Government has further encouraged linking mobile banking and insurance services. The Indian government also plans to launch a 'Unified Package Insurance Scheme' for farmers that bundles mandatory crop insurance with nine policy features such as health or personal accident insurance and a cover for agricultural equipment such as pumps or tractors.[6]

ESG Factors and Artificial Intelligence

Technology has the ability to make any unorganized processes more systematic and more reliable over time. Each ESG factor is ever emerging and dynamic. It is imperative here that more robust machine learning analysis is used to analyze and evaluate ESG indicators. The deployment of Artificial Intelligence in the process to analyze ESG factors shall be construed to be more efficient and fast. The machine learning algorithms shall curb down the probable human biases which can often manipulate the accuracy in risk analysis.An ESG indicator driven insurance underwriting is inclined towards entities that hold up strongly on sustainability policies factors and ESG values that provide greater transparency into their practices and reputations. To amalgamate every indicator of sustainability and start to incorporate ESG factors as a consideration for insurance underwriting and risk analysis, it is important for insurers to efficiently analyzes the large quantities of unstructured emerging dataset of a Company's ESG indicators. Thus companies are hell-bent to incorporate artificial intelligence and machine learning tools to analysis and evaluate the always emerging ESG data with the intention to project the company to be sustainable and accountable. An AI tool can process a huge amount of data records and filter out the most relevant concepts. Thus it allows for improved and accurate researched results out of large volumes of data. Since ESG indicators are extremely dynamic and ever changing, the AI tool can collect historical data and historical decisions and can then begin to give out results of calculative analysis by providing data in new ways or providing confidence scores with evidence. With the help of AI driven results, Insurers can process mountains of ESG data and identify trends in a company's activities and calculate metrics like sentiment to gauge the impact of ESG on performance.

Stopadani Case Study

The social media has the power to create havoc. Public opinions and displeasure can surface on digital platforms and point towards the wrongdoings of a public entity. The example of the Adani mine movement in Australia stands to be a cogent proof of how environment-social factors can act as primary parameters in insurance underwriting. In recent times, Australia has encountered increasing blow of environmental and climatic threats in the form bushfires, drought, floods and storms. Adani Coal Mines have had the audacity to construct mammoth coal mines in Central Queensland, Australia, amidst such climatic and environmental atrocity. Research shows that the project envisaged by Adani group possesses disruptive environmental threats and can cause catastrophic global warming. Adani's Carmichael coal mine project is planned to be built upon one of the world's largest unbarred coal reserves, the Galilee Basin region. This coal mine has the ability to add 4.6 billion tonnes of carbon pollution to the environment thus causing dangerous global warming and destroying lives. The coal mine project can sabotage the ancestral lands, waters and cultures of indigenous people without their consent. The #stopadani campaign has culminated into a global phenomenon . A major setback for Adani group came in when it was dropped off the Dow

[6] *'27 July 2015, Centre to launch 'unified' insurance product for farmers', Economic Times,*

[7] *Why we will #stopadani, https://www.stopadani.com/why_stop_adani*

Jones' Sustainability Indices. Adani group had been seeking to enter into insurance contract with Arch Capital Group to indemnify the coal mine projects. The Arch Capital Group has however denied issuing any insurance policy for Adani's controversial Carmichael coal project in central Queensland. This case study points at the imminent hazards which the ESG factors can qualitatively predict in terms of commercial insurance underwriting and reputational risks analysis. ESG factors can be construed to be a significant predictor which can identify financial risk to the insurer while entering into an insurance contract with any company. Each ESG indicator can be an early warning to identify potential risks before they can trigger financial loss. The global insurance sector does play a huge factor in securing a sustainable future by supporting and indemnifying projects that are responsibly complying to ESG factors and to serve the humanity at large.

Conclusion

The world is going through a dynamic phase in terms of environmental changes, social disruptions and major governance factors. This in return culminates into affecting the livelihood of human race and the economy at large. The society is now driven by the emerging factors which eventually give rise to newer emotions and even newer insecurities. For example, the COVID-19 pandemic has shown the world economy the importance of pre-planned ESG based practices and policies in businesses to manage risks, improve returns and build immunity for a crisis scenario thereby protecting the long term value creation. The financial domain at large is needed to be constantly evaluated keeping in mind the emerging ESG indicators as environmental and social issues surely have a profound and direct role in the economic revival. However, the major cons lies in the fact that since the incorporation of sustainability factors in risk analysis is relatively a new concept, there is a lack of a plausible system or process to define the various environmental, social and governance indicators. Also, different jurisdiction has different approach towards ESG disclosure norms. Having streamlined it, the economy at large is to only benefit from the practice of considering ESG factors in risk analysis and decision making.

ESG – The Space to Watch Out for Insurers

"Two roads diverged in a wood … I took the one less travelled by, and that has made all the difference." – Robert Frost

Vijay Dwibhashi
Marine Underwriting & Claims
ICICI Lombard General Insurance,
2nd Floor, SVR Complex,
89 Hosur Main Road,
Madivala, Kormangala,
Bangalore - 560 068.
vijay.dwibhashi@icicilombard.com

The three words – Environmental, Social and Governance risks – is the new kid to look out for in the insurance block right now. They have suddenly risen to the top of the agenda across the UN Global Sustainability indexes as well as the boards of companies across industries. Companies today have shifted from the industrial era and are gearing up to achieve the self-actualization needs that create value apart from profits. Today companies are trying to at least replenish what they are consuming if making it better. Companies are focusing on being natural and impartial to ensure no one feels left out. Although governance was and will be a major agenda for the boards, the emerging risks and compliance today can have far more devastating results than earlier.

ESG has the capacity to impact a company's reputation, including environmental stewardship towards issues such as climate change or global warming, treating employees, suppliers and customers, advertisements; and anti-corruption practices, crisis management and cyber security. Investors as well as regulators, now a days are focusing on sustainability and are expecting companies and boards to take the challenges of ESC seriously as well.

Although it can be seen as a synonym for "Climate and

Environmental Agenda", ESG stands out as a broader umbrella term today. Its definition changes as per the context of usage as it has a far reaching ambit of reach, ranging from - emissions and waste management, human rights and employee relations, and financial crime and corporate governance. In other words it's an index to define a company as a "Good Corporate Citizen" ensuring better collaboration with insurers.

The new challenges faced by companies today are Activist investors and climate activism targeting big companies. Recently the climate activists have scored a major victory against the oil companies, when the Dutch court ordered Shell to drastically cut its carbon footprint, while ExxonMobil was forced to accept activists on to its board. Further to this, post pandemic disruptions, companies have seen increased interest from activist investors. There are reports which reveal that many of the companies are being targeted by packs of investors simultaneously as aggressive investment tactics by the activist investors. This depicts the level of interest shown by the board towards ESG concerns. Also owing to activism, investors acted to force boardroom changes at ExxonMobil. Investors have recognized the risks as well as the rewards associated with ESG investing as it gives a moral high ground, which is ethically sound and financially rewarding at the same time.

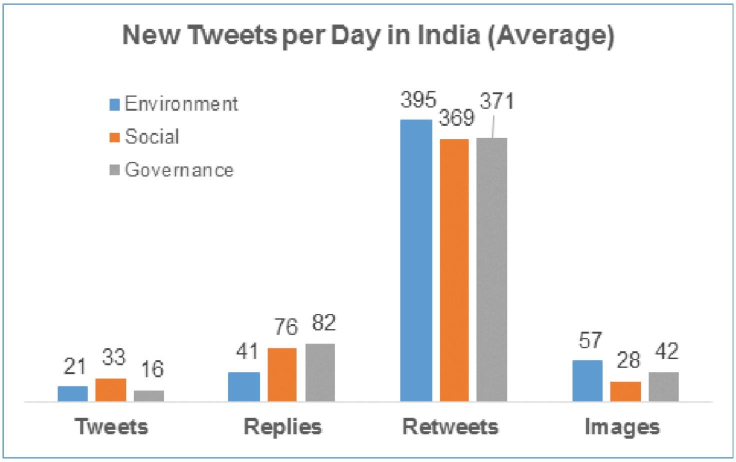
The 2017 Volkswagen emissions scandal resulted in costs to the tune of USD 33 billion in fines alone. The cost towards fines, penalties, out-of-court settlements, cost of replacing the sold automobiles around the globe are just a figment of imagination for the extent of loss. While the huge amounts of fines make bold headlines, the losses due to depletion of market capitalization, investors' pullback, brand erosion, reluctance of new joiners, crisis communications etc. are unimaginable. The broad spectrum is well depicted in the table – representing who all can participate in ESG Litigations, if any

Who?	How?
Single individual **Group of Customers**	Files petitions against companies and/or governments as well
NGO's **Pressure Groups**	Take the issues to common public Advertisements Protest Litigations
Law Firms	Representing the claimants on a whole
Litigation funders	Fund litigation seeking monetary compensation
Companies	Companies can be a claimant under ESG as well
Trade Associations and / or industry groups	For judicial reviews and / or changes in regulations

The reason why companies are forced to look towards ESG is also depicted by a small check on the count of tweets on any given day, as depicted in Graph 1. Although the number seems to be too small compared to the similar analysis for US or other geographies, the increasing trend has forced companies to look towards it. But the major area of concern, is actually the exponential reach obtained by the few tweets (20-25 on average) to gain exposure to tune of around 400 users per day on real time basis. These are figures where the user has mentioned the keywords (Environment, Social and Governance) while posting their tweet. Imagining the number of tweets, where the user has not mentioned any hashtag and the retweets / mentions further is tricky but can be expected to be multi-fold than the numbers being depicted in the graph. If the user gets a celebrity / influencer to respond on it, the graphs will shoot up at un-imaginable levels further.

A glance on the social media shows how companies are being trolled, disliked or forced to pull down content if the same is found not to be in sync with the expectations of general public.

The study of their expectations bring us to broadly defining the ESG parameters as well, which confirms the "deep-rooted" and "to-the-ground" concepts of ESG.



Graph 1: Analysis of tweets per day on Twitter.com *(the graph shows average count of tweets by users between May 1, 2020 to April 31, 2021 using -Twitter Hastag Tracking tools)*

Major challenges that will be impacting the ESG action-plan of companies are: **Climate change** - Climate change is a key challenge of the coming decade. Flood loss events for example has increased by a factor of three to four times

2020 published on www.munichre.com. Allianz estimates that responding to the challenges posed by climate change could cost companies worldwide as much $2.5trn over the next 10 years.

Water management –
by 2050, the world population is expected to reach 9.7 billion, as per United

of Economics and Social Affairs at United Nations on June 17, 2019. At the same time, global water demand is expected to increase by 20% to 30%, propelled by demand from both the industrial as well as domestic sectors. At present more than two billion people are residing in areas of high water

almost half of the global population – that is approximately four billion people – are forced to experience severe water scarcity at least for a month in a year. This is only going to increase further.

Biodiversity –

Southeast Asia alone with inclination towards shrimp farming, resulting in

cyclones with lesser intensities are causing more damages than earlier.

Plastic pollution has increased tenfold from 1980, even as 300 to 400 million tons of heavy metals, industrial waste and sludge are dumped annually into global waters as per Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report April 2019 – at their 7th session of IPBES Plenary meet.

Human rights – This doesn't need to be elaborated. Today human rights challenges are holding the boards and/or directors liable and demanding more transparency in the system. This is no more limited to the internal employees but involves the suppliers, vendors, third party employees and end customers as well. This is not only inviting D&O claims but also bringing reputation risk to the front.

Governance - Corporate misconduct has resulted not only from obvious issues like corruption or bribery, but also from incidents of data privacy, ransom attacks, data integrity apart from allegations of money laundering or misuse. Data governance has become a challenge

targeting not only institutions like banks or casinos but rather even institutions like hotels, pizza delivery or oil suppliers. The regulators and legal institutions are passing the onus of data integrity, with the companies as well making it a double whammy of reputation loss as well as legal challenges.

The below illustration **(Figure 1)** depicts the various risks that the companies can face in terms of sustainability from the various factors of ESG risks with few examples, so that the readers can visualize the depth of the risks it carries.

Sustainability	Environmental	Climate Change	Floods Brown Clouds Green House Emissions
		Ecosystem	Landfills Invasive Species Deforestation Damage to Marine Life
		Water Management	Water Scarcity Oil Spillage
		Energy	Sustainable Energy Green Energy Sources
		Pollution	Greenhouse emissions Hazardous Waste
	Social	Financial inclusion	People with special needs Poverty Micro Insurance
		Human rights	Child Labor, Asbestos Risks Food Insecurity, Medical Aid Vulnerable Community Modern slavery
		Manmade Health risks	Pandemics, Bio Wars, Crimes Nanotechnology Risks
		Aging	Comorbidities Obesity
	Social	Regulations	Corruption Bribery Transparency and Disclosures
		Data Protection	Privacy Ransom attacks Piracy Regulatory Aspects
		Alignment of company's interests	Board Structure Political Funding
		Ethics	CSR, Vision of the company

Figure 1. ESG Risk - Areas of Concern

How are Insurers Impacted?

If we wonder how this will impact the insurers, we have to see through the clutter of jargons. In fact deeper understanding reveals that out of the BFSI's, insurers are most sensitive to the ESG Issues as these issues constitute not only reputation risk for insurers but can have an impact on assets and liabilities as well. The impact can be exemplified from –

	Events	Liability Exposure	Assets Exposure	Net Balance Sheet effect
Environmental	Global warming and climate change, due to manmade gases as chlorofluro carbons or greenhouse gases.	Increased frequency and severity of natural catastrophic events such as floods, hurricanes and /or scarcity.	Investment losses on assets impacted by catastrophe events (e.g. oil and gas companies operating in storm prone areas.	Increasing liabilities and a fall in the value of investment assets leads to reduction in solvency and profitability.
Social	Data security and privacy in social media era.	Theft of user data, or insecure data leading to a significant data breach, could be used in hacks against global targets. Insurers are increasingly providing cover for cyber security related risks so these incidents can have an impact on underwriting results.	Insurers invested in companies for whom they provide cyber security cover may be exposed to portfolio losses following a cyber-event. Many insurers will also be directly or indirectly invested in social media companies.	Assets and liabilities are exposed to the same types of technology risks increasing balance sheet volatility and risk correlations. Increasing liabilities and a fall in the value of investment assets leads to reduction in solvency and profitability.
Governance	New regulation introduced to incentivize ESG aware business practices.	Certain types of insurance become commercially unviable as a result of regulation; for example providing insurance cover to coal miners.	Some assets currently held have increased regulatory capital requirements levied on them to discourage investment.	Reduced solvency as a result of higher capital charges and less risk diversification.

The problem can be tackled through effective introduction of ESG parameters in the underwriting process flow as

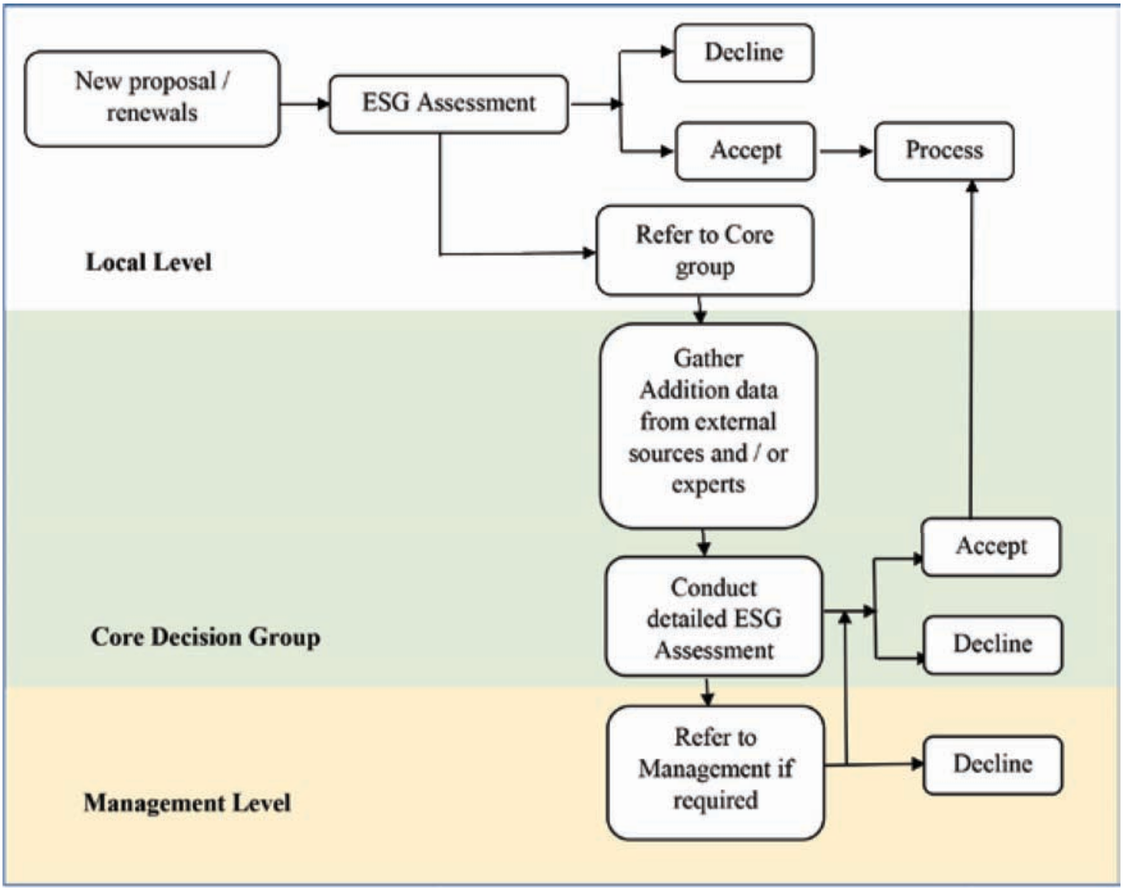


Figure 2: Tackling the ESG Risks

The target for underwriters while accessing ESG risks can be

while protecting the capital, liquidity earning and reputation by checking the parameters outlined earlier, within the companies tolerance levels

diversify risk and mitigate unrewarded risks

providing consistent, reliable and timely risk information

ESG data, research and analysis accessible to decisions makers

sustain the ESG risks on a longer run

For this one needs to pay special attention to ESG risks that may (as per Zurich strategies standards):

rights abuses, such as involuntary relocation of local communities and support of regimes with poor human rights records

and access to water in neighboring states

poor governance, such as failed

ineffective rule of law, or poor human rights records

ecosystems with a high biodiversity value

areas or critical natural habitats

ent in production, distribution and/or marketing of banned cluster munitions or anti-personnel land mines

- client risk and impact analysis
- exclusion of certain business activities like say, weapons, tobacco, coal etc
- contractual requirements / clauses: Compliance with human and labor rights, health and safety
- environmental management, climate change strategy
- ensure awareness-raising of the clients
- compliance monitoring and / or improvement plans

Based on these a sample questionnaire can be formed to include details, not limited to the following –

Questions to be asked
1. How does the company define ESG risks for a business?
2. What risks and / or losses can be attributable to ESG and how to quantify it appropriately?
3. Exposure in the books towards ESG risks? How are they quantified?
4. Out of the exposures identified, how many are within the tolerance levels of the organization?
5. Are these risks correlated? (i.e. can the same risk event negatively impact both assets and liabilities)?
6. What will be the Probable maximum loss in case of such co-relations?
7. Steps taken to mitigate / minimize the risk?
8. Is the industry / client future ready apart from being compliant?

To ensure this the companies must understand that the ESG claims will be different from the normal claims insurers' witness. ESG claims may not be entirely for compensation but rather they will be more towards forcing companies change course or act in a manner more consistent with ESG objectives. Here the claims can come from not only the insured but from external parties as well, like NGO's, activists, investors, competitors etc. Moreover the insurers should prudently anticipate the regulatory changes which are bound to come in due to the focus on ESG. An early movement in this field will help gain the "early-bird" advantage and help cement customers' impression.

Insurers have to be prepared for the legal battles in this case as well. Most of the litigation in this area derives from alleged distinctions between what companies do and what they say they are doing. Insurers need to understand that potential claimants may be doing the same and once revealed will have devastating effects. Finally the claims team also needs to think creatively and strategically to resolve claims. Every scenario is a new scenario and hence requires ample amount of brainstorming. Any settlement should be made considering the litigation aspects of a dispute, and broader ESG concerns including those around reputation and access to capital, while ensuring that claims of genuine customers are settled without hassles.

Conclusion

Overall one needs to be open to that fact that ESG matters will definitely increase the regulatory overhead along with adding newer risks. If managed properly, by ensuring system compliance and embedding these risks in the product designs they can definitely provide considerable opportunities for the insurers.

In this era of social media where we see flow of information at unbelievable speed, a negative aspect on the ESG front can pose major challenge a company's reputation and / or acceptance. In these scenarios, the insurance industry has to look out for these risks and make decisions based on these factors / scores. In fact insurers should not only check for these risks prospectively but rather look out for the hidden risks already in their books. With the increasing focus on these risks, by all the stakeholders, we can expect the ESG risk framework being integrated right from strategy levels or product

development to day-to-day business management. An early adoption of these risks will help insurers gain

and can have competitive edge in a longer run.

Finally, Get Vaccinated and help

masked whenever venturing out of your houses. TJ

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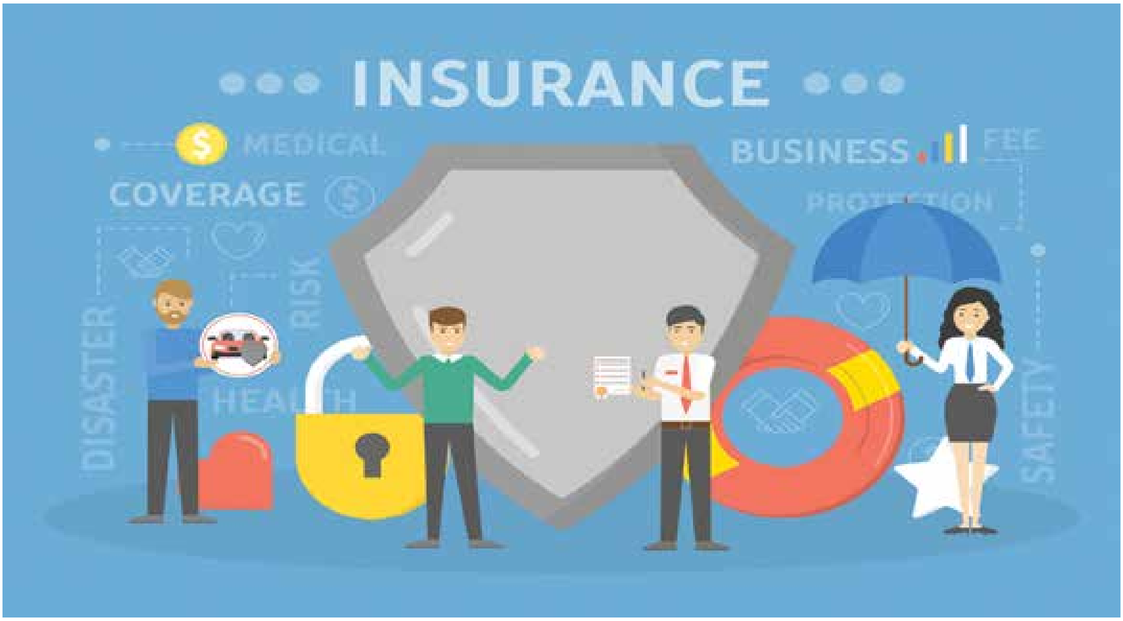
Insurance – Have All Risks been Accounted for?



