



ORIGINAL RESEARCH ARTICLE

INFLUENCE OF LIQUIDITY ON FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

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ABSTRACT

Liquidity is the capacity of a company to satisfy its current financial obligations after they fall due. A firm may incur extra costs if it fails to honor its short term financial obligations. The aim of the study was to determine the influence of liquidity on the financial performance of insurance companies in Kenya. The research applied a correlational research design. A correlational study design is administrated to debate the connection between variables. The target population for this study was the fifty-three insurance companies in Kenya that were operational in 2018. The investigation found that liquidity had an enormous positive effect on financial performance (Return on assets and return on equity). The study concludes that the greatest threat to liquidity may occur in an insurance firm during a catastrophe when a large number of claims are received directly or there could even be prospects of a significantly large claim which insurance companies should have optimal liquidity for such situations. The review recommends that Insurance firms should monitor liquidity in their firms and adopt corrective actions in instances of high liquidity risk.

Key words: Liquidity, Financial performance

1.0 INTRODUCTION

Liquidity is the capacity of a company to satisfy its current financial obligations when and as they fall due (Demirgüneş, 2016). Holding assets in liquid form enables the firm to be ready to comfortably meet its short-term financial obligations. However, liquid assets have an opportunity cost since they provide little returns (Akenga, 2015). On the other hand, not holding enough liquid assets may put the firm in a very tight position that it would be challenged to settle its short-term financial obligations effectively. This could be costly to the firm because of the penalties incurred or the need to turn illiquid assets into cash within a short time. The firm, therefore, has to balance between the benefits and cost of holding liquid assets. Maintaining optimum liquidity will have a positive influence on the firm's financial performance. Retaining an excessive amount of or too little liquid assets is also costly to the firm and hence hurt its financial performance (Nyamao, Ojera, Lumumba, Odondo & Otieno, 2012).

Financial performance in the insurance sector in Kenya has been poor with the total growth rate either stagnating or dropping every year since the year 2012 (IRA, 2018). According to IRA (2018), penetration of insurance remains low at 2.8 percent in 2017 measured using gross premiums as a percentage of Gross Domestic Product. Moreover, IRA (2018) indicates that the insurance sector reported a decline in return on equity (ROE) and return on assets (ROA) to 8.29% and 1.36% from



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14.36% and 2.69% respectively in the year 2017. Additionally, 31.8% of the insurance companies posted losses while 68.2% posted profits. This indicates a sector where the sustainability of insurance companies is not guaranteed, despite the various consolidations in the sector aimed at enhancing the success and sustainability of insurance companies.

The performance of insurance companies continues to be poor, yet the industry has undergone various improvements and consolidations over the years. In Kenya, various insurance companies have been placed under administration in the last twenty years. Invesco Guarantee Firm was positioned under receivership in 2008. In 2009 Typical Assurance and 2011 Blue guard insurance firm was placed under statutory administration. According to Mudaki and Wanjere (2012), the others which collapsed previously consist of Kenya National Guarantee Business, United Insurance Company, Lake Celebrity Assurance Company, Access Insurer as well as Stallion Insurance. As of 2013, Concord Insurance Company came to be the 9th insurance company to collapse, which according to IRA (2013), it had failed to meet its obligation to the shareholders.

Various studies have investigated the effect of various internal factors on the financial performance of companies. Pervan and Višić (2012) assessed the effect of a firms' size on the financial performance of non-financial firms in Croatia and established that firms' size plays a major positive role in influencing the firms' performance. This study, however, considered the firm size and overlooked other critical internal factors like liquidity, capital structure and operational efficiency. Moreover, Croatia's non-financial firms have a distinct regulatory and economic environment when put next to Kenya's non-financial firms. Siro (2013) studied how the financial performance of firms listed at the NSE, are influenced by capital structure. The results revealed an inverse association between the financial performance and capital structure of listed firms within the NSE. This study ignored other key internal factors like operational efficiency, liquidity and firm size. The survey captured all firms listed within the NSE from different sectors with differences in operative and regulatory requirements. However, it did not apply a panel data model considered appropriate for the information collected but applied OLS regression.

