THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Performance Evaluation of Selected Private Life Insurance Companies in Bangladesh

Tanbir Ahmed Chowdhury

Professor, Department of Business Administration, East West University Plot no. A/2, Main Road, Jahurul Islam City, Aftabnagar, Dhaka-1212, Bangladesh

Farzana Huda

Senior Lecturer, Department of Business Administration, East West University Plot no. A/2, Main Road, Jahurul Islam City, Aftabnagar, Dhaka-1212, Bangladesh

Abstract:

In a developing country like Bangladesh insurance sector plays a vital role in the progress of economic development. In this paper we have tried to analyze the development and growth of selected Private Life Insurance Companies of Bangladesh. It is observed that all the selected Private Life Insurance Companies were able to achieve a stable growth of premium, total assets during the period of 2007-2011. Seven trend equations have been tested for different activities of private life insurance companies. Among them the trend value of premium, investment fund, total assets, earnings per share etc. are positive incase of all the selected private life insurance companies. Square of correlation coefficient (r^2) has also been tested for all trend equations. The r^2 of premium, investment fund and total assets is more than 0.5. It indicates the prospect of private life insurance Companies in Bangladesh is very bright.

Key words: Premium, Net Income, Insurance Company

1. Introduction

1.1. Portrait of Insurance in Bangladesh

Today, people are quite concerned about their present and future protection for various purposes. They are concerned about their health protection, educational protection and so on. Life Insurance companies are providing them those opportunities to make it real. They provide unique financial services to the growth and development of every economy. Such specialized financial services range from the underwriting of risks inherent in economic entities and the mobilization of large amount of funds through premiums for long term investments. 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. The business world without insurance is unsustainable since risky business may not have the capacity to retain all kinds of risks in this ever changing and uncertain global economy (Ahmed et al., 2010).

Insurance is a big opportunity in a country like Bangladesh with a large population and untapped potential. Indeed, a well-developed and evolved insurance industry is a windfall for economic development as it provides long-term funds for infrastructure development of every economy (Charumathi, 2012). The Insurance Development & Regulatory Authority, the regulatory body of Bangladesh insurance sector, has intensified its supervision, field visits, and has adopted a risk-based assessment of insurers' activities. All of these regulatory measures are to ensure that the financial performance of insurance companies is in sound condition.

Through the Insurance Corporation Act VI, 1973 all private insurance companies were nationalized and led to creation of two corporations namely Sadharan Bima Corporation for general insurance and Jiban Bima Corporation for life insurance in Bangladesh. Later on Bangladesh Government allowed the private sector to conduct business in all areas of insurance for the first time in 1984. The private sector availed the opportunity promptly and came forward to establish private insurance companies through promulgation of the Insurance Corporations (Amendment) Ordinance (LI of 1984) 1984. The Insurance market in Bangladesh now consists of two state-owned corporations, forty three and seventeen private sector general & life insurance companies respectively, a total of 62 insurance companies are functioning now(Ahmed, 2010).

In Bangladesh the growth of insurance industry during last 18 years is relatively remarkable due to operation of private sector insurance companies. Although a country with population of 150 million, around 25-27 percent annual growth of life sector, it is very low in per capita terms, only approximately Tk. 150, while in Pakistan this amount is more than Pakistan rupee 300 and in Indian rupee 700. Some 700 to 900, out of every thousand population, are covered by insurance in most

developed countries viz, the USA, France, Japan, the UK etc. Still in some developing countries like Pakistan, India, and Thailand this number is 100, 150 and 70 respectively. But this number is not yet more than 10 in Bangladesh. Insurance premium as a percentage of GDP is around 14 percent for Japan, 13 percent for South Africa, 12 percent for South Korea, 9.0 percent for UK and 2.0 percent in India while for Bangladesh it is less than 0.1 percent (*Haq, 2008*).

On the other side, the average annual growth rate of general insurance 12-13 percent cannot be considered as any good measure of its development. After opening of insurance market for private sector 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), the total being 43 companies began operation in a very small market. As a result, stiff competition, unethical practices such as credit business, high rate of procurement cost popularly known as commission, shortage of professionally qualified personnel, step-motherly attitude from the banks etc., are some of the acute problems eroding the development of this sector. (*Haq*, 2008).

