Determinants of Profitability of Life Insurers in India- Panel Evidence

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ABSTRACT

The purpose of this paper to identify the factors that affect the profitability of life insurance companies in India using a panel data. The study includes twelve life insurance companies for a period covering 2005-2015. In this study, econometric analysis has been adopted to determine the impact of micro-economic factors on the profitability of life insurers in India. The findings of the analysis reveal that out of nine independent variables only three significantly explain the profitability of life insurers as measured by ROA. The results reveal that liquidity, loss ratio, investment performance, operating margin, premium growth, and tangibility are significant in determining the profitability, as measured by ROA, of Indian life insurers. On the other hand, leverage, commission ratio, and size are insignificant in explaining the profitability as measured by ROA.

Keywords: Profitability, Insurance, micro-economic variables, return on assets, return on equity.

INTRODUCTION:

The insurance sector in India is in the thrones of systematic change during the current environment of economic liberalisation, privitisation, deregulation and reforms of financial sector in general and insurance sector in particular. There is a virtual deluge of insurance companies, finance companies, leasing institutions, private banks and mutual funds. However, during yester- years the market for insurance services was monopolized while market place was regulated and insurance companies were expected to receive assured spread and systematic demand for their products. This phase of Indian insurance sector was the result of sheltered markets and administered prices for insurance products (Joo, 2013). Now the scenario for insurance companies is becoming less and less predictable and more and more competitive. The challenges the insurance companies face are becoming increasingly dauting. The liberalisation of insurance sector has made the industry more professional and lowering the entry barriers and growing sophistication of the customers has made the insurance market digopolistic (Shenhbargraman, 2001).

The guidelines issued by the Insurance Regulatory and Development Authority (IRDA) has paved the way for opening up insurance sector to private players. The Indian Insurance sector has experienced growth and change in recent years, as witnessed by the entry of private life and non-life insurance companies and increase in size of market from $4 billion to $67 billion for both life and non- life segment since 2000-01. However, the largest life insurance company in India is still owned by the government. Presently there are fifty two insurance companies operating in India, of which twenty four are in the life insurance business including one public sector company and twenty seven are in non-life insurance business including six public sector companies. In addition, General Insurance Corporation (GIC) is the sole national reinsurer. In emerging scenario when a larger cake shall be shared by the existing and new players, it's high time for public sector companies to be niche players for particular segment of market so as to maintain their existing profitability (Jain, 2004).

REVIEW OF LITERATURE:

Analysis of the literature on insurance companies also stated that finding obtained in one country are different from the other. More serious studies on determinants of profitability of insurance companies have been conducted by the researcher using different firm specific factors. Many studies focused on general insurers used financial

characteristics as predictor of insolvency (Ambrose et al., 1988; BarNiv, 1990; BarNiv et al., 1992; BarNiv et al., 1987; Barrese, 1990; Harrington et al., 1986; Hershbarger et al., 1986). The factors that are significant for assessing insurer's insolvency include firm size, investment performance, underwriting result, liquidity, operating margin, premium growth, tangibility, leverage, and growth rate of surplus. However, the extent of research on insurance companies taking macro-economic factors as determinants of profitability is very less.

Adams et al., 2003 argued that highly geared and low liquid Bermuda insurers perform better and that their underwriting risk is directly related to a resilient financial performance. This seems that Bermuda insurers are able to manage actuarial risk and operational risk. The study further reveals that insurers' size and scope of business do not have significant influence on financial performance. The findings of Adams and Buckle about the Bermuda market confirm the results of an earlier study of Adams (1996) about the New Zealand insurance market. Specifically, Adams (1996) found that firm-specific factors such as leverage and underwriting risk are positive and significantly related to investment earnings of life insurers. However, the findings of Charumathi, 2012 about the Indian life insurance sector show contradictions with that of Adams et al., 2003 and Adams, 1996. Charumathi claims that the profitability of life insurers is positively and significantly influenced by the size (as measured by logarithm of net premiums) and liquidity. Her study argues that leverage, premium growth, and logarithm of equity capital have significant and inverse relationship with insurers' profitability. This study does not find any evidence regarding the relationship between underwriting risk and profitability of Indian life insurers.