Abstract

With changing dynamics of how Businesses including Insurance Companies are viewed, various new factors have now started coming into picture which have material impact on Risk the organization faces and affects the Business choices. ESG Risks is one of them. ESG stands for Environmental, Social and Governance Risk. The term gained popularity in 2004, when United Nations started a joint initiative with leaders and CEO's of all major financial institutions to incorporate and integrate ESG Risks into their decision making with aim to increase their shareholder value through the proper management of risks, accessing new markets and by improving their reputations and brands, all whilst contributing to the sustainable development of societies.

The insurance industry has long been in the fore-front of understanding and managing risk, and has served as an important early warning system for society by amplifying risk signals and devising strategies to minimize damages. Through loss prevention and mitigation, by sharing risks over many shoulders, and as major investors, the insurance industry has protected society, shaped markets and underpinned economic development. Today, the risk landscape is rapidly evolving, spawning new and complex risks

Ankit Jain

Assistant Manager, United India Insurance Company Ltd. {Currently on deputation to Office of the Insurance Ombudsman, Bengaluru}

ajain514@gmail.com

that threaten our increasingly scarce nature-based assets and undermine our common future.

In India, Insurance has largely been an underrated choice. The fact that Insurance penetration in India is merely 3.76% is testament to the above statement. One of the major reasons for the same is that Customers view Insurance as costs (non-life segment)/investments (life segment), whereas from a business viewpoint Insurance is purely a risk management science. But as gloomy as these numbers seem, it also presents an interesting opportunity to leverage the untapped potential of the Insurance Industry and one can only imagine the role this sector can have on the development story of New India.

The ensuing article sheds some light on ESG Risks and its impact from Insurance Companies point of view.

What is Risk Management?

Risk is one of the most fundamental constant in life. No matter how much one plans to ensure a smooth sailing in life, the very uncertainty of events impacts our present and is instrumental in shaping our future.

In insurance terms, risk is the chance or the probability that something harmful or unexpected could happen. Insurers assess and price various risks to work out how much they would need to pay out if a policyholder suffered a loss for something covered by the policy. This helps the insurer determine the amount (premium) to charge for insurance.

In broad terms, risks may be broken down into two categories:

- **Pure Risk -** Risks where the possible outcomes are either a loss or no loss. It includes things like fire loss, a building being burglarized, having an employee involved in a motor vehicle accident, etc.
- **Speculative Risk -** Risks where the possible outcomes are either a loss, profit, or status quo. It includes things like stock market investments and business decisions such as new product lines, new locations, etc.

Risks can be minimized with prudent planning, but the chances of risks cannot be avoided altogether. The entire science of taking measures to minimize damages by assessing the underlying Risk factors comes under the ambit of Risk Management.

Risk management is the process of making and implementing/ executing decisions that will minimize the adverse effects of risk on an organization. From an Insurance Companies point of view, the adverse effects of risk can be objective or quantifiable like insurance premiums and claims costs, or subjective and difficult to quantify such as damage to reputation or decreased productivity. By focusing attention on risk and committing the necessary resources to control and mitigate risk, a business can protect itself from uncertainty, reduce costs, and increase the likelihood of business continuity and success.

Insurance and Risks

Insurance works on distribution of risk. An insurance company pools the money of a large group and promises that if one of the group suffers a predefined loss, then the pool will pay for the loss.

It is the decision and prudence of the underwriter to properly assess the risk and to decide as to what to insure and for how much. If the underwriters do their job well, then the insurance company should be able to anticipate how much it will pay in claims and expenses, and charge a commensurate premium that allows for a profit. With wafer thin margins and large risk exposures in certain lines of Insurance Business, there is very less breathing space for errors. The expertise gained and continuous learning required with an aim to strive for better risk reward ratio in an extremely uncertain environment is what differentiates this sector from others. It is believed that a 1% increase in insurance penetration results in a 13% reduction in uninsured losses.

ESG Risks are different from the traditional risks which fall under the exclusive purview of the underwriter.

ESG means using Environmental, Social and Governance factors to evaluate companies and countries on how far advanced they are with sustainability.

Compared with other types of perils, such as financial risks, the understanding of the relevance of ESG issues and their practical application for insurance is still in its infancy. A useful framework to examine in this context is the UN Environment Programme Finance Initiative (UNEP FI) Principles for Sustainable Insurance (PSI). It argues that the new risks and opportunities posed by ESG factors mean that it is prudent for the insurance companies to change the risk factors they consider when managing their businesses and decisions. The PSI is motivated by the fact that, as risk managers, risk carriers and investors, insurance companies can play a vital role in encouraging and promoting sustainable economic development.

It defines sustainable insurance as "a strategic approach where all activities in the insurance value chain, including interactions with stakeholders, are done in a responsible and forward looking way by identifying, assessing, managing and monitoring risks and opportunities associated with environmental, social and governance issues. Sustainable insurance aims to reduce risk, develop innovative solutions, improve business performance, and contribute to environmental, social and economic sustainability."

The principles for Sustainable Insurance, including a list of possible actions, provide a common aspiration and global framework for the insurance industry to manage ESG issues, and to strengthen its contribution to building resilient, inclusive and sustainable communities and economies. Four main principles outlined under PSI framework and some of the main actions within these principles are given below:

Principle Description	Possible Actions
Embed in decision making ESG issues relevant to insurance business.	1. Ensure the company strategy identifies, assesses, manages and monitors ESG issues in business operations 2. Develop products and services which reduce risk, have a positive impact on ESG issues and encourage better risk management 3. Integrate ESG issues into risk management, underwriting and capital adequacy decision-making processes 4. Educate sales and marketing staff on ESG issues relevant to products and services 5. Integrate ESG issues into investment decision making and ownership practices, e.g., by implementing Principles for Responsible Investment
Work together with clients and business partners to raise awareness of ESG issues, manage risk and develop solutions.	1. Communicate with clients and suppliers on the company's expectations and requirements on ESG issues 2. Encourage clients and suppliers to disclose ESG issues and to use relevant disclosure or reporting framework
Work together with governments, regulators and other key stakeholders to promote widespread action across society on ESG issues.	1. Support prudential policy, regulatory and legal frameworks that enable risk reduction, innovation and better management of ESG issues 2. Communicate with business and industry associations to better understand and manage ESG issues across industries and geographies
Demonstrate accountability and transparency in regularly disclosing publicly the progress in implementing the Principles.	1. Proactively and regularly disclose information on the company's progress in managing ESG issues publicly 2. Participate in disclosure or reporting frameworks

ESG Factors: Environmental

In business terminologies, Environment usually denote the external factors which affect the business decisions of the organization. These factors may range from demand-supply dynamics to competition in the sector/Industry in which the organization operates. All such external factors have a direct bearing on the business parameters which are used to rate an organization. For eg: a seasonal industry dealing with manufacturing and sale of Ice Creams/cold drinks would do well in summers as demand would be more in summers than in winters. Similarly the entry of a new player in the market or launch of a new product by a competitor might impact the growth prospects/ sales of an existing product of the organization. These risks are beyond the control of the Management, but need to be accounted for in planning stage as they effect the business operations/growth. However in ESG Risks, the term Environment is taken in literal sense.

Environmental factors include the contribution a company or government makes to climate change through greenhouse gas emissions, along with waste management and energy efficiency. Given renewed efforts to combat global warming, cutting emissions and decarbonization, it is becoming more important that everyone is required to take proactive steps in this direction. With growing concerns about the Environment, slowly and steadily companies have started coming forward to differentiate themselves from others by showcasing the extra efforts they are taking to make mother Earth a better place to live in or by suggesting ways in conservation and judicious use of limited natural resources. Insurance Companies can have maximum impact in this space.

Few ways in which an Insurance Company can integrate Environment factors in their Business decision making are:

1. In motor Insurance, which accounts for one of the major business segment for Insurance Companies, Insurers can aim to promote use of Electric vehicles or use of such vehicle which use Eco-friendly fuels such as CNG, sensitize customers to use public transport as primary means of commutation and avoid discretionary use of private transportation

2. In Industrial Insurance, Insurance Companies can advise Industrial units strategies for proper disposal of waste and its management, impact of emissions on environment, using and promoting usage of clean sources of energy etc

3. In Marine and Aviation Insurance, Insurance Companies can collaborate with the Businesses with an aim to reduce carbon footprint

4. In Home and Property Insurance, promote employment of such devices which rely heavily on use of renewable sources of energy like installation of solar power panels to employment of rain water harvesting systems

5. In Agriculture Insurance, promote use of organic methods of farming - with advice for controlled/limited use of fertilizers and suggesting ways to increase agricultural output with minimal damage and maximum conservation of Environment

6. Help Governmental Authorities in formulating policies and guidelines which promote Sustainable development with efficient utilisation of limited resources

ESG Factors: Social

Social factors include human rights, labor standards in the supply chain, any exposure to illegal child labor, and more routine issues such as adherence to workplace health and safety. Social risk factors can have a significant impact on an insurance organization’s customer and employee base, as well as its financial strength. In general, financial institutions with retail-oriented operations are closely scrutinized by regulators to manage social risk factors fairly. If they fall short of expectations – for example, via a data breach, or mis-selling products – organizations could be subject to hefty fines and penalties. They could also face irreparable damages to their reputation, which in turn, could have a negative impact on their investment capabilities. A social score also rises if a company is well integrated with its local community and therefore has a 'social license' to operate with consent.

Companies have to anticipate a growing consumer demand for ESG-compliant products, as well as increased disclosures on how a product is ESG-compliant, not just in investment-focused products but in all forms of insurance. With continuous evolution and incorporation of ESG factors in rating of products, it not only impacts the brand value and reputation of an organization, but also presents an opportunity/ challenge to outshine others to portray a preferred choice and better value for investment.

Some ways of how Insurance Companies can incorporate Social factors in business processes are:

1. Strong commitment to general Labor laws and welfare safety standards/policies prevalent in the country of operation
2. Strict adherence to law and justice system with commitment to consent on ways for speedy resolution of disputed matter in court of Law
3. Full public disclosure of product Liability, such as privacy and data security, financial product safety, health and demographic results etc.
4. Implementing Corporate Social Responsibility initiatives with focus on rural growth, promoting access to healthcare, improving infrastructure etc.
5. Employing such techniques to identify areas of employee improvement with continuous performance monitoring and motivation building, implementation of internal policies on Sexual Harassment, Whistleblower protection etc.
6. Ensuring accessible means for Grievance Redressal of employees as well as customers in order to resolve their grievances in a fair and transparent manner without any bias.
7. Providing potential business customers or Government Authorities with professional expertise and proactively suggest ideas to differentiate themselves as Industry leaders with responsibilities for long term reputation gains and favorable image building

ESG Factors: Governance

Governance refers to a set of rules or principles defining rights, responsibilities and expectations between different stakeholders in the governance of corporations. A well-defined corporate governance system can be used to balance or align interests between stakeholders and can work as a tool to support a company's long-term strategy. Among ESG Risks, Governance Risks are the ones which can be most easily accounted and managed by the organization and its Management.

Few ways in which Governance Risks impact Insurance Companies are:

1. Avoiding too much dependence on few key personnel for guidance on operational decision making, organizational hierarchy, Management flexibility etc.
2. Minimizing delay in filling up of Management positions, avoiding delay in nomination of Board members, efficient Board Structure etc.
3. Working with successive Governments with fair understanding of political landscape of the country, including anticipation of radical shift of investment policies on change of Government, factoring micro and macro-economic indicators etc.
4. Adhering to prevailing Regulatory frameworks/ controls/checks and balances

imposed by Regulators/ Government Authorities with clear impetus on transparent disclosure in the Annual Reports

5. Promoting morally sound Business Ethics, tax/investment transparency, anti-competitive policies, Intellectual Property Rights, Regular Review Meeting to discuss Business etc.

6. Implementation and successful execution of internal guidelines and policies, vision and mission of the Management and leadership views about future business prospects

Few Examples of Sustainable Insurance

Insurance companies can play an important role in social, economic, and ecologically friendly sustainability. Munich Re has developed offered coverage solutions for manufacturers and operators of photovoltaic projects and solar thermal power plants by supplementing the performance warranty with an insurance policy that pays out compensation upon a guarantee trigger, such as a manufacturer becoming insolvent or fluctuations in solar irradiation. Since 2010, Munich Re has insured over 55 solar module manufacturers and projects using this product. Similarly Swiss Re has sold weather-risk products to 320,000 small farmers in India. Netafim in collaboration with New India Assurance has implemented a programme to insure drip-irrigation equipment in the state of Gujarat, where equipment insurance is mandatory. In Japan, Sompo Japan Insurance and Tokio Marine Nichido Fire Insurance Co. Ltd. have given premium discounts to 10 million policyholders who drive low-emitting cars in a bid to reduce carbon emissions. In the U.S., automobiles account for 25% of all Greenhouse gas emissions and it is anticipated that by implementing Pay as You Drive policies issued by Insurers and hybrid vehicle incentives, emissions could reduce by 10%.

Conclusion

Identifying, understanding and managing risks is at the core of the insurance industry. All risks have various dimensions, but the environmental, social and governance (ESG) profile of a risk is a dimension that has only recently found its way into risk analysis of the commercial insurance segment. As aptly put out by the PSI Team which has conducted extensive research on ESG Risks under United Nations Environment Programme's Finance Initiative -

"Environmental, social and governance (ESG) issues—also known as sustainability issues—pose a shared risk to insurers, communities, businesses, cities, governments and society at large, providing a strong incentive for innovation and collaboration. Some ESG issues have varying implications, with some increasingly being recognised to be potentially financially material (e.g. climate change, ecosystem degradation, pollution).

With the adoption of the UN Sustainable Development Goals (SDGs), Paris Agreement on Climate Change, and Sendai Framework for Disaster Risk Reduction in 2015, and the Post-2020 Global Biodiversity Framework, there is growing pressure and urgency across all sectors of society to respond and find solutions to sustainability challenges the world is facing.

The insurance industry is also subject to a growing number of international standards and best practice frameworks across ESG issues (e.g. UN Guiding Principles on Business and Human Rights, the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures). At the same time, the number of industry participants who actively integrate ESG risk factors into their risk assessment and underwriting process is growing. There is an opportunity to streamline information requests and build knowledge within the insurance industry, making it easier for business partners to carry out ESG due diligence on clients and transactions.

Some ESG issues, such as climate change, require efforts from the entire industry. Working together as an industry to raise awareness of the importance of ESG issues and to support clients in managing them will play an increasingly important role in the future.

The benefits for companies taking an active role in developing an ESG approach will not only help mitigate reputation risk to their organisations and manage societal expectations, but will also help them capitalise on developing understanding of the financial benefits of clients with strong ESG performance. Stronger internal ESG expertise can lead to a competitive advantage in engaging and supporting clients. Furthermore, as companies around the world strive to support the Sustainable Development Goals, an active ESG approach can be a source of engagement for employees in an increasingly challenging market to secure and retain the next generation of talent in the insurance industry."

With increased human awareness, many organizations have started incorporating ESG Risks in routine business decision making and in times to come, integrating ESG strategy with business operations will be one of the most important success mantra for any organization. A classic example to substantiate this point of how ESG Risks can affect business operations of an organization is by exploring the history of Sterlite Industries (India) Private Limited's Tuticorin Sterlite Copper Smelting Plant. Started in 1998 in Thoothukudi in Tamil Nadu, the plant faced stiff resistance from Environmentalists over pollution concerns. The plant had to in fact shut down in 2018 after major protests by local people for causing a range of health problems and accused of violating environmental norms. However in 2021, the Company's Management passed a resolution to produce and supply free Oxygen in order to contribute at a time when the country was grappling with shortage in wake of COVID-19 pandemic.

Though few activists still question the intention of the conglomerate to supply oxygen for free, the fact of the matter is that as of today the plant has restarted operations for production and supply of oxygen after getting nod from the Hon'ble Supreme Court of India. TJ

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Climate Change and Innovative Insurance Solutions

Vineet Saxena
PGDM Batch (2019-21),
Second Year
National Insurance Academy, Pune
vneet91@gmail.com

Scenario 1: *Little girl Anjali, aged 12, dreamt of becoming a pilot one day. She wanted to study well and make her parents proud. But on a fateful day in 2020, cyclone Amphan ruined her home and broke her family. Her dreams, like her home, lay in ruins. Anjali has been a victim of climate change.*

Scenario 2: *In the faraway hinterlands of Vidharbha in Maharastra, Aniket Rao is mired in deep debt. He is hoping for a bumper crop this season so that he can pay off his debts. Unfortunately, the monsoon refused to visit his farm and his crops died a slow death, leaving Aniket Rao and his family in unspeakable misery. Aniket Rao too is the victim of climate change.*

Like Anjali and Aniket Rao, climate change is wreaking havoc on millions of lives and is leading to the destruction of the planet. This is the toughest crisis humanity ever faced. It has become the greatest challenge to the survival of future generations. As per the UN's Emission Gap Report 2020-

- Green House Gas (GHG) emissions are rising speedily and reached a record high in 2019. Maximum GHG emissions are coming from fossil fuels.
- G20 countries are responsible for the greater part of emissions: Top four emitters - China, US, EU+UK, and India contributed 55% of the total GHG emissions in the last decade.
- Current Nationally Determined Contributions (NDCs) would lead to a temperature rise of

at least 3o C by the end of the century.

COVID-19 pandemic offers only short-term decline in global emissions. This is not going to add substantially to emission reductions by 2030.

Environmental risks are continuously rising and causing climate change. Climate change is a great threat to health, food supplies, biodiversity, and livelihoods across the globe. Risk management tools are of great need to ease the burden of climate change on low-income groups. One such tool is insurance. Insurance can help us to better manage the negative impact of these rising climate risks.

Risk that can't be stopped or diminished cost-effectively can either be retained by the risk holder and/ or transferred to third parties

such as insurance. By transferring some of the risks to third parties, insurance can help to safeguard the individual

due to loss of assets and livelihoods and thus facilitate economic growth after a disaster. Well-designed insurance solutions will help in managing the economic impact and ease quick recovery after a natural catastrophe.

As per the study conducted for World Bank by Melecky and Raddatz (2011), countries with high insurance penetration experience a positive Gross Domestic Product (GDP) trend after a large weather-related catastrophe event. Countries with low insurance penetration suffer from negative

GDP deviation after extreme weather events and also experience a long-term reduction in GDP, if not compensated by other growth

a risk management tool that offers

like – incentivizing for loss reduction & resilience-building behavior; providing support for decision-making, with the provision of protection to take risks & pursue opportunities. Various insurance solutions re available for climate risk management (see Figure 2). Current insurance products for managing climate risks are- contractors' pollution liability, energy-related coverage, premises pollution liability, packaged insurance for environment facilities and transportation pollution liability, etc. Further, innovation is also happening in environment-related insurance products. Insurers are providing various innovative insurance solutions for managing climate risks.

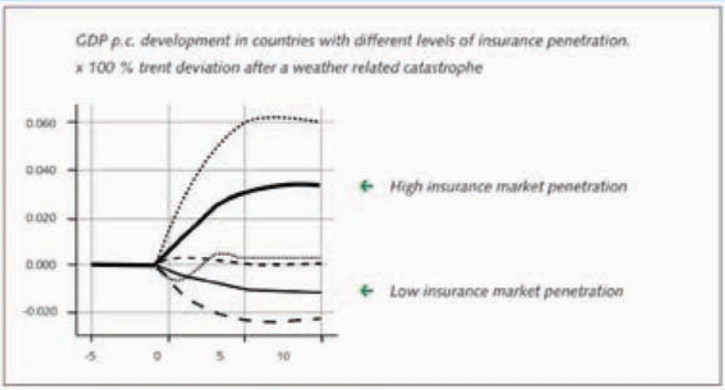

Figure 1: Comparison of GDP (p.c.) after a weather-related loss event in countries with high- and low insurance penetration.
Source: Melecky and Raddatz (2011).

Innovative Insurance Solutions for Managing Climate Risks

For handling the rising environmental risks, insurers are offering various sustainable insurance solutions to the customers such as -

Sustainable Insurance Product System- Ping An Insurance (Group) Company of China, has prepared a sustainable insurance

addresses customer requirements and assuages environment & social risk for a green environment and viable economic development. Till now, it has launched more than 500 sustainable insurance products & ecological related products such as environmental liability insurance, catastrophe insurance, wildlife product insurance, and inclusive

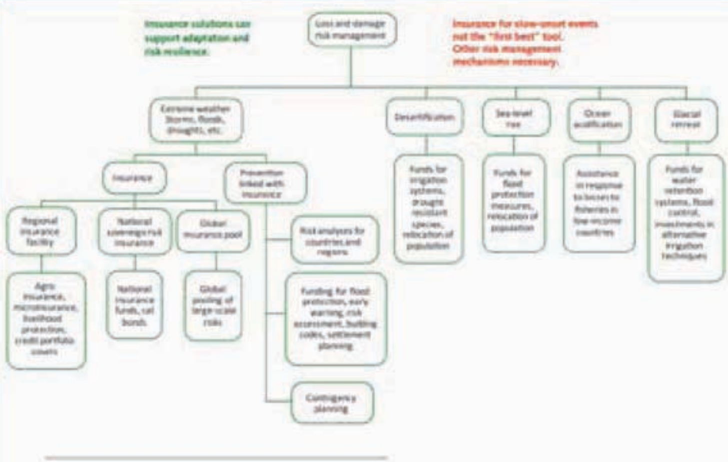

Figure 2: Tree of options for climate risk management.
Source: Derived from MCII Policy Brief. Warner et al., 2012.

insurance products for vulnerable groups of society.

Sustainable Solutions Program- World-leading insurer, Allianz has developed a program called Sustainable Solutions to recognize the insurance, asset management products, and assistance service that they offer for the betterment of peoples' lives and make a worthwhile environmental impact. It has also introduced customized insurance products for large-scale renewable energy projects and green building insurance. Furthermore, Allianz is providing a special rebate on car insurance for drivers with

vehicles and also on property insurance for rooftop solar panels.

Windstorm insurance solution- Leading reinsurer, Swiss Re has created an innovation named windstorm insurance solution for a Green Bank in the USA, using a the installation of more than 14000 solar panels on a residential and commercial rooftop in the state of Connecticut. Rooftop panels are not owned either by banks or investors so conventional insurance was not available for this risk. The company is also making the environment sustainable through its Grand Paris Express project. Under this, Paris city authority is planning to double the size of the metro system by adding 200km of new tracks and 68 new solutions. For this, Swiss re is offering construction and post-construction covers.

Eco-Friendly Auto Insurance- Conventional fuel-based vehicles are major contributors to air pollution and global heating. There is a need for more strong movement towards hybrid & electric vehicles. Insurers like Travels and Farmers are giving hybrid and alternative fuel vehicle drivers a 10% rebate. American Auto insurance company offers 5% off for environment-friendly motorists.

Sustainable Rebuilds- Many insurers are offering the option to rebuild with eco-friendly materials. This will raise insurance premiums by a little amount. Under the cover, Insurance companies will cover added expenditure to replace damaged items with eco-friendly options. Farmers Insurance Company of USA offers an Eco-Rebuild product, which is available as an addition to a regular homeowner policy for just 2% of an annual premium. In case of loss, the company will pay extra to replace old kilowatt-hungry appliances with

US

Green Building Council issues Leadership in Energy & Environment

environment standards such as-

Fireman Fund Insurance Company offers a 5% rebate to a customer

Comprehensive Approach to diminish vulnerability in the Horn of Africa- Horn of Africa program with Ethiopia Program was launched in 2007 to strengthen the farmers against climate risks. It combines insurance with risk pruning, credit & saving. Under the program, low-income farmers can use their labor

farmers who purchased insurance work more days on a community development project. This assists the farmer even if there are no payouts due to risk reduction efforts and will aid them in improving their yield and reduce vulnerability to drought.

