

Investment Portfolio of Insurance Companies in Bangladesh: A Study on Selected Insurance Companies of Bangladesh

Quazi Sagota Samina ¹

Insurance companies are such financial institutions¹ which stand by us at our disaster moments and try to uphold us by providing a lump sum amount of claim. To accelerate this important role in the economy, insurance companies involve in different investments so that they can earn a good profit. And here comes the importance of the construction of an efficient investment portfolio. Researchers like Oyatoye & Arileserre (2012) have focused to the importance of investment by insurance companies. On the other hand some have identified factors influencing the structure of investment portfolio. The insurance companies in Bangladesh from their inception are investing in different financial assets. This paper analyzes the structure of investment portfolio of different general insurance companies of Bangladesh and tries to focus to the cause effect relationship between the structure of investment portfolio and profitability of insurance companies in Bangladesh. To fulfill the objectives this paper considers cases of 13 general insurance companies operating in Bangladesh. Data has been collected from the annual report of the sample companies and from the Yearbook published by the Bangladesh Insurance Association. The findings show that the general insurance companies mainly concentrate toward Share investment where usually they do the investment through private placement and also they invest in government securities which they usually do as a part of statutory requirement and safety purpose.

Keywords: Insurance companies, investment.

1. Introduction

Insurance industry consists of such financial institutions which help us to be protected from a variety of perils. Not only in Bangladesh rather throughout the world, insurance industry has evolved as an important sector of the financial system side by side the banking industry. This industry helps the business sector as well as individuals more extensively than the banks. Because if one takes a loan at necessity of fund from a bank, in exchange one will have to pay a higher value for that including interest. On the other hand, in case of an insurance company, the policyholder gets a larger amount as claim against any loss covered at the time of real trouble in exchange of a small payment in the form of premium. Feyen & Rocha (2011) states that the insurance sector helps pool risk and reduces the impact of large losses on firms and households—with a beneficial impact on output, investment, innovation, and competition. The authors further indicates the insurance sector's role in the improvement of the efficiency of other segments of the financial sector, such as banking and bond markets, by enhancing the value of collateral through property insurance and reducing losses at default through credit guarantees and enhancements.

¹ Quazi Sagota Samina ¹, Assistant Professor, Department of Business Administration, East West University, Bangladesh, e-mail: gss@ewubd.edu

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Arkell (2011) states that insurance industry plays a more fundamental role in underpinning the working of a modern society, being a necessary precondition for many activities.

The premium collected by the general insurance companies is mainly used to settle down the claims for different incidents covered under the insurance policies. This part of the premium usually insurance companies keep in their bank accounts in the form of FDR as well as STD account. A part of premium income the companies use for making payment of reinsurance premium. And a part companies use for investment purpose. So among the various uses of premium, investment is the only utilization which provides positive income in future for the company. Different insurance companies have investment in different sectors to get income from their investment. Chatterji (2012) focuses on economic significance of insurance as “insurance business contributes to formation of national income by creating value added role in providing indemnification and role as institutional investor”.

In Bangladesh general insurance companies have achieved a good growth inspite huge competition in the sector and there is huge scope for the insurance companies in the country. However with the expansion of general insurance industry, companies in this industry are involving themselves in several investment activities. This article discusses about the general insurance industry in Bangladesh concentrating and analyzes the investment activities of these companies. The rest of the paper follows as part 2 literature review, part 3 objective of the study, part 4 methodology, part5 discusses about the general insurance industry, part 6. gives an idea about the progress in the general insurance industry, part 7. discusses proportion of investment in the industry, part 8 gives light to the investment portfolio of sample general insurance companies and lastly part 9 conclusion.

2. Literature Review

An extensive literature has been developed regarding the investment portfolio of property insurance companies. Janowicz-Lomott (2011) describe the role of insurance investment management as to manage the funds generated by the insurance business, maximizing risk adjusted returns while meeting regulatory requirements on its assets and other financial constraints. The author further states that insurance investment management must ensure that investment returns preserve the solvency, both regulatory and economic, of the insurance company, earn the return commensurate with the use of its capital and enable it to continue to underwrite profitable insurance business.

