# A Study on the Performance of Private Non-Life Insurance Companies in Bangladesh

## Ayesha Siddiqua<sup>1</sup>, Shahnaz Parvin<sup>2</sup>

<sup>1</sup>MBA, Department of Finance and Banking, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200, **BANGLADESH** 

<sup>2</sup>Associate Professor, Department of Finance and Banking, Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200, **BANGLADESH** 

\*E-mail for correspondence: ayeshasiddiquakeya@gmail.com



https://doi.org/10.18034/abr.v7i2.11

## **ABSTRACT**

Insurance becomes an essential part of every economic system. In Bangladesh, insurance industry plays an important role in economic progress. This study aims at determining the performance of private non-life insurance industry in Bangladesh. For the analysis, researchers selected five private non-life insurance companies and used the financial statements of the companies for the year 2012-2014 as a secondary source of data. Seven variables were selected to analyze the performances which were total asset, investment, net premium, and profit after tax, total insurance policy, earnings per share (EPS) and return on asset (ROA). Growth rate, trend equations and square of correlation coefficient  $(r^2)$  were tested in respect of these variables. All the companies had a positive trend equations and the  $r^2$  of the variables were above 0.50. The result indicates that the non-life insurance industry has a great prospect in Bangladesh.

JEL Classification Code: G 21

Key words: Insurance industry, non-life insurance, performance, growth, trend line

## INTRODUCTION

The insurance industry plays a crucial role in both developed and developing countries through providing financial services to the insured. In Bangladesh there are 77 life and non-life insurance companies in both private and public sectors. There is a significant participation private sector in the insurance sector of Bangladesh. This study focused the private non-life insurance industry by selecting five non-life insurance companies in Bangladesh.

## Objective of the Study

The main objective of this study is to analyze the performance of private non-life insurance companies in Bangladesh.

### LITERATURE REVIEWS

Almajali et al. (2012) argued that leverage, liquidity, size and management competence have positive effect on the performance of insurance companies. According to Sambasivan and Ayele (2013) company size and capital are positively related to the profitability and liquidity and leverage ratio have significant negative relationship with the insurance companies' profitability. Cekerezi (2015) studied on the insurance companies of Albania by selecting five insurance companies from the country. He found that leverage and risk had negative impact but tangibility had positive impact on the selected insurance companies' performance. Soekarno and Azhari (2009) argued that technical reserve to investment ratio, debt ratio, return on equity (ROE), loss ratio and expense ratio are the most influential determinant of performance measurement of general insurance companies. Maharana and Panda (2016) investigated the service quality of insurance companies in India. They found that public sector insurance companies were more efficient than private sector insurance companies in providing insurance services to the customers. Ismail (2013) examined the insurance companies' performance in Malaysia. He found that size of the company and solvency ratio had significant effect on the investment performance of general Islamic insurance companies but profit or



interest level, size, solvency margin, liquidity and premium growth had significant effect on the investment performance of conventional insurance. Mwangi and Murigu (2015) conducted a study on the 23 insurance companies in Kenya to find the effect of ROA, leverage, retention ratio, liquidity, underwriting risk, equity capital, size, management competence index, ownership and age of the company on the performance o0f non-life insurance companies in Kenya. The result from the analysis revealed that leverage, equity capital and management competence index have positive effect whereas size and ownership structure had negative effect on the performance of selected insurance companies in Kenya during 2009-2012. Rani and Shankar (2014) investigated the general insurance companies in India on the basis of capital adequacy, asset quality, premium, claim and equities to determine the financial performance of non-life insurance business in India.