Early Warning System and Insurance- climate risk adaptation and insurance project in the Caribbean uses an early warning system and risk reduction information in combination with climate index-based insurance products aimed at poor individuals. Remote sensing data is utilized to monitor daily rainfall levels and wind speed. Policyholders receive warnings and advice via SMS. This allows them to take safety measures before a storm hits. Further, policyholders are also helped with training & education modules to assist them in better understanding of insurance products and to improve insurance literacy.

Satellite Technology and Insurance - With the use satellite technology, data is collected on rice areas and rice growth in seven Asian countries to reduce the vulnerability of rice growing farmers. It helps in forecasting the rice growth and expected harvest. Father, it also facilitates in easily quantifying the crop losses with technology. There are two purposes that are served by data collection- one, for building up a crop information system that alerts the government on potential losses and can trigger the measures with regard to food security in the country. Second, data collected is also utilized in developing agricultural insurance solutions for rice farmers.

Green Insurance- Insurance companies are offering discounted insurance to a customer who is adopting green practices to help the environment.

Challenges of Insurance Solutions in the Context of Environmental Risk Management

Apart from opportunities and benefits of insurance solutions, there are many challenges faced by insurers while designing and implementing these insurance solutions in the context of environment risk management including:

Cost of Insurance and Intricacy- insurance products can be expensive for the poorer countries, communities and individuals. This happens because of soaring start-up costs, transaction costs and infrastructure need for data collection. Low insurance knowledge and the complexity of insurance solutions on one hand, and low eagerness and ability to pay by customers on the other hand, can make insurance a “tough sell” for national leaders.

Setting up Economical Distribution Channel- The setting up of low cost distribution channels for a pilot initiative to be scaled up nation-wide is a herculean task to be addressed. The transaction cost can be at manageable level if we utilize existing networks, such as branch networks of insurance or bank channel, members of large farmer groups, or through public extension services. The use of technology should be encouraged such as mobile-phone based money systems that could help in managing cost and reaching a large customer base.

Ramping-up of Small Pilot Projects- Things change place to place like risks, livelihoods, geographies, micro-climates, coping mechanisms and other factors and all these make hard to broadly spread and repeat the same insurance solution over a wide area.

Unsymmetrical Information- insurance approaches should be designed in such a way that they incentivize the risk management behavior and reduce the asymmetric information issues like adverse selection and moral hazard. Adverse selection arises when an insurer possesses less information about the subject matter than the insured. Hence, customer with a high risk profile would like to buy insurance cover. Moral hazard occurs when the protected party acts differently than if they didn’t have that protection. The party reduces efforts in risk prevention because of insurance coverage.

Suggestions for Feasible Insurance Solutions Design

Insurance Product Design- This should be based on local context which can be measured by a market study. In Ghana, customers have shown less interest in products which only cover extreme weather events and make payouts only every 10-12 years but rather in more all-inclusive insurance solutions which pay out more often. However, these all-inclusive insurance cover have high premium rate and customers are not eager to pay such big amounts.

Finding cost-effective distribution channels- This can be done through partnering with risk aggregators or wide network actors to reduce the transaction cost and reach a larger number of customers at the same time. And also utilizing the merit of technology such as use of mobile phones.

Customer Education- customer literacy should be increased in areas of climate risks and then this can be used to tackle these risks. This should consist of awareness creation on basic insurance principles, running nation-wide awareness movements with backing of the government through diverse channels planned for local context, can assist in reaching scale.

Capacity Building- For the sustainable approach the capacity of local supply side such as designing, pricing, marketing and underwriting of products and claims management should be scaled up. Supporting in establishment of local institutional and organizational structures.

Improving Data Availability- Public actors should be supported in setting up additional automatic weather stations and retrieving alternative remotely-sensed datasets for implementing suitable insurance solutions. This will improve data availability.

Due to the climate crisis, the prevalence and harshness of catastrophic events are on the rise globally. This impairs the resilience of poorer countries and their natives by reducing their capacity to recoup and absorb losses from these extreme weather events. This has a bad impact on the socio-economic condition of these countries. It will affect the agricultural yield, occurrence of disease, water, and food security. We have read initially about Anjali and Aniket Rao, victims of climate change.

Risk sharing and transfer tools, such as insurance, are adding to the endeavor of governments and citizens to lessen the immediate and long-term economic effects related to devastating natural events. They provide post-event liquidity for relief and rehabilitation measures. Further, they also assist in preparedness measures to reduce the negative impact. Risk prevention measures among the target population can be increased if insurance solutions are well designed and meet the need of the target population. There is a strong need for co-operation worldwide among regulators, advisory bodies, and insurers. Insurers should work closely with customers to encourage the use of environment-related insurance products and initiatives. It is not going to happen on the spur of the moment but working together, it will lead to success surely. TJ

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Insurance and ESG [Environmental, Social and Governance Risks]

Gautam Bhatnaggar
ICICI Lombard GIC Ltd,
315, 3rd Floor Aggarwal City Mall,
Pitam Pura, New Delhi – 110034
gautam.bhatnagar@icicilombard.com

Abstract

In this article I'm going to highlight that beyond just a regulatory requirement, ESG (environmental, social and corporate governance) factors have become crucial in understanding an insurance company's investment risk and credit profile. This journal intends to cover the ever increasing popularity of ESG investments, how ESG investments are selected risk and strategy considerations for insurers, influence of ESG factors on product design, for both long-term insurance products and requirements.

ESG is not simply a matter of complying with the rules—it is essential for insurer's survival. In the Insurance industry, and in the wider financial and business communities, the concept of sustainability is evolving. Now insurers are looking at it not just from the perspective of how ESG issues impact insurance and investment portfolios, but also how insurance and investment portfolios impact the environment and society. ESG concepts are of interest among a wide variety of investors. Part of that awareness stems from the recognition that ESG investments now represent a significant pool of assets. Not surprisingly, there is a growing awareness among insurers and their asset managers of better developed frameworks to incorporate ESG factors into investment decisions. As a result, insurers and their asset managers need to understand the challenges of integrating ESG into fixed-income investment management. The firms that master those challenges may find themselves in a stronger position to ensure ESG factors are fully captured during investment analysis, reduce investment risk, and be a positive catalyst for investment returns.

Introduction

The pandemic year has taught us that sustainability is not just about tackling environmental risks but much more. It is about creating resilience into infrastructure, and this is where the Environmental, Social and Governance (ESG) conversation comes into play.

As a term, ESG made its first appearance in 2005's Who Cares Wins study 1. That same year, the UNEP/Fi (United Nations Environment Programme – Finance Initiative) published the so-called Freshfield's Report 2 which showed that ESG issues are relevant for financial valuation. These publications led to the launch of the PRI (Principles for Responsible Investing) and the SSE (Sustainable Stock Exchange Initiative).

Investors are looking for a strong ESG proposition to protect their interests and the company's success. The fine line between doing good business and what is profitable is fast diminishing.

In the insurance industry, and in the wider financial and business communities, the concept of sustainability is evolving. Now insurers are looking at it not just from the perspective of how environmental, social and corporate governance (ESG) issues impact insurance and investment portfolios, but also how insurance and investment portfolios impact the environment and society.

What is ESG?

E – Environment – The E in the ESG is perhaps one of the most important concerns of the 21stcentury – the environment. How companies use energy and manage their environmental impact have far-reaching consequences on society and the planet.

S – Social – The social impact may not be evident right at the onset, but it is an integral part of the ESG framework. How a company fosters its people and culture will have a rippling effects on the broader community. Their inclusivity and diversity will pave the way for a sustainable future.

G – Governance – There are two parts to this criterion. One is staying ahead of violations, ensuring transparency and industry best practices, and dialogue with regulators. The other is the internal system of controls, practices, and procedures to govern and make effective decisions.

Why is ESG Important?

According to the European Green Deal 4, by 2050, all member states will have circular economies, having achieved net-zero emissions. While the European Union (EU) has a head start, the United States also has bold plans to decarbonize the economy and aim for net-zero emissions target by 2050.

Companies are already experiencing the financial consequences of failing to act on sustainability as many countries have implemented regulations, such as carbon taxes, and the financial and banking sectors have integrated ESG rules into their funding criteria. The only way stakeholders can avoid poor lending conditions and exclusion from capital markets is to show evidence of having developed robust sustainability and ESG strategies.

In addition, the private equity market also includes sustainability and ESG criteria into its portfolio strategies. Private investors have realized that investing in companies with a robust and convincing ESG strategy positively affects ROI, reduces lending and revenue risks.

Investors are increasingly considering ESG issues to help manage investment risks. ESG performance ratings and reports show investors a company's efforts to mitigate risks and generate sustainable long-term financial returns.

Furthermore, firms that have successfully implemented sustainability and ESG strategies tend to outperform the other top global companies. ESG transparency is, therefore, a key focus for companies in 2021 and beyond.

Benefits of ESG

There are multi-fold benefits for companies to invest in development and implementation of robust ESG strategies. A strong ESG proposition can help create enormous business value across the enterprise.

E – Sustainable practices attract more customers, allows better access to resources, lowers energy and water consumption and therefore also can reduce operational costs.

S – Sustainable practices lead to greater social credibility, attract talent, boost employee morale, and build stronger community relations.

G – Sustainable practices may lead to government support, subsidies, overcoming increasing regulatory pressure and better investor relations, e.g., in form of better loan conditions or lower capital costs.

What Does This Mean for Companies?

Companies need to put sustainability and ESG strategies in place right away, addressing the main challenges of net zero and circularity. Those who consider ESG aspects will have a higher valuation than those that do not.

The automobile and manufacturing industries will perhaps face the biggest challenges of all, especially with their supply chains. They need to invest in innovative product development to create new technologies that provide climate-neutral and circular solutions to the market. They need strong sustainability and ESG policies, which will make them more resilient during crisis.

Without proactive leadership, businesses cannot hope to make the industry-wide impact that we need. Forward-thinking C-level executives must focus on sustainability and make decisions for the greater good if they want to see solid bottom-line results from their strategic business decisions.

The good news is that businesses can develop sustainability and ESG strategies that achieve net-zero and circularity goals in compliance with 2050 targets remain profitable while maintaining access to financing through banks and capital markets. Companies can develop net-zero and circularity roadmaps for their business that protect shareholder value, create opportunities for growth and innovation, and set the foundation for long-term success.

ESG in the Insurance Industry

CESG risks have resulted in increasing numbers and quantum of insured claims, and therefore losses to carriers, and are also linked to other legal and, crucially, reputational concerns. The ongoing activity of governments and the spotlight being shone by activists on these issues has led to an increasing amount of ESG-related legislation. Although adapting to ESG risks is expected to reduce costs for companies in the longer term, in the short term, this greater regulatory burden represents a cost to all firms, including insurers and re-insurers. This compliance burden is significant for international insurance groups subject to standards that diverge between jurisdictions, such as the marked contrast between the relatively and increasingly stringent requirements of the European Union (the “EU”) and the lack of any standardised ESG disclosure regime in the United States. However, compliance with ESG reporting requirements and foregrounding ESG within investment strategies may also offer opportunities for insurers, such as attracting the growing number of ESG-minded consumers, as well as having the potential to enable positive financial returns on investments. By successfully integrating ESG factors into their risk assessment and underwriting processes, insurers may be able to mitigate their losses from the growing number and range of ESG risks. To ensure the success of their businesses going forward, insurers must prioritise consideration of ESG factors, both in their roles as investors and as insurers.

Impacts of ESG Issues

The number and type of ESG risks are growing. Perhaps the most obvious manifestations of these are the risks posed by climate change to insurers. With the intensification of natural catastrophes and weather-related events, at least in part due to the impact of climate change, property losses have increased. These events also cause significant disruption to businesses and the market, as well as climate-related migration, which in turn leads to lower property values and therefore associated revenues for insurers in the areas people are abandoning.

While the 'E' of ESG is important, we cannot rule out the importance of other risks ie Social and Governance. One major 'social' risk is the recent spate of diversity disputes, such as the shareholder derivative action filed against Facebook in 2020, alleging that the directors violated their fiduciary duties through their failure to take action on diversity and inclusion, and hate speech.

These growing risks are relevant to insurers in their roles as both investors' and underwriters. From an underwriting perspective, a failure to integrate all ESG factors into the risk assessment and underwriting process will misunderstand the scope of the eventualities and the related risks that policy is covering. This will likely lead to increased claims on policies, which has the capacity to significantly reduce insurers' ability to derive underwriting profits on policies. A failure to consider ESG factors can also be detrimental to the value of insurers' investment portfolios. Companies' revenues, profits and market values decline following ESG incidents such as oil spills and weather-related supply chain disruptions. If an insurer invests in companies seeing a reduction in their share value, this may reduce investment returns. Taking a longer-term view, some companies may ultimately collapse in the face of risks stemming from long-term trends such as climate change. A failure to factor this in could impact the value of investment portfolios and underwriting profits (or extend underwriting losses), as well as the ability of the insurer to attract investment itself, as institutional investors and consumers start to compare products and turn to those more aligned with their personal and institutional values. Risks related to, and the approach generally to, ESG issues can also impact a company's reputation. With the advent of viral social media, customers can easily express displeasure, with wide exposure, at how companies, particularly those that are public facing, have handled ESG issues. ESG legal frameworks are currently focused on diligence, disclosure and reporting obligations so as to allow investors and interested parties to bring pressure to bear on those who do not meet expected or mandated targets and/or requirements. Such laws can have a significant impact on furthering the consideration of ESG issues.

Conclusion

Insurers that factor ESG issues into decision making, and make sustainability disclosures in line with regulatory requirements, are expected to derive significant benefits in the long term. Various recent analyses show that ESG investments may offer higher returns as compared to more traditional investments. With the growth in the volumes of both ESG regulation and material ESG risks, insurers can no longer afford to ignore ESG factors. It may be a slow progression, but the market is moving more steadily towards greater disclosure of ESG risks and issues and, as a result, investors, customers and regulators are coming to expect the same – whether required by the regulators or not. In addition, those that adapt and display a forward thinking attitude towards ESG issues may find they increase their customer base and profitability. Proper assessment can help companies implement a systematic approach to business integrity risks to manage the rapidly evolving reputational, financial, political and legal consequences of such risks. TJ

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Insurance and ESG Risks

The insurance industry is built upon risk: quantifying, assessing, mitigating, and managing the potential for sustaining losses due to a variety of factors, from malfeasance and operational problems to natural disasters and systemic issues. All risks have various dimensions, but the environmental, social and governance (ESG) profile of a risk is a dimension that has only recently found its way into risk analysis in the industrial insurance segment.

ESG — also known as sustainability — is made up of environmental, social and governance factors. It began emerging in the 1990s, with international events and frameworks such as the Kyoto Protocol and more recently the Paris Agreement and UN Sustainable Development Goals.

Compared with other types of perils, such as financial risks, the understanding of the relevance of ESG issues and their practical application for insurance is still in its infancy. Insurance organizations worldwide are now starting to give impetus on increasing environmental, social, and governance (ESG) risk factors and their potential impacts on their investment portfolios and lending policies.

- ➢ Environment factors refer to the company's behavior on environmental issues such as resource depletions, climate change, waste and pollution.

Gajendra Pratap Singh
singhgajendrap@gmail.com

- Social factors are related to the company's treatment regarding people, workers and local communities, including health and safety issues.
- Governance factors refer to corporate policies and governance, including tax strategy, corruption, structure, remuneration.

Global losses from natural disasters in 2020 were US$210 billion. The dominating perils for these losses were mainly floods, cyclones, and large wildfire. It is clear from the above, that climate change will play an increasing role in all of these hazards, putting more emphasis on managing the environmental exposures appropriately. This includes the impact of insured catastrophes on an insurance company's financial strength, as well as considerations regarding claims predictability, frequency, and severity.

Social risk factors can also have a significant negating impact on an insurance organisation's customer and employee base, as well as its financial strength. For example, retail-oriented operations are closely scrutinized by regulators to manage social risk factors fairly. If they fall short of expectations – for example, via a data breach, corruption, in admissive contractual clause or mis-selling products – insurers could be subject to fines and penalties. They could also face irreparable damages to their reputation, which in turn, could have a negative impact on their investment capabilities.

Weak corporate governance, as well as inadequate business ethics, can have a detrimental impact on an institution, potentially resulting in fines, impaired financial performance, or even the withdrawal of an operating license.

As ESG issues become more widely scrutinized by investors and consumers alike, it is important that insurers address them within their own businesses in order to contribute to sustainable economic and social development, as well as to maintain their own brands and reputations. A useful framework to examine in this context is the Principles for Sustainable Insurance which is defined as **"a strategic approach where all activities in the insurance value chain, including interactions with stakeholders, are done in a responsible and forward-looking way by identifying, assessing, managing and monitoring risks and opportunities associated with environmental, social and governance issues. Sustainable insurance aims to reduce risk, develop innovative solutions, improve business performance, and contribute to environmental, social and economic sustainability".**

It argues that the new risks and opportunities posed by ESG factors mean that it is prudent for insurers to change the risk factors they consider when managing their businesses.

Key Principles for sustainable Insurance: -

1. Embed in decision- making ESG issues relevant to insurance business.
2. Work together with clients and business partners to raise awareness of ESG issues, manage risk and develop solutions.
3. Work together with governments, regulators and other key stakeholders to promote widespread action across society on ESG issues.
4. Demonstrate accountability and transparency in regularly disclosing publicly the progress in implementing the principles.

The growth of interest in ESG naturally necessitates insurers to consider the impacts on risk management and strategy. Clearly there is a reputational risk that an insurer is not seen as environmentally and socially conscious and some kind of reputational event highlighting its practices results in significant increases in lapse rates and reductions in new business. Firms could also attract litigation if they do not conduct themselves appropriately, in line with expectations. This could be particularly problematic if a firm's behavior is not in line with its external disclosures to policyholders and shareholders. To this end, integration of ESG issues within the business could require wide-ranging changes with respect to culture across the business, to ensure that its behavior matches its externally slated ethics.

From the insurer's perspective, there could be an opportunity cost if those managing investments do not consider new investment opportunities in green initiatives which could have huge potential for growth. On the other hand, there is perhaps a limited extent to which such investments are likely to be a good match for insurance liabilities. If such investments are taken, they should be taken only under circumstances in which they are properly understood and there are appropriate risk management measures in place. A core ESG concern is climate change, and a key issue faced by firms in a climate-aware economy is the impact of changing perceptions of a firm based on its disclosure, which can lead to a tangible impact on the firm's value.

Whilst looking to manage ESG-associated risks, firms should also have clear ideas regarding risk appetite and ESG strategy, in order to inform appropriate risk management. The extent to which firms want to pursue provision of ESG funds and products and implement due diligence on both their own actions and the actions of suppliers, from an ESG perspective, is a strategic consideration. Insurance-based investment products are unlikely to have a primary objective of sustainable investment or a reduction in carbon emissions, because protection is of course a key focus for insurance-based products. However, as demand for ESG- compliant products grows, insurers may opt to incorporate environmental or social characteristics into their insurance-based investment products.

Conclusion

ESG considerations cannot be overlooked by insurers in today's environment, given the growing prominence of such issues. As awareness of sustainability increasingly influences customer demand and as regulatory attention to this area grows, insurers must ensure that their positions on ESG matters are clear and that their strategies, product designs and day-to-day business management are aligned to them. This will be increasingly important not only in order to maintain brand and reputation, but also to remain competitive as customer demand evolves.

ESG matters pose numerous risks to insurers and therefore, as per other risk types, insurers should be clear on their ESG risk appetites and their approaches to managing this risk exposure. The risk appetite of firms for the closely related emerging risk, climate change is currently being explored by the insurance industry through the introduction of specific disclosure requirements and scenario testing recommendations, among other developments. Whilst ESG has a broader spectrum, including social and governance issues as well as other environmental concerns, the avenues that insurers travel to embed climate change risk could form useful reference points as ESG-specific risk exposure is explored further within the insurance industry, expanding beyond investments alone.

Overall, whilst ESG matters will increase the regulatory burden for insurers and will inevitably introduce risks, if managed properly within the business and effectively embedded into product design, they can also provide insurers with considerable opportunity.

Technology Platforms Redefine Insurance in ESG

Reecha Goel
Associate Director,
IBM Global Services,
E-3/6, Third Floor, Vasant Vihar,
New Delhi – 110057.
reecgoel@in.ibm.com

Abstract

Objective

Insurance Industry is best positioned to play a pivotal role in creating a more sustainable tomorrow as it stands at the fulcrum of transition to Net zero carbon, resilient and sustainable global economy, both in terms of the risks it covers and the investments it makes. A strong Leadership backed by Technology platforms and specialized Insurance policies are required to achieve SDG outcomes, addressing ESG risks.

Methodology

This article utilizes a variety of research sources. Key component of the Research analysis includes secondary research and where applicable, all secondary research sources are appropriately cited within this report. These research sources, combined with industry data and technological expertise, are synthesized into suggesting Technological platforms and New Insurance Policy instruments.

Keywords

Technology, Platforms, Insurance, Climate, Emissions, Weather, Green, Carbon, Sustainable, Solutions, Policy, ESG, Agenda2030, SDG, Cloud, Electric Vehicles, Driverless Cars, Green Buildings, Risks, Analytics, Auto Insurance, Crop Insurance, Farmer Insurance, Environment, Social, Governance, CO2 Reduction, GHG Emissions, Sustainability.

The global community witnessed a high point in 2015 as leaders around the world unanimously adopted the landmark Paris Agreement, within the UN Framework Convention on Climate Change and crafted the **2030 Agenda for Sustainable Development.** The 2030 Agenda included the Sustainable Development Goals (SDGs) or Global Goals as a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all"[1]. These SDGs cut across People, Profit and Planet to address ESG (Environment, Social and Governance) Risks to achieve Sustainable Development. The Paris Agreement was signed by 195 member states, against Greenhouse Gas (GHG) emissions, with the goal to hold global average temperatures to well below 2 degrees Celsius above pre-industrial levels and thus transforming to a healthier planet. The increasing awareness related to environmental concerns; social challenges; lack of Leadership focus, underpinned by Paris Agreement targets are driving the need for sustainability solutions in the market. The Sustainability market is expected to grow from $11.2 billion in 2020 to $36.6 billion by 2025, at a Compound Annual Growth Rate (CAGR) of 26.6%[7].

Sustainability is endemic to the insurance industry. The Principles for Sustainable Insurance were introduced in 2012, at the same conference that marked the introduction of the United Nations' Sustainable Development Goals (SDGs).

The Principles for Sustainable Insurance[12] were developed as part of the UN Environment Programme Finance Initiative. These Principles present four overarching themes:

- Incorporating material ESG issues into decision-making
- Collaborating with clients and business partners to raise the profile of ESG factors, manage risk, and find solutions
- Working with governments to spur societal action on ESG issues
- Disclosing progress on the Principles in order to maintain accountability and transparency

For insurers, sustainability evolved beyond altruism into a new business imperative. There are both external market forces and internal cultural forces elevating sustainability items on the insurer's agenda. Insurance Industry is best positioned to play a pivotal role in creating a more sustainable tomorrow as it stands at the fulcrum of transition to Net zero carbon, resilient and sustainable global economy, both in terms of the risks it covers and the investments it makes. Insurance helps make the world more resilient. During the Covid-19 pandemic, resilience is threatened, and hence it's time insurance will have to lead the sustainability agenda for times to come. Insurers are looking to (re)build trust with organizational purpose (Environmental, Social & Governance (ESG)) and a commitment to Sustainability targets. In terms of Insurance Industry, ESG related risks and circular in nature and impact one another and need to be addressed together in pursuit of a more forward-looking, healthier and better managed world. Digital technology powered by Market Making Platforms, is one of the most potent forces available to insurers in their quest to address the ESG Risks and making equitable and viable recommendations. Various problems related to ESG risks threaten a company's sustainability, but the act of endeavouring to solve such issues may generate new business opportunities.