Oyatoye & Arileserre (2012) states that as it is crucial for insurance industry to survive and develop, the insurance investment enables insurance companies to offset their possible underwriting losses and make a considerable profit. Mukati (2012) states that the risk faced by an insurance fund manager differs from what the typical fund manager faces because of the fact that the risk in insurance investment management must factor in the liability side of its balance sheet that includes benefit amounts for shareholder capital as well as the reserves that are necessary for the insurer future claims.

Lambert & Hofflander (1967) argued that the most important single factor affecting the investment portfolio decision of property liability insurance companies is liquidity i.e.

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the readily available fund to make payment of the claims of the policyholders. They also identified that income from investment is a requirement by the stockholders as they get dividend from it.

Cummins & Nye (1981) presents a model to assist property liability insurance companies in making product and investment mix decision. Steinle& Eggers (1994) shows how strategic planning can benefit an insurance companies decision.

Hobbs et. Al. (2010) examine strategies to protect insurance companies' investment portfolios against potential inflation scenarios. Oyatoye & Arileserre (2012) offer alternative solution to portfolio investment management by implementing best processes for minimizing the risk for a given expected return, which is generally a non-linear function considering the scenario of Nigeria. Worzala et. Al. (1996) explores the use of real estate in investment portfolios of large property/casualty and life insurance companies in the U.S.

In Bangladesh different authors have analyzed different aspects of insurance industry of the country. Raihan (a financial analyst) has measured the performance of insurance industry both for life insurance and general insurance in terms of corporate governance, business profile, risk management, performance level, solvency and liquidity. Raihan states that The significant portion of the investment portfolio of insurance industry is usually kept with different banks as FDR under different maturity bucket which serves the purpose of liquidity.

Tamjid, Rahman and Afza (2007) put light regarding the reasons behind non-popularity of insurance service in Bangladesh. Nurul Haq (2008) describes how the trend of globalization may create new dimension of challenges for insurance industry. But the structure of investment portfolio of these insurance companies was not discussed under those studies. So this paper focuses on this area of investment portfolio structure of general insurance companies in Bangladesh as the investment portfolio of insurance industry has been given emphasized in different studies.

3. Objective of the Study

This paper mainly tried to focus on the investment portfolio structure of insurance companies in Bangladesh. Specifically

- i. To have an idea about the insurance industry of Bangladesh.
- ii. To observe the growth in general insurance industry of Bangladesh.
- iii. To find out the structure of investment portfolio of selected insurance companies in Bangladesh.
- iv. To find out the determinant factors of investment portfolio.

4. Methodology

4.1 Sources of Data

Information regarding the investment portfolio of selected insurance companies has been collected from the annual report of the concerned companies. Besides that the Insurance Year Book published by Bangladesh Insurance Association was also

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utilized to get required information. So it can be said that the paper is based on secondary data source.

4.2 Sample Size

This paper focuses on the investment behavior of private general insurance companies of Bangladesh and at present there are 43 private general insurance companies in Bangladesh. Among these 43 companies, we took 13 companies as our sample of the study.

4.3 Sampling Method

As sampling method, we used the convenient sampling method. That means the companies whose data is easily available, we chose those companies.

4.4 Method Used

This paper discusses about the investment portfolio of selected general insurance companies. So about the sample companies we identified the investment portfolio by taking average data.

To represent the scenario of insurance industry bar diagram has been utilized. Also to get the growth rate of insurance industry, we used the average value and to get the proportion of investment we used the ratio method. And to test the hypothesis regression analysis, correlation analysis has been utilized.

To achieve the objectives, we formulated the following hypothesis:

1. There is no significant role of size of insurance company (asset size) and profitability (net income) upon investment portfolio (amount of investment) of the sample insurance companies.
2. There is no significant correlation between amount of investment and the no. of assets in which the company has invested that is portfolio diversification.

