

Analyzing the Financial Performance for Jordan Islamic Insurance Companies

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Abstract

This research analyzes the determinants of financial performance for Islamic insurance companies in Jordan during 2008 – 2015, by analyzing the impact of external and internal business environment. The internal business environment is measured by return on assets, Islamic insurance companies' size, equity ratio, and debt ratio. On the other hand, the external business environment is measured by Gross Domestic Product growth rate, inflation rate, and unemployment rate in Jordan. Also, the dependent variable is measured by return on equity for Islamic insurance companies in Jordan. The results of this research are there are positive and significant impacts for return on assets and companies' size on the financial performance of Islamic insurance companies at (0.001) significant level. In addition, there are positive not significant impacts of debt ratio and inflation rate on the financial performance. Moreover, there are negative not significant impacts of equity ratio, gross domestic product, and