AN EMPIRICAL STUDY OF INDIAN INSURANCE INDUSTRY POST GLOBAL FINANCIAL CRISIS

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ABSTRACT
India has recently emerged as a major political & economic power in the world. The financial crisis that engulfed the world in 2008 needed developing countries like India to lead the rescue and recovery, instead of G7 western countries who dealt with such crisis in the past. Recently, discussions and negotiations are going amongst G20 countries regarding a new global financial architecture (G-20 Summit, 2008). The outcome will affect the relevant industries in India and hence it is a public interest issue for the actuarial profession in the country. Increased and more intrusive and costly regulations and red tapes are likely to be a part of the new deal (Economic Survey 2009-10).

The objective of this paper is to study the perception of higher level authorities in Insurance sector regarding the role of regulator in minimizing the impact of global financial crisis. The primary data has been collected from 200 authorities in insurance industry. The data has been analyzed with statistical tools like MS-Excel.

On the basis of the findings, various measures and policy recommendations for insurers have been suggested to minimize the impact of crisis.

Keywords: Global financial crisis, regulatory framework, IRDA, de-regulation, Insurance securitizations, risk transfers

INTRODUCTION
It was found that the current global economic crisis had a major impact on insurance companies all over the world. In 2008, global Life insurance premiums declined by 3.5% to US$ 2,490 bn. This de-growth was triggered by a 5.3% decline in Life insurance premiums growth (as against a 4.4% growth recorded in 2007) in the industrialized countries (Yalman, 2008). The financial crisis and the global economic downturn severely affected sales of unit-linked products, particularly single premiums, causing a strong decline in overall premiums in Western European countries like UK, Italy and France where unit-linked products are quite common (Rangarajan, 2008).

However, the global financial crisis has not had a major impact on the Indian Life insurance sector. This was primarily due to stringent guidelines laid down by the IRDA on solvency margins as well as investment norms for the industry players to follow (Reserve Bank of India, 2008). Domestic life insurers are subject to solvency requirements, which stipulate them to maintain a minimum
The solvency ratio of 150% (Union Budget, 2010-11). This ensures that life insurance companies remain well capitalized at all points of time. In addition, IRDA has stringent guidelines regarding the investment of policyholders' funds. These guidelines cover a gamut of risk management issues for individual companies as well as the industry including defining acceptable quality of investment and set limits on permissible exposure to single asset class. IRDA's investment guidelines restrict life insurance companies from investing in global markets. Thus, the industry does not have any exposure whatsoever to the international credit instruments. As a result, Indian Life Insurance companies remained relatively insulated from the financial crisis plaguing the global markets (Jayashree, 2008).

**FINANCIAL CRISIS AND REGULATION**

As with previous crises the fundamental cause of the ongoing financial turmoil was an overextension of credit and a mispricing of risk. The crisis has been blamed on short-comings of the regulatory regime among other reasons. Depending on one's viewpoint, the finger has been pointed at a lack of regulation (or de-regulation), ill-devised regulation or over-regulation. Given the scope and complexity of this financial crisis, there is probably some truth in all of these (Dao, 2005).

When tackling regulatory reforms, policy makers need to take into account that the business model of insurance differs substantially from that of other financial services providers. Insurers are funded by advance premium payments unlike banks, which rely mainly on short-term deposit or short-term credit funding. In most cases, they cannot be withdrawn on demand or prematurely - exceptions are certain life insurance policies (Associated Press, 2004).

Even for life policies, there are generally early-withdrawal penalties, making withdrawal expensive and less likely. Therefore, traditional insurers are much less susceptible to or may they originate a 'liquidity panic'. In addition, insurance risks represent a high proportion of the risk profile of insurance companies. They are diversified and to a large extent, uncorrelated with market risks. The impact of a market crash is partly mitigated compared with banks where the portfolio of outstanding loans is correlated with general economic conditions (Blair, 2007).

Insurers are infrequently exposed to margin calls at times of rapid market declines, since the industry rarely uses leverage to enhance investment returns. The long-term investment horizon of insurers usually has a stabilizing effect in the market environment.

Finally, insurance-linked securitization (ILS) differs from bank securitization in the type of risk transferred, since the underlying risks are typically not financial or market risks (e.g. exchange or interest rate, credit, price) but are related to the likelihood of non-financial events. ILS has so far withstood the financial crisis.