5. Insurance Industry in Bangladesh

Bangladesh has a history of insurance industry aging about a century. Before liberation about 75 insurance companies including 10 locally incorporated ones had insurance business in East Pakistan. After liberation, all the insurance companies of this area were nationalized under the control of five insurance companies through Bangladesh Insurance Order 1972. In 1973 government decided to separate the two major sectors of insurance- life insurance & general insurance. So at that time government formed Jiban Bima Corporation to take over the undertakings of life insurance activities & Shadharan Bima Corporation to deal with general insurance activities.

As the single state-owned institution to handle all types of general insurance business in Bangladesh, Sadharan Bima Corporation did 100% of the business until 1984. Through the Insurance (Amendment) Ordinance 1984 and Insurance Corporations (Amendment) Ordinance 1984, the government allowed operation of insurance

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companies in the private sector. In 1990, the government further allowed private sector insurance companies to underwrite 50% of public sector business and the remaining 50% was kept reserved for Sadharan Bima Corporation. Private insurance companies were also given option to insure 50% of their re-insurable business with any local or foreign insurance companies. SBC distributes 50% of all public sector insurance businesses to private general insurance companies on an equal basis.

Recently some more changes have been incurred in the insurance industry of Bangladesh. The circular (No: 21/21/98-376 dated March 12, 2007) of the Chief Controller of Insurance regarding mandatory credit rating for the insurance companies is considered to be the most effective breakthrough in the sector. According to the direction, all insurance companies were instructed to get credit rating with effect from 2007. Although the rating of insurance companies is a new phenomenon in the rating industry in Bangladesh, it experienced tremendous response from the market participants including the insurers themselves. Many of the good rated insurance companies, particularly upper investment grade entities, started using the rating as a 'marketing tool'. They are also trying to improve their position based on report of the rating agencies. (*Khaled Mahmud Raihan*).

The age old insurance laws have been replaced with Insurance Regulatory Authority (IRA) Ordinance 2008 and Insurance Ordinance (IO) 2008. The Department of Insurance will be abolished by the five member Insurance Regulatory Authority headed by the Chairman not below the rank of Government Secretary. To improve the solvency position of this industry, the paid up capital for general and life insurance companies have been raised to TK. 400 million and TK. 300 million respectively. According to the new law the insurance companies will have to ensure international accounting standard, have to separate Islamic insurance from conventional ones and need to put a limit on commission expenses. With the promulgation of the ordinances, the insurance industry will be under the Ministry of Finance from the Ministry of Commerce.

Hopefully all these steps taken by the regulatory authority will make the industry more stronger and the companies sustainable in the long run.

At the recent time some changes have been made in the insurance industry of Bangladesh to accelerate the development and efficiency of this sector.

6. Progress of Private General Insurance Industry in Bangladesh

After the inception of the general insurance industry of Bangladesh in private sector in 1984, a good number of insurance companies have been emerged in the small economy resulting in a competitive position. In general insurance sector, private insurance companies came into the economy in three phases- in 1985, the first group of insurance companies (16) started functioning, in 1996, the second group (8) and in 2000, the third group of general insurance companies (19), total 43 companies. But this quantitative growth does not necessarily shows qualitative development. The presence of too many companies, 43 general and 17 life, apart from two corporations-- one for general and another for life -- and one multinational life company in a small market has given rise to all the unethical practices and maladies retarding the growth of the industry in the past decades. (Nurul Haq,, 2008). The rate of annual growth in life insurance is 25-27% in our country but the par capita insurance and the population

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coverage by insurance policy is too low compared to our neighboring countries like India & Pakistan and off course much lower compared to the developed countries. The contribution of this sector to GDP is even less than 0.1%. The scenario is not enhanced in case of general insurance industry. They have an annual growth of about 12-13%. They also have too many problems which are hindering the development of this sector.

Table 1 shows the scenario of the total industry under private sector from the year 1999 to 2010.