Kingóo (2015) study on commercial banks listed in the NSE, assessed the influence of internal factors on financial performance. This study considered the size of the bank, capital adequacy, operational cost efficiency and liquidity and established that all of them had a significant influence on the financial performance of the commercial banks. The focus of this study was on commercial banks whilst the current study was on insurance companies. Though the study used panel data, it did not apply a panel data model but utilized ordinary least squares (OLS) regression which is not robust for panel data. Njigo et al. (2018) investigated the impact of internal factors on the profitability of commercial banks listed on the NSE in another study. The price of deposit, asset quality, Herfindahl Hirschmann Index (HHI), and debt ratio were all taken under consideration during this study. Liquidity, business size, and operational efficiency weren't included within the study, which are important internal characteristics that will affect performance.

In the insurance sector, Ejigu (2014) investigated the inner factors influencing the financial performance of Ethiopian insurance companies. The findings indicated that the management competence index, liquidity ratio, company size, company rate of growth and leverage ratio significantly affected financial performance. Ethiopia has discrete differences within the social, economic, financial and regulatory environment to Kenya. Another study by Mulchandani, Sitlani and Mulchandani (2018) investigated the influence of internal factors on the profitability of the Life-Insurance sector in India. The interior factors considered during this study included age, capital, foreign holdings, rate of growth and reinsurance. This investigation ignored key internal



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factors like liquidity, size and operational efficiency. The trio focused on Life-Insurance companies only using the OLS multivariate analysis rather than the foremost appropriate panel regression model. Likewise, India has contrasting macroeconomic factors from Kenya. In summation, these findings revealed contextual, methodological and conceptual gaps that the present study sought to fill. Therefore, the study pursued the prevailing gaps and investigated the influence of liquidity on the financial performance of insurance companies in Kenya.

2.0 METHODOLOGY

The research embraced a longitudinal design since the study relied on panel data. A longitudinal study was carried out to assess the study problem where data was collected from various entities for various periods (Saunders, Lewis & Thornill, 2009; Bryman & Bell, 2007; Cooper & Schindler, 2006). The target population for this study was the fifty-three insurance companies in Kenya (Source IRA) that were operational in 2018. This study collected panel data for 15 year (2004 – 2018) period. Liquidity (measured through current ratio) was the independent variable, while the dependent variable was a financial performance measured using ROA and ROE. The collected data was from the published financial statements of the insurance companies.

The study conducted diagnostic tests to make sure no autocorrelation, homoscedasticity and that the errors were normally distributed. In addition, a Hausman test established that the fixed effects model was appropriate for the study. The fixed effects panel data regression model was accustomed to establish the influence of liquidity on performance. The model used is;

$$Y_{it} = \beta_0 + \beta X_{it} + e_{it}$$

Where:

Y = Financial Performance (ROE, ROA)

{ β ; i=1,2,3,4,5} = The coefficients for the various independent variables

X_{it} = Liquidity (predictor variable)

i = Insurance companies (1 – 53)

t = Time period (2004 – 2018)

e is the error term which is assumed to be normally distributed with mean zero and constant variance.

3.0 RESULTS AND DISCUSSION

The study collected unbalanced panel data from 53 insurance companies in Kenya. The data collected related to profitability (ROA and ROE) and the current ratio (CR). Regarding current ratio, the study established that the mean for the insurance companies was 7.905 with a standard deviation of 9.258. The insurance company with the lowest current ratio over the study period had 0.453 while the one with the highest had 48.192. The average ROA was 3.063 with a standard deviation of 4.956. The insurance company with the lowest ROA had -23.101 while the highest had 27.778. On ROE the mean was 7.497 with a standard deviation of 13.354. The insurance company with the lowest ROE had -79.243 while the highest had 51.259. Figure 1 provides the liquidity (Current Ratio) of the firms over time and the average liquidity of the different insurance companies.