**THE IMPACT OF THE FINANCIAL CRISIS ON INSURERS**

Conventional insurers entered the crisis in a comparatively strong position. The specific characteristics of the insurance business model have protected the industry from the worst impacts of the financial turmoil. However, the insurance industry is not immune to the effects of the current crisis. The main reason is declining asset values and its effect on the value of their investment portfolios. Specific lines of business, like directors and officers (D&O) and errors & omissions (E&O) insurance, are also likely to be affected by rising claims. The sale of insurance products in particular new unit linked business in life - is expected to fall due to the economic slowdown (Naveen, 2008). With macro-
economic conditions deteriorating at the global level, insurers will not be able to escape the negative consequences of recession in key markets. Some large, complex financial companies were confronted with losses that originated in their banking divisions and have had to be rescued by governments, in common with other banks presenting a systemic risk. Financial insurance in particular bond and mortgage insurers, have correlated risk portfolios and have experienced a significant rise in credit defaults (Prasad, Eswar, Rajan and Subramanian, 2007).

**RESEARCH METHODOLOGY**
The Research methodology adopted for this study has been described below:

**OBJECTIVES OF THE STUDY**
The main objectives of this study are following:

1. To study the impact of the financial crisis on insurers.
2. To analyze the implications of financial crisis for the insurance industry.
3. To study the perception of higher level authorities in Insurance sector regarding the role of regulator in minimizing the impact of global financial crisis.
4. To suggest measures and policy recommendations to be followed by insurers to minimize the impact of crisis.

**HYPOTHESIS**

- $H_{01}$: Perception of insurance authorities regarding the role of insurance regulators is independent of their age.
- $H_{02}$: Perception of insurance authorities regarding the role of insurance regulators is independent of their sector.

**PROCESS ADOPTED**

In order to gain knowledge about the Insurance market, reading about the Insurance market was the first step undertaken. This gave not only in depth knowledge about what is been offered but also proved useful while developing the questionnaire. The main instruments required for survey was a well-developed questionnaire.

The whole research is based on primary data as well as secondary data. Primary data was collected through questionnaire from the employees of various insurance companies. Secondary data was collected through the magazines, newspapers, insurance companies catalogue, etc. The data was collected from 200 respondents. The selected respondents were higher level authorities of Insurance Industry not below the rank of managers. Out of 200 respondents, 88 respondents (44%) were employees of Public sector companies whereas 112 respondents (56%) were employees of Private sector companies. The sampling Technique used was Judgemental sampling.

**LIMITATIONS**

A higher number of questionnaire surveys from managers in insurance industry would have increased the credibility of results from the survey analysis.
2. Primary data might not be too realistic and may suffer from personal biases of the respondents. Also, the managers were having very busy schedule because of which they were reluctant to give appointment.

3. The research also suffered from regional limitations as the research was limited to Uttar Pradesh. Although, telephonic interviews were conducted and e-mails were sent in different cities, the collected data holds a greater percentage of respondents from Uttar Pradesh.

**DATA ANALYSIS**

The following table reveals the demographic profile like age and sector of the insurance authorities:

### Table 1: Age of respondents

<table>
<thead>
<tr>
<th>Particulars</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 – 30 years</td>
<td>8</td>
</tr>
<tr>
<td>31 – 40 years</td>
<td>16</td>
</tr>
<tr>
<td>41 – 50 years</td>
<td>28</td>
</tr>
<tr>
<td>51 – 60 years</td>
<td>148</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

### Table 2: Sector of respondents

<table>
<thead>
<tr>
<th>Particulars</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>88</td>
</tr>
<tr>
<td>Private</td>
<td>112</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>
Q.1. Do you agree that global financial crisis has affected the Indian Insurance industry?

**Fig. 4.1. Authorities perception about global financial crisis affecting the Indian Insurance industry**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>14</td>
<td>26</td>
<td>22</td>
<td>96</td>
<td>42</td>
</tr>
</tbody>
</table>

**Interpretation:** The data suggests that majority of respondents (48%) disagree that global financial crisis has affected the Indian Insurance industry.