2. Literature Review

Insurance services are now integrated into wider financial industry and this sector plays an important role in the economy of Bangladesh. There have been many studies intended at isolating the characteristics, behavior and performance determinants of life insurance companies. This study is designed to determine the performance of life insurance companies in Bangladesh.

- Mehari et al., (2013) survey 9 insurance companies over the period 2005-2010 to determine insurance companies' performance in Ethiopia. The study reveals that insurers' size, tangibility and leverage are statistically significant and positively related with return on total asset; nevertheless, loss ratio (risk) is statistically significant and negatively related with ROA. Thus, insurers' size, Loss ratio (risk), tangibility and leverage are important determinants of performance of insurance companies in Ethiopia. But, growth in writing premium, insurers' age and liquidity have statistically insignificant relationship with ROA.
- Almajali et al., (2012) surveyed 25 insurance companies of Jordan during the period 2002-2007 by using a number of basic statistical techniques such as T-test and Multiple- regression. The results showed that leverage, liquidity, Size, management competence index have a positive statistical effect on the financial performance of Jordanian Insurance Companies and a high consideration of increasing the company assets will lead to a good financial performance and there is a significant need to have highly qualified employees in the top managerial staff.
- Chen et al. (2009) examined the determinants of profitability and the results showed that profitability of insurance companies decreased with the increase in equity ratio. Chen and Wong (2004) found that size, investment, liquidity are the important determinants of financial health of insurance companies. In many literatures, it has been suggested that company size is positively related to financial performance.
- Browne et al. (2001) has shown empirically that company size is positively related to the financial performance of US life insurance companies. However, company size is not found to be an important determinant of operational performance in the Bermuda insurance market during the period 1993-1997 (Adams and Buckle, 2000). Carson and Hoyt (1995) found that leverage is significantly positively related to the probability of insolvency. Furthermore, a negative relationship between leverage and performance has also been found in Browne et al. (2001).
- **Pervan et al., (2012)** inspected the underlying factors of Bosnia and Herzegovina insurance industry's profitability indicated a strong negative influence of claims ratio on profitability. They further showed that age and market shares have significant positive impacts on insurers' financial performance.
- Charumathi (2012) included 23 Indian life insurers (including 1 public and 22 private) and it used the data pertaining to 3 financial years 2008-11 indicates that, profitability of life insurers is positively and significantly influenced by the size and liquidity. The leverage, premium growth and logarithm of equity capital have negatively and significantly influenced the profitability of Indian life insurers but no relationship between underwriting risk and profitability.
- Greene (2004) notified that, earnings have particular importance to life insurance companies because earnings and capital determine the viability of the insurer. Since the life insurance industry is mature and highly competitive, cost efficiency may be the main driver of profitability using the stochastic frontier (SF) method allowing the mean inefficiency to vary with organizational form and the outputs. The research explored the relationship between cost inefficiency and profitability in the U.S. life insurance industry and suggests that cost inefficiency in the life insurance industry is substantial relative to earnings, and that inefficiency is negatively associated with profitability measures such as the return on equity.
- Study of Vigaykumar and Kadirvelu (2004) revealed that, age of firm is an important determinant of profitability. Older the firm the more will be the profitability due to experience and efficiency cost decreases. They found the positive relationship between firms` profitability and age of the firm. Bates et al., (2008) found that both age and size of the firm had positive and significant effect for enterprise investment scheme recipients: the highest the level of fixed assets formation, the older and larger the EIS company.
- Malik (2011) investigated the determinants of profitability in insurance companies of Pakistan. This study includes 35 listed life and non-life insurance companies which cover the period of 2005- 2009. The findings show that there is no relationship between profitability and age of the company and is significantly positive association between size of the company and profitability. The result also shows that the volume of capital is significantly and positively related to profitability. Loss ratio and leverage ratio showed negative but significant relationship with profitability.

3. Objectives of the study

- To present an overview of Private Life Insurance Companies of Bangladesh.
- To appraise the performance of selected Private Life Insurance Companies of Bangladesh
- To recommend remedial measures for the development of selected Private Life Insurance Companies of Bangladesh.