Chen et al., 2004 identified firm specific factors that affect life insurer's insolvency in four economies viz. Singapore, Malaysia, Taiwan, and Japan. The firm specific factors that are significant for assessing life insurer's insolvency include firm size, investment performance, operating margin, change in asset mix, change in product mix, and insurance leverage. The findings reveal that firm size has a significant impact on life insurer's financial health. Change in asset mix is another factor that significantly and negatively affects life insurer's financial health in Japan and Taiwan. This is consistent with the findings by BarNiv et al., 1990, Carson et al., 1995. The negative relationship is partly attributed to the role of financial intermediaries played by life insurers. It is further reiterated that assets in life insurance companies are invested in various products like bonds, stocks, and loans. Hence, any significant change in the asset mix will change the risk exposure of life insurers, and thereby will affect their financial stability. The results indicate that investment performance is not significantly related to the financial stability of Singapore, Malaysia, and Taiwan life insurers, however the investment performance is significant for Japan. The changes that might have improved the investment performance of Japanese insurers include promotion of deregulation and liberalization, maintenance of sound management, and provision of fair business operations. The impact of operating margin on life insurer's stability is found to be insignificant. This finding is consistent with the results of BarNiv et al., 1990 who stated that operating margin is the single best variable associated with the life insurer's insolvency. The study also reveals that change in product mix has negative effects on the financial stability of life insurers in Singapore, Malaysia, and Taiwan. However, it is only statistically significant in case of Japan to a certain extent. The results are consistent with the findings of BarNiv et al., 1990 that change in product mix affects smaller life insurers adversely. Further, it is also revealed that insurance leverage is only negatively significant for Japan.

Al-Shami, 2008 conducted a study on determinants of profitability on a panel data of twenty five insurance companies over the period of 2006-2007 listed on UAE stock market. The determinants of profitability used in the study are age, leverage, volume of capital, loss ratio, and firm size. The findings of this study conclude that there is no relationship between profitability and age of company and there is significantly positive association between firm size and profitability. The results also show that the volume of capital is positively and significantly related to profitability. The study suggests an inverse and significant relationship between leverage ratio and loss ratio as independent variables and profitability.

Ahmed et.al, 2011 also investigated the impact of firm level characteristics on the performance of listed insurance sector of Pakistan over a period of seven years from 2001 to 2007. The results of the OLS regression analysis revealed that leverage is negatively and significantly related to the performance of life insurance companies. Growth of written premium and age of a firm has negative and insignificant relation with the performance of life insurance companies. The study also shows that tangibility and liquidity are statistically insignificant and positively related with the performance of life insurance companies. Therefore tangibility and liquidity are not considered powerful explanatory variable to explain the performance of life insurance companies in Pakistan. However, firm size is positively and significantly related to the performance of insurance companies. This indicates that the performance of large size life insurance companies is better than the small size companies.

Almajali et al., 2012 aimed at investigating the factors that mostly affect financial performance of all Jordanian

insurance companies listed at Amman stock exchange during the period 2002-2007. T-test and multiple-regression analysis show that the variables viz. leverage, liquidity, size, and management competence index have a positive statistical effect, while as company age has no significant impact on the financial performance of Jordanian insurance companies. The study also recommended that an increase in 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.

Bhatia et al., 2013 conducted a study to evaluate the impact of macroeconomic variables on the growth of insurance sector in India. The study reveals that population, GDP, per capita GDP, inflation, and unemployment are the main factors affecting insurance penetration, insurance density and growth in total insurance premium in India. The results of the study found that population growth, GDP growth, and per capita GDP growth exhibits positive relationship with insurance growth indicators while inflation and unemployment rate exhibit a negative relationship with insurance growth indicators.