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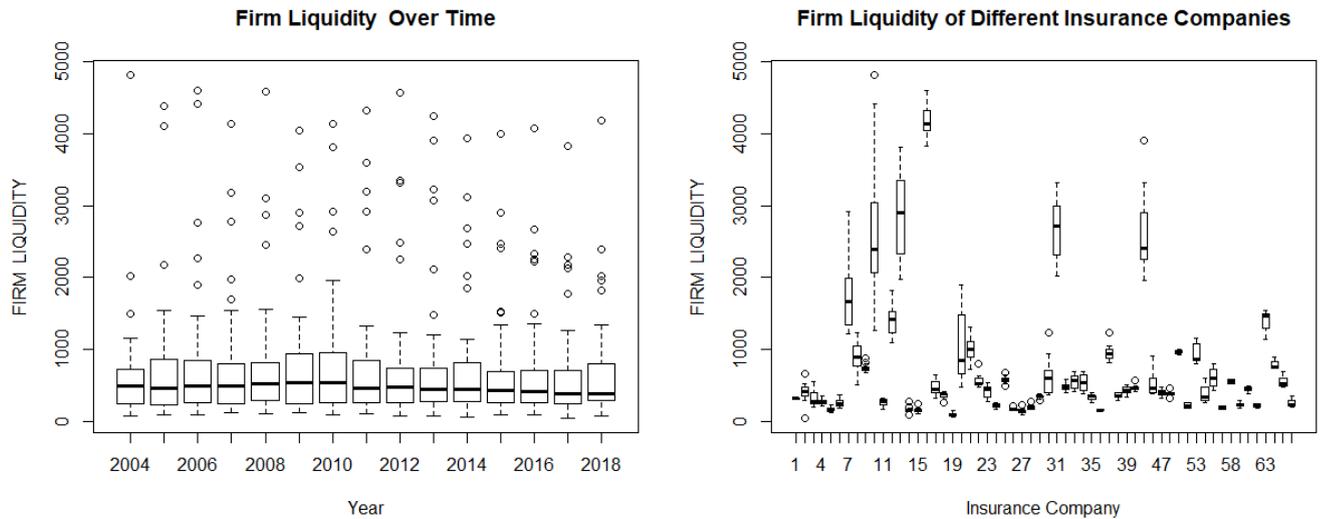


Figure 1: Firm Liquidity over Time

As indicated in Figure 1, the average liquidity of the insurance companies from 2004 – 2008 did not have significant changes. However, during the period 2004 – 2008, there were a few outliers as was the case from 2014 – 2018. Regarding the average liquidity of the insurance companies over the 15-year period, results in Figure 1 indicate that most of the insurance companies had comparable liquidity. However, there were six insurance companies with very high average liquidity compared to the others.

On financial performance, ROA and ROE were used as indicators. The distribution of the financial performance (ROE) over the years and amongst the varied insurance companies is provided in Figure 2. The distribution indicates that the majority of the insurance companies had average ROE of between 0 and 20% over the years with few outliers. Regarding the average ROA of insurance companies over the years, the figure indicates few significant changes amongst insurance companies over the years.