4. Scope and Methodology of the Study

The study has been carried out mostly on the basis of secondary data to evaluate the performance of selected private life insurance Companies of Bangladesh. The selected life insurance companies are National Life Insurance Company Ltd. (NLICL), Sandhani life insurance Company Ltd. (SLICL), Meghna Life Insurance Company Ltd. (MLICL), Rupali Life Insurance Company Ltd. (RLICL) and Progressive Life Insurance Company Ltd. (PLICL). Others relevant data and information has been extracted from Stock Exchanges, Annual Reports of different insurance companies of Bangladesh, Bangladesh Securities and Exchange Commission and web sites of relevant insurance companies of Bangladesh etc. The study also incorporates existing literature and relevant articles on the performance of insurance. In this article we analyzed five years data i.e 2007-2011 of selected private life insurance companies of Bangladesh. For evaluating the performance of selected private life insurance companies of Bangladesh data has been analyzed through the various statistical measures like growth percentage, trend equation, square of correlation coefficient etc.

5. An overview of the Selected Private Life Insurance Companies of Bangladesh

5.1. National Life Insurance Company Ltd. (NLICL)

National Life Insurance Company Ltd. formally started functioning on 23 April 1985. The company has grown & developed massively over a period of about 20 years. The company has multifarious life assurance products to match customers' needs & preferences with three distinct & definite philosophies, the first one is to encourage & induce saving of the high/mid income population and especially of the low income & marginal group. The low income people usually face economic hardship for household food security & health problems at certain period of their life. Saving through insurance might provide them relief at odds & calamities. The second one is to create & provide employment opportunity for the illiterate/literate youth of the country. The third one is capital formation at national level for investment to develop dynamism at macro-economy.

The company began operation with 11 staff but today manpower enrollment has reached more than 100,000 staffs. The company has grown & developed massively & substantially over a period of about 20 years. It has earned name & fame along with premium for the services it provides to the policy holders.

5.2. Sandhani life insurance Company Ltd. (SLICL)

Sandhani life insurance Company Ltd. is incorporated as a public limited company on 23 January 1990 under the Companies Act 1913 to conduct life insurance business. On 28 March of the same year, the company obtained certificate for commencement of business. It was registered with the Controller of Insurance on 25 April 1990, following which it immediately commenced life insurance business. The authorized capital of the company is Tk 200 million divided into 2 million ordinary shares of Tk 100 each. Its paid up capital is Tk 30 million. The sponsor shareholders subscribed 50% of its paid up capital and the remaining 50% was paid by the public shareholders, of which 20.63% by institutions and 29.37% by individuals. The company went public in January 1996 and was enlisted with the Dhaka Stock Exchange on 6 April 1996.

Since 1990 SLIC provide Life Insurance coverage in the remote area as well as within all the people of the country. To be a competent service provider, SLIC maintain the quality, also increasing the growth rate by maximizing the Return on Investment. It is registered as a publicly quoted company; with shares listed on Dhaka Stock Exchange under ticker symbol SANDHANINS. As a whole SLIC is a complete package with corporate practice, diversified business profile and foster entrepreneurship.

The company provides a wide range of insurance products and services such as accident & health insurance, life insurance, motor insurance, travel insurance, old age insurance, management liability insurance, property insurance, as well as casualty insurance, and other related products and services. This provider of insurance products and services is active and operational in Bangladesh.

5.3. Meghna Life Insurance Company Ltd. (MLICL)

Meghna Life Insurance Company Ltd. is one of the leading Life Insurance Companies in Bangladesh was emerged in 1996. The main object of Meghna Life is to provide maximum financial security to a person and families by giving modern Insurance facilities. Its other objectives are to turn it into a profitable savings institution through payment of bonus at an attractive rate and enriched servicing and invest the accumulated small savings in the nation building various welfare and profitable projects. The authorized capital of the company is Tk. 600 million and paid up capital stands at Tk. 230.343 million in 2011. In 1996 Premium income, Life Fund & Investment was Tk. 33.0 million, Tk. 0.40 million & Tk. 25.9 million respectively and in 2011 such Premium income, Life Fund & Investment increased to Tk. 3927.8 million, Tk. 9001.6 million & Tk. 6715.8 million respectively. From 1996 to 2011 Meghna Life paid Tk.433.8 million as death claim, Tk.1861.8 million as survival benefit, Tk.678.5 million as maturity claims and Tk.314.8 million as bonus to the policy holders.

Meghna life insurance made a mark in the Life Insurance arena emerged as the 4th private sector indigenous life insurance by undertaking and successfully implementing innovative and welfare oriented Life Insurance schemes. It introduced an array of conventional Life and other Insurance products of Loko Bima, Islami Bima (Takaful), Swanirvor Bima and Islami Khudra Bima (Takaful) many of which were the first in Bangladesh. For the first time Hospitalization benefit Insurance product was also introduced by Meghna Life. Meghna Life has earned reputation in every corner of the insurance Industry. It can take pride of its

prestigious achievements which are molded with transparency, accountability, impeccable working capacity, sincerity, honesty and sagacity.