Lee, 2014 investigates the relationship between firm specific factors and macroeconomic factors on the profitability of Taiwanese property-liability insurance industry. The study employed two indicators of profitability viz., operating ratio and return on assets. The results of the study lime light the fact that underwriting risk, reinsurance usage, input cost, return on investment, and financial holding group have significant influence on profitability in terms of operating ratio and return on assets models. The findings argue that economic growth rate has significant influence on profitability in operating ratio model but insignificant influence on profitability in return on assets model.

Cekrezi, 2015 focussed on providing empirical evidence on the relationship between the performance of insurance companies in Albania and five independent variables viz. leverage, tangibility, flexibility, size, and risk. The findings of the study depicts that total debt ratio and risk have a negative and significant relation with return on assets, tangibility has a positive and significant relation with ROA, and flexibility and size are not significant determinants of the level of performance of insurance companies.

Wasike et al., 2016 conducted a study on ten insurance companies to determine the factors affecting the profitability of insurers in Kenya. The results of the ordinary least square econometric regression analysis reveals that commission expenses significantly affect the profit margin of the insurance companies, while as loss ratio is insignificant in explaining the profitability of insurance companies.

Mazviona et al., 2017 examined the factors affecting the performance of insurance companies in Zimbabwe for twenty short term insurance companies over the period 2010 to 2014. The finding s of the study suggest that expense ratio, claims ratio and the size of a company has negative and significant impact on insurance companies performance. On the other hand, leverage and liquidity positively affects the performance of insurance companies.

Ismail et al., 2018 conducted a study on six insurance companies over a period 1996 to 2015 to determine the impact of macroeconomic variables on the performance of insurance companies. The findings of the study reveal that interest rate has negative and significant impact on ROA, while as GDP and consumer price index are found to have an insignificant impact on ROA.

OBJECTIVES:

The general objective of the study is to identify the factors determining the profitability of Indian insurance companies. Based on the general objective, the researcher elucidates the following specific objectives:

1. To identify the main determinants of insurance companies profitability.
2. To measure the extent to which these determinants exert impact on insurance companies' profitability.
3. To determine the relationship between these factors and profitability in insurance companies.

METHODOLOGY:

The nature of data collected and used for this study is secondary in nature. The relevant and required data has been collected from the annual reports of individual insurance companies and IRDA data base.

Identification of Population and Sample Size:

The target population of the study are all life insurance companies registered by IRDA. Currently there are 23 (1 Public & 22 Private) life insurance companies operating in India. There should not have been any need to sample from 23 life insurance companies, as they are few in number. But, because of the non-availability of data the number of sample is reduced to twelve. The data collected and analysed is a balanced panel of 12 Private life insurance companies operating in India. As such, life insurance companies having data for less than eleven years were excluded in this study. Therefore the period of study is selected from 2005-2015.

Dependent and Independent Variables Used:

The researcher has identified following dependent and independent variables to assess their impact on the profitability of life insurance companies.

Table 1: List of Dependent and Independent Variables

	Variables	**Measures**	**Notation**	**Expected relationship**
Dependent variables	Profitability	Return on Assets = Profit before tax / Total Assets	ROA	
Independent variables	Bank specific factors	Liquidity = Current Assets / Current Liabilities	LIQ	-
		Tangibility = Fixed Assets / Total Assets	TAN	-
		Investment performance = Net Investment Income / Total Income	IP	+
		Premium growth =	PG	+
		Loss ratio = Claim Incurred / Net Premium	LOSS	-
		Size = Log of Total Assets	SIZE	+
		Leverage = Debt / Equity	LEV	+
		Operating margin = Net Operating Income / Premium Earned	OM	+
		Commission ratio = Commission Paid / Net Premium	COM	-

The dependent variables, as the proxy for profitability include return on assets while the firm specific determinants of profitability include liquidity, tangibility, leverage, size, investment performance, premium growth, operating margin, loss Ratio, and commission ratio.

Analytical Tools:

Data analysis section is based on descriptive analysis and regression.