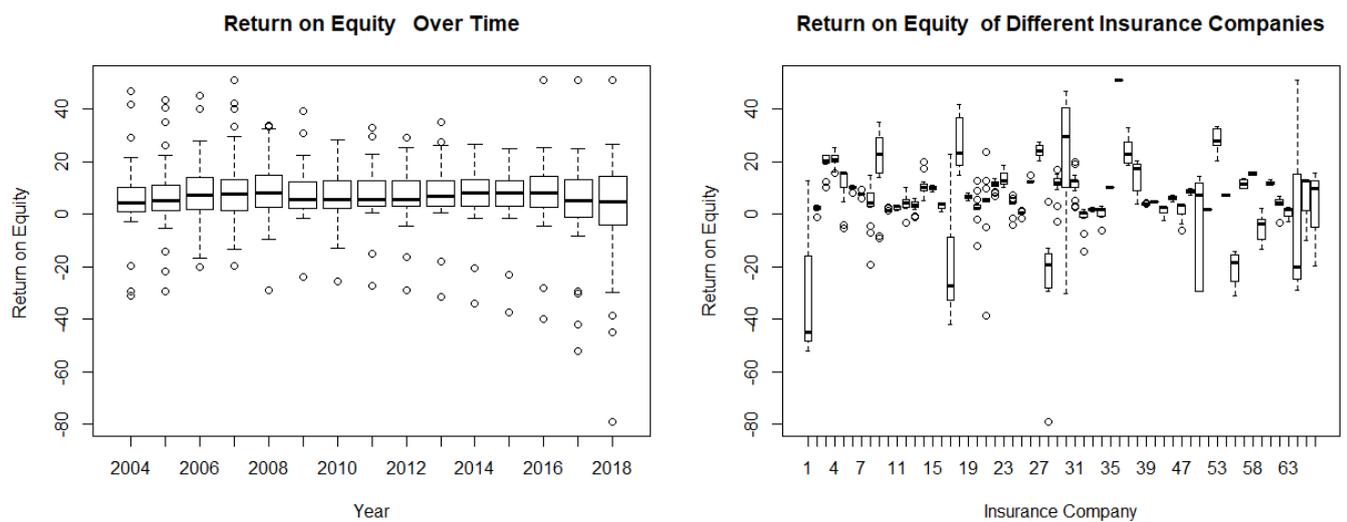


Figure 2: Return on Equity of the Insurance Companies over time

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The study also explored the financial performance of the insurance companies over the years as indicated by return on assets (ROA). Figure 3 shows the average ROA of the insurance companies over the years and also the average ROA amongst the insurance companies. The average ROA of the insurance companies over the years ranged between 0 and 10%. The figure also shows a disparity in average ROA amongst the insurance companies.

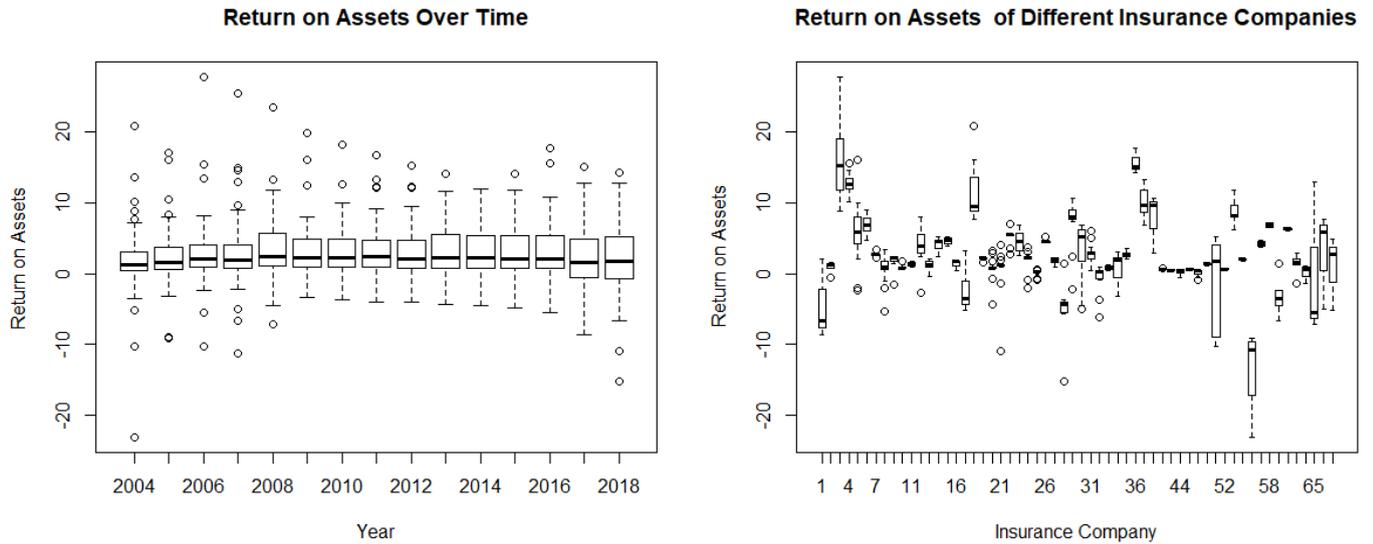


Figure 3: Return on Assets of the Insurance Companies over time

The study sought to test the hypothesis; Liquidity has no significant influence on the financial performance of insurance companies in Kenya. This was tested using panel data regression. However, before the analysis, the study conducted model specification tests to determine whether the panel data regression was appropriate for the data. The results of the diagnostic analysis indicated that the errors of the regression were homoscedastic ($\chi^2 = 2.81$, $p = 0.272$), were normally distributed (Shapiro Wilk = 0.981, $p = 0.328$) and had no serial correlation (Durbin Watson = 0.981). This hence indicated that panel data regression could be conducted on the data. To determine which panel data model was appropriate for the study, a Hausmann test was conducted. The findings indicated the fixed effects model was the one suited for the data ($\chi^2 = 32.176$, $p < 0.05$).

The fixed-effects panel regression models liquidity against both ROA and ROE were run. The findings in Table 1 indicate the effect on liquidity of ROE.