5.4. Rupali Life Insurance Company Ltd. (RLICL)

Rupali Life Insurance Company Ltd was established in 2000. Today Rupali Life, with its Head Office in Dhaka operates more than 1500 Agency Offices throughout Bangladesh. RLICL offers a system to replace the loss of income that occurs when someone dies (usually the person who produces the majority of income in a family situation). It has a very dignified management having magnificent professional Identity, illustrious educational background and honesty. The Company transacts a wide range of Life Insurance business in Bangladesh and has gradually developed goodwill and expertise in the field with sound and stable financial position.

RLICL got listed in capital market through public offering of shares in 2009. Now it is listed in both DSE and CSE. The paid up capital of RLICL reached BDT 82.50 million against authorized capital of BDT 1000.0 million as of 31 December 2011. Presently the Company has 97 service cells and 919 agency office across the country. As the main contributing source of income RLICL net premium grew by 27.5% in 2011 and reached BDT 1,605.6 million. The growths of 1st year premium and renewal premium in 2011 were 32.15% and 23.89% respectively. The growth of life fund was high for the last three years with 40.3% at the end of 2011. Lower growth of management expense during the last year compared to its previous period and increased investment yield helped to build greater life fund. Conversely the market share of RLIC in respect of life fund, premium and total asset were still insignificant. In 2011, total management expense of the Company grew by 15.3% and reached BDT 925.66 million which was within the allowable management expense limit.

5.5. Progressive Life Insurance Company Ltd. (PLICL)

Progressive Life Insurance Company Ltd. incorporated and started its operation in 2000 and listed in DSE and CSE in 2006. The company is engaged in different portfolio of life insurance business i.e. Ordinary Life and Group Life including pension, health scheme etc. It also operates micro life insurance business under names of Sujan Bima and progressive Islami Bima Prakalpa (Takaful).

The company has completed the first 10 years of success in 2010. During 2010, it achieved a laudable growth, maintained the reputation and has been continuing to be a leading private sector Life Insurance Company in Bangladesh. During the year 2011 PLICL has earned gross premium Tk. 2068.28 million against 1305 million in 2010. The life fund has increased to Tk. 2841.021 million in 2011 from Tk. 2001 million in 2010. During the year 2011 the company has invested Tk. 900.015 million against 1176.2 million in 2010. It is a matter of great success that the company has been able to match the market demand during this period and offer the policyholders and shareholders the beat of services with efficiency.

6. Performance Evaluation of Selected Private Life Insurance Companies of Bangladesh

In this section we tried to evaluate the performance of selected private life insurance companies of Bangladesh. For performance evaluation we appraised premium collection, growth of investment, growth of total assets, growth of EPS and growth of dividends. We also measured the trend equations and r^2 for the above mentioned variables.

6.1. Growth of Premium of Selected Private Life Insurance Companies

Name of Insurance Company	Amount of Premium				
	2007	2008	2009	2010	2011
Meghna Life Insurance Company Limited(MLICL)	1842.7	2312.7	2679.4	3378.8	3927.8
Growth		25.51%	15.86%	26.10%	16.25%
Progressive Life Insurance Company Limited(PLICL)	588.4	833.7	1080.9	1305	2068.28
Growth		41.69%	29.65%	20.73%	58.49%
National Life Insurance Company Limited(NLICL)	3537.84	4069.2	4718.36	6070.339	6321.835
Growth		15.02%	15.95%	28.65%	4.14%
Sandhani Life Insurance Company Limited(SLICL)	1714.1	1904	2204.5	2509.4	2632.6
Growth		11.08%	15.78%	13.83%	4.91%
Rupali Life Insurance Company Limited(RLICL)	716.36	902.65	1260.11	1606.91	1664.38
Growth		26.01%	39.60%	27.52%	3.58%

Table 1: Premium of Selected Private Life Insurance Companies
Amount in Million BDT

Source: Compiled from different issues of Annual Report of National Life Insurance Company Ltd., Sandhani life insurance Company Ltd., Meghna Life Insurance Company Ltd., Rupali Life Insurance Company Ltd. and Progressive Life Insurance Company Ltd. Note: US \$1 = BDT 78