Descriptive analysis:

The descriptive statistics explores and presents an overview of all variables used in the analysis. In this section the mean, minimum, maximum, and standard deviation are produced for the variables.

Regression Analysis:

The regression analysis is used to examine the relationship between the profitability of Indian life insurance companies and explanatory variables. This study samples cross section data of twelve life insurance companies across time. Therefore panel data is used to examine the determinants of insurer's profitability for life insurance companies in the Indian Insurance industry. Panel data, also known as longitudinal or cross sectional time series data is a data set in which the behaviour of entities are observed across time. Panel data methodology facilitates testing of economic relationships over time and across companies which cannot be merely tested either by the time series or cross sectional methods alone (Baltagi, et.al, 2004). A panel data set which includes time series having the same length for all cross section units is referred to as balanced panel. In this study twelve year data exists for all cross sections, it is therefore a balanced panel set. With panel/cross sectional time series data, the most commonly estimated models are fixed effects and random effects models. If the omitted variables are correlated with the explanatory variables, then fixed effects model provides a means for controlling omitted variable bias. On the other hand, if the omitted variables are uncorrelated with the explanatory variables, then a random effects model is probably employed. It will produce unbiased estimates of the coefficients, use all the data available, and produce the smallest standard errors. A Hausman test is therefore employed to select either fixed or random effects for the analysis of panel regression.

DESCRIPTIVE STATISTICS:

The descriptive statistics of the surrogates of profitability measurement such as ROA together with the explanatory variables is presented in table 2. The total observations for each variable are 132, as the panel data of 12 life insurers for 11 years is utilized. The analysis exhibits the mean, standard deviation, minimum and maximum value of the said variables for sample organisations for the reference period of 2005 to 2015.

Table 2: Descriptive Statistics of ROA and Micro-Economic Variables

Variables	Mean	Standard Deviation	Coefficient of Variation	Minimum	Maximum
Dependent Variables					
ROA	-0.0201	0.0504	-2.50746	-0.183	0.043
ROE	-0.0161	0.1979	-12.2919	-0.518	0.481
Independent Variables					
Lev	6.0294	4.8957	0.811971	0.069	18.95
Liq	0.8523	0.2360	0.276898	0.312	1.57
LR	0.2863	0.2748	0.959832	0.01	1.164
CR	0.0876	0.0452	0.515982	0.0256	0.2318
IP	0.1383	0.1832	1.324657	-0.406	0.55
OM	0.9091	0.3204	0.352436	-0.168	1.375
PG	898	1226	1.365256	-622	6099
Sz	7.7822	0.6170	0.079283	6.224	8.859
Tan	0.0134	0.0157	1.171642	0.0003	0.0754

Source: Computed by using STATA 12.0

Multicollinearity Test for ROA and Micro-Economic Variables:
The main assumption of all multiple regression models is that there is no multi-collinearity problem, because as the degree of multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients get wildly inflated. Therefore, regression model of ROA is tested for the presence of multicollinearity. Multicollinearity occurs when the VIF value is greater than 10 (Gujarati et al., 2008). The results of the test as exhibited in table 3 reveals that all the variables have VIF value of less than 10, thus it can be concluded that the ROA model do not suffer from multicollinearity problem.

Table 3: Collinearity Diagnostics for ROA Model

Variables	VIF	SQRT VIF	Tolerance	R-Squared
ROA	2.42	1.56	0.4128	0.5872
Lev	2.57	1.60	0.3895	0.6105
Liq	1.18	1.09	0.8475	0.1525
LR	2.66	1.63	0.3761	0.6239
CR	1.82	1.35	0.5499	0.4501
IP	4.36	2.09	0.2291	0.7709
OM	6.84	2.61	0.1463	0.8537
PG	1.37	1.17	0.7281	0.2719
Sz	4.27	2.07	0.2340	0.7660
Tan	2.58	1.61	0.3879	0.6121
Mean VIF	3.01			

Source: Computed by using STATA 12.0

Normality of Residuals:
Normality of residuals is required for valid hypothesis testing, that is, normality assumption assures that the p-values for the t-test and f-test are valid. It is therefore important that the ROA Model is checked for the normality of residuals. The Histogram of the residuals is used to check whether the error terms are normally distributed or not. A symmetric bell-shaped histogram which is evenly distributed around zero indicates that the normality assumption is fulfilled. If the histogram indicates that residuals are not normally distributed, it suggests that the model's underlying assumption has been violated. In this context, histogram of residuals as presented in figure I is obtained for ROA model.