Q.2. Do you agree that regulator (IRDA) must introduce reforms to enhance customers trust in the insurance industry?

**Fig. 4.2. Authorities perception about Regulators introducing reforms to enhance customers trust**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>48</td>
<td>96</td>
<td>16</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>
**Interpretation:** The data suggests that majority of respondents (47%) agree that regulators must introduce reforms to enhance customers trust in the insurance industry.

Q.3. Do you agree that IRDA has stringent guidelines regarding the investment of policyholders funds?

**Fig.4.3. Authorities perception about IRDA stringent guidelines regarding investment**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>80</td>
<td>70</td>
<td>31</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

**Interpretation:** The data suggests that majority of respondents (75%) agree that IRDA has stringent guidelines regarding the investment of policyholders funds.

Q.4. Does the Indian insurance industry have any exposure whatsoever to the international credit instruments?

**Fig.4.4. Authorities perception about Indian insurance industry exposure to the International credit**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Can't say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>164</td>
<td>10</td>
<td>26</td>
</tr>
</tbody>
</table>
Interpretation: The data suggests that majority of respondents (82%) say Yes to the statement that Indian insurance industry has exposure whatsoever to the international credit instruments.

Q. 5. While formulating policies to minimize the impact of global financial crisis, should the regulator (IRDA) take into account the fact that the business model of the insurance industry differs substantially from that of other financial services sectors?

Fig.4.5. Authorities perception about Regulators should take into account the fact that the business model of the insurance industry differs substantially from that of other financial services sectors

Interpretation: The data suggests that majority of respondents (69%) say Yes to the statement that while formulating policies to minimize the impact of global financial crisis, the regulators should take into account the fact that the business model of the insurance industry differs substantially from that of other financial services sectors.

Q. 6. Do you agree that compliance frameworks can meet new regulator demands on insurers whose financial stability is questionable.

Fig. 4.6. Authorities perception about Compliance frameworks to meet new regulator demands
Interpretation: The data suggests that majority of respondents (50%) agree that compliance frameworks can meet new regulator demands on insurers whose financial stability is questionable.

Q. 7. Do you agree that independent and structured testing is necessary to ensure that regulatory framework and models are functioning as intended?

**Fig. 4.7. Authorities perception about Independent and structured testing**

<table>
<thead>
<tr>
<th>Series1</th>
<th>Yes</th>
<th>No</th>
<th>Can’t say</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
<td>94</td>
<td>44</td>
</tr>
</tbody>
</table>

Interpretation: The data suggests that majority of respondents (47%) say Yes to the statement that independent and structured testing is necessary to ensure that regulatory framework and models are functioning as intended.

Q. 8. Do you agree that the well positioned and prepared organizations are able to capitalize on the dislocation in the market?

**Fig. 4.8. Authorities perception about well positioned organizations ability to capitalize**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Can’t Say</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>134</td>
<td>32</td>
<td>34</td>
</tr>
</tbody>
</table>
Interpretation: The data suggests that majority of respondents (67%) say Yes to the statement that the well positioned and prepared organizations are able to capitalize on the dislocation in the market.

Q. 9. During the times of global financial crisis, insurance organizations need to protect their assets and capital base, maintain liquidity, and mitigate the exposures to losses that may be developing?

Fig.4.9. Authorities perception about Insurance organizations mitigating the exposures to losses

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Can't say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>142</td>
<td>44</td>
<td>14</td>
</tr>
</tbody>
</table>

Interpretation: The data suggests that majority of respondents (71%) say Yes to the statement that during the times of global financial crisis, insurance organizations need to protect their assets and capital base, maintain liquidity, and mitigate the exposures to losses that may be developing.

Hypothesis:

$H_0$: Perception of insurance authorities regarding the role of insurance regulators is independent of their age.

To test whether the age has significant impact on perception regarding the role of insurance regulators, chi-square test is conducted.

<table>
<thead>
<tr>
<th>Table 3: Perception of insurance authorities * Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Pearson Chi- Square</td>
</tr>
</tbody>
</table>
There are seven parameters regarding the role of insurance regulators on which the respondents are questioned. The analysis reveals that the calculated value is 11.672. As the p-value (Asymp. Sig-2 sided) is found to be 0.021, hence hypothesis is rejected at 5% level of significance. So the Perception of insurance authorities regarding the role of insurance regulators is dependent on their age.