Table-1 shows growth pattern of premium collection of selected private life insurance companies. It is observed from the table that premium is highest in NLICL that is Tk. 6321.835 million in 2011. The growth percentage of PLICL is highest in 2011 is 58.49%. In 2011 growth percentage of MICL, NLICL, SLICL and RLICL is 16.25%, 4.14%, 4.91% and 3.58% respectively. The lowest growth percentage of premium is in RLICL in 2011. During 2007 to 2011 every year premium of all selected insurance companies has increased but at a yearly decreasing rate. So it is reflected from the table that the premium of all selected private life insurance companies have shown up and down trends during the period of 2007-2011.

6.2. Growth of Investment Fund of Selected Private Life Insurance Companies

Name of Insurance Company	Investment of Fund				
	2007	2008	2009	2010	2011
Meghna Life Insurance Company Limited(MLICL)	2007.8	2910.6	4138.8	5525.1	6715.8
Growth		44.96%	42.20%	33.50%	21.55%
Progressive Life Insurance Company Limited(PLICL)	281.6	494.7	798.8	1176.2	900.015
Growth		75.67%	61.47%	47.25%	-23.48%
National Life Insurance Company Limited(NLICL)	830.89	976.69	1168.96	1567.09	1897.45
Growth		17.55%	19.69%	34.06%	21.08%
Sandhani Life Insurance Company Limited(SLICL)	2203.9	3230.9	4257.9	5446.9	6348.7
Growth		46.60%	31.79%	27.92%	16.56%
Rupali Life Insurance Company Limited(RLICL)	364.63	525.98	710.68	1022.93	1299.89
Growth		44.25%	35.12%	43.94%	27.08%

Table 2: Investment Fund of Selected Private Life Insurance Companies
Amount in Million BDT

Source: Compiled from different issues of Annual Report of National Life Insurance Company Ltd., Sandhani life insurance Company Ltd., Meghna Life Insurance Company Ltd., Rupali Life Insurance Company Ltd. and Progressive Life Insurance Company Ltd.

Note: US \$1 = BDT 78

The growth patterns of investment fund of selected private life insurance companies of Bangladesh are revealed from Table-2. It is depicted from the table that every year investment fund of all selected insurance companies have increased from previous year. The growth of investment fund is more than 20% in MLICL and RLICL. The lowest growth observed in NLICL. The growth percentage of investment of RLICL during 2007 to 2010 is more than 35%. The investments of all the selected companies decreased from the previous year in 2011.

6.3. Growth of Total Assets of Selected Private Life Insurance Companies

Name of Insurance Company	Total Assets				
	2007	2008	2009	2010	2011
Meghna Life Insurance Company Limited(MLICL)	3428.4	4747.3	6188.1	8345	10054.1
Growth		38.47%	30.35%	34.86%	20.48%
Progressive Life Insurance Company Limited(PLICL)	765.548	993.981	1535.575	2136.566	2998.2
Growth		29.84%	54.49%	39.14%	40.33%
National Life Insurance Company Limited(NLICL)	10762.1	13140.97	16285.95	20422.492	23824.748
Growth		22.10%	23.93%	25.40%	16.66%
Sandhani Life Insurance Company Limited(SLICL)	2964.7	4127.7	6210.3	7941.5	9037.3
Growth		39.23%	50.45%	27.88%	13.80%
Rupali Life Insurance Company Limited(RLICL)	788.61	1202.95	1706.01	2663.35	3051.12
Growth		52.541%	41.819%	56.116%	14.559%

Table 3: Total Assets of Selected Private Life Insurance Companies
Amount in Million BDT

Source: Compiled from different issues of Annual Report of National Life Insurance Company Ltd., Sandhani life insurance Company Ltd., Meghna Life Insurance Company Ltd., Rupali Life Insurance Company Ltd. and Progressive Life Insurance Company Ltd.

Note: US \$1 = BDT 78

It is observed from the Table-3 that during 2007 to 2011 assets of all selected private life insurance companies have increased from previous year. In most of the years assets have increased by more than 30%. The assets of RLICL have increased by more than 40% during 2008 to 2010. The assets of PLICL have increased by more than 35% during 2008 to 2011.