Table 1: Growth of Private General Insurance Industry of Bangladesh

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Gross Premium	3239.07	3645.5	4101.97	4506.86	5111.57	6003.72	7129.4	7971.61	9417.32	11163.93	12284.2	14883.94
Growth		0.1254	0.1252	0.0987	0.1341	0.1745	0.1874	0.1181	0.1813	0.1854	0.1003	0.2116
Underwriting Profit	291.46	170.45	172.69	297.75	394.69	459.7	637.19	456.98	678.91	928.76	1356.95	1262.94
Growth		0.41519	0.013142	0.724188	0.325575	0.164712	0.3861	0.282825	0.485645	0.368016	0.461034	0.06928
Investment	2239.23	3194.84	3655.25	4488.33	5100.14	5667.79	6611.11	7220.89	8571.4	11132.41	12765.15	17107.37
Growth		0.426758	0.144111	0.227913	0.136311	0.111301	0.166435	0.092236	0.187028	0.298785	0.146665	0.340162
Income from Investment	277.55	324.06	404.51	447.84	475.48	664.19	655.04	753.43	1320.85	1454.66	1546.88	3155.56
Growth		0.167573	0.248256	0.107117	0.061718	0.396883	0.01378	0.150205	0.753116	0.101306	0.063396	1.039951
Total Asset	7848.59	9178.11	9868.34	10326.73	11145.68	12666.7	14199.72	15815.53	19829.68	22756.46	32676.63	33368.62
Growth		0.169396	0.075204	0.046451	0.079304	0.136467	0.121028	0.113792	0.253811	0.147596	0.435928	0.021177

Table 2: Average Growth Rate of Private Insurance Industry of Bangladesh

	Average Growth Over years	Growth from 1999-2009
Gross Premium	14.31%	279.24%
Underwriting Profit	22.30%	365.57%
Investment	19.38%	470.07%
Income from Investment	20.36%	457.33%
Total Asset	15.79%	316.34%

The gross premium of the private general insurance companies has an average growth rate of 14.31% over the year 1999 to 2010. If we compare the amount of gross premium directly from 1999 to 2010, we get an increase in the gross premium of

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279.24%. The underwriting profits of the companies have increased on an average at 22.30%.

Now if we look at the scenario of investment made by the companies, it is observed that the industry has increased their investment activity at 19.38% whereas income from investment has increased by 20.36%.

The size of the industry which is reflected through the total assets, has an average increment of 15.79%.

7. Proportion of Investment

As this paper is mainly concerned about the investment activity of general insurance companies in Bangladesh, in this part we focus on the investment proportion of general insurance industry under private sector from the year 1999 to 2010.

Table 3: Proportion of Investment

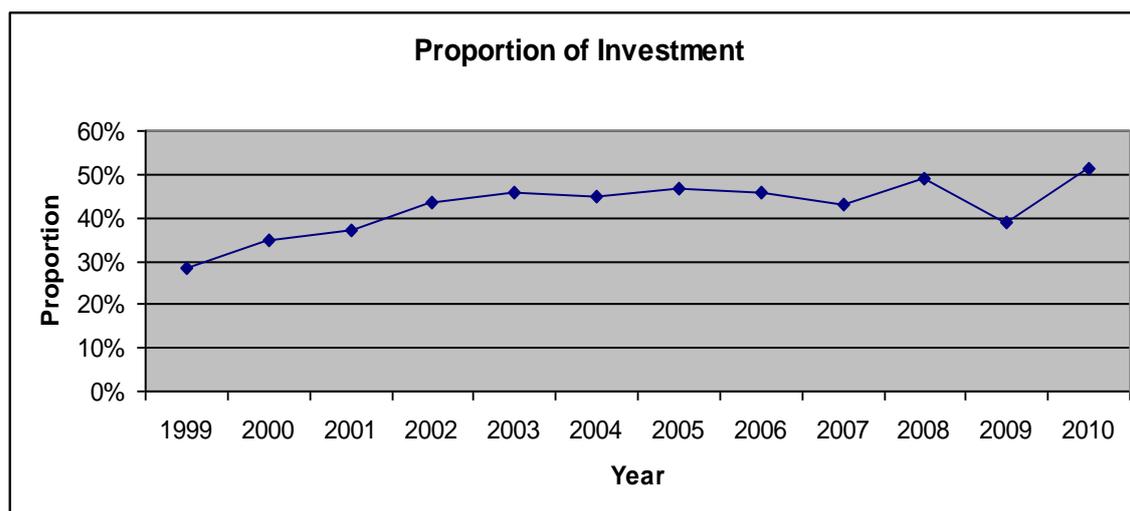
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Investment	2239.23	3194.84	3655.25	4488.33	5100.14	5667.79	6611.11	7220.89	8571.4	11132.41	12765.15	17107.37
Total Asset	7848.59	9178.11	9868.34	10326.73	11145.68	12666.7	14199.72	15815.53	19829.68	22756.46	32676.63	33368.62
Proportion of Investment	0.285303	0.348093	0.370402	0.434632	0.457589	0.447456	0.46558	0.45657	0.432251	0.489198	0.390651	0.512678