Figure I: Histogram of Residuals for ROA Model
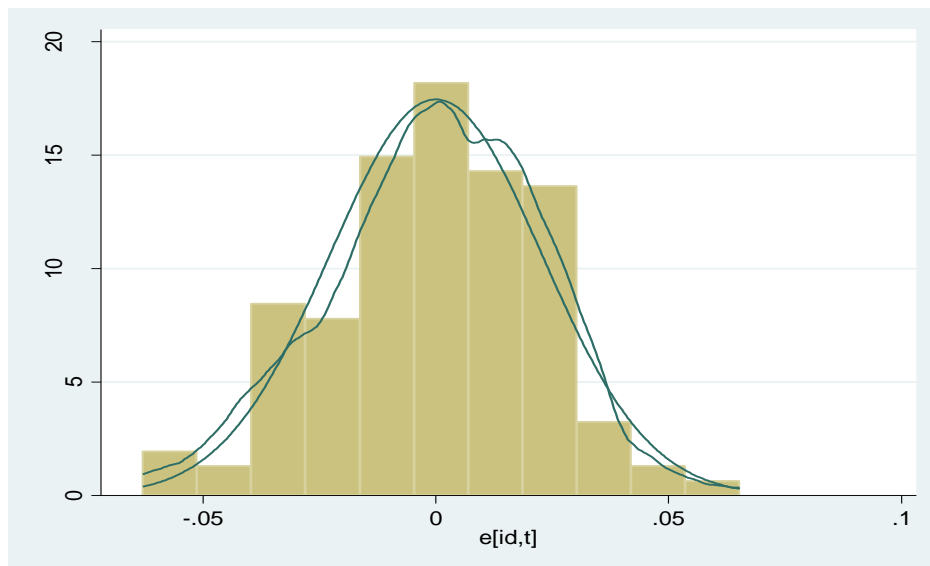
Source: Computed by using STATA 12.0

The histogram for ROA model as shown in figure I suggests that the residuals appear to be normally distributed.

Regression analysis:
Panel data models are used to analyse group (individual-specific) effects, time effects or both in order to deal with heterogeneity or individual effect that may or may not be observed. These effects are either fixed or random effect. A fixed effect model examines if intercepts vary across group or time period, whereas random effect model explores differences in error variance components across individuals or time periods.

The hypothesis to be tested in each case for selection of model between fixed effects and random effects with pooled OLS are as under:

Fixed Effect: Ho – The Null Hypothesis is that all Dummy Parameters except for one Dummy Parameter are zero i.e. $\mu_1 = \mu_{n-1}$ (No Fixed Effect).

Random Effect: Ho – Individual (or time) specific Variance Components are zero, $H_0:\sigma_\mu^2=0$ (No Random Effect).

Hausman Test:
When both fixed and random effects are significant, to ascertain which model is more significant and which model is better than the other, the Hausman specification test is to be used to choose the suitable one. In this context, decision is taken by testing the following hypothesis:

Ho: The Individual Effects are not correlated with other Regressors (Independent Variables).

However, test requires that both the fixed and random effect models are fitted and then run the Hausman command followed by random and fixed effects model in order. Accordingly, the fixed effect model and the random effect model for profitability surrogates of ROA as presented in table 4 is obtained. It is found that fixed effect model and random effect model are significant at 5% level for ROA. Therefore, it is hard to choose which model is appropriate. To overcome this problem, Hausman Specification test is employed to decide the appropriate model.