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Table 1: Fixed Effects Panel Regression on Return on Equity

Fixed effects (within) regression				Number of observations = 575		
Group variable: Insurance Company				Number of groups = 53		
R sq: Within = 0.5672 Between = 0.5126 Overall = 0.2328				Observations per group: Min = 3 Avg = 10.8 Max = 15		
corr (u _i , X _b) = 0.7291				F (1, 521) = 7.899		
				Prob > F = 0.000		
					95% Confidence Interval	
Return on Equity	Coefficient	Std. Err.	t	p > t	Lower Bound	Upper Bound
Current Ratio	.0747	.02816	2.653	.009	.01893	.1305
Constant	-1.820	2.2326	-.815	.417	-6.2421	2.6019

The leads to Table 1 show that the model was statistically significant (F = 7.899, p < 0.05). This indicates that the liquidity of insurance companies can be employed in predictive financial performance (ROE). Besides, the results indicate that the model explained 56.72% of the variation in ROE within the study period (r squared within = 0.5672) and 51.26% of the variation in ROE between the insurance companies (r squared between = 0.5126). Moreover, current ratios had a significant positive influence on ROE ($\beta = 0.0747$, p < 0.05). These findings imply that insurance companies with higher current ratios reported a higher ROE than their counterparts with lower current ratio. Besides, the findings imply that increasing this ratio is expected to lead to an increase in ROE.

The study also regressed the current ratio against the ROE of the insurance companies. The study findings are presented in Table 2.

Table 2: Fixed Effects Panel Regression on Return on Assets

Fixed effects (within) regression				Number of observations = 575		
Group variable: Insurance Company				Number of groups = 53		
R sq: Within = 0.5385 Between = 0.5063 Overall = 0.2537				Observations per group: Min = 3 Avg = 10.8 Max = 15		
corr (u _i , X _b) = 0.7216				F (1, 521) = 8.148		
				Prob > F = 0.000		
					95% Confidence Interval	
Return on Assets	Coefficient	Std. Err.	t	p > t	Lower Bound	Upper Bound
Current Ratio	.08524	.03219	2.648	.007	.029125	.152902
Constant	-1.6721	1.98216	-.844	.394	-4.32817	2.656021

The study findings in Table 2 show that the model was statistically significant (F = 8.148, p < 0.05). This shows that the liquidity of insurance companies is a statistically significant predictor of the financial performance (ROA) of insurance companies. Besides, the study findings established that



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the panel regression model explained 53.85% of the variation in ROA within the study period (r squared within = 0.5385) and 50.63% of the variation in ROA between the insurance companies (r squared between = 0.5063). Moreover, current ratio had a significant positive effect on ROA (β = 0.08524, $p < 0.05$). These findings indicate that improving the current ratio amongst the insurance companies would lead to increased ROA.

4.0 CONCLUSION

The study concludes that the greatest threat to liquidity may occur in an insurance company during a catastrophe when a large number of claims are received at once or there may be prospects of a significantly large claim. For these situations, they have risk management processes in places, such as reinsurance cover and alternative risk transfer methods. In some cases, the full amount is not paid for a period after the event until the losses are fully adjusted, giving additional time to liquidate the assets, avoiding a liquidity crunch in the short run. Overall, catastrophic events are rare and general insurers largely concentrate on managing the vulnerability to such events. Thus, these firms view their exposure to liquidity risk as being a consequence of a major catastrophe and so the risk is usually contained within insurance, investment or credit risk.

The study also concludes that liquidity positively affects the financial performance of insurance companies (ROA and ROE). Besides, the study concludes that liquidity in a life insurance company is considered less threatening than in some other institutions because of the higher frequency of money exchange takes place in the banking industry compared to the life insurance industry. However, liquidity is equally important in life insurance because of the interconnection of the financial system leading to cash crisis and secondly, liquidity risk may prove very expensive to insurers due to meeting the cost of liquidity and also impacting the Assets and Liability mismatch.

5.0 RECOMMENDATIONS

The study recommends that insurance firms must have optimum liquidity for smooth operations of their businesses. Monitoring liquidity without an appropriate action plan is incomplete. When the liquidity risk level is above the set limit, management must be aware of the tools that it has available with which to lessen the risk and it must be willing to use them when necessary.

The liquidity management of an insurer should include the characteristics of the organization's assets and liabilities, its internal structure, and market behavioral factors. Close management and careful fine-tuning of the liquidity risk framework are essential to assist the firm survive in extreme stress and optimize assets without undue strain in less stressed conditions.

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