Table: 3 reflects the amount of investment as well as the amount of total assets possessed by the private general insurance companies from 1999 to 2010. With the help of these two information we calculated the proportion of investment which shows that proportion of investment made by the industry has increased gradually over the years. Whereas the industry invested only 28.53% of total assets in 1999 they accelerate their investment activity in 2000 to 34.8% of total assets. In 2010 the industry involved 51.26% of their total assets for investment purpose.

Graph 1 also shows the behavior of general insurance industry towards investment through a bar diagram.

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Graph 1: Proportion of Investment



This upward moving trend indicates the fact that the private general insurance companies are becoming more interested to employ their assets for investing in different financial assets rather than keeping money only in their bank accounts.

8. Investment Portfolio of Insurance Companies in Bangladesh

Based on the annual report of the sample general insurance companies, we observed the financial asset items in which these insurance companies have invested. In this case one thing to be noted that this paper focuses only towards the general insurance companies and in general insurance companies the policy is made for one year tenure, so these companies invest their fund mainly in short term instruments or instruments which are marketable means easily sellable in market.

After analyzing the annual reports, we found the following instruments in which the sample companies invest more or less:

- i. **Govt. Securities:** As government securities general insurance companies mainly invest in National Investment Bonds. This is a risk free investment for them as well as this instrument is very liquid. Moreover insurance companies get involved in these instruments as a part of fulfillment of govt. statutory requirements.
- ii. **Corporate Debt Instruments:** Besides the govt. securities, general insurance companies do involve in investment in corporate debt instruments. They invest in debentures, corporate bonds etc.
- iii. **Minority Ownership:** Insurance companies which are under a holding company, sometimes invest in other subsidiary companies. But such ownership has a minor proportion.
- iv. **Share:** Like govt. securities, most of the sample general insurance companies invest in shares of different companies. Most of this share investment is done through private placement. A very less percentage of the total share investment is done through stock exchange.

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- v. ICB Debenture: Some general insurance companies invest in the debenture issued by the Investment Corporation of Bangladesh.

Given the data in annual report, the proportion of investment in different instruments has been calculated. Table 4 gives a picture of the proportion of investment made by the sample general insurance companies in the above stated instruments:

Table 4: Structure of Investment Portfolio

Company	Govt. Sec.	Corporate Debt Instruments	Minority Ownership	Share	ICB Debenture
Green Delta	0.27%	0.66%	10.52%	83.01%	
Reliance Insurance	2.32%	2.51%		95.18%	
Pioneer	4.15%			95.86%	
Phoenix Insurance	4.16%		60.29%	35.21%	
Asia Pacific	15.27%			84.73%	
Pragati Insurance	99.74%			0.06%	0.20%
United Insurance Company	2.18%			97.83%	
Peoples Insurance Company	12.43%			87.57%	
Central Insurance	18.22%			80.51%	
Mercantile Insurance Company	19.91%			80.09%	
Eastern Insurance	1.08%	0.67%		98.24%	
City General Insurance	23.08%			76.93%	
Eastland Insurance Company	1.49%	3.42%		95.10%	

The above table shows that the sample general insurance companies have two basic streams of investment, first is the govt. securities and the second one is the share. Except Pragati General Insurance Company, all the other companies have the main sector of investment as shares (mainly through private placement). However to some extent every company invest in govt. securities mainly as a risk free investment and also to meet up the statutory requirement.