# RESEARCH METHODOLOGY AND DESIGN

Researchers conducted this study on the basis of secondary data. Five private non-life insurance companies were selected for the study which are-

- Central Insurance Company Limited (CICL)
- Eastern Insurance Company Limited (EICL)
- Federal Insurance Company Limited (FICL)
- Prime Insurance Company Limited (PICL)
- Takaful Islami Insurance Limited (TIIL)

For the study Journals, annual reports for the years 2012-2014 and books were the main sources of secondary data. The ratios which were used in this study are

The statistical tools of the study are growth percentage, trend equation and coefficient of determination. The straight line trend equation is,

$$\hat{Y} = a + bx$$

Where, Y: Represents estimated result

a: Represents intercept

b: Represents slope of the line

x: Represents time

The coefficient of determination  $(r^2)$  was used to test 'goodness of fit' and  $r^2$  is between 0 and 1. The greater the  $r^2$  the better the result will be.

## **RESULTS AND ANALYSIS**

Table 1, 2, 3, 4, 5, 6 and 7 summarizes the growth pattern of total asset, investment, net premium, and profit after tax, total policy, EPS and ROA respectively of some

selected private non-life insurance companies in Bangladesh during the financial year 2012 to 2014. From table 1, it is observed that the growth rate of all the companies was positive. Eastern Insurance Company Limited had the highest total asset during the period but Prime Insurance Company Limited experienced maximum growth of total asset in 2014.

Table 1: Growth of total asset (In Million BDT)

Name of Insurance	Amount of Total Asset			
Company	2012	2013	2014	
CICL	1304.61	1467.06	1572.21	
Growth		12.45%	7.17%	
EICL	1824.63	1909.00	1978.28	
Growth		4.62%	3.63%	
FICL	1020.62	1115.12	1188.83	
Growth		9.26%	6.61%	
PICL	920.71	1042.96	1192.31	
Growth		13.28%	14.32%	
TIIL	637.64	720.13	748.10	
Growth		12.94%	3.88%	

**Source:** Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 2 gives us the information that Federal Insurance Company Ltd had the highest growth of investment in 2013 whereas the lowest growth rate was of Prime Insurance Company Limited.

Table 2: Growth of investment (In Million BDT)

Name of Insurance	Amount of Investment		
Company	2012	2013	2014
CICL	156.63	180.07	179.36
Growth		14.97%	-0.39%
EICL	537.14	586.25	602.29
Growth		9.14%	2.74%
FICL	12.16	58.66	58.75
Growth		382.40%	0.15%
PICL	195.99	186.33	152.19
Growth		-4.93%	18.32%
TIIL	456.17	548.51	565.06
Growth		20.24%	3.02%

**Source:** Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 3 describes that Prime Insurance Company Limited had the highest net premium and the growth rate was also highest in 2014. From table 4, it can be observed that all the selected insurance companies had a positive growth rate of profit after tax except Takaful Islami Insurance Limited in 2014. The highest growth rate of profit after tax was of Central Insurance Company Limited in 2013.

Table 3: Growth of net premium (In Million BDT)

Name of Insurance	Amount of Net Premium			
Company	2012	2013	2014	
CICL	171.57	199.41	203.89	
Growth		16.23%	2.25%	
EICL	184.41	193.59	205.60	
Growth		4.98%	6.20%	
FICL	229.23	254.88	251.40	
Growth		11.19%	-1.37%	
PICL	266.34	249.77	300.98	
Growth		-6.22%	20.50%	
TIIL	198.63	183.44	203.25	
Growth		-7.65%	11.34%	

Source: Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 4: Growth of profit after tax (In Million BDT)

Name of Insurance	Amount o	Amount of profit after tax			
Company	2012	2013	2014		
CICL	63.14	82.05	91.89		
Growth		29.95%	11.99%		
EICL	95.85	105.90	108.59		
Growth		10.49%	2.54%		
FICL	51.20	55.99	56.08		
Growth		9.36%	0.16%		
PICL	72.47	86.51	98.35		
Growth		19.37%	13.68%		
TIIL	58.41	60.78	43.09		
Growth		4.06%	-29.10%		

Source: Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 5 shows that Federal Insurance Company Limited had the highest total insurance policies and except eastern Insurance Company Limited all the companies experienced positive growth of total policy during the period. From table 6, it is observed that all the companies had a positive EPS but they could not increase the growth rate of EPS overtime. Only Central Insurance Company Limited and Eastern Insurance Company Limited had a positive growth rate of EPS during that period.