6.4. Growth of Earnings Per Share (EPS) of Selected Private Life Insurance Companies

Name of Insurance Company	Earnings per Share					
	2007	2008	2009	2010	2011	
Meghna Life Insurance Company Limited (MLICL)	154.87	162.89	171.272578	174.460585	127.92828	
Growth		5.18%	5.15%	1.86%	-26.67%	
Progressive Life Insurance Company Limited (PLICL)	8.045	10.85	12.36	19.58	22.54	
Growth		34.87%	13.92%	58.41%	15.12%	
National Life Insurance Company Limited (NLICL)	1170	4110	832.5	117975	12320.55	
Growth		251.28%	-79.74%	123.17%	-89.56%	
Sandhani Life Insurance Company Limited (SLICL)	N/A	N/A	N/A	N/A	N/A	
Growth		N/A	N/A	N/A	N/A	
Rupali Life Insurance Company Limited (RLICL)	0.39	1.37	1.11	1.43	1.31	
Growth		251.28%	-18.98%	28.83%	-8.39%	

Table 4: Earnings per Share of Selected Private Life Insurance Companies
Amount in Million BDT

Source: Compiled from different issues of Annual Report of National Life Insurance Company Ltd. (NLICL), Sandhani life insurance Company Ltd. (SLICL), Meghna Life Insurance Company Ltd. (MLICL), Rupali Life Insurance Company Ltd. (RLICL) and Progressive Life Insurance Company Ltd. (PLICL).

Note: US \$1 = BDT 78Note: N/A- Data not available

It is observed from Table: 4 that EPS of PLICL has increased from previous year during 2007 to 2011. The highest growth rate is 58.4% in 2010. The EPS of NLICL and RLICL were not stable during 2007 to 2011. In 2008 and 2010 EPS increased from the previous year but EPS has decreased from previous year during 2009 and 2011 of most of the companies.

6.5. Growth of Dividend of Selected Private Life Insurance Companies

Name of Insurance Company			Dividend (%)	
	2007	2008	2009	2010	2011
Meghna Life Insurance Company Limited(MLICL)					
Cash Dividend	0	5	0	0	30
Growth			-100.00%		
Stock Dividend	25	30	35	40	
Growth		20.00%	16.67%	14.29%	-100.00%
Progressive Life Insurance Company Limited(PLICL)					
Cash Dividend	0	0	10	0	0
Growth				-100.00%	
Stock Dividend	0	10	0	12	18
Growth			-100.00%		50.00%
National Life Insurance Company Limited(NLICL)					
Cash Dividend	20	0	0	0	50
Growth		-100.00%			
Stock Dividend	20	50	55	60	10
Growth		150.00%	10.00%	9.09%	-83.33%
Sandhani Life Insurance Company Limited(SLICL)					
Cash Dividend	0	0	0	0	0

Growth					
Stock Dividend	25	35	45	48	48
Growth		40.00%	28.57%	6.67%	0.00%
Rupali Life Insurance Company Limited(RLICL)					
Cash Dividend	0	0	0	0	0
Growth					
Stock Dividend	0	0	10	14	14
Growth				40.00%	0.00%

Table 5: Dividend of Selected Private Life Insurance Companies
Amount in Million BDT

Source: Compiled from different issues of Annual Report of National Life Insurance Company Ltd., Sandhani life insurance Company Ltd., Meghna Life Insurance Company Ltd., Rupali Life Insurance Company Ltd. and Progressive Life Insurance Company Ltd.

Note: US \$1 = BDT 78

Table-5 shows growth pattern of dividend (cash and stock) of selected private life insurance companies. The table reflects that all the selected insurance companies compensated by stock dividend rather than cash. The growth rate of dividend stock is high in NLICL but lowest in MLICL.

6.6. Trend Equation of Selected Private life Insurance Companies

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc = 523.63 + 2828.28x	0.98
Progressive Life Insurance Company Limited(PLICL)	Yc = -343.11 + 1175.26x	0.92
National Life Insurance Company Limited(NLICL)	Yc = 756.92 + 4943.52x	0.96
Sandhani Life Insurance Company Limited(SLICL)	Yc= 244.24 + 2192.92x	0.98
Rupali Life Insurance Company Limited(RLICL)	Yc = 260.03 + 1230.08x	0.96

Table 6: Trend equation and r^2 *of Amount of Premium*

Table-6 shows the summary of trend equation and r^2 of premium of selected private life insurance companies. It is reflected from the table that trend equation of all the selected private life insurance companies are positive except PLICL and Goodness of fit of all the equations are high i.e. more than 0.90.