**H**: Perception of insurance authorities regarding the role of insurance regulators is independent of their sector.

To test whether the sector has significant impact on perception regarding the role of insurance regulators, chi-square test is conducted.

**Table 4: Perception of insurance authorities * Sector**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig.(2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7.267</td>
<td>6</td>
<td>.036</td>
</tr>
</tbody>
</table>

There are seven parameters regarding the role of insurance regulators on which the respondents are questioned. The analysis reveals that the calculated value is 7.267. As the p-value (Asymp. Sig-2 sided) is found to be 0.036, hence hypothesis is rejected at 5% level of significance. So the Perception of insurance authorities regarding the role of insurance regulators is dependent on their sector.

**FINDINGS**

The main findings of the study are given below:

1. Majority of respondents (48%) disagree that global financial crisis has affected the Indian Insurance industry.
2. Majority of respondents (47%) agree that regulators must introduce reforms to enhance customers trust in the insurance industry.
3. Majority of respondents (75%) agree that IRDA has stringent guidelines regarding the investment of policyholders funds.
4. Majority of respondents (82%) say Yes to the statement that Indian insurance industry has exposure whatsoever to the international credit instruments.
5. Majority of respondents (69%) say Yes to the statement that while formulating policies to minimize the impact of global financial crisis, the regulators should take into account the fact that the business model of the insurance industry differs substantially from that of other financial services sectors.
6. Majority of respondents (50%) agree that compliance frameworks can meet new regulator demands on insurers whose financial stability is questionable.
7. Majority of respondents (47%) say Yes to the statement that independent and structured testing is necessary to ensure that regulatory framework and models are functioning as intended.
8. Majority of respondents (67%) say Yes to the statement that the well positioned and prepared organizations are able to capitalize on the dislocation in the market.
9. Majority of respondents (71%) say Yes to the statement that during the times of global financial crisis, insurance organizations need to protect their assets and capital base, maintain liquidity, and mitigate the exposures to losses that may be developing.
10. Perception of insurance authorities regarding the role of insurance regulators is independent of their age and sector.
RECOMMENDATIONS

The following measures should be considered to strengthen the role of regulator in minimizing the impact of financial crisis:

1. Government policies should provide incentives for sound risk and capital management.
2. Large complex financial institutions (LCFI) have to be supervised in their entirety.
3. Regulators must step up their efforts to achieve convergence with accounting standards.
4. Much greater transparency is needed for structured financial products.
5. Policy makers reacting to the financial crisis need to take into account that the business model of the insurance industry differs substantially from that of other financial services sectors.
6. As the regulatory environment in financial services is being redefined, it is recommended that new legislation should be targeted, balanced, and calibrated by the expected impact it will have on the economy. It should also enhance the working of existing regulations, safeguard the level playing field, and further enhance global consistency.
7. IRDA needs to identify which activities and products need to be regulated and how extensive the regulation needs to be. It is widely agreed that both unregulated participants, such as non-bank lenders, and unregulated instruments, such as credit default swaps, have contributed significantly to the current financial crisis and that any changes to the existing systems need to address these issues.
8. The government should allow regulators to adapt to market changes as they arise and include mechanisms for evaluating new market risks.
9. The government should provide regulator with independence from inappropriate influence, sufficient prominence and authority to carry out their mission and require accountability for meeting the stated goals.

CONCLUSION

The financial crisis is likely to lead to a redefinition of the role of regulator in the insurance industry, at national, regional and global levels. In this process, the insurance industry has to be a credible voice to make sure that policy makers understand the distinctive features of insurance and the potentially negative consequences of hastily prepared and ill devised intervention and regulation. A close dialogue between politicians, regulators, insurers and other market participants ensures that we draw the right lessons from the current crisis. Such a dialogue is key to ensure that reforms make regulatory systems more resilient and internationally consistent. Ultimately, any reform must act to enhance customers' trust in the insurance industry.

IRDA has stringent guidelines regarding the investment of policy holders' funds. These guidelines cover a gamut of risk management issues, including defining acceptable quality of investment, and set limits on permissible exposure to a single asset class, security, company as well as industry.

REFERENCES

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