Let us discuss some risk drivers and how Insurers can strive to realize a sustainable society by creating new platforms / business models for solving environmental and social risks along with a strong Management framework to cover the risks associated with Governance.

1. **Climate Change Risks[2]:** Global climate change has already manifested effects on the environment. Glaciers are shrinking, ice on rivers and lakes is melting. Plant and animal ranges are migrating and trees are flowering sooner. Insurers should evolve from being Financial-loss Compensators to Physical-risk preventors. Insurance is a data-driven industry and has tons of data, both structured and unstructured, but only the ones converting that data into useful insights can make this data a "gold mine". Insurance companies should leverage a Big data Analytical Platform, let us term it as "Insurlytics", to allow comprehensive understanding of climate, physical and transition risks. This platform will enable:

a) Quantitative study about probability of climate hazards occurring

b) Severity level of the upcoming climate hazards

c) Quantification of Impact function on different asset classes with resultant through calculation of net financial loss.

d) Ability to use historical data to effectively calculate premium rates and plan for pay-outs for future large-scale climate hazards.

This Risk assessment, evaluation and analysis through this platform, will help as Early Warning signal for Insurers and enable them to assess and determine the Insurance premium in a prudent manner covering aspects of demography, social and economic parlance. Insurlytics platform will thus addresses environmental risks. Parallelly, Social risks are mitigated through quick, early, and accurate information. The insurance premiums are disbursed without any delay and act as a big relief for individuals, communities, local governments, administrations to recuperate back from the climatic loss or these funds are utilized in preparing for the potential disaster.

2. Emissions Risks

2a. From Buildings and Construction: Together, building and construction (buildings, dams, roads etc) are responsible for 39% of all carbon emissions in the world, with operational emissions (from energy used to heat, cool and light buildings) accounting for 28%[8]. To circumvent the emissions, the Industry invented the concept of Green Buildings, to reduce the overall impact of the environment on human health and natural environment.

- Green buildings incorporate sustainable materials in their construction (e.g., reused, recycled content, or made from renewable resources) with minimal pollutants.
- Featured landscaping that reduce water usage.
- Produce less construction waste and have a mechanism for Waster re-cycling
- Use of renewable energy and eco-friendly equipment
- Regularly maintained Heating, ventilation, and air conditioning systems (HVAC) to reduce Carbon emissions

Insurance can play a central role in the construction Industry through the use of technology platform, backed with IoT sensors and Intelligent workflows towards building automation to control everything from lighting, energy usage, waste re-cycle, carbon emissions to user-centric functions. Let us call this technological platform “InsurBuild”. The output of InsurBuild will be coming through sensors, automation controls and devices installed in the building towards tracking energy or electricity usage / GHG emissions / water usage & waste management in order to achieve the final goal of Socio – Environmental sustainability. Insurers can leverage the outcome of InsurBuild and design a specialty Insurance Policy, to promote Green buildings to save our environment and make energy and water efficient, waste re-cycled clean surrounding, reduced emissions communities. In the event of a repair of a Building, using outcomes from InsurBuild, this Insurance Policy can enable policyholders to replace traditional systems and materials (flooring, paint, carpeting, etc.) with green, environmentally friendly materials in accordance with defined eco-standards. If the entire building is to be built / re-built, this Insurance Policy will disburse according to the accepted standards of a Green Building. Combination of technological platforms and such Insurance policies will encourage a huge population to move towards greener options such as usage of LEDs and save energy, have proper system towards water and waste re-cycling, water free landscaping, emission free paints and furniture and so on, helping out environmental and social goals, aligned to SDGs.

2b. From Mobility: A typical passenger vehicle emits about 4.6 metric tons of CO2 per year assuming the average gasoline vehicle on the road today has a fuel economy of about 22.0 miles per gallon and drives around 11,500 miles per year. Every gallon of gasoline burned creates about 8,887 grams of CO2[9]. In addition to carbon dioxide (CO2), automobiles produce methane (CH4) and nitrous oxide (N2O). The automobile Industry is witnessing rapid evolution to circumvent GHG emissions.

i) The Electric Vehicle Market is picking up and projected to reach 26,951,318 units by 2030 from an estimated 3,269,671 units in 2019, at a CAGR of

21.1% during the forecast period[3].

ii) Driverless Car is another game changer in the Auto Industry. In 2015, a research paper made headlines when scientists demonstrated that road accidents could be reduced by 90% before 2050 with Driverless Cars, which attributes to a`lmost 300,000 lives saved each decade in the US, and a saving of $190 billion each year in healthcare costs associated with accidents[4].

To address the Automobile Industry, Insurers need to move to a modern technology platform, let us call this "InsurAuto", which combines telecommunications, vehicular technologies (telematics) and Internet of Things (IOT) to transform how insurance companies do business. This platform will combine navigation, safety, security and communication into one convenient piece of technology, that fits in a vehicle's dashboard. InsurAuto platform can collect data from varied data sources: a GPS, a sensor on the engine diagnostic port and an accelerometer and provide real-time data to enable Insurers benefit economically and simultaneously help the environment and society:

a) With GPS feature enabled, the platform can automatically detect the collision and summon help. This technology will also enable remote support during on-site investigations with provision of accurate estimates and faster claim settlement leading to high point customer experience.

b) Sensor on engine diagnostic port can provide periodic health of the vehicle in terms of fuel consumption, emissions, faults, servicing requirements. These inputs can be used to calibrate the AutoInsurance premium and provide subsidies based on some outlined parameters in the policy such as Lesser fuel consumption, controlled emissions etc. Alternately "Green Policies" can be floated by Insurers, which have emission control linked premiums e.g. minimum premium for customers using EVs.

c) Accelerometer can provide multiple data points such as Journey start and finish times, Vehicle speed violations, Acceleration events, Braking events, Cornering events, Idling times etc. Analysis of these data points will enable Insurance companies to understand the car owner's risk profile based on the distance covered, the average speed of the vehicle, frequency of using the vehicle, and the overall driving skills. This information will help Insurers to provide personalized premiums providing flexibility and transparency to customers.

Speed-reduction strategies and Eco-driving techniques can have quite a significant affect on CO2 and GHG emissions and Insurers will help in maximising emission controls and serve the society, by use of their policies and platforms.

2c. Through IT Infrastructure:
The insurance industry is highly dependent upon IT systems to support their core applications – issuing and servicing policies, processing claims, underwriting, billing etc. The legacy on-premise infrastructure behind these IT systems has been a long history in this data intensive industry, which is resultant to tons of emissions. According to a live poll conducted in Insurance Times's webinar in 2020 with CIOs, on main barriers to boosting digital touch points in Insurance Industry, 55% participants said legacy systems[6]. In order to put their house in order, Insurers should resort to Cloud Migration i.e. adopt the process of moving data, applications or other business elements to a cloud environment. Migrations to the cloud, can reduce CO2 emissions by 59 million tons per year which equates to taking 22 million cars off the road[10]. Insurers should adopt Cloud based technology platforms, let us coin them as "InsurClou" to enable them to unlock new opportunities like clean energy transitions enabled by cloud-based geographic analyses, material waste reductions from better data insights and reduce CO2 emissions. According to a forecast[5] from IDC, cloud enabled platforms can potentially prevent more than 1 billion metric tons of CO2 from 2021 through 2024. These platforms can offer substantial energy savings as they take advantage of the most efficient state-of-the-art infrastructure design and help reducing peak loads, boosting server utilization, move to VMware

designs, overall reducing the carbon footprint significantly. Insurers, using the InsurClou platform could reduce their carbon emissions by as much as 84% and if they increased their commitment, and designed their applications specifically for the cloud, they could curb carbon emissions by as much as 98%[11] contributing to environment positively.

3.Weather Risks: It is known that, rising global average temperature is associated with widespread changes in weather patterns. Scientific studies indicate that extreme weather events such as heat waves and large cyclonic storms are likely to become more frequent and intense. Extreme variations in Weather can be a threat to society in terms of Spread of illness, Damage to Crops and Properties, Loss of lives, Disruption in essential services such as water, electricity, transport etc.

Insurance companies have wealth of knowledge in relation to insurance underwriting and weather-related risks. Insurance company can leverage platforms used for Weather forecasting using Geospatial technology, Predictive and Prescriptive modelling, AI-based demand forecasting to develop disaster preparedness and mitigation actions. We will term these platforms as "InsWeaFore". This platform will help in fore warning of a Weather disturbance and AI will enhance mitigation preparedness. Using this platform, a simulation can also be run to understand the quantum of damage and specific action points to be addressed. Insurers can in this way assist the communities, Governments, Organizations resilient to Weather impacts and provide services that contribute to security, health and well-being of affected parties. Insurers can achieve economic benefit through launch of multiple Insurance products using inputs from InsuWeaFore platform:

a) Products for local governments that compensate for evacuation costs in natural disasters

b) Products for farmers which pay out a contractually pre-determined insurance amount when Weather patterns meet certain specific conditions.

c) Products towards Crop Insurance in areas which are vulnerable to extreme weathers or certain targeted crops damage caused due to catastrophic events.

d) Products for communities to treat patients during pandemics or epidemics or breakout of certain diseases as aftermath of natural calamity.

Insurers thus play a crucial role in combating environmental issues and promote social responsibility by serving the mankind in form of multiple instruments from Insurance Industry.

Essentially, with the above considerations, we can re-wire Risks as Opportunities for the Insurance Industry, underpinned with Technological Platform solutions. In the process, we have also unfurled how Insurance Industry can increase their coverage and float policies that benefit the society and mankind, in mitigating risks and increase revenue for Insurance companies.

"A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty." - Winston Churchill, British Prime Minister.

This statement seems so appropriate in this context and proves the point that embracing risks may be the best thing a business can do! Sometimes a risk / threat is needed to shake up, jar out of complacency, and change perspective. It will result in profits, assuming it is handled right. There is a lot of significance of the words "Handled Right" and this where in the ESG, the relevance of "G" – Governance comes into importance.

In the entire scheme of events and risk mitigating strategies, Governance can become the biggest risk for Insurance companies. In the ecosystem of Insurance, there are multiple touch points such as Compliances, Regulatory bodies, constantly changing political, social and economic situations in countries, ever-changing regulations, physical and logical security, which act as deterrents to the path of achieving sustainability goals. All these factors, if not tackled right upfront may lead to increased costs, induce misallocation of capital, foster uncertainty, and lead to opportunity costs of diverted management time and much more.

A strong hierarchical Governance structure, dedicated to Sustainability will be the key for Insurers, in order to meet the SDG goals of Agenda 2030 and mitigate Governance

Risks (Figure 1). This Governance layer will embrace and ensure smooth Implementation and functioning of the technological platforms Insurlytics, InsurBuild, InsurAuto, InsurClou & InsWeaFore, as suggested above and share a common agenda to alleviate issues and risks from external forces, market complications and promote efficiency of risk mitigation towards Sustainable development. It would behove the leaders of Insurance industry to constantly maintain a long-term outlook, provide services and products that contribute to security, health and well-being with industry leading solutions contributing positively to healthy balance sheet and, at the same time, endeavour to strive as a solution provider to promote the realization of a resilient and sustainable society.

Figure 1: Framework to Sustainable Insurance Outcomes

Conclusion

Technology powered Platforms, and Specialized Insurance Policy options under the umbrella of Governance are one of the most potent forces available to insurers in their quest to address the ESG Risks and making equitable, responsible, and viable Sustainable Transformation. TJ

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A Study on the 10 Essential Factors Affecting Adaptability of Health Insurance During Covid 19 Pandemic

Abstract

Health Insurance in India has a very low penetration with heavy out of pocket expenses which has risen phenomenally during Covid -19. As a result there has been a substantial increase in the interest generated towards health insurance. The study aims to analyse the impact of the main factors that are influencing the adaptability of health insurance during COVID 19 as there is a surge in the enquiries relating to health insurance. The study employed primary and secondary data. The study used a convenience sampling method. The total sample size of the study is 200. The study used frequency distribution, T-test for analysis. It observed that majority of the essential factors were found to have significant impact in case of adaptability of health insurance during COVID 19 except the factors 'Promise' and 'Planning'.

This study would facilitate the health insurance sector to understand the influences on customer expectations and desired customer's perception towards the adaptability of health insurance. With the application of this study's result, the health insurance players would be able to get an insight into the variables influencing customer behaviour and they would be able to promote customer awareness and engagement.

Keywords

Health Insurance, Essential Factors, Adaptability, Consumer, COVID 19.

Madhuri Sharma
Faculty
College of Insurance,
Insurance Institute of India.

Introduction

The recently discovered severe acute respiratory syndrome Coronavirus 2, resulting in Coronavirus disease 2019 (COVID-19),declared as a pandemic has abruptly uprooted the day to day life and has impeded the global economy in an unprecedented manner. This global pandemic has affected the social lives of everyone on the planet. The disease has reached 213 countries across the world, as reported by the World Health Organization, and has shown extreme effects on the economies of these countries' and its health systems **Wang et al. (2020)**. Many countries that were affected by the infection completely locked down their services, amenities, educational institutions, industrial sectors, daily use marketplaces, and others. This resulted in depressive feelings and thoughts amongst the people and the psychological impact led to an even greater spread of the infection **Mobbs, Hagan, Dalgleish, Silston, & Prévost, (2015).**

The elderly population was the first strata to be impacted in the worst possible way due to their frailty, multiple co morbidities, and increase in hospitalisation. Thereafter the second wave of this mutated highly contagious virus has wreaked havoc on the public systems and there has been a total breakdown of health care infrastructure in almost all countries and India has been affected in the worst possible way. It has created financial miseries for many families as the hospitalisation expenses for treatment of COVID-19 have varied from Rs 50,000 to Rs 20 lakhs with no uniformity in the charges levied. With more than one family member requiring hospitalisation simultaneously it has financially pushed many families into debt and poverty. The insurance sector too has not been spared from the effects of the crisis, with mounting losses.

There is no alternative presently than to look hopefully at insurance products as the only way to take care of the financial burden likely to arise out of hospitalisation expenses. The Regulator IRDAI has been very proactive in coming out with guidance for product innovation and servicing during Covid -19. Some insurers specifically introduced new products to take care of this corona disease. Demand for health insurance has risen significantly, as people become more worried about the pandemic's effect on their wellness and wallets. **Kale (2020)** the insurance sector has also responded by introducing innovative products to cater to the specific needs of the customer during this time Since COVID 19, people are adjusting their spending patterns in order to account for healthcare costs. Given the current state of the broader economy, insurance companies will have to further deal with a multitude of problems in servicing and rising claims cost but they will also see a wide range of potential opportunities over the medium to long term in increasing awareness and penetration of health Insurance. It is imperative that businesses put an emphasis on meeting consumer expectations during each step of a customer's life cycle journey.

Health insurance sector is reorganising after COVID-19, in a way it has never done so before. A digital shift to ensure accessibility, affordability, and quality treatment has occurred in the health environment around the world and in particular in India, where a recent viral outbreak has shown the overall poor condition of India's impoverished and poorly equipped medical facilities **Seethalakshmi and Nandan, (2020).**

Review of Literature

According to **Itumalla, Acharyulu, & Reddy, (2016)** one can definitely assert that the future health insurance in India will advance rapidly. The task of the government, private organisations, and civil society is to solve issues and problems, as well as helping people who are most disadvantaged when it comes to better coverage and higher-quality health services at lower costs. Standardization of cost, increased tax benefit and a pool for senior citizens are all needed to increase the awareness of rights and responsibilities.

According to **Choi, S., & Blackburn, J. (2018)** When health insurance providers offer products on the consumer market, they are now able to consider five additional attributes when calculating personal premium prices: age, geographic location, insured person or plan status, and medical and administrative costs.

As per **Indumathi, HajiraSaba, Msubramanian (2016)** Access to affordable health care is a major problem for the consumers. Prevalence of diseases, puts them at risk of losing their ability to earn an income and push them further into poverty. Insurance is one of the strategies used in risk management to transfer risk. People will benefit from an insurance system that operates on the principle of law of large numbers because all people are sharing in the risks of unforeseen medical expenses by collecting premiums from a wider base of citizens.

In opinion of **Sanghvi (2020),** Covid-19 concern is pushing more people to buy health insurance. Insurance inquiries have increased by approximately 30-40 percent, according to the report.

According to **Reshmi (2021)** Health insurance is an important method that can help to enhance the percentage of people with universal healthcare coverage by increasing access to healthcare, lowering healthcare costs, and providing financial protection.

As per Canara HSBC Oriental Bank of Commerce Life Insurance Co. Ltd. (2021) after the outbreak of the COVID-19 pandemic, the world realised how short life and health could be. When health insurance pays for future medical procedures without reducing people's savings or compromising personal and family's financial destiny, it allows people to stay well in the future. Affording medical care might become an issue when medical prices increase fast. A health insurance plan helps to ensure that you and your family are worry free as you simply pay a minimal monthly fee. Cashless treatment and reimbursement are offered in certain health insurance policies, whereas others offer cashless treatment and network hospitals provide reimbursements.

In the opinion of **Ahuja, R. (2004)** CBHI is better adapted to providing health insurance to the individuals who cannot afford it in developing countries. Prime Minister has lately implemented a universal health insurance plan for the country. Insurance companies that are tightly controlled can also serve low-income populations. As well, measures that limit cost increases in the formal health insurance market are crucial to ensuring affordable health care supply.

Ahlin, T., Nichter, M., & Pillai, G. (2016) As health policy planners and poverty reduction initiatives have gained traction in India, public health planners have encouraged the extension of health insurance. Most important forces that have drawn the attention of Indian policymakers to the issue of health insurance include (1) the considerable burden of illness; (2) inadequate state healthcare expenditures; (3) significant private (particularly OOP) healthcare spending; and (4) limited insurance coverage. These are some reasons on which people should plan their health coverage benefits.

In the words of **Kenneth Saldanha** (2021)Young adults between the ages of 18 and 34, who have greater concerns about keeping safe, healthy, and sustainable, are more interested in digital offerings that help them do so. In a market where customer demand for personalised offerings, pricing, and discounts grows, customers show an inclination to give up personal data in return.

FICCI (2020) in its findings of consumer pulse survey states that previously indifferent consumers will progressively resort to insurance, as the incidence of diseases increases during Pandemic. Consumers have increasingly been looking for need-based health insurance policies. They are making it clear that they want health insurance that covers their needs. As customers become more conscious, they will be more vigilant about policy conditions.

Objective

1. To study the impact of the 10 essential factors affecting adaptability of health insurance during COVID 19

Statement of the Problem

In health insurance, the role of consumer awareness plays an important role. The efficacy of purchasing a health insurance product mostly depends upon customer awareness, customer preference, the satisfaction of customers etc., Apart from these, the review of literature and opinion of knowledge

the customers perception towards adaptability of Health insurance Therefore this study covers those 10 essential factors that are affecting adaptability of health insurance during Covid 19 pandemic.

It is perceived that these factors would have an impact on the customers adaptability towards purchase of Health insurance which are detailed as given below

Source: Researcher's Compilation

1. **Product (Health Insurance):** A product is a discrete set of health

   network type (such as a health maintenance organisation, managed service organisation, exclusive provider organisation, point of service, within a geographical area. Health insurance is a kind of insurance product that provides reimbursement for medical costs that result from an illness. Hospitalization charges, pharmaceutical prices, and doctor consultation fees may be associated with these charges. This health insurance product is considered an essential buy in these times perhaps for a person or a family could save themselves during a pandemic. Lot

   Hence, it is perceived that better and customised products for all demography and diseases will result in better adaptability of the Health Insurance and innovation will go a long way.

2. **Premium:** An insurance contract is formed when an insured

   the insurer for granting the risk coverage taking care of future losses. In this current scenario, it is imperative that health insurers charge a premium with a focus to enhance the health insurance adaptability by the consumers so that there is maximum usage of the product at a crucial time to alleviate the sufferings. The health insurance sector is now providing facility of paying premium in instalments and EMI for premiums and this will likely enhance the adaptability of health insurance.

3. **Pain:** The pain alerts people to a problem and offers suggestions to the solution. The pain and suffering of the masses leads them and the governments to look for insurance solutions as a mitigating factor. In the wake of the pandemic, healthcare expenditure on hospitalization has again come under sharp focus and this pain and suffering during pandemic is likely to lead to growing adaptability of health insurance.

4. **Pressure:** There is tremendous pressure in the current pandemic to take health insurance coverage in view

   hardships. Health insurance was growing even before but the pandemic has made people realise the necessity of having a safety net for healthcare costs. Every family is having problems in coping with unforeseen and emergency healthcare costs, and there is a perceptible pressure to think insurance as financial tool.

5. **Purpose:** Having a personal health insurance policy is essential, because health care costs are extremely high and growing exponentially. It serves the purpose of mitigating the financial hardships of the policyholders, as hospitalization is both expensive and counterproductive when it comes to money management. If this purpose is served well by the insurance industry by providing a slew of beneficial products and easy mode of payments of premium, there is likely to be a better adaptability of health insurance.

6. **Promise:** Good health insurance coverage would typically cover fees for consultations with doctors, test costs, ambulance costs, and other health-related expenses to some degree. Today consumers want to be safe and health insurance commits them to being safe when it comes to the health and wealth hazard. If this promises were fulfilled adequately and timely, the adaptability of Health insurance would be faster by the consumers.

7. **Protection:** The insurance advantage is that it spreads the risk of a few individuals who have a high risk of being ill over a broad group of persons exposed to the danger of the same kind of health issues. The protection given by various coverage's in form of indemnity or benefit-based products along with compensation for additional expenses like PPE, oximeter etc. is what will increase the adaptability of health insurance.

8. **Planning:** Without financial planning, the consumer will not be able to plan for his/her goals. The financial goals can be achieved by taking adequate protection by way of various insurance plans. Health is wealth without which the economic activity comes to a standstill. Although this is certainly important, while building an effective financial strategy, it is necessary to anticipate medical problems because they can disrupt your well-defined financial strategy. Thus, proper financial planning and thought will help to build adaptability to Health insurance.

9. **Preference:** People are much more conscious of the significance of health insurance after experiencing and learning that the Coronavirus has wreaked financial havoc in society. Before the Covid-19 epidemic, just 10% of the population were interested in purchasing health insurance to cover new age diseases. In the face of this crisis, however, 71% of the population now believes health insurance is necessary, according to Max Bupa Covid-19 survey on post covid 19 Health Insurance trends. There is no doubt a growth in consumer preference. Especially the millennial are giving preference to purchase of health policies during pandemic and this is likely to go a long way in growth of adaptability of Health Insurance

10. **Pandemic:** A global epidemic occurs when a virus or bacterium spreads over the world and becomes a pandemic. The entire health infrastructure has collapsed catering to the surging need for hospitalisation following the ill effects of this pandemic. Suddenly the society has realised the necessity of health coverage. Therefore, during this pandemic a growing preference and need for financial protection by taking health insurance will result in higher adaptability for Health insurance products.

Research Methodology

The present study is focused on the 10 essential factors affecting adaptability of health insurance post Covid 19 pandemic. The study employed primary and secondary data. The primary data is collected from the customers of health insurance policyholders in Mumbai City. The responses are gathered from the policyholders through the well-designed questionnaire that used 5 point Likert scale questions on the basis of strongly agree to strongly disagree based on the 10 factors of adaptability of health insurance. The secondary information is collected from the research articles, magazines, journals of Insurance Regulatory Development Authority, and daily newspapers. The study used a convenience sampling method. Overall, 267 questionnaires were distributed with the help of Google form, out of which the customers returned 200 filled responses. Therefore, the total sample size of the study is 200. The study used frequency distribution, T-test for analysis.