Table 5: Growth of total policy (In Number)

Name of Insurance	Number	Number of Total Policy			
Company	2012	2013	2014		
CICL	18518	21539	25568		
Growth		16.31%	18.71%		
EICL	35777	34574	38218		
Growth		-3.36%	10.54%		
FICL	36860	38509	42935		
Growth		4.47%	11.49%		
PICL	2153	2253	2336		
Growth		4.64%	3.68%		
TIIL	32502	32860	36205		
Growth		1.10%	10.18%		

Source: Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 6: Growth of EPS

Name of Insurance	Amount of EPS		
Company	2012	2013	2014
CICL	1.79	1.98	2.21
Growth		10.61%	11.62%
EICL	2.22	2.46	2.52
Growth		10.81%	2.44%
FICL	1.23	1.21	1.09
Growth		-1.63%	-9.92%
PICL	2.14	2.56	2.53
Growth		19.63%	-1.17%
TIIL	2.52	2.28	1.40
Growth		<i>-</i> 9.52%	-38.60%

Source: Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

Table 7 shows that all the companies experienced negative growth rate of ROA in at least one year except Central Insurance Company Limited. But Takaful Islami Insurance Ltd. had the highest ROA of 9.16% in 2012.

Table 7. Growth of ROA

	-		
Name of Insurance	Percentage of ROA		
Company	2012	2013	2014
CICL	4.84	5.59	5.85
Growth		15.50%	4.65%
EICL	5.25	5.55	5.48
Growth		5.71%	-1.26%
FICL	5.02	5.02	4.72
Growth		0.00%	-5.68%
PICL	7.87	8.29	8.25
Growth		5.34%	-0.48%
TIIL	9.16	8.44	5.76
Growth		-7.86%	-31.75%

Source: Annual Reports (2012-2014) of Central Insurance Company Ltd., Eastern Insurance Company Ltd., Federal Insurance Company Ltd., Prime Insurance Company Ltd., Takaful Islami Insurance Company Ltd.

The trend equations and  $r^2$  of all the above mentioned variables of non-life insurance companies are reflected in table 8. Trend equations of total asset were positive of all the companies and goodness of fit and the  $r^2$  was above 0.90 of all the companies. The trend equations of investment were positive and  $r^2$  was above 0.50 of most of the insurance companies. Net premium of the companies had a positive trend line but the  $r^2$  of net premium of Prime Insurance Company Limited and Takaful Islami Insurance Limited was below 0.50. The trend equations of profit after tax were positive of all the companies except



Takaful Islami Insurance Limited and the r<sup>2</sup> was above 0.50 of all the companies. Total insurance policy had a positive trend line and goodness of fit. Federal Insurance Company Limited and Takaful Islami Insurance Limited had a negative trend line of EPS but the r<sup>2</sup> of EPS of all the companies was above 0.50. Only Takaful Islami Insurance Limited had a negative trend line of ROA but r<sup>2</sup> was above 0.50 of all the companies during that period. As most of the trend lines were positive and r<sup>2</sup> was above 0.50 of all the selected variables, it can be concluded that non-life insurance companies have great potential to expand their business and to earn higher profit in Bangladesh.