Table 4: Fixed and Random Effects Model

Variables	Model I ROA	
	Fixed Effect	**Random Effect**
Lev	-.001 (0.251)	-.0003 (0.713)
Liq	-.025 (0.027)**	-.0212 (0.066)
LR	.061 (0.000)*	.0496 (0.001)*
CR	-.001 (0.151)	-.0106 (0.154)
IP	-.0579 (0.024)**	-.0713 (0.007)*
OM	.0619 (0.001)*	.0758 (0.000)*

Variables	Model I ROA	
	Fixed Effect	**Random Effect**
PG	.0000163 (0.000)*	7.44e-06 (0.040)**
Sz	-.0142 (0.311)	-.0039 (0.742)
Tan	-.951 (0.001)*	-.843 (0.002)*
Cons	.05999 (0.576)	.0286 (0.754)
R^2	40.97	52.80

**Significant at 5%, *Significant at 1%
Source: Computed by using STATA 12.0

The results of the Hausman test are presented in table 5 and the results indicate that chi-square values are significant at 5% level for profitability surrogate of ROA, thus the null hypothesis is rejected. Hence, it is clear that random effect model is not appropriate measure, and as such fixed effect model is suitable for the analysis of ROA model.

Table 5: Hausman Test

Tests	Model 1 ROA
Hausman Test Chi–Square Statistic Pbility	16.960.0306*

*Significant at 5%
Source: Computed by using STATA 12.0

FINDINGS AND SUGGESTIONS:

1. Descriptive analysis of the micro-economic variables reveals that among all the variables, premium growth exhibits highest coefficient of variation of 1.365. However, size of firm records lowest coefficient of variation of 0.079, which indicates that among all the micro-economic variables, this variable remained relatively stable over the study period.

2. The results of the descriptive analysis for ROA reveal the disparity of rates of return earned by Indian insurers. The main reason for the companies incurring losses may be attributed to lack of cost efficiency or high operating cost, as it is evident that the operating margin for the insurance companies incurring losses is very less (-0.168).

3. Analysis of the descriptive of the micro-economic variables also reveals that the sample insurers do not perform homogenously in terms of investment performance. This indicates that the loss incurring insurers are characterized by low investment performance, as it is evident that the minimum value for the insurers for investment performance is low (-0.406) and coefficient of variation is more than one. The main reason behind dismal investment performance of insurance companies may be attributed to the obligatory pattern of investment suggested by the IRDA.

4. The results of the fixed effect model suggest that liquidity, loss ratio, investment performance, operating margin, premium growth, and tangibility are significant in explaining the profitability of life insurers in India. On the other hand, leverage, commission ratio, and size are insignificant in explaining the profitability of life insurance companies in India.

5. The insurance companies need to optimize the use of assets so as to increase the return on assets and in order to insulate positive spread insurance companies need to curtail operating cost.

6. The manner in which the investment is required to be made is – not less than 50% in Government and Approved securities (out of which 25% only in Government securities) and the balance in Approved investments as specified in Section 27A. In this context, it is suggested that investment pattern as dictated by the IRDA should be relaxed and only then the improvement in the investment performance could be achieved. However, such a change in regulatory pattern of investment has policy implication for whole insurance industry as well as could have greater influence on the profitability of insurance companies. Moreover, the insurance companies must be allowed to design their own investment strategy for 50% of available funds, but IRDA has a role to play for evaluating their investment performance on regular basis, so that such exposure of insurance companies is kept under strict vigil.

REFERENCES:

Adams, M. (1996). Investment Earnings and the characteristics of Life Insurance Firms: New Zealand Evidence. *Australian Journal of Management, 21*(1), 41-55.

Adams, M., & Buckle, M. (2003). The Determinants of Corporate Financial Performance in the bermuda Insurance Market. *Applied Financial Economics, 13*, 133-143.