Research Hypothesis

Ho: there is no significant difference between consumer's perceptions towards the factors affecting health insurance during COVID 19 pandemic

Data Analysis

Cronbach's Alpha

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.934	10

The Cronbach's Alpha is done to check the reliability on the scale of the responses, which comes out to be at 0.934.

Table 2: Demographics of the sample Insurers

Gender	No. of Respondents	Percentage
Male	137	68.5
Female	63	31.5
Total	**200**	**100**

From the above table, it is represented that the maximum number of respondents are from male category (137) and from female category (63). It inferences that males respondents are more concerned and aware towards adapting health insurance for themselves and their family too.

Table 3: Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Product	Equal variances assumed	.270	.604	-.145	198	.885	-.02329	.16058	-.33995	.29338
	Equal variances not assumed			-.145	120.672	.885	-.02329	.16049	-.34104	.29446
Premium	Equal variances assumed	3.188	.076	1.251	198	.212	.23091	.18457	-.13307	.59489
	Equal variances not assumed			1.315	136.680	.191	.23091	.17554	-.11622	.57804

Pain	Equal variances assumed	.346	.557	-.687	198	.493	-.07160	.10421	-.27711	.13391
	Equal variances not assumed			-.716	133.436	.475	-.07160	.10005	-.26949	.12629
Pressure	Equal variances assumed	3.158	.077	-1.663	198	.098	-.27714	.16669	-.60585	.05157
	Equal variances not assumed			-1.583	107.433	.116	-.27714	.17502	-.62408	.06980
Purpose	Equal variances assumed	6.972	.009	-2.259	198	.025	-.41177	.18227	-.77120	-.05234
	Equal variances not assumed			-2.083	100.106	.040	-.41177	.19764	-.80387	-.01967
Promise	Equal variances assumed	4.280	.040	-4.662	198	.000	-.80570	.17281	-1.14648	-.46492
	Equal variances not assumed			-4.330	101.620	.000	-.80570	.18607	-1.17479	-.43661
Protection	Equal variances assumed	10.219	.002	-2.177	196	.031	-.34074	.15655	-.64947	-.03201
	Equal variances not assumed			-1.933	92.684	.056	-.34074	.17629	-.69083	.00935
Planning	Equal variances assumed	.801	.372	-2.915	198	.004	-.50214	.17224	-.84181	-.16248
	Equal variances not assumed			-2.798	109.332	.006	-.50214	.17947	-.85783	-.14646
Preference	Equal variances assumed	1.217	.271	-1.921	198	.056	-.30819	.16042	-.62455	.00816
	Equal variances not assumed			-1.841	108.907	.068	-.30819	.16744	-.64005	.02367
Pandemic Fear	Equal variances assumed	1.983	.161	-2.304	198	0.42	-.37423	.16244	-.69456	-.05391
	Equal variances not assumed			-2.381	130.770	0.49	-.37423	.15719	-.68521	-.06326

As per the above table T test represents the ten essential factors that affect the adaptability of health insurance post COVID 19 pandemic. The significant value of factor i.e. 'Product' = 0.885, for 'Premium' = 0.212, for 'Pain' = 0.493, for 'Pressure'= 0.098, for 'Purpose'= 0.40, for 'Promise' = 0.00, for 'Protection' = 0.056, for 'Planning' = 0.004, for 'Preference' = 0.056, for 'Pandemic Fear' = 0.42, therefore it can be clearly seen that all the factors except 'Promise' and 'Planning' have a significant value which is greater than P value (0.05) and hence the null hypothesis is accepted. H0: There is no significant difference in consumer's perception towards factors affecting the adaptability of health insurance during Covid 19.

The results of the study imply that people are willing to adapt to health insurance on all the above factors but in case of the factor 'Promise', respondents have not expressed the same willingness. There is a perception that insurance companies do not keep their promise with regard to paying claims in time and to full amount, with many deductions, which has led to disillusionment amongst customers. This could have been compounded by adverse media reports about the humongous medical bill charges levied by the hospitals and not paid by the insurers. Further for the factor 'Planning' there is difference between respondents perception towards planning financially for their health coverage on time, which means financial literacy is very low and that insurance does not play a major part in the financial planning strategy of the customers.

Conclusion

1. Respondents' knowledge and adaptability about health insurance is good. Further research indicates that majority of the 10 essential factors have a positive impact on the adaptability towards health insurance except the factors 'promise' and 'planning'.

2. The consumer perceptions towards health insurance have also changed now as the pandemic affects almost everyone's life or survival.

3. The pandemic provides an opportunity to the health insurers to serve more relevant /innovative products to the consumers.

4. In this study, male respondents are found to be more aware of the benefits of health insurance for their family.

Keeping all these factors in view, it can be concluded that perception towards Health Insurance has been positively impacted in a big way during Covid -19 and will rise exponentially and it is now for the health care insurance industry to rise to the occasion and meet all the expectations and perceptions of the customers and seize the opportunity.

The problems faced by the customers in settlement of cashless claims during Covid wave has eroded the faith reposed in the insurance companies, as many had to pay almost 40% of hospital expenses out of pocket. This has adversely impacted the customer's perception and insurers must now refurbish their image in a way that negative perception about problems with claim payment is taken care of and customers' report a smooth painless experience as after all claim is the "moment of truth".

An individual's financial plan should be tailored to meet one's needs at various stages of life and it is important to have a balanced portfolio to address the multiple needs of protection, savings and wealth creation. It is observed that people tend to focus on the 'wealth creation' aspect of financial planning and the 'protection' element often gets compromised or neglected. Insurance can be a very crucial tool to take care of any untoward incidents in life and help preserve emergency funds. Specially in these times, planning for Health insurance is of paramount importance as an appropriate insurance policy can help mitigate these risks so one does not have to dip into savings for medical expenses. Hence financial literacy is very important to ensure better health of all and needs to be emphasised at school and college level and benefits of Insurance should be promoted at all levels by the various stakeholders by holding webinars and workshops for educating the masses.

Limitations

- The primary data is collected from only the customers of health insurance policyholders and was limited due to COVID -19 lockdown.
- The present study is limited to only 10 factors of consumer adaptability of health insurance.
- This study is limited to specific geographical region (Mumbai City). TJ

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Investing in Corporate Governance Risk Management in Insurance Industry – An Analysis

Abstract

The insurance industry has been swept by the waves of globalization in the last two decades. This has resulted in governance challenges resulting due to strategic alliances, mergers and acquisitions. The role of board of directors in steering the organization in the right direction by ensuring compliance with all the governance norms has become more pronounced than ever. Regulatory interventions on corporate governance have become absolutely essential. A governance collapse in financial services sector has far-reaching consequences that can threaten the stability of an economy. Regulatory surveillance has therefore become more stringent in view of some of the scandals and governance leakages in the financial services sector. It is therefore imperative to study the corporate governance risks in the insurance industry and the role played by board of directors in ensuring governance integrity of the organization. One of the significant challenges in managing corporate governance risks is to arrive at a cogent understanding of compliance regulations as cost of regulatory compliance is high. Rather than relying solely on regulatory guidelines, insurance industry must also establish their own framework to manage governance risks. The time is ripe for corporate governance to become an integral component of business strategy. This paper is a preliminary attempt to understand the existing corporate governance norms in the insurance sector.

Prof Venkatesh Ganapathy
Associate Professor
Presidency Business School
Bangalore-24.
gvenkatesh69@gmail.com

Keywords

Corporate Governance, Insurance, Risk management, Consolidation, Financial Services, Regulatory Compliance, Governance Leakage.

Introduction

Life insurance in India accounts for 3.6% of GDP and in the case of general insurance it is lower at 0.94% of GDP as against the world average of 2.88%. While the insurance industry makes every effort to increase penetration, governance leakages in insurance firms can create bottlenecks in the initiatives of industry to enhance penetration. Governance failures can erode trust customers have in insurance firms. The insurance business model is somewhat complex as compared to other financial services. So, greater attention needs to be paid in managing corporate governance risks.

Insurance companies are subject to various types of risks – governance risks are one among them. Legal liabilities, errors in strategic judgments, increase in claims and unexpected natural disasters are some of the other risks. Insurers must comply with state insurance codes. These codes indicate requirements for starting, financing, operating and winding down insurance operations. Consumer activism is on the rise and insurers have to be vigilant. Issues that an insurance company is vulnerable to are generally associated with risks at the operational level. The corporate governance framework must be structured so as to promote free flow of information across the organization. Besides complying with rules imposed by state and regulator, insurance company must ensure that day to day business and claims handling practices are mapped with demands of the external environment.

Ethical integrity of businesses is no longer an option. The proliferation of digital channels and social media can cause reputational damage to an organization within no time. As insurance firms improve their corporate governance practices, this will result in better access to capital, mitigation of risks and ensuring safeguards against mismanagement. Governance and strategy must be connected to ensure long term business sustainability. By and large, regulations stipulate “what not to do” and insurers must self-regulate to understand the right things to do as part of corporate governance.

In the insurance sector, the guidelines issued by IRDAI are intended to protect policyholders, ensure that solvency levels are maintained by insurance firms and businesses make efforts to frame a sound long term investment policy. Board must understand expectations of all stakeholders as well as regulators.

This research effort traces the evolution of corporate governance norms across the globe and in India highlighting the efforts taken by the Government in general and regulators in particular. The paper argues that boardroom decisions must engender trust among the stakeholders and these decisions must not lead to those risks that could have been avoided.

What is Corporate Governance?

Corporate governance is the process by which shareholder equity is maximized ensuring fairness to all stakeholders like employees, suppliers, distributors, customers, bankers, Government, community etc. Governance needs a sharper focus in financial sector as the companies operating in this sector act as intermediaries between investors and borrowers. Leakages in governance can have a far-reaching impact on the economy.

India’s SEBI committee on corporate governance defines corporate governance as the acceptance by management of the inalienable rights of shareholders as the true owners of the corporation and of their own role as trustee on behalf of the shareholder.

Corporate governance is the relationship among shareholders, board of directors, top management, employees, regulators, any other stakeholders and the community to facilitate determination of the direction of the organization (Ruin, 2001).

Life insurance companies are subject to frauds due to nature of business, poor internal control and collusions between vendors and employees (Rana & Chhikara, 2018). Corporate Governance is a mechanism to protect an organization from unethical influences that can damage future organizational prospects. It provides a cogent framework for decision making in an organization by facilitating direction and control.

Corporate governance essentially addresses issues of ethics, efficiency and accountability in an organization. While ethics is generally associated with instances of fraud and graft in organizations, efficiency issues are concerned with performance of management in ensuring a return on investment made by shareholders. Stakeholders expect greater transparency in the conduct of business and this is where accountability assumes prominence. Accountability has also become essential as today there is a greater awareness about the need for organizations to demonstrate exemplary social responsibility.

Evolution of Corporate Governance

The Watergate scale scandal in the US in 1980s formed the genesis of corporate governance norms. The Cadbury Report made recommendations to improve corporate governance in the report that it tabled in the UK in December 1992. The thrust areas were financial reporting and strengthening internal control. Following the stock market scam in India in 1992, South East Asian economic crisis in 1997-98 and many such scandals in the West in 2002, the Sarbanes Oxley Act was introduced with the intent of protecting investors from fraudulent financial reporting by organizations. High profile frauds like Enron and WorldCom dented investor confidence in the trustworthiness of financial statements.

In 1999, the Kumaramanagalam Birla committee was appointed to promote and raise the standards of corporate governance. The committee chose to view corporate governance from the perspective of investors and shareholders and prepared a code to suit the Indian business ecosystem.

To further promote corporate governance practices in Indian companies, SEBI appointed the Narayanamurthy committee in 2002. Among other recommendations, this committee highlighted the need for strengthening the responsibilities of audit committees, improving the quality of financial disclosures and transparency in accounting the proceeds from initial public offers. The committee also emphasized the need for code of conduct for board members and senior management team.

A high level committee to examine various corporate governance issues was appointed by the Department of Company Affairs on 21st August 2002. Some of the recommendations made by this committee under the Chairmanship of Naresh Chandra were

1. Reviewing the auditor-company relationship
2. Disqualification criteria for audit assignments
3. List of prohibited non-audit services
4. Independence standards for consulting
5. Compulsory audit partner rotation
6. Disclosure of contingent liabilities

The clause 49 of SEBI guidelines on corporate governance was amended on 29 October 2004. It resulted in change in definition of independent directors and strengthened the responsibilities of audit committees improving the quality of financial disclosures. Non mandatory clauses like whistle blower policy and restriction of the term of independent directors were also included.

Scope of Corporate Governance

Financial sector has a fiduciary relationship with customers. Planning performance as part of strategy formulation and top management accountability for effective supervision and surveillance falls under the ambit of corporate governance. A corporate Governance framework indicates the roles, responsibilities and accountabilities within an organization and defines the relationship between shareholders, Board of Directors and management.

Corporate governance norms ensure that insurance firms maintain solvency and have a sound long term investment policy and assume underwriting risks on a prudential basis. The governance practices vary according to the nature of insurance industry, composition of board of directors, independent directors etc. The way an organization tables its financial records is ample proof of its commitment to corporate governance norms (Bansal & Bansal, 2014). Insurance firms where board size was huge devoted enough resources for corporate social responsibility.

Importance of Corporate Governance

High profile corporate scandals like Enron, World.Com, Xerox, Satyam and more recent ones like Yes Bank, IL&FS, Kingfisher Airlines, Jet Airways, Punjab Maharashtra Co-operative Bank and Lakshmi Vilas Bank have highlighted the need to sharpen the federal focus on corporate governance.

Here is how effective corporate governance mechanism can help an insurance business

1. Increase competitive advantage
2. Better access to capital
3. Increase trust and faith in investors
4. Induce managers to act in the best interest of shareholders to maximize firm value
5. Increase profitability

Insurance sector plays an important role in ensuring liquidity of the financial markets. Insurance industry should provide stability if there is economic turmoil. Good corporate governance enables the growth and development of economy and society. Without worrying about growing market share, insurers must look at ways to grow the market and increase penetration. Governance and financial sustainability of an insurance business are closely related. Governance indicates responsibility and accountability for the overall operation of an organization through the involvement of top leadership and board in policy making and decision making.

A study was conducted on corporate governance mechanisms of insurance organizations in Bahrain. The results of the research revealed that there is no statistically significant association between Return on Equity (ROE) and CEO status, concentration of ownership, employee strength and number of shares traded. The size of the board and firm size had a significant impact on ROE. Thus, good governance has a positive impact on the organization and the economy as a whole.

In the recent past, insurance companies emerging as part of financial conglomerates has added a new dimension for corporate governance in insurance firms. Poor governance and weak internal controls have jeopardized the prospects of many corporates. Insurers are not impervious to such risks. Safety and strength of financial institutions are important for overall financial sector and for the economy as a whole.

Increase in FDI in Insurance

To achieve the objective of government's FDI policy of supplementing domestic long term capital, technology and skills for the growth of economy and the insurance sector, and thereby enhance insurance penetration and social protection, FDI limits for insurance sector have been increased from 49% to 74%. Under the new structure, the majority of directors on the board of insurance company and key management personnel would be resident Indians, at least half of the directors would be independent, and a specified percentage of profit must be retained as a general reserve. The government had raised the overseas limit for both insurance and pension sectors to 49% in 2015. The government has already allowed 100% foreign investment in insurance intermediaries such as brokers, consultants, third party administrators, surveyors and loss assessors. These changes in the FDI policy have focused the spotlight on need for corporate governance reforms in insurance sector.

FDI in insurance is going to result in co-existence of diverse cultures. Hence, greater regulatory surveillance may be needed.

Role of Regulators in Enforcing Corporate Governance Discipline

What does governance in insurance entail?

1. Protect policyholder interests by reasonable premiums

2. Claim settlement processes that are hassle free
3. Prudent investment of policyholder funds
4. Maintaining solvency margin
5. Compliance to legal and regulatory framework

Prior to regulation for insurance sector in India, the public sector insurance companies were not subject to any control or rigor. They were mainly accountable to higher officials and Finance Secretary. The insurance law existed in paper. There was a scramble for growing top line but profitability was accorded the least preference. Customer's disenchantment with insurance was the collateral damage suffered by the insurance industry as a whole.

Insurance regulators have to enforce financial examination standards and stress the importance of engendering a risk management culture that is self-sustaining. They must also clarify the procedure for annual disclosures.

Regulator must inspect specific governance controls for capacity of the insurer to manage specific risks and gain a clear insight whether an insurer's corporate governance structure can emphasize the competence, transparency and independence of the company's senior management and board of directors. One can even boldly proclaim that the efforts of the regulator have resulted in absence of any major instances of corporate governance deficit in insurance sector. However, the cost of regulatory compliance is high in India.

Comprehensive Corporate Governance guidelines were issued by IRDA on 18th May 2016. The intention was to check the compliance status. The revised guidelines cover the Corporate Governance practices, appointment of MD/ CEO and other Key Management Persons (KMPs) and the appointment of statutory auditors of insurers. They also provide for the mandatory appointment of independent directors and a woman director on the board of directors of an Indian Insurer in compliance with Section 149 of the Companies Act. There are also norms for preventing conflict of interest. Insurers have to comply with the provisions with regard to related party transactions under Section 188 of Companies Act. Insurers are also required to follow the Corporate Social Responsibility norms introduced in Companies Act 2013. IRDA advised insurers to familiarize themselves with corporate governance structures and laid the onus of good governance on the board of directors of the insurance organization.

The 2016 guidelines have also resulted in the integration of nomination and remuneration committees. Insurers transacting life insurance business have to constitute a 'With Profits Committee' which provides the framework for share of assets that can be attributed to policyholders. Audit Committee has to be constituted. The outsourcing arrangements need approval of committee of key management persons. Core functions cannot be outsourced. Compliance officer has to submit a compliance report highlighting the status of compliance of the insurance firm with the 2016 guidelines.

The insurance companies (other than life insurance) may form Ethics and Asset Liability Management Committees but they have to follow the IRDA guidelines in this regard.

Following corporate governance benchmarks need close examination and evaluation

1. Competency of board
2. Channels of communication between board, auditors and management
3. Code of conduct for senior management
4. Strategic and financial objectives
5. Focus on risk management processes
6. Business planning and resource allocation
7. Reporting mechanisms and their objectivity
8. Whistle blower provisions
9. Board oversight and approval of executive compensation and performance evaluations.

Regulators have to evaluate the overall structure and operations of the board of directors. They may conduct meetings with the board if deemed necessary. This will give the regulator a clear idea about the general functions of the board and its responsibilities and also offer a glimpse of the company culture.

Regulators emphasize on board members possessing an appropriate degree of industry experience, knowledge and skill besides managerial and technical expertise. The board's independence from management, collective experience of the board and involvement of the board in inspecting company-wide activities and performance are areas of focus. The regulator should also evaluate the manner in which board sets objectives for management and the mechanism through which it assesses management performance.

Good **corporate governance must subsume** every aspect of business operation. Boards have to delegate duties to committees like audit, compensation, finance, employee benefits etc. Regulators may want to know how the board assigns responsibilities to these committees and how the performance of these committees is monitored.

The management performance will be evaluated based on the strategic planning, response to regulatory changes, management of key functional activities and the manner in which the business objectives are accomplished by management.

Disclosure Requirements Prescribed by IRDA

The Board has to provide information about financial and operating ratios of the insurance company like claims incurred, expense ratios, commissions paid etc. Life insurers should disclose persistency ratio. Actual solvency position of insurer has to be indicated besides growth rate and financial performance of the organization. Besides actions taken to mitigate risks, the board has to indicate details of claims intimated, claims disposed of and claims that were pending. The Annual accounts have to disclose transactions between Non-Executive Directors and the insurance organization. Remuneration packages of key management personnel and employee stock options must be indicated.

IRDA stipulates that insurer adopt a whistle blower policy so that employees feel free to raise concerns about any issues that can lead to a governance deficit. As per Schedule IV of Companies Act,

<table>
<tr><th colspan="2">Duties of Board of Directors</th></tr>
<tr><td></td><td>• Consult key management persons and evaluate strategies and policies
• Promote a corporate culture that rewards ethical behavior
• Compliance with the Insurance Act
• Policy for resolving conflicts of interest between stakeholders and fair treatment of policyholders and employees</td></tr>
<tr><td>Control Functions</td><td>• Stringent mechanisms for quantification of agreed risk level, identification of present risk level, and ways to mitigate additional risks.
• Ensure processes are in place so that there is compliance with applicable laws and regulations and adherence to the policies approved by the board.
• Establish an internal audit function to review the effectiveness of policies and compliance with internal control mechanisms
• A sustainable organizational structure to demarcate control function from operational activities</td></tr>
<tr><td>Formation of Committees</td><td>Insurers have to mandatorily establish Committees for
• Policyholder Protection
• Risk Management
• Investment
• Audit
• Nomination and Remuneration
• Corporate Social Responsibility (only for-profit earning insurers).
The board may form other committees like Asset-Liability Management Committee, Ethics Committee etc.</td></tr>
</table>

2013, independent directors have to meet at least once in a financial year to evaluate the performance of non- independent directors. The independent directors shall be evaluated by non-independent directors.

Agency performance has to be evaluated by the management. Company Secretary has to be designated as the Compliance Officer whose duty is to continuously monitor compliance of the insurer with the guidelines.

IRDA has exhorted companies to revisit corporate governance standards and related party transactions. Insurers were asked to classify their exposure to the beleaguered IL&FS as non-performing loans and make provisions. IRDA is working on establishing a risk-based capital system – a self-regulating mechanism where those who manage risk better will be allowed to operate with lower capital. Self- regulation is important for insurers and corporate governance compliance is one of the routes to achieve this. Risk-based supervision norms are evolving.

Important clauses stipulated by IRDA

1. Minimum lock in period of 5 years for transfer of shares from date of commencement of business for promoters of insurance company
2. FDI in insurance (49%) to 74%
3. Board level review of key transactions and disclosures of conflict of interest
4. Board shall ensure compliance of statutory requirement on maintenance of capital structure

Role of Board of Directors in Corporate Governance

Corporate governance refers to the manner in which a board directs and manages the corporation and considers the impact of its decisions on employees, customers, suppliers, communities and shareholders. The board has the responsibility of overseeing the conduct of the business and supervising management. Directors can delegate certain powers to CEO or CFO so that they can manage the company's day-to-day affairs. Corporate governance is combination of people, rules, processes and procedures to manage the business affairs of an organization. Corporate governance is the basis of organizational decision making and contributes to creating long term value and sustainability for all stakeholders.

While tabling the Cadbury Report in 1992, Sir Adrian Cadbury had remarked that corporate governance was the system by which companies were directed and controlled. Directors have an important role to play in discharging their duties and responsibilities. Board of Directors must steer the organization in the right direction but they must use their freedom and discretion along with accountability. This can be considered as the essence of good corporate governance. Expectedly, the regulator has also underscored the role of Board of Directors in enforcing corporate governance compliance.

In every decision made, the Board must consider the impact of their decision on employees, customers, suppliers, communities and shareholders. Good corporate governance will result in clear demarcation of the roles of board of directors and managers. The board should never get involved in micromanaging the affairs of the organization. The Board of directors is responsible for oversight and planning.

Majority of board seats must be offered to independent directors. Otherwise there are examples of how investors insist on their nominees on the board and this can lead to conflict of interest.

A board that is well-composed is characterized by diversity of experience, expertise, perspectives and knowledge. The board has to plan and strategize goals and objectives for the organization and ensure proper mechanisms in place to review the progress against the objectives. Independent directors must challenge the board's perspectives because this will improve the quality of decisions made by the board. The board must be clear about future plans as this is what will assure investors that the organization is moving in the right direction.