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc = 1203.05 + 4259.62x	0.98
Progressive Life Insurance Company Limited(PLICL)	Yc = 191.83 + 730.26x	0.75
National Life Insurance Company Limited(NLICL)	Yc = 272.35 + 1288.22x	0.96
Sandhani Life Insurance Company Limited(SLICL)	Yc = 1050.56 + 4297.66x	0.97
Rupali Life Insurance Company Limited(RLICL)	Yc = 236.75 + 784.82x	0.98

Table 7: Trend equation and r^2 of Investment of Fund

Table-7 shows the summary of trend equation and r^2 of investment of fund of selected private life insurance companies. It is replicated from the table that trend equations of all the selected insurance companies are positive. Goodness of fit of all the selected insurance companies are high i.e. more than 0.90 except PLICL.

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc= 782.66+1231.56x	0.98
Progressive Life Insurance Company Limited	Yc = -7.17 + 115.94x	0.96
National Life Insurance Company Limited(NLICL)	Yc= 296.93+1776.16x	0.96
Sandhani Life Insurance Company Limited(SLICL)	Yc= 124.41 +397.46x	0.97
Rupali Life Insurance Company Limited(RLICL)	Yc= 87.81+225.70x	0.98

Table 8: Trend equation and r^2 *of Total Assets*

Table-8 shows the summary of trend equation and r^2 of total assets of selected private life insurance companies. It is imitated from the table that trend equations of all the selected private life insurance companies are positive. Goodness of fit of all the selected insurance companies is high i.e. more than 0.90.

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc = -4.23 + 158x	0.13
Progressive Life Insurance Company Limited(PLICL)	Yc = 3.77 + 14.68x	0.95
National Life Insurance Company Limited(NLICL)	Yc= 13616.61 + 27281.61x	0.18
Sandhani Life Insurance Company Limited(SLICL)	N/A	N/A
Rupali Life Insurance Company Limited(RLICL)	Yc = .19 + 1.12x	0.5

Table 9: Trend equation and r^2 of Earnings per Share (EPS)

Table-9 shows the summary of trend equation and r^2 of earnings per share of selected private life insurance companies. It is revealed from the table that trend equation of PLICL and RLICL are positive and goodness of fit of PLICL is very high i.e. more than 0.90.

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc = 5.5 + 76x	0.45
Progressive Life Insurance Company Limited(PLICL)	Yc = 0 + 2x	0
National Life Insurance Company Limited(NLICL)	Yc = 6 + 14x	0.19
Sandhani Life Insurance Company Limited(SLICL)	0	0
Rupali Life Insurance Company Limited(RLICL)	0	0

Table 10: Trend equation and r^2 *of Dividend (Cash)*

Table-10 shows the summary of trend equation and r^2 of cash dividend of selected private life insurance companies. It is exposed from the table that trend equations of all the selected insurance companies are positive.

Insurance Company	Yc= a+bx	r2
Meghna Life Insurance Company Limited(MLICL)	Yc = -4 + 26x	0.16
Progressive Life Insurance Company Limited(PLICL)	Yc = 3.8 + 8x	0.58
National Life Insurance Company Limited(NLICL)	Yc = -1 + 39x	0.005
Sandhani Life Insurance Company Limited(SLICL)	Yc = 5.9 + 40.2x	0.86
Rupali Life Insurance Company Limited(RLICL)	Yc = 4.2 + 7.6x	0.87

Table 11: Trend equation and r^2 *of Dividend (Stock)*

Table-11 shows the summary of trend equation and r^2 of stock dividend of selected private life insurance companies. It is observed from the table that except MLICL and NLICL, trend equation of the selected insurance companies is positive.

7. Findings and Conclusion

After commencement, the private insurance companies play a vital role in the economic development of the country. Every sort of business consists of risks. By taking all uncertain business risk insurance companies extended the field of business in our country. Insurance gives the assurance of indemnity and help to collect the capital to launch a new business and expand the existing business.

As the maximum people of our country are illiterate and over 50% of our total population lives below the poverty line so they have not much knowledge about the future life to enhance the living standard. On the other hand People have a very small saving potentiality and thus have less or no disposable income. Almost the whole of the income is exhausted in the process of maintaining the day-to-day life. Thus they are left with little amount, which may not deemed to be sufficient for the payment of premiums. This factor discourages many to buy life insurance policy. But at present the problem is reducing as the population of our country is increasing and people are now much more conscious about their safety. So they are encouraged to take an insurance policy for making their life free from any unexpected occurrence which creates big opportunity for the insurance companies.