Table 8. Trend analysis of non-life insurance companies

		CICL	EICL	FICL	PICL	TIIL
Total Asset	$\tilde{Y} = a + bx$	1180.36 + 133.8x	1750.32 + 76.825x	939.980 + 84.105x	780.393 + 135.8 x	591.497 + 55.23x
	r²	0.985	0.997	0.995	0.997	0.925
	$\bar{Y} = a + bx$	149.29 + 11.365x	510.077 + 32.575x	- 3.400 + 23.295x	221.970 - 21.9x	414.357 + 54.445x
Investment	r <sup>2</sup>	0.727	0.921	0.751	0.906	0.861
N. a D.	$\hat{Y} = a + bx$	159.303 + 16.16 x	173.343 + 10.595x	223.000 + 11.085x	237.723 + 17.32x	190.487 + 2.31x
Net Premium	r <sup>2</sup>	0.852	0.994	0.635	0.439	0.050
Profit after tax	$\hat{Y} = a + bx$	50.263 + 14.38x	90.707 + 6.37x	49.543 + 2.44x	59.897 + 12.94x	69.413 - 7.66x
	r²	0.968	0.900	0.764	0.998	0.636
Total Policy Ŷ	$\hat{Y} = a + bx$	14825 + 3525x	33748.667 +1220.5x	33359.667 + 3037.5x	2064.333 + 91.5x	30152.667 + 1851.5x
	r <sup>2</sup>	0.993	0.432	0.935	0.997	0.822
EPS	$\hat{Y} = a + bx$	1.573 + 0.21x	2.100 + 0.15x	1.317 - 0.07x	2.020 + 0.195x	3.187 - 0.56x
	r <sup>2</sup>	0.997	0.893	0.855	0.693	0.902
DO.	$\hat{Y} = a + bx$	4.417 + 0.505x	5.197 + 0.115x	5.220 + 0.15x	7.757 + 0.19x	11.187 - 1.7x
ROA	r2	0.927	0.537	0.750	0.672	0.900

Source: Authors

### CONCLUSION

The evolution of insurance industry is a blessing for a developing country like Bangladesh. By examining the growth rate, trend lines and r<sup>2</sup> of total asset, investment, net premium, profit after tax, total policy, EPS and ROA of the selected private non-life insurance companies researchers came to the end with a positive result. They observed that the growth rate of most of the variables during that period was positive without some exceptions. The trend lines and  $r^2$  were also an indication of positive output. As the  $r^2$  of most of the variables was above 0.50, it is clear that non-life insurance industry can have a bright future in Bangladesh.

## **ACKNOWLEDGEMENT**

The authors wish to thank Md. Jahangir Alam Siddikee, Assistant Professor, Department of Finance and Banking, Hajee Mohammad Danesh Science and Technology University, Bangladesh for his guidance to accomplish the research work.

### REFERENCES

Almajali A. Y., Alamro S. A. & Al-Soub Y. Z. (2012). "Factors affecting the financial performance of Jordanian Insurance Companies listed at Amman Stock Exchange," Journal of Management Science, vol. 4, no. 2, pp. 266-289.

Cekerezi A. (2015). "Determinants of financial performance of the insurance companies: A case of Albania," International Journal of Economics, Commerce and Management, vol. III, no 4, pp. 1-10.

Ismail M. (2013). "Determinants of financial performance: the case of general takaful and insurance companies in Malaysia," International Review of Business Research Papers, vol. 9, no 6, pp. 111-130.

Maharana T. & Panda J. (2016). "Service quality management of insurance company in India," Imperial Journal of interdisciplinary Research, vol. 2, no. 2, pp. 223-230.

Mwangi M. & Murigu Z. W. (2015). "The determinants of financial performance in general insurance companies in Kenya," European Scientific Journal, vol. 11, no. 1, pp. 288-297.

Rani T. & Shankar H. (2014). "Financial performance of general insurance business in India- A study of select indicators," Indian Journal of Applied Research, vol. 4, no. 10, pp. 281-285.

Sambasivan Y. & Ayele A. G. (2013). "A study on the performance of insurance companies in Ethiopia. International Journal of Marketing," Financial Services & Management Research, vol. 2, no. 7, pp. 138-150.

Soekarno S. & Azhari D. A. (2009). "Analysis of financial ratio to distinguish Indonesia joint venture general insurance company performance using discriminate analysis," The Asia Journal of Technology Management, vol. 2, no. 2, pp. 100-111.

Online Archive: https://abc.us.org/ojs/index.php/abr/issue/archive