As per a report in Economic Times dated 15th March 2021, Indian businesses have requested for streamlining of the liability of independent directors. Increasing liability has resulted in independent directors resigning and this has affected the availability of such directors for board level positions. The industry feels that there is a need to create legal and procedural safeguards relating to personal liability of independent directors. The penal clauses in Companies Act could dissuade high quality professionals from joining as independent directors. Independent directors play a crucial role in corporate governance.

Board of directors must assess a variety of risks in functional areas like financial reporting, reputation, litigation, ethics, technology, health, safety and environment. They should develop and write policies for codes of business conduct, codes of ethics, conflicts of interest and whistleblowing. Only good corporate governance can deter fraudulent practices in an organization.

Board directors must have regular conversations with managers about risk mitigation and prevention. Board members must evaluate their responsibilities and must be of diverse background and experience. Regulatory compliance on corporate governance is a huge responsibility. Board meetings and dividend payments can be scrutinized by regulators. It is expected that board members are financially literate so that they can make prudent financial judgments. The board needs to make appropriate adjustments in the company's strategic goals so the needs of the insured can be better understood.

This issue can be aggravated when the board defers too much so that service providers effectively control all the levers of information and decision-making within the captive. Board members who bring a 'trust, but verify' approach can go a long way toward ensuring solid captive board governance.

What the board members are expected to do

- Review business and strategic plans and assess business performance against these plans
- Monitor the company's operating and financial performance
- Understand the key issues and challenges faced by the company
- Assess if minutes of meeting accurately reflect matters discussed in the meeting
- Identify risks and opportunities critical to the success of business efforts
- Conduct meetings promoting constructive dialog and meaningful participation so that issues can be resolved in a timely fashion

Conclusion

Corporate governance is needed to align the long-term goals of shareholders, management and employees. Regulatory needs are increasingly driving corporate governance in the Indian insurance industry. Measures to increase financial transparency can increase compliance levels of an insurance firm. Dubious business practices, rampant dressing up of accounts, conflict of interest, related party transactions and fraud can undermine the economic system of a nation causing major shocks. Also, governance deficit can have a cascading effect – when Enron collapsed, it affected the entire energy trading sector. Structural changes resulted in the audit and consulting industry when Arthur Andersen collapsed.

India's diverse culture demands that business leaders must involve stakeholders in important decisions. Governance is more about trust between an insurance organisation and its stakeholders. Corporate governance standards have to be fair, transparent, trustworthy and financially sound.

Governance practices can impact leadership, communication protocols and strategic decision making in insurance organizations. The success of corporate governance initiatives depends on the three pillars of accountability, transparency and trust. It has therefore become imperative that businesses increase the visibility of their governance efforts. Greater involvement of boards in corporate governance can influence company culture.

Businesses have to comply with corporate laws that govern the manner in which organizations are structured and managed. Board members must always act in the best interest of the insurance company and its stakeholders.

A system of corporate governance should gather information from the operating levels of an organization and facilitate decision making processes. Reporting mechanisms must be robust to ensure free flow of vital information.

The Indian insurance sector is highly regulated due to the very nature of insurance business. Sums are collected as premiums in advance which will be paid as claims later. The sums collected must be properly invested so that customers have access to claims when they file one. Insurance industry is subject to various risks and hence adherence to corporate governance will result in better understanding of risk management procedures and processes.

The insurance industry must view the corporate governance norms more seriously and must take adequate steps to ensure compliance on their own. Regulatory compliance can be cumbersome but it shouldn't be considered a burden – instead this should be viewed as an investment for the sustainability of the business. The regulators must also attempt to simplify governance norms and focus more on enforcing compliance rather than merely insisting on more and more paper work. There must be a mechanism in place to identify early warning signals so that actions can be taken much in advance before a governance deficit actually occurs. Companies in the insurance industry must learn from adverse experiences of other organizations in the financial services sector and they must collaborate with one another when it is a question of devising an industry wise corporate governance standard. Having a dedicated employee in the organization like a "Chief Compliance Officer" will throw the spotlight on the efforts by insurance businesses to improve corporate governance.

Corporate governance must be understood by everyone in the organization. Corporate governance mechanisms must be well aligned with the vision, mission and long term goals of the organization. This will breed stakeholders' confidence and entice investment flows.

Since the time India has opened up its economy to liberalize the insurance sector, much attention hasn't been paid to governance issues in the insurance sector. However, increase in the number of corporate scandals particularly in the financial sector can make the insurance industry vulnerable. Therefore, enforcement of corporate governance principles is no longer an option – it has become an absolute necessity. The regulator must ensure that governance audit is conducted every six months to ensure appropriate due diligence.

Good corporate governance can give an insurer a competitive edge. Governance is a shared process where leadership elements, policy making and decision making converge. Better corporate performance through active involvement of board in strategy falls under the scope of corporate governance.

Corporate governance must address the following key aspects in Indian insurance industry:

1. Growth of private players
2. Growth of captive insurance companies
3. Insider trading
4. Litigations against directors
5. Changes in auditing practices

In India, both public and private sector insurance companies have adopted governance norms but these are not elaborate as required by Clause 49. A diverse approach to corporate governance is essential. Further, a governance deficit in an organization with which an insurance organization has business links is also a potential risk factor.

Greater consumer activism and vigil on the part of Internet savvy consumers demand greater attention to governance aspects by the Board of Directors. They must ensure active communication channels with the top management to realise the objectives of the organization. The insurance industry is unique in the financial services industry. It collects sums in advance for a liability that may or may not occur. So, it is a huge responsibility for the insurance industry. They must demonstrate exemplary levels of transparency and accountability. Maintaining profitability of the insurance sector and governance compliance cannot be mutually exclusive.

In the era of strategic alliances and joint ventures, mergers and acquisitions, corporate governance compliance is a true barometer of an insurance organization's commitment to all its stakeholders. With the 2021 budget increasing FDI in insurance sector to 74%, governance in insurance firms has now assumed greater importance than before. TJ

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Insurance Regulatory Environment of Investment, Risk, Capital Management and Solvency – Indian Situation and Global Standpoint

Abstract

Insurance is an important financial risk transfer tool. The risk is being transferred from the insured to the insurer on the payment of consideration called as the premium. This is an important financial product and is designed to take care of the interests of the insured in case a loss happens. The loss can be of life, health, assets. Worldwide, insurance forms the backbone of the financial sector and the economy. The insurance companies are cash rich ones that hold the funds for investment in the various sectors of the economy. Conventionally, the insurance companies play a big role in the economic development of the nations. Also they play a big role in protection of the assets and lives.

Well-functioning financial reporting and monitoring ensures compliance and timely intervention in case of mismanagement or non-compliance of statutory regulations, corporate governance or risk management issues thereby minimizing the risk of insolvency.

This paper discusses on the broad global framework of insurance sector regulation in respect of Solvency, investments, financial management, Risk and capital management and reporting and also draws reference to the Indian sector

Amitava Banik
Area Manager - Commercial Underwriting,
Reliance General Insurance Co Ltd,
Kolkata.
amitava_banik@yahoo.co.in

and the present situation of the insurance sector in India in respect of these parameters of regulatory environment.

Importance of Global Regulatory Environment

The importance of setting in place efficient regulatory structures is a prerequisite to the efficient operation of the insurance sector and particularly in the context of insurance liberalization in India and evolving global insurance sector and risk management scenario. Emerging trends in the global insurance market particularly those relating to technology, newer financial products and corporate failures have underscored the value of regulation in the insurance sector. There exist differences, sometimes large ones in the regulatory and supervisory structures of developed and developing countries. In respect of regulation most Governments are faced with three challenges. –first, the need to set up efficient regulatory structures, the second is harmonization of prudential and regulatory structures across countries and the third is an examination of the implications of accessions to international standards in general and vis-à-vis the General Agreement on Trade in Services (GATS).

Market-Impacting Regulation or The Regulation of Market Conduct

The first thing that the governments seek to regulate is entry requirements to ensure that financially weak or non-credible insurance companies are not allowed to operate in the market. These restrictions can take the form of licensing requirements, specified organizational requirements, and ownership restrictions, restrictions on operating in areas other than insurance such as banking or securities and separation of activities in different insurance subsectors. Well-functioning financial reporting and monitoring ensures compliance and timely intervention in case of mismanagement or non-compliance of statutory regulations, corporate governance or risk management issues thereby minimizing the risk of insolvency. Corporate governance requirements presuppose the existence of efficient internal control by management of procedures and policies followed in the insurance company. It includes the use and supervision of qualified accountants and actuaries, who play an important role in providing an accurate picture to the supervisor, consumer and shareholder of the financial health of the company.

Prudential regulations are measures the compliance of which allows an insurer to continue its operations within a given market. Prudential laws and regulations cover a broad range of aspects related to the operations of insurers ranging from consumer protection to establishment of reasonable solvency standards. The objective of prudential regulation is to ensure the security and solvency of the market and protect policyholders even if insurers fail. In that context, the prudential regulation also ensures the integrity and stability of the financial system.

To complement prudential regulations for consumer protection also other measures, such as public complaints processing, consumer education and information and adequate policyholder protection solutions are worth to be considered.

Indicators for the insurer's financial soundness can help. The following indicators have been identified, most of which are relevant for both life and non-life insurance: capital adequacy, assets quality, reinsurance and actuarial issues, management soundness, earnings and profitability, liquidity, market-based indicators, group exposures.

The extent of government regulation of investment funds is an important question, which, in fact, is further complicated by the changing nature of financial products (e.g. high return/high risk) and their markets. While proponents of liberal investment rules suggest allowing insurers to maximize returns as they deem fit (including by investing in foreign markets), there is also an important role for regulators, in terms of setting out investment regulations to avoid the collapse of insurance companies. An added objective for the regulator has been the reliance on the insurance sectors for investment into the economies infrastructural development and related sectors often through the purchase of specified instruments such as government bonds, real estate, secured loans, investment in local stock markets, etc. Information-gathering is a valuable tool in the hands of the regulatory authority.

In the case of insolvencies and mergers and acquisition, the question arises as to who would take on the insurance claims of the insolvent or acquired insurance company. Certain countries have set up a safety net in the form of guarantee funds. Guarantee funds are used in the United States of America (State of New York), the United Kingdom, the European Union and Canada; they are generally administered by the Government but may also be administered by the insurance industry. Thailand set up the Insurance Stabilization Fund to handle insolvency cases. In India, the IRDA has rules and framework in place to prevent insolvency situations.

Finally, the insurance supervisor can play an important role in controlling and preventing abuse of dominant position, ensuring competition in the fixing of insurance rates and thereby the price of the insurance product, and preventing the formation of cartels. In India, there are several bodies working in tandem to regulate the various entities – IRDA, SEBI, RBI, CCI, etc.

In an increasingly globalizing world, government regulatory activities encounter challenges arising from the linkages between the national and international levels.

Regulatory Structure – International Standard

Insurer solvency takes a central position in risk management by insurers and in insurance supervision. Based on the Insurance Core Principles and the Principles on capital adequacy and solvency, the IAIS (International Association of Insurance Supervisors) has developed a range of Principles and Standards. The IAIS *Insurance core principles and methodology* (Insurance Core Principles) address a wide range of issues of relevance to insurance and insurance supervision.

The IAIS has a wide membership covering most jurisdictions of the world. Some insurance lines of business are offered on a global basis and some insurance groups serve a global client base. Other insurance products have a more local flavor, reflecting local markets and conditions, and are offered by more locally operating insurers. Even so, insurance products, markets and companies have many characteristics in common, enabling, and indeed calling for a common, globally acceptable and applicable structure for the assessment of insurer solvency. This common structure must be sufficiently flexible to take into account both the local and the global aspects of insurance.

In developing a common structure and common standards for the assessment of insurer solvency and formalizing an overarching Framework for insurance supervision, the IAIS has taken note, and will continue to take note, of relevant work on insurer solvency undertaken in a number of jurisdictions. The IAIS will also closely follow and carefully consider developments within global fora such as the Bank for International Settlements (BIS), the Basel Committee on Banking Supervision (BCBS), the International Accounting Standards Board (IASB), the International Actuarial Association (IAA), the International Federation of Accountants (IFAC), the International Monetary Fund (IMF), the International Organization of Securities Commissions (IOSCO), the Organization for Economic Cooperation and Development (OECD) and the World Bank.

A considerable number of large financial groups are active across various financial sectors, and supervisors are now focusing more on specific types of risk, some of which are common to the different financial sectors in which they occur, whereas others are more sector-specific.

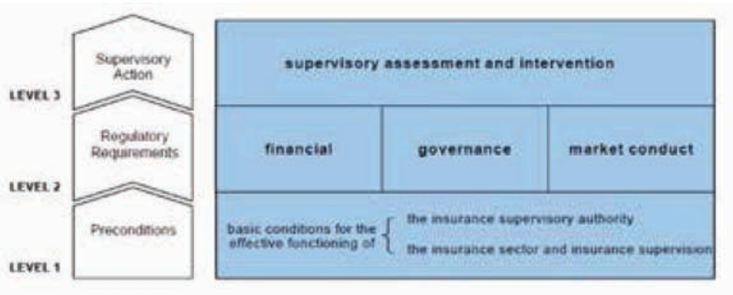
The wide range of aspects already identified and elaborated to some extent in the Insurance Core

Principles suggests that the Framework for insurance supervision consists

conduct issues. It also encapsulates three levels or aspects in relation to

effective insurance supervision, regulatory requirements, and supervisory action.

Figure 1 - Outline of the Framework for insurance supervision



Regulatory Requirements

Supported by these preconditions, the Framework consists of three broadly

Each of these blocks may be viewed from two main standpoints or aspects:

insurer

of the supervisory authority.

It is the responsibility of insurers to meet regulatory requirements, both qualitative and quantitative, in pursuing their insurance activities. Such requirements may be enshrined in law or regulations, or be imposed by the supervisory authority, but need to be broad enough to deal with the full range of insurers in the market.

The three blocks are:

adequacy; valuation and adequacy of technical provisions; forms

of capital; investments;

disclosure

refers to governance processes and controls in areas such as the Board, directors, senior management and other organizational aspects,

directors and management; administrative, organization and internal controls, including risk management; compliance with legislative requirements; shareholder relationships; and the governance risks posed by group structures

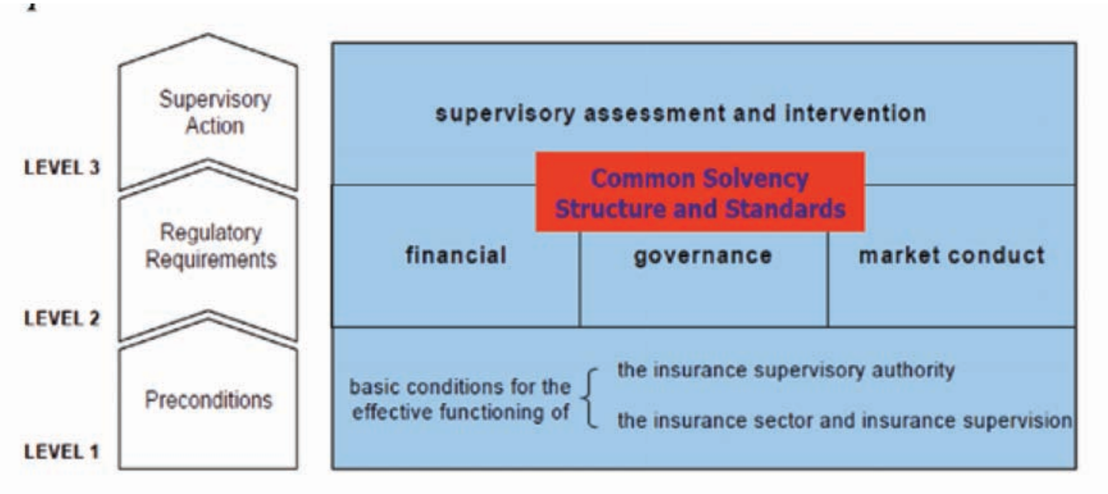
includes areas such as dealing with customers in the selling and handling of insurance policies, and also the integrity of conduct by an insurer as an institutional investor. It also includes disclosure of relevant information both to the market and to policyholders.

A Common Structure and Common Standards for The Assessment of Insurer Solvency

The common structure and standards for the assessment of insurer solvency that are to be developed are an important

Framework. However they will also address components of the governance and market conduct level 3 (supervisory actions). As illustrated, the effectiveness of such solvency standards will be dependent upon the other elements of the Framework. The position of the common structure and standards within the Framework is illustrated as follows

Figure 2 - The common solvency structure and standards within the Framework for insurance supervision



Indian Regulatory Environment

MONITORING OF INVESTMENTS BY THE INSURERS

The investments are regulated by the IRDAI (Investment) Regulations, 2016. Details of investments as on 31.03.2019

Table 1

TOTAL INVESTMENTS OF THE INSURANCE SECTOR
(As on 31st MARCH)
(₹ crore)

SECTOR	LIFE		GENERAL, HEALTH & RE-INSURANCE		TOTAL	
	2018	2019	2018	2019	2018	2019
Public	2526923	2760658	162503	178977	2689426	2939635
	(11.06)	(9.25)	(16.94)	(10.14)	(11.40)	(9.30)
Private	662137	772485	106426	135354	768563	907839
	(14.37)	(16.67)	(27.64)	(27.18)	(16.04)	(18.12)
Total	**3189060**	**3533143**	**268929**	**314331**	**3457989**	**3847474**
	(11.74)	**(10.79)**	**(20.95)**	**(16.88)**	**(12.41)**	**(11.26)**

Note: *Figures in brackets represent growth in percentage over the previous year*

This table shows the quantum of investments made by the insurers in the Indian market and the YOY growth of investments. This money is being rolled into various segments of the economy for capital investments, building of infrastructure and other productive uses.

Table 2
INVESTMENTS OF LIFE INSURERS

INVESTMENTS OF LIFE INSURERS : FUND-WISE
(As on 31st March)
(₹ crore)

Insurer	Life Fund		Pension and General Annuity & Group Fund		Unit Linked Fund		Total of all Funds	
	2018	2019	2018	2019	2018	2019	2018	2019
LIC	1883018	2042651	600374	683735	43530	34272	2526923	2760658
Private	254462	304804	73265	90527	334411	377153	662137	772485
Total	**2137480 (67.02)**	**2347455 (66.44)**	**673639 (21.12)**	**774262 (21.91)**	**377941 (11.86)**	**411425 (11.65)**	**3189060 (100.00)**	**3533143 (100.00)**

Note: *Figures in brackets is percentage of respective funds to the total funds.*

Table 3
INVESTMENTS OF GENERAL INSURERS (Including Health and Reinsurers)

TOTAL INVESTMENTS OF GENERAL, HEALTH & Re-INSURERS : CATEGORY-WISE
(As on 31st MARCH)
(₹ crore)

Pattern of Investments	2018		2019	
	Total	% to Total	Total	% to Total
Central Govt. Securities	69315	25.77	81755	26.01
State govt. and other approved securities	36549	13.59	48948	15.57
Housing and Loans to State Govt. for Housing & FFE	27554	10.25	31770	10.11
Infrastructure Investments	42322	15.74	50070	15.93
Approved Investments	85388	31.75	90162	28.68
Other Investments	7801	2.90	11626	3.70
Total	**268929**	**100.00**	**314331**	**100.00**

Note: *1. Included Specialized Insurers and Indian Reinsurance Branches*
2. FFE: Fire Fighting Equipment

Maintenance of Solvency Margin

Every insurer is required to maintain a Required Solvency Margin as per Section 64VA of the Insurance Act, 1938 as

IRDAI (Assets, Liabilities and Solvency Margin of General Insurance Business) Regulations, 2016.

The Authority had issued guidelines on Cross Border Reinsurer effective from April 1, 2016, The guidelines are

reinsurance business with Indian Insurance Companies.

Table 4

EQUITY SHARE CAPITAL OF LIFE INSURERS

(₹crore)

Insurer	As on 31st March, 2018	Infusion During the year	As on 31st March, 2019	Indian Promoter*	Foreign Investor	Foreign Investment %
AEGON Life	1442.62	20.49	1463.11	746.19	716.92	49.00%
AVIVA LIFE	2004.90	0.00	2004.90	1022.50	982.40	49.00%
BAJAJ ALLIANZ LIFE	150.71	0.00	150.71	111.53	39.18	26.00%
BHARTI AXA	2406.20	120.00	2526.20	1288.36	1237.84	49.00%
ADITYA BIRLA SUNLIFE	1901.21	0.00	1901.21	969.62	931.59	49.00%
CANARA HSBC	950.00	0.00	950.00	703.00	247.00	26.00%
DHFL PRAMERICA	374.06	0.00	374.06	190.77	183.29	49.00%
EDELWEISS TOKIO	312.62	0.00	312.62	159.44	153.18	49.00%
EXIDE LIFE	1750.00	100.00	1850.00	1850.00	0.00	0.00%
FUTURE GENERALI	1737.82	105.00	1842.82	1372.88	469.94	25.50%
HDFC	2011.74	5.64	2017.38	1303.02	714.36	35.41%
ICICI PRUDENTIAL	1435.35	0.43	1435.78	943.26	492.52	34.30%
IDBI FEDERAL	800.00	0.00	800.00	592.00	208.00	26.00%
INDIAFIRST	625.00	0.00	625.00	462.50	162.50	26.00%
KOTAK MAHINDRA	510.29	0.00	510.29	510.29	0.00	0.00%
MAX LIFE	1918.81	0.00	1918.81	1429.15	489.66	25.52%
PNB METLIFE	2012.88	0.00	2012.88	1367.70	645.18	32.05%
RELIANCE NIPPON	1196.32	0.00	1196.32	610.13	586.20	49.00%
SAHARA	232.00	0.00	232.00	232.00	0.00	0.00%
SBI LIFE	1000.00	0.00	1000.00	647.77	352.23	35.22%
SHRIRAM LIFE	179.38	0.00	179.38	103.35	76.03	42.39%
STAR UNION DAI-ICHI	258.96	0.00	258.96	140.00	118.96	45.94%
TATA AIA	1953.50	0.00	1953.50	996.29	957.22	49.00%
Total (Private Sector)	**27164.38**	**351.56**	**27515.94**	**17751.75**	**9764.20**	**35.49%**
LIC	100.00	0.00	100.00	100.00	0.00	0.00%
Total	**27264.38**	**351.56**	**27615.94**	**17851.75**	**9764.20**	**35.36%**

Note: ** Includes Indian investors holding*

Table 5

QUARTERLY SOLVENCY RATIOS OF LIFE INSURERS IN INDIA 2018-19

Sl. No.	Name of Insurer	30.06.2018	30.09.2018	31.12.2018	31.03.2019
1	Aegon Life Insurance Co. Ltd.	1.95	2.15	1.99	2.59
2	Aviva Life Insurance Company India Ltd.	2.92	2.89	2.95	2.99
3	Bajaj Allianz Life Insurance Co. Ltd.	7.74	7.49	7.67	8.04
4	Bharti-AXA Life Insurance Co. Ltd.	1.62	1.62	1.7	1.71
5	Aditya Birla Sunlife Insurance Co. Ltd.	2.12	2.04	2.04	1.98
6	Canara HSBC OBC Life Insurance Co. Ltd.	3.70	3.72	3.73	3.93
7	DHFL Pramerica Life Insurance Co. Ltd.	5.33	4.91	4.8	4.6
8	Edelweiss Tokio Life Insurance Co. Ltd.	2.22	2.45	2.37	2.29
9	Exide Life Insurance Co. Ltd.	1.93	1.80	1.86	2.08
10	Future Generali India Life Insurance Co. Ltd.	1.94	1.64	1.56	1.62
11	HDFC Life Insurance Co. Ltd.	1.97	1.93	1.91	1.88
12	ICICI Prudential Life Insurance Co. Ltd.	2.35	2.34	2.24	2.15
13	IDBI Federal Life Insurance Co. Ltd.	3.83	3.82	3.85	3.34
14	IndiaFirst Life Insurance Co. Ltd.	1.97	1.73	1.68	1.74
15	Kotak Mahindra OM Life Insurance Co. Ltd.	3.11	3.1	3.1	3.02
16	LIC of India	1.52	1.51	1.50	1.60
17	Max Life Insurance Co. Ltd.	2.62	2.61	2.39	2.42
18	PNB MetLife India Insurance Co. Ltd.	2.02	2.01	2	1.97
19	Reliance Nippon Life Insurance Co. Ltd.	2.67	2.81	2.79	2.6
20	Sahara India Life Insurance Co. Ltd.	9.24	9.42	9.47	8.44
21	SBI Life Insurance Co. Ltd.	2.14	2.21	2.23	2.13
22	Shriram Life Insurance Co. Ltd.	2.01	2.05	2.14	1.82
23	Star Union Dai-ichi Life Insurance Co. Ltd.	2.78	2.74	2.90	2.53
24	TATA AIA Life Insurance Co. Ltd.	2.91	2.68	2.59	2.68