Besides, four insurance companies out of 13 companies invest in corporate debt instruments, two have investment in minority ownership and only one has investment in ICB debenture.

In case of minority interest Phoenix Insurance Company has major investment in this sector.

9. Determinants of Investment Portfolio & Portfolio Diversification

In this section at first we will try to find out whether size of the sample insurance companies and profitability affect the investment made by them or not. That means here we will test our hypothesis with the help of regression analysis following the below equation

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$$I_p = a + \beta_1 X_1 + \beta_2 X_2 + e_i$$

Where

- I_p = Investment Portfolio
- X_1 = size of bank (total assets)
- X_2 = Profitability (net profit)

The regression analysis shows a value of

$$\begin{aligned} R \text{ square} &= 0.863 \\ \text{Significance Level} &= 0.000 \end{aligned}$$

The results show that the independent variables that is size of the company and profitability explains the investment portfolio of sample general insurance companies 86.3% and the result is statistically significant. This rejects our null hypothesis and accepts the alternative hypothesis that size of company and profitability has impact over the investment portfolio of sample companies.

The correlation table below (Table 5) shows that the asset size of sample insurance companies has a statistically significant positive correlation with investment amount that is 0.86 with significant value 0.000 which is less than 0.05 (at 5% significant level). Profit earned by sample insurance companies also has a statistically significant correlation with investment amount as the correlation value is 0.921 and the significant value is 0.000 which is less than 0.05 (at 5% significant level).

Table 5: Correlations

		INVESTMENT	ASSETSIZE	PROFIT
INVESTMENT	Pearson Correlation	1.000	.860	.921
	Sig. (2-tailed)	.	.000	.000
	N	13	13	13

** Correlation is significant at the 0.01 level (2-tailed).

Now to test our second null hypothesis that is there is no correlation between amount of investment made by the sample insurance companies and diversification of the investment portfolio (no. of assets invested), we have done the correlation. The correlation between the two variable (i.e. amount of investment and no. of investment assets) show a result of 0.735 with significance value of 0.004 which shows there is positive correlation between the variables and the relationship is statistically significant at 5% significant level.

10. Conclusion

Insurance Companies serve a very important role in the economy by extending helping hands towards the distress people at the time of their necessity. For this reason besides commercial banks, insurance companies have become an essential ingredient of the financial system. There are two wings of insurance companies among which one category is the general insurance companies. These companies help people against different perils like fire incident, incident in the marine way, motor accident, aviation incident, natural calamity etc. However besides the regular dealings of general insurance companies, they occupy in investment with a part of their premium collection.

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Different general insurance companies invest in different sectors. This paper focused on the scenario of Bangladesh general insurance industry. After liberation in 1971, the industry passed through certain phases and has achieved a good growth though the contribution of this industry to economic development is not that much remarkable. The number of companies has grown rapidly which has created a huge competition in the industry for which the companies have found investment as one of their income source. After analyzing the investment portfolio of general insurance companies in Bangladesh, it is found that the sample companies mainly invest in two financial instruments, i.e. government securities and shares. Besides, they also invest in corporate debt instruments, minority ownership and ICB debenture to some extent. However the proportion of investment by the general insurance companies in Bangladesh has increased substantially which may induce the companies to move for some more diversified portfolio. However this paper considered the case of only 13 general insurance companies out of 43 private insurance companies. So the small sample size may be a limitation of the study. So to omit this limitation more companies can be taken into consideration and a vast analysis can be done in this regard.

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