The selected private life insurance companies create employment opportunities for the country. It has been observed that the premium of the selected private life insurance companies have increased from the previous year during 2007-2011. It is also reflected from the analysis that the EPS of all the selected private life insurance companies are relatively high during 2007-2011. It indicates the profitability of all the selected private insurance companies is quite satisfactory. Investment fund indicated that insurance companies are able to manage their fund efficiently. Every year these insurance companies' total assets increased.

Seven trend equations have been tested for different activities of the private life insurance companies. Among them the trend value of investment fund is positive of all selected private life insurance companies. Square of correlation coefficient (r^2) has also been tested for all trend equations. The r^2 of premium, investment fund and total assets is more than 0.5. It indicates the prospect of private insurance companies in Bangladesh is bright.

The growth percentage of EPS in case of MLICL, NLICL and RLICL was very low and fluctuating. In order to increase activities and income these insurance companies need to increase their premium collection.

From the series of our analysis it is reflected that although the amount of premium of all the selected insurance companies have shown an increasing trend during the period of 2007-2011, the total premium of PLICL and RLICL are not satisfactory in comparison to NLICL. So these insurance companies need to sale more policies and to increase their premium collection.

It has been identified that although almost every year's EPS of selected private insurance companies have increased from the previous year, but the growth rate of net income and EPS is not satisfactory for MLICL. So it should try to increase the growth rate.

We are quite optimistic that if the given suggestions of this paper are implemented then the insurance sector will be able to overcome its present problems and may contribute in the rapid development of the economy of Bangladesh.

8. References

- 1. Neelam C. Gulati and C.M. Jain (2011), Comparative Analysis of the Performance of All the
- 2. Players of the Indian Life Insurance Industry. VSRD- International Journal of Business & Management Research, Vol. 1 (8).
- 3. Grace, F. M. and S. G. Timme. (1992), An Examination of Cost Economics in the United States Life Insurance Industry. Journal of Risk and Insurance 59, 72–103.
- 4. Reza, S.M and Iqbal, M.M (2007), Life Insurance Marketing in Bangladesh. Daffodil International University Journal of Business and Economics, Vol. 2, No. 2.
- 5. B. Charumathi (2012), On the Determinants of Profitability of Indian Life Insurers An Empirical Study. Proceedings of the World Congress on Engineering, Vol I, U.K.
- 6. Cummins, J. D. and H. Zi. (1998), Comparison of Frontier Efficiency Models: An Application to the U.S. Life Insurance Industry, Journal of Productivity Analysis 10, 131–152.
- 7. Fecher, F., D. Kessler, S. Perelman and P. Pestieau (1993). Productive Performance of the French Insurance Industry. Journal of Productivity Analysis 4, 77–93.
- 8. Quazi Sagota Samina (2012), Investment Portfolio of Insurance Companies in Bangladesh: A Study on Selected Insurance Companies of Bangladesh. World Journal of Social Sciences, Vol. 2. No. 7.
- 9. Nabila Zaman (2012), Scope for Micro Health Insurance (MHI) in Bangladesh for low-income household. Bangladesh research Publications Journal, Vol. 7, Issue. 4.
- 10. Moghadam, K.H, Atefi, Z., Barati, P., Omidi, M. and Zoghi, A. (2012). Performance Comparison of Insurance Companies. Interdisciplinary Journal of Contemporary Research Business, Vol. 4, No. 7.
- 11. Mehariand, D. and Aemiro, T., (2013). Firm Specific Factors that Determine Insurance Companies' Performance in Ethiopia. European Scientific Journal, vol.9, No.10.
- 12. Almajali, Y.A. and Al-Soub, Y.Z (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. Journal of Management Research, Vol. 4, No. 2.
- 13. Greene, W. H. (2004). Profitability and Efficiency in the U.S. Life Insurance Industry. Journal of Productivity Analysis.
- 14. Myers, D., Smith, C.W. Jr (1988), Ownership structure across lines of property-casualty insurance. Journal of Law and Economics, Vol. 31.
- 15. Malik, H.(2011), Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan. Academic Research International, vol.1