Table 6

EQUITY SHARE CAPITAL OF GENERAL, HEALTH AND RE-INSURERS

Insurers	As on 31st March 2018	Infusion During the Year	As on 31st March 2019	Indian Promoter**	Foreign Investor	Foreign Investment %
PRIVATE SECTOR INSURERS						
Acko General Insurance Ltd.	136.00	100.00	236.00	236.00	--	--
Bajaj Allianz General Insurance Co. Ltd.	110.23	--	110.23	81.57	28.66	26.00%
Bharti AXA General Insurance Co. Ltd.	1621.45	--	1621.45	826.94	794.51	49.00%
Cholamandalam MS General Insurance Co. Ltd.	298.81	--	298.81	179.28	119.52	40.00%
DHFL General Insurance Limited	190.05	--	190.05	190.05	--	--
Edelweiss General Insurance Company Limited	170.00	38.00	208.00	208.00	--	--
Future Generali India Insurance Co. Ltd.	809.80	--	809.80	603.25	206.55	25.51%
HDFC ERGO General Insurance Co. Ltd.	605.07	0.35	605.42	305.69	292.20	48.26%
Go Digit General Insurance Ltd.	350.00	324.57	674.57	674.57	--	--
ICICI Lombard General Insurance Co. Ltd.	453.95	0.36	454.31	253.84	--	--
IFFCO Tokio General Insurance Co. Ltd.	269.32	4.90	274.22	139.85	134.37	49.00%
Kotak Mahindra General Insurance Co. Ltd.	175.00	45.00	220.00	220.00	--	--
Liberty General Insurance Co. Ltd.*	1084.60	0.63	1085.23	556.90	528.33	48.68%
Magma HDI General Insurance Co. Ltd.	112.50	12.50	125.00	92.11	32.00	25.60%
Raheja QBE General Insurance Co. Ltd.	207.00	--	207.00	105.57	101.43	49.00%
Reliance General Insurance Co. Ltd.	251.55	--	251.55	251.55	--	--
Royal Sundaram General Insurance Co. Ltd.	449.00	--	449.00	269.40	179.60	40.00%
SBI General Insurance Co. Ltd.	215.50	--	215.50	150.85	56.03	26.00%
Shriram General Insurance Co. Ltd.	258.74	0.34	259.08	198.60	59.40	22.93%
Tata AIG General Insurance Co. Ltd.	732.50	175.00	907.50	671.55	235.95	26.00%
Universal Sompo General Insurance Co. Ltd.	368.18	--	368.18	240.74	127.44	34.61%
PRIVATE SECTOR TOTAL (A)	**8869.24**	**701.64**	**9570.88**	**6456.32**	**2895.99**	**29.79%**
PUBLIC SECTOR INSURERS						
National Insurance Co. Ltd.	100.00	--	100.00	100.00	--	--
The New India Assurance Co. Ltd.	412.00	412.00	824.00	704.00	--	--
The Oriental Insurance Co. Ltd.	200.00	--	200.00	200.00	--	--
United India Insurance Co. Ltd.	150.00	--	150.00	150.00	--	--
PUBLIC SECTOR TOTAL (B)	**862.00**	**412.00**	**1274.00**	**1154.00**	**--**	**--**
TOTAL (PRIVATE + PUBLIC) (A+B)	**9731.24**	**1113.64**	**10844.88**	**7610.32**	**2895.99**	**27.15%**
SPECIALISED INSURERS						
Agriculture Insurance Co of India Ltd	200.00	--	200.00	200.00	--	--
Export Credit Guarantee Corporation of India Ltd.	1500.00	500.00	2000.00	2000.00	--	--
SPECIALISED INSURERS TOTAL (C)	**1700.00**	**500.00**	**2200.00**	**2200.00**	**--**	**--**
STANDALONE HEALTH INSURERS						
Aditya Birla Health insurance Co. Ltd.	132.88	79.15	212.03	108.13	103.89	49.00%
Apollo Munich Health Insurance Co. Ltd.	357.89	0.52	358.41	182.42	173.95	48.54%
Cigna TTK Health Insurance Co. Ltd.	364.73	226.14	590.86	301.34	289.52	49.00%
Max Bupa Health Insurance Co. Ltd.	926.00	55.00	981.00	500.31	480.69	49.00%
Reliance Health Insurance Ltd.	--	186.55	186.55	186.55	--	--
Religare Health Insurance Co. Ltd.	594.83	93.72	688.55	668.77	--	--
Star Health and Allied Insurance Co. Ltd.	455.58	--	455.58	158.65	101.58	22.30%
STANDALONE HEALTH INSURERS TOTAL (D)	**2831.90**	**641.07**	**3472.97**	**2106.18**	**1149.64**	**31.77%**
REINSURERS						
Public Sector Reinsurer - GIC	438.60	438.60	877.20	752.50	--	--
Private Sector Reinsurer- ITI	268.94	--	268.94	268.94	--	--
REINSURERS TOTAL (E)	**707.54**	**438.60**	**1146.14**	**1021.44**	**--**	**--**
GRAND TOTAL (F) = (A+B+C+D+E)	**14970.69**	**2693.31**	**17664.00**	**12937.94**	**4045.63**	**23.66%**

** Erstwhile Liberty Videocon General Insurance Co. Ltd.*
***Includes Indian investors holding*
***Note:** Reclassification/Regrouping in the previous year's figures, if any, by the insurer has not been considered.*
***Note:** Infusion during the year includes cancellation, reduction and fresh issue of shares*

Table 7

SOLVENCY RATIO OF GENERAL, HEALTH AND RE-INSURERS 2018-19

Sl. No.	Insurers	June 2018	September 2018	December 2018	March 2019
	PRIVATE INSURERS				
1	Acko General Insurance Ltd.	2.45	1.80	2.11	1.78
2	Bajaj Allianz General Insurance Co. Ltd.	2.88	2.86	2.81	2.55
3	Bharti AXA General Insurance Co. Ltd.	1.82	1.76	1.77	1.76
4	Cholamandalam MS General Insurance Co. Ltd.	1.62	1.61	1.64	1.55
5	DHFL General Insurance Limited	3.29	2.76	2.59	2.60
6	Edelweiss General Insurance Co. Ltd.	2.60	2.37	2.02	2.40
7	Future Generali India Insurance Co. Ltd.	1.66	1.64	1.71	1.54
9	Go Digit General Insurance Limited	4.47	6.57	3.38	2.27
8	HDFC ERGO General Insurance Co. Ltd.	2.10	2.03	1.92	1.75
10	ICICI Lombard General Insurance Co. Ltd.	2.04	2.10	2.12	2.24
11	IFFCO Tokio General Insurance Co. Ltd.	1.75	1.57	1.60	1.66
12	Kotak Mahindra General Insurance Co. Ltd.	2.57	2.36	2.15	1.86
13	Liberty General Insurance Co. Ltd.**	1.95	3.25	2.57	2.15
14	Magma HDI General Insurance Co. Ltd.	2.12	1.67	1.77	1.58
15	Raheja QBE General Insurance Co. Ltd.	4.10	4.19	4.04	3.83
16	Reliance General Insurance Co. Ltd.	1.61	1.71	1.64	1.60
17	Royal Sundaram General Insurance Co. Ltd.	2.11	1.96	1.94	1.93
18	SBI General Insurance Co. Ltd.	2.38	2.46	2.33	2.34
19	Shriram General Insurance Co. Ltd.	2.52	2.74	2.85	3.47
20	Tata AIG General Insurance Co. Ltd.	1.89	2.00	1.75	1.63
21	Universal Sompo General Insurance Co. Ltd.	2.41	2.29	1.76	2.24
	PUBLIC INSURERS				
22	National Insurance Co. Ltd.*	1.43	1.21	1.01	1.04
23	The New India Assurance Co. Ltd.	2.66	2.52	2.25	2.13
24	The Oriental Insurance Co. Ltd.*	1.65	1.54	1.21	1.57
25	United India Insurance Co. Ltd.*	1.21	1.53	1.51	1.52
	SPECIALIZED INSURERS				
26	Agriculture Insurance Co of India Ltd	2.52	2.26	2.37	2.14
27	Export Credit Guarantee Corporation of India Ltd.	6.70	9.95	11.52	10.40
	STANDALONE HEALTH INSURERS				
28	Aditya Birla Health insurance Co. Ltd.	2.21	2.98	1.77	1.62
29	Apollo Munich Health Insurance Co. Ltd.	1.56	1.60	1.55	1.64
30	CignaTTK Health Insurance Co. Ltd.	1.11	2.43	1.91	2.23
31	Max Bupa Health Insurance Co. Ltd.	1.95	1.76	1.76	1.77
32	Reliance Health Insurance Co. Ltd.	NA	NA	1.88	1.53
33	Religare Health Insurance Co. Ltd.	1.53	1.54	1.53	1.56
34	Star Health and Allied Insurance Co. Ltd.	1.51	1.28	1.65	2.01
	REINSURER				
35	Public Sector - GIC	1.77	1.73	1.84	2.06

** After consider the forbearances granted to the insurer. ** Erstwhile Liberty Videocon General Insurance Co. Ltd.*
***Note:** Reclassification/Regrouping in the previous year's figures, if any, by the insurer has not been considered.*

Financial Statements of Indian Insurers

in the form and manner prescribed under the IRDA (Preparation of Financial Statements and Auditors' Report of Insurance Companies) Regulations, 2002, amended from time to time.

Paid-Up Capital – Life Insurance Industry

The total capital of the life insurance companies as on 31 March, 2019 was Rs. 27615.94 Crs. During 2018-19, an additional capital of Rs. 351.56 crores was brought in the industry by the private sector insurers.

Table 8

PAID UP CAPITAL* : LIFE INSURERS
(₹crore)

INSURER	As at 31st March, 2018	Additions during 2018-19	As at 31st March, 2019
LIC	100.00	0.00	100.00
Private Sector	27164.38	351.56	27515.94
TOTAL	**27264.38**	**351.56**	**27615.94**

Note: * *Excludes Share premium & Share application money*

Paid-up Capital – General Insurance Industry

The total paid-up capital of general insurers and re-insurers (including assigned capital of foreign reinsurance branches) as on 31 March, 2018 was Rs. 17,541 Crs. During 2018-19, the general insurers and re-insurers added Rs. 5,780 Crs to their equity capital base, including increase of Rs. 3,087 Crs in the assigned capital of foreign reinsurance branches. Public sector insurers infused capital of Rs. 412 Crs whereas specialized insurer ECGC infused a further capital of Rs. 500 Crs. Private sector insurers infused further capital to the extent of Rs. 701 Crs. Standalone health insurers infused a capital of Rs. 641 Crs. GIC infused Rs. 439 Crs. Total paid up capital of all insurers and reinsurers (including assigned capital of foreign reinsurance branches) as on 31.03.2019 is Rs. 23,321 Crs.

Table 9

PAID-UP CAPITAL : GENERAL, HEALTH INSURERS AND REINSURERS
(₹crore)

Insurer	2017-18	2018-19
General Insurers		
Public Sector	862.00	1,274.00
Private Sector	8,869.24	9,570.88
Sub Total	**9,731.24**	**10,844.88**
Standalone Health Insurers		
Public Sector	NA	NA
Private Sector	2,831.90	3,472.97
Sub Total	**2,831.90**	**3,472.97**
Specialized Insurers		
Public Sector	1,700.00	2,200.00
Private Sector	NA	NA
Sub Total	**1,700.00**	**2,200.00**
Reinsurers		
Public Sector	438.60	877.20
Private Sector	268.94	268.94
Sub Total	**707.54**	**1,146.14**
Grand Total	**14,970.69**	**17,664.00**
Branches of Foreign Re-insurers including Lloyd's India	**2570.35***	**5657.27***

**assigned capital; NA:- Not applicable*
***Note:** Reclassification/Regrouping in the previous year's figures, if any, by the insurer has not been considered.*

Merger and Acquisitions

In India, there is growing trend of consolidation in Insurance industry. As the market opened up, many companies entered the market but as Indian market is slowly maturing, there is consolidation in the industry through strategic merger and acquisition activities. Already there had been a few mergers.

As a result of merger of L&T General Insurance Co. Ltd with HDFC ERGO General Insurance Co. Ltd. HDFC Ergo also acquired Apollo Munich Health Insurance Company and entered the health insurance segment. Recently, ICICI Lombard General Insurance Co Ltd also acquired Bharti AXA General Insurance Co Ltd recently through share swap agreement.

Conclusion

The insurance supervision and monitoring of accounting standards and regulation are important aspects of the insurance industry. Being a major backbone of the economy in terms of capital formation, investments,

productive use of capital and asset protection, stringent regulatory guidelines and monitoring are important pre-requisites for the industry to function. Also as the policy holder's fund and public money is involved, the ensuring of proper health of the insurance industry is paramount in terms of maintaining solvency margins of insurers, proper business climate for mergers and acquisitions, adhering to best practices of accounting, Corporate governance, etc. The profitability of insurance companies, protection and growth of shareholder capital and best quality standard of customer services in terms of claim settlement, policy servicing, grievance redressal, etc are other important factors. TJ

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Behavioural Benchmarking as a Robust Tool of Total Safety Culture in Industries

Dr. Harbans Lal Kaila
Professor of Psychology (Retd.)
SNDT Women's University,
Founder Director - Forum of Behavioural Safety
kailahl@hotmail.com

Abstract

People in industry think that if they received awards in business excellence, they are obviously best in safety as well, that is actually not the case. Behaviour based safety (BBS) benchmarking is an approach to comparative assessment of the impact and effectiveness of a BBS program. Most BBS benchmarking compares the successful implementation of BBS in terms of its qualitative and quantitative results. This article presents the rich experiential logical conclusions of 171 HSE professionals to compare and contrast peer companies or locations that used BBS approach in similar ways, and within the same industry. Recommendations would help organisations benchmark and improve their safety culture on the basis of a defined criteria as well as the implications of parameters, comparison and safety versus business excellence, as discussed in this article.

Keywords

BBS, Industries, Benchmarking, Total Safety Culture, Indian.

Introduction, Rationale, Context

The organisational journey in safety evolved from compliance-driven standards and guidelines to a behaviour-centric safety culture to help achieve the zero harm goal (Tata Metaliks, 2020). A longitudinal employee-driven behaviour based accident prevention initiative implemented in industrial settings of 229 companies while comparing pre- to post-initiative incident levels across groups revealed a significant decrease in incidents following the BBS implementation. The effect sizes were estimated from the average percentage reduction from baseline. The average reduction from baseline amounted to 26% in the first year increasing to 69% by the fifth (Krause et al., 1999).

BBS Framework (figure-1) reveals that safety cultural change is an essence of managing all incidents at the workplace. Hence the BBS benchmarking ought to focus on the significant change in incidents rate as an outcome for comparing Organisations.

1. BBS premise is that near-misses, injuries, fatalities etc are behavior-based	2. Behavior is the root cause of all incidents	3. BBS helps build safety cultural change to achieve zero incidents	4. Culture is the summation of behavior's and culture drives all behavioral change.

Figure-1: BBS Framework (Kaila, 2020)

Safety culture was consistently and independently associated with safety performance. In addition, employees' perceptions of safety were consistently and independently associated with individual safety performance, health and wellbeing. These associations were not limited to particular sectors of industry, suggesting that they are robust and generally applicable (Smith and Wadsworth, 2009).

Most benchmarking studies have historically not taken the state of operation into account. This can create distorted comparisons. Considering these, three variables are allowed: industry type, company size, and the incident frequency (Dyne and Tolbert, 2017).

Benchmarking concept is likely to achieve the best work related safety outcomes. Comparison has been done to show the different understanding of benchmarking approach and how safety performance can be benchmarked. The safety quality can be improved by doing the right benchmarking process on it to seek what are the best practices to be applied (Ishak and Azizan 2018).

Research Objective

The present article is focused to explore BBS as a robust tool for benchmarking of industries in improving safety cultural change (SCC).

Methodology

Since the BBS programmes are implemented in many Industries, it will be good idea to share the data, learnings and good practices. It will also be a good tool for benchmarking present data of peer industries / plants.

A total of 171 HSE professionals participated in this study to reflect their viewpoint on the comparison of BBS data of peer industries for considering BBS as a robust tool for benchmarking. Both primary and secondary data were collected from organisations across India. The BBS method, being a generic one, can be adopted by the managers to assess present safety performance and find a suitable peer to which, it should follow to improve own technical efficiency followed by in what respect it has to improve for benchmarking based on safety performance in Indian industries (Beriha, Patnaik and Mahapatra, 2011).

Results and Findings

The findings of the study are presented in following points for evolving conclusive recommendations for benchmarking BBS as a tool towards establishing total safety culture at sites.

1. The workmen must be vocal in spot-correction of the safety risks at workplace and anyplace. That's the basis of BBS implementation i.e. empowerment up to the lowest person of the pyramid. But in some companies, "only staff will correct and fill BBS observations in dashboard / 4 per month. Each week schedule is fixed by BBS committee members. IT has prepared the dashboard.

Total flop show designed by safety corporate office. They talk only to make their plant safe, not family and society. But who will make the management understand that they want only work without good results towards development of an independent / interdependent safety culture" (Personal Communications, 2020).

2. Benchmarking is a larger issue that needs a re-definition in terms of behavioural practices in safety management in a plant or site, as being depicted in this research article. Total safety culture demands a clear fundamental clarity/difference between what is safe and what is unsafe to one and all. A line between compliance and non-compliance is very thin visible safety culture that can be seen and not seen by many as culture drives the behaviours. Safety awakening by each of us is the key to creating safety culture. We need to transform the safety culture in many Organisations and finally at community level for mankind. Human bonding saves people from injury not merely the safety manuals or procedures. Mere standards are not enough to achieve safety of employees.

3. Benchmarking for peer classification to develop a robust program to help industry for better BBS practice by involving everyone in risk correction would finally lead to business excellence. The basic concept of BBS implementation is same for all industries. We can compare performance/ rating industry-wise such as Chemical, Oil & Gas, and construction.

The following themes emerged from this study for understanding the scenario of comparison of BBS data of peer industries for developing BBS Benchmarking as a robust/right tool for safety cultural change.

a. Benchmarking BBS as best practice helps identify opportunities for change to fully optimise our return on investment (ROI) by comparing data of peer industry on a behavioural safety measures that can be developed accessed and scrutinised for a robust tool. The data can also help to find out the gap which can be helpful for strengthening for development of such a tool (BSMS, 2020).

b. As part of this study, the comparison were done between similar industries having similar type of management controls. For example, data of an oil and gas industry cannot be compared with engineering industry or cement industry. Once the working conditions change, type of management change, workers involvement in field activities change, comparison of data will be misleading. Secondly, even within the same industry, data of a public sector organisation cannot be compared with that of a private MNC. Considering above limitations similar type of industries and management controls be identified, and comparison could be done which would be beneficial.

c. Parameters/Data comparison were done Apple to Apple meanings:

1 Years since implementation
2 No. of Employees
3 No. of Associates
4 Who all are Drivers of BBS Programme
5 Monitoring Mechanism
6 Hot Spots
7 Action Plan to address the Hot Spots.

An example:

1. Years since implementation: 2 Years 3 Months
2. No. of Employees: 650 Employees [O&M-450 Employees]
3. No. of contractors' workmen: 2 X 1000 Nos.
4. Who all are Drivers of BBS Programme: Business Head & HODs?
5. Monitoring Mechanism: Weekly by BU Head, Monthly by Group
6. Hot Spots: 1st Social Distancing & Personal Hygiene, 2nd Material Handling

In order to make BBS a benchmark, we will have to work out some parameters basis which the industry-wise comparison could be made and ranking could be done. If we really compare with same or similar industries. Risk profile (high risk, medium and low risks), and workers profile (skilled, semiskilled and unskilled) varies from industry to industry and so is behavior. The safe behavior of people is always better in private MNCs than most of the Indian public sector companies. So this factor also needs to be considered while comparing. According to Mr. Pavan K. Rao, EHS Head of a MNC, “any benchmarking will need parameters, to know where we excel and to know where we need to improve” (Personal Communications, 2020). We can also have following considerations:

- National Safety Rating
- Risk Rating of Industry
- Duration since implementation
- Number of Employees and Contract Workers [Associates]
- Work Area of Industry [More the work area of facilities, supervision is a challenge]
- Training Records [% of Workforce trained]
- No. of Audits, Safety Index [Safe Observations/ Safe + Unsafe Observations] and Unsafe Observations/hour

Also there are challenges in comparing as it also depends on many factors apple to apple such as:

- Type of industry
- Process steps involved
- Operations-manual/auto
- Manpower employed (skilled/ unskilled)
- Age of equipment/ plant / machinery
- Type of industry: private/ Govt/ multinational etc.

d. Though, competitive feeling is good if looked at in the right spirit for achieving excellence and not just showcasing. Certainly not downgrading others which is experienced in many awards by putting numbers to get the awards. In reality, the competition should be raising one’s performance bar to the next level. According to Mr. Siva Ramakrishna Rao, a HSE general manager of a large construction company, “there is a saying ‘Measure to improve’ and measurement needs statistics. Their ups and downs are the indicators of improvement. We already have SR / FR/IR. For the Safety Department. But Near-miss and potential near-miss (at-risk behaviours) numbers are for the BBS and for the whole company. Safety department is the custodian of the statistics. I was in tremendous pressure by the management for comparison. With peers and superiors. But my stand was to let the competition come from within the company, not from outside. I am only sharing my experiences as ultimately BBS should be there in every company and every employee shall be benefitted” (Personal Communications, 2020). BBS helps to develop culture of care in organisation and leads to create positive safety culture. It empower each employee including each working hands to become safety officer for his team. Preventing accident is like saving someone's life and pain and it gives peace and humbleness. It would be a wonderful and ultimate idea. It will immediately strike to everyone mind and become easy to implement. It is must, otherwise purpose of BBS wouldn't be served (Kaila, 2020).

e. Due to high attrition rate of contractual employees, it is much challenging to get on the result. It is a good insight that we added ‘spot-correction’ a psychological approach in the history of Indian Safety. ‘Spot-correction’ (with cool mindset) in the hands of ‘everyone at site’ changed the safety culture. This clarified the ‘process of achieving behavioural reinforcements in safety'. ‘Continuing this safety culture’ would save generations! Be a Mentor of BBS to make more!! Be a Proud human! According to a veteran safety expert, Shankar Rajagopalan, "Spot Correction, erstwhile BBS went into analysis paralysis after recording observations and creating a nightmare of data” (Personal Communications, 2020).