Ahmad, N., Ahmad, Z., & Usman, A. (2011). Determinats of Performance:A Case of Life Insurance Sector of Pakistan. *International Research Journal of Finance and Economics*(61), 123-128.

Almajali, A. Y., Alamro, S. A., & Al Soub, Y. Z. (2012). Factors Affecting the Financial Performance of Jordian Insurance Companies Listed at Amman Stock Exchange. *Journal of Management Research, 4*(2), 266-289.

Al-Shami, H. A. (2008). Determinants of Insurance Companies Profitability in UAE. Unpublished Ms Finance thesis., *E-Prints Repository Software*.

Ambrose, J., & Seward, J. (1988). Best's Ratings Financial Ratios and Prior Probabilities in Insolvency Prediction. *Journal of Risk and Insurance, 55*, 229-244.

Baltagi, B. (2005). *Econometric Analysis of Panel Data* (3rd ed.). John Wiley and Sons,Ltd.

BarNiv, R., & Hershbarger, R. (1990). Classifying Financial Distress in the Life Insurance Industry. *Journal of Risk and Insurance, 57*, 110-136.

BarNiv, R., & McDonald, J. (1992). Identifying Financial Distress in the Insurance Industry: A Synthesis of Methodology and Empirical Issues. *Journal of Risk and Insurance, 59*(4), 543-573.

BarNiv, R., & Smith, M. (1987). Underwriting, Investment, and Solvency. *Journal of Insurance Regulation, 5*, 409-428.

Barresse, J. (1990). Assessing the Financial Condition of Insurers. *CPCU Journal*, 37-46.

Bhatia, B., & Jain, A. (2013). Relationship of Macroeconomic Variables and Growth of Insurance in India: A Diagnostic Study. *International Journal of Advances in Management and Economics, 2*(6), 50-54.

Cekrezi, A. (2015). Determinants of Financial Performance of the Insurance Companies: A case of Albania. *International Journal of Economics Commerce and Management, III*(4).

Charumathi, B. (2012). On the Determinants of Indian Life Insurers-An Empirical Study. *World Congress on Engineering, 1*. London,U.K.

Chen, R., & Wong, K. A. (2004). The determinants of financial health of Asian Insurance Companies. *The Journal of Risk and Insurance, 71*(3), 469-499.

Gujarati, D., & Sangeetha, S. (2008). *Basic Econometrics* (4th ed.). Tata McGraw Hill Education.

Harrington, S., & Nelson, J. (1986). A Regression Based Methodology for Solvency Surveillance in the Property Liability Insurance Industry. *Journal of Risk and Insurance, 53*, 583-605.

Hershbarger, R., & Miller, R. (1986). The NAIC Information System and the Use of Economic Indicators in Predicting Insolvencies. *Journal of Insurance Issues and Practices, 9*, 21-43.

Ismail, N., Ishak, I., Manaf, N., Husin, M., & Hasim, A. (2018). Macro-economic Factors Affecting Performance of Insurance Companies in Malaysia. *Academy of Accounting and Financial Studiers Journal, 22*.

Joo, B. (2013). Analysis of Financial Stability of Indian Non-Life Insurance Companies. *Asian Journal of Finance and Accounting, 5*(1).

Lee, C. (2014). The Effects of Firm Specific Factors and Macroeconomics on Profitability of Property-Liability Insurance Industry in Taiwan. *Asian Economic and Financial Review, 4*(5), 681-691.

Mazviona, B., Dube, M., & Sakahuhwa, T. (2017). An Analysis of FactorsAffecting the Performance of Insurance Companies in Zimbabwe. *Journal of Finance and Investment Analysis, 6*(1), 1-2.

Shenhbargraman.K. (2001). Insurers are patners in Economic Growth. *The Insurance Times, 21*(4), 77-86.

Wasike, & Ngoya, A. (2016). Determinants of Profitability in the Insurance Sector in Kenya: A Case of Composite Insurance Companies. *Journal of Humanities and Social Science, 21*(10), 10-24.