Conclusions

This article have raised a thought provoking question, comparing two persons/children in a family or two of the friends on a scale! This initiative should be useful for many industries for benchmarking and to know where they stand. We may invite industries to present their BBS performance/ learnings with whatever metrics they are using currently. However, when we go for comparison, we lose track, as every company / industry is led by human beings. In oil and gas it if you compare companies like ONGC and SHELL, there is a huge difference because of their origin. So every company has its own characteristics what we call behaviours and attitudes. Our benchmarking shall be, whoever is guided, REDUCTION in INJURY (RIN) whatever may be the percentage. As it takes years for the parents to see prosperity / happiness to nurture the children. We shall also take care of the Organisations to achieve excellence in their respective fields.

Reducing accidents and incidents shall be the primary responsibilities of any management. In that there is no cast, creed, religion or region (chemical, oil and gas, metros, manufacturing etc etc.). It's a humanitarian effort. It's also in the CSR category. Our aim is to reduce injury / pain and make a human being happy. again not only at work at home also. Hence, being elite and gaining a lot of experience, we shall encourage any industry to achieve excellence in reducing injuries. As parents want the prosperity of their children, we shall guide everybody on the principles of BBS to reduce injuries in turn create a happy and enjoyable atmosphere which will contribute to more production / progress resulting in profits. As it is felt, BBS is Physical (injury), Psychological (behaviors / Attitudes) and Philosophical (happiness / contentment) effort. Any one P suffers, then BBS is lost. This needs Shraddha & Saburi (Commitment - Patience) as we are the missionaries of happiness.

ILO focused upon safety for all economic activities. National Safety Council emphasised safety from workplace to anyplace. World Safety Forum themed for safety as a way of life. Forum of Behavioural Safety pushed the concept of safety in the behaviour of all as emphasised in the ISO45001 to empowering the workforce in the internal risk control and management. There is a transformation in the leadership behaviour as well as safety cultures of the corporates. But achieving an interdependent safety culture is a journey of continuous struggle and patience, as the corporate values fumble between business profits and caring for safety of people at the lower levels. Mr. Rajam Krishnamurthy who headed the Dubai Burj Khalifa project for safety said, "never compromise with less than the best as it comes to safety of people and the project" (ANI, 2019).

Recommendations

1. It is imperative for companies to benchmark their BBS process against the parameters of zero at-risk behaviours to realise a sustainable zero injury rate. Parameters for BBS Benchmarking are: the behaviour categories that are defined as observable, measurable, spot-correctable, and an organisation-wide planned intervention was launched in every site among Indian Organisations. How do we know where we need to improve: an organisation needs to check how far an organisation has reached towards zero at-risk behaviours, and continue this organisational planned intervention? The research and practice trends reveal that BBS Benchmarking can be done on the generic 11 behaviour categories across an organisation, across peer industry, across the zone, as our measurement index remains the same for every site i.e. reaching zero at-risk behaviours, by involving everyone till last person for achieving an interdependent safety culture. These behaviour categories are: PPE, Housekeeping, Using tools, Body positioning, Material handling, Communication, Following procedures, Visual focusing, Using mobile at work, Road Safety, Covid-19 Behaviours (Kaila, 2020). Almost, every organisation has been benefitted for significant improvement in safety performance with BBS implementation. Some Organisations took longer time to reach zero at-risk behaviours, depending upon management continuous engagement with BBS progress, frequency of observations for spot-correction, size of organisation.

2. According to Mr. K. K. Sharma a director EHS of DCM Shriram, "the concept of benchmarking like any other performance excelling is an excellent idea for BBS program implementation to get the maximum value and achieve zero accident goal. However, the competitive feeling is good if looked at in the

right spirit for achieving excellence. The objective of the competition should be raising one's performance bar to the next level" (Personal Communications, 2020). Also the Organisations have experienced challenges in comparing two sectors/sites as it also depends on many factors to compare apple to apple such as:

- Type of industry
- Process steps involved
- Operations: manual/auto
- Manpower employed (skilled/ unskilled)
- Age of equipment/ plant / machinery
- Type of industry : private/ govt/ multinational etc.

Certainly benchmarking on BBS will help us in moving ahead following principles of inclusiveness and healthy competition. Challenge is to put a framework addressing all the criteria for a uniform assessment giving due weightage to all the 10 aspects as described below.

In order to review quantitative and qualitative analysis of your BBS Project Rating, the following are a list of 10 BBS measurable practice and criteria for peer benchmarking.

1. Safety cultural shift from reactive, dependent culture to independent, interdependent culture
2. Increase in Leadership involvement
3. Regularity of Monthly BBS meetings
4. Continual Incidents reduction
5. Monthly Behavioural trends improvement
6. Sharing of at-risk behaviours during Tool Box Talk daily
7. Motivational reward, recognition for observers, units, HODs
8. Top Managements' regular observation rounds
9. Repeat BBS awareness sessions for spot-correction
10. Quarterly reviews across units/ sites

These 10 indices of BBS Benchmarking are tested and proven as a robust tool of total safety culture of Industries. Over the past 30 years, the implementation of BBS programs have resulted in dramatic reductions in the number of lost time/minor injuries that companies have experienced across the globe (Byrd, 2007). However, the high management commitment led to the success of the BBS intervention resulting towards higher safety performance (Choudhry, 2012). Focusing on the prevention of losses of life and business (in the context of daily incidents like fires and fatalities at sites), this article based on the industrial settings of Indian corporates, is an endeavor to address on the possibilities, approach and vision of how an ambitious corporate safety movement through BBS is achievable, by an understanding of a variety of key benchmarking aspects such as positive outcomes of BBS implementation, BBS culture rating, quality of observations and spot-correction of at-risk behaviours, criteria for selection of BBS observers, the BBS organisational procedure to behaviouralize ISO 45001, focusing on the margins of BBS implementation to optimise it, BBS content design for HODs. Adopting site BBS policy etc (Kaila, 2020).

3. Some of the critical factors that affect achieving BBS benchmarking criteria, need company's special attention, are: a) the dynamic sync between safety versus business excellence among top leaders, b) change in company leadership and priorities, c) integrating safety culture with the changing manpower requirements, d) addressing the socio-environmental conditions like Covid-19. Beside this, as long as the focus of the Organisations is, like safety function is being treated as daughter-in-law, and the company business as daughter, it would be difficult to achieve total safety culture. Both safety and business are to be treated at par, which is lacking in company's behaviours. The following reflection describes this organisational behaviour.

Q: Do you think, in our Indian companies, SAFETY is being treated as daughter-in-law, and BUSINESS as daughter, which is why, total safety culture lacks due focus?

A: Surprisingly, 90% of the senior HSE professionals agreed to this logic and their responses were as follows: Safety gets STEP MOTHERLY. TREATMENT. It's Indian industrial culture that drives our action. Production or profits is the mother-in-Law. Most of the company's Top management have business on top priority. Only 10% responses are positive like: this type of culture is not so much in good companies. Safety and ethics (human values as a whole) generate profits for organisation.

The behavioural scientists who mentor the BBS planned intervention must consider these mindsets, that impede the progress of BBS program planning and action, while implementing a robust technique like BBS. Broadly, the national safety rating as well as the backdrop of non-compliance in a cultural context need attention of the managements for balancing safety and business scenario. TJ

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nanditabanerjee65@gmail.com

Erstwhile IRDAI Chairman Subhash Khuntia has urged health insurance providers to develop disease-

holders in preventing different ailments. "I would urge insurers

products like for diabetics or for

Khuntia said at a health insurance

Mr Khuntia also said the

hospitalization and now there was

care and more on to have preventive care.

There are now a number of

The question which follows is how worthwhile are these disease-

relegate comprehensive health

one purchase to build a health insurance portfolio?

assess these different kinds of policies and provide some logical answers to these questions.

Disease Specific Policies

Such Policies cater to only a particular disease like diabetes, cancer or AIDs. They provide comprehensive coverage for the disease and include treatment for all stages of the disease from the initial diagnosis to advanced care. These niche plans are costlier than comprehensive health policies and designed specifically for high-risk individuals or those who may not get a standard health insurance policy, or get it at a high premium, due to non-admissible conditions of pre-existing diseases. They also eliminate the long waiting period of 24 to 48 months that regular insurance takes to pay for the given pre-existing health conditions.

Thus, someone who has a family history of a particular disease may benefit from a disease-specific plan. Covid-specific policies are also disease-specific policies which are finding many takers during the prevailing pandemic.

Critical Illness Policies

A critical illness is a life-threatening disease or a corrective measure such as cancer, end stage renal disease, Coronary Artery (Bypass) Surgery, Heart Attack (Myocardial Infarction), Heart Valve Surgery, Multiple Sclerosis, Primary Pulmonary Arterial Hypertension, Paralysis, Coma, major organ transplant etc. It is a daunting prospect to absorb the crippling expenses of a critical illness, entirely uninsured.

Critical illness policies are defined-benefit health policies and pay the insured individual a lump sum amount if diagnosed with any of the listed critical illnesses on their predetermined list. They are quite affordable and are usually cheaper than comprehensive health policies.

The list of critical illnesses and their severity are specified in the policy. They are available as independent health policies or as riders to life insurance products. They usually vary from 10 to 30 numbers of critical illnesses. ***The latest critical illness and disability rider from Max Life Insurance Company Ltd covers up to 64 critical illnesses, which is now one of the highest in the industry.***

There is a waiting period of 90 days from the commencement of the policy, for claims. Most importantly, the insured person can make a claim only after the completion of the ***survival period of 30 days*** that starts from the day when the illness is diagnosed. Medical and pathological reports, along with supporting documents have to be furnished in support of the claim. The policy comes to a close once the specified sum insured is paid out.

These policies are normally available upto 65 years of age. Their main advantage is that the claimant is normally not required to submit proof of hospitalization. The entire Sum Insured is paid out in one installment and can be utilized in any way convenient such as treatment in a different city, prolonged home-care or to pay off existing loans.

Hence, with the high incidence of critical illnesses with their prohibitive cost of treatment, purchasing such a policy would be tantamount to good financial planning. The claim pay-out would provide a contingency fund when it is most required. It would also be of help if these policies have life-long renewability and perhaps the Regulator will also look into this aspect.

Cancer Policies

A cancer-specific policy offers cover for costs associated with cancer diagnosis and treatment such as hospitalization, surgery, chemo-therapy and radiation therapy. Different types of cancer covered at both early and advanced stages include stomach cancer, lung cancer, breast cancer etc. The claim payout is payable at different stages of the disease such as minor, major and critical stages. It is also not limited to the actual cost of treatment during hospitalization.

However, those with pre-existing cancer symptoms are not eligible for coverage and neither are those who have received treatment earlier and have now recovered.

There are multiple benefits associated with these policies. They can be obtained from both life and general insurers. They cover multiple stages of cancer and a lump-sum is paid out on cancer diagnosis. A monthly income may also be paid out for several years in case of early cancer diagnosis. Insurance cover does not cease after first diagnosis. Even premium waiver may be available after early cancer diagnosis. In case of no-claims the Sum Insured is increased by a specific percentage. This can also be said to be a kind of wellness feature.

Comparison between Critical Illness policies and Cancer Policies

One major difference is that, Cancer is covered at an advanced stage only in Critical Illness policies unlike cancer policies which cover them from an early stage. Moreover, cancer policies do not cease with detection and a payout, but continue thereafter.

For protection against the heavy burden of expenses due to critical illnesses it would be prudent to opt for a Critical Illness Policy. However, if there is a family history of cancer or one has some reason to suspect that one may develop cancer, such as living in a very polluted area, then opting for a cancer policy may be more prudent.

Covid Specific Health Policies

IRDAI had mandated insurance companies to offer short-term health plans that will cover hospitalization expenses related to the treatment of only COVID-19.

Both Corona Kavach (indemnity policy) and Corona Rakshak (benefit policy) are health insurance plans meant for exclusively Covid-19 related hospital expenses. These policies are issued for a duration varying from 3.5 months to 9.5 months and will remain valid until March 31, 2021.

In Corona Kavach the minimum sum insured is Rs 50,000 and the maximum is Rs 5 lakh. It requires a hospitalization of a minimum period of 24 hours. In case of Corona Rakshak the minimum sum insured is Rs. 50,000 and the maximum limit is Rs.2.5 lakh. It requires hospitalization for a minimum continuous period of 72 hours.

T. S. Alamelu, Member Non-Life IRDAI has been quoted as saying that said that as of August 14, 2020 the domestic general insurers have been able to sell a total of 7,50,000 Corona Kavach policies covering 1.28 million lives and have earned a premium of Rs 215 crore. She also said that the life insurers were able to sell 1,83,000 Corona Rakshak policies covering 2,17,000 lives and collected premium of Rs 29 crore.

Though Covid policies have gained a lot of traction, neither policy is a substitute for a comprehensive health cover. At best they can give limited protection during the pandemic or supplement the existing comprehensive health cover, in case it is inadequate for covid treatment.

Vector Borne Diseases

IRDAI has recently launched draft guidelines on a standard health insurance product for vector-borne diseases such as dengue, malaria, kala-azar, chikungunya, Japanese encephalitis and zika virus. As per these guidelines, the general and health insurers can offer one or a combination of diseases and can price a policy for every disease separately. The minimum sum insured will be Rs10,000, while customers can opt for a cover in the multiples of Rs10,000, up to Rs2 lakhs. The policies, which can be offered on a family floater basis as well, will have a waiting period of 15 days and the premium will be same, pan India.

Now the question that arises is whether customers need a separate policy for dengue or malaria? As mentioned earlier in the case of Covid policies, a standard health insurance plan, which covers many diseases including malaria and dengue, will suffice. And in case the existing health cover is insufficient, it would be more advisable to enhance the sum insured suitably rather than purchase one such policy. However, for those without any health cover, it would give respite from the expenses of at least these diseases.

Diabetes and hypertension Specific Policies

Previously, buying a policy to cover diabetes was a daunting task. With a marked change in underwriting policies, this has become much easier. There are policies covering diabetes from Day One and these policies eliminate the long waiting time that regular insurance takes to pay for this health condition.

It would be easier to illustrate the coverage with a specific example. The Diabetes Insurance Plan 'Energy' marketed by HDFC Ergo has 3 variants. The plan covers individuals in the age group of 18 to 65 years at entry, who are currently diagnosed with Type I Diabetes or Type II Diabetes or Pre-Diabetes (Impaired Fasting Glucose/ Impaired Glucose Tolerance) or Hypertension with lifelong renewal. It is available only for individuals in various specified Sum Insured upto a maximum Sum Insured of Rs 50 lakhs. **There is no waiting period for these 2 diseases.**

It has coverage from Day One for all hospitalization arising out of Diabetes and Hypertension. However, there is a 2 years waiting period for specific diseases like cataract, hernia, joint replacement surgeries, surgery of hydrocele etc. The other coverages include Pre and Post hospitalization cover of 30 and 60 days respectively, 182 day care procedures, Emergency ambulance coverage, Organ donor expenses, Shared Accommodation benefit, HbA1C Checkup benefit etc. There is also co-pay and cumulative bonus.

They also have an active ***Wellness Progamme.*** There is also a provision for ***Rewards***, which rewards the customer for staying healthy.

However, policies without a waiting period are a little more expensive than others, which come with a pre-defined waiting period. Thus there are disease-specific options available for diabetics and it is necessary for them to verify the extent of coverage, pre-existing periods and premium and claims ratio of the insurer prior to opting for cover. ***However, one notable feature is that other diseases are also covered along with diabetes, so they are usually as good as a comprehensive health policy tailored for diabetics, which makes them a viable option for their health insurance.***

Health Insurance for HIV Positive/AIDS patients

India has the world's third largest number of HIV positive patients. However, this is a pre-existing condition which is a permanent exclusion across the entire gamut of health policies. There are very few health policies covering this condition in India.

Some of the policies covering this disease are the Star Plus Net Policy, Manipal Cigna Global Health Group Plus Plan and Max Bupa Health Premia Individual Health Insurance Plan.

Those already infected with HIV can be covered under the first policy, the second policy is a corporate health plan and is available for globally mobile individuals and families travelling in India or abroad for work and the third one covers HIV/AIDS treatment after a waiting period of 48 months.

Persons who may be exposed to this problem or those in the high risk category would benefit from this coverage. There is a pressing need for more such policies for this section of the population as they require prolonged treatment to pursue normal lives.

Comprehensive Health Insurance Policies

A comprehensive medical policy is one which covers all the major illnesses, includes seasonal illnesses and pays according to the plan that the customer has opted for. For example, Covid and dengue hospitalization would also be covered here.

A good example of such a policy is the standardized Arogya Sanjeevani mandated by the Regulator and now made available by all general and health insurers. There are also top-up and super-top up plans which are both economical and useful. There are also target-specific policies such as those for students studying abroad, global health policies for those who may want to take routine treatment abroad etc.

Many of these comprehensive policies and even disease specific policies come with wellness features and preventive features.

Comprehensive policies also have add-ons such as hospital cash, maternity benefit, out-patient department coverage, dental treatment, personal accident coverage and critical illness, which give an added benefit conveniently, albeit, at additional premium.

However, to rise up to the expectations of the Regulator some more preventive features and wellness features need to be added to our health products and they need to be made more viable for customers. For example, allowing for reimbursement of the cost of Covid vaccination, would be a good wellness feature in comprehensive and Covid specific policies, at a relatively small cost for the insurer, to rule out possible Covid claims in the future. ***To sum up, with its inherent advantages, there is no substitute to a good comprehensive health policy, with adequate sum insured, from an established insurer, with a good claims ratio.***

Take-Aways: Using disease-specific and comprehensive policies to build a balanced health insurance portfolio

From the discussion earlier, the plethora of choices may seem confusing. The disease-specific policy aims to ease financial burden if somebody is diagnosed with a specific illness. While these plans provide a range of benefits, they cannot serve as a replacement for comprehensive health covers. One may however get the best possible health cover by having both.

Those in government service, defence services, railways, public sector undertakings and nationalized banks are at an advantage as they are covered under their own organizational schemes which continue even after superannuation. Many underprivileged are beneficiaries in schemes like Ayushman Bharat.

Various state government schemes like the Mahatma Jyotiba Phule Arogya Yojana in Maharashtra and Swasthya Sathi in West Bengal have extended their health schemes to all the people residing in the state, free of cost. However, this is not true of the entire country. ***Even these persons covered under the aforesaid schemes may find it inadequate or want better treatment elsewhere in India or abroad or prefer a lump sum for meeting all the expenses of terminal diseases.*** They would do well to purchase a critical illness policy for at least Rs. 10 lakhs.

In the private sector, people often rely on their corporate group health insurance schemes for cover. If one totally relies on their employer, they may suddenly find themselves in a lurch in case of job-loss or whilst switching jobs. A personal health cover of one's own would be a permanent and reliable safeguard against the burden of heavy health expenses. With the option of monthly, quarterly and bi-annual payment of premium the question of affordability has also been adequately addressed by the Regulator.

Medical insurance requirements also evolve with age, medical inflation and the number of one's dependents. It also requires review from time to time. For example a healthy youngster in his twenties without familial responsibilities and less disposable income may not invest in more than a disease-specific policy such as a dengue or malaria policy and a Covid policy.

But, a married millennial in his early thirties, who has to cater for his spouse and aged parents, would require at least a Rs 10 lakh comprehensive individual or a floater cover. He would also require a super-top up cover of Rs 10 to 20 lakhs or a critical illness policy for the huge expense that a critical illness entails.

A couple in their fifties, whose children may be working, should not only depend on their children's corporate policies, where they maybe also covered. They should also at least have a Rs. 20 lakh comprehensive floater cover or disease-specific policies for Diabetes and Hypertension, depending on their ailments. They should also invest in a top-up cover or a critical illness policy depending on their health profile.

Last, but not the least, despite having insurance it would be prudent to also keep one's own contingency fund for health expenses, which no health insurance plan will cover. TJ

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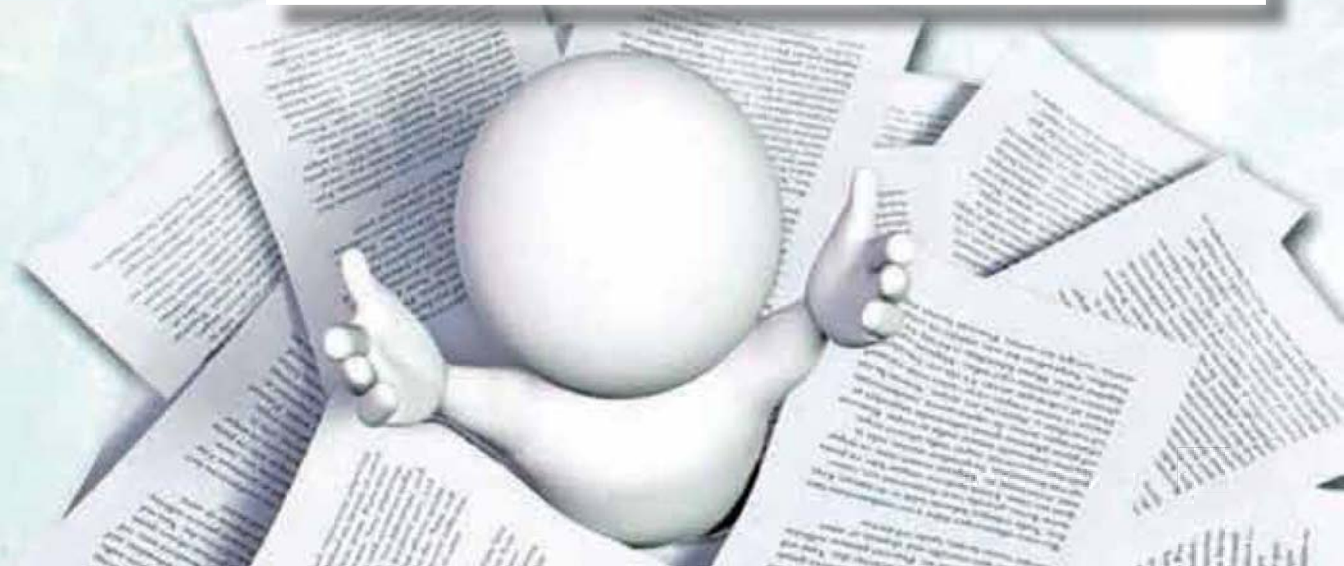

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Appendix I

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"..."

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COLLEGE OF INSURANCE

Virtual (Online) Training Schedule
(August 2021 to September 2021)

Sr. No.	Tittle of the Training Program	Tittle of the Training Program	Timings (IST)	Fees
		August 2021		
13	ERM in Insurance Industry and the Role of CRO's	6th August 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
14	Management of Fire Insurance (Material Damage and LOP)	10th to 11th August 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST
15	Managing Thermal Power Plant Insurance	23rd August 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
16	Liability Insurance - CGL and Non-Financial Lines	24th to 25th August 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST
17	Comprehensive Programme on Insurance Customer Rights Protection	26th August 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
18	Personal Financial Planning and Life Insurance	27th August 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
		September 2021		
	Challenges and use of Technology Livestock and Pet Insurance	1st September 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
	Procedures and Practices-Insurance Arbitration, Ombudsman and Consumer cases	6th to 7th September 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST
	Underwriting challenges	7th to 8th September 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST
	Industrial Risk Inspection-Methods & Reporting	8th September 2021	10.00 am to 1.00 pm	Rs. 1500/- + 18% GST
	Cyber Liability Insurance for Payment Gateways - Risk Assessment and Underwriting Considerations	23rd to 24th September 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST
	Marine Hull Insurance	28th to 29th September 2021	10.00 am to 1.00 pm	Rs. 3000/- + 18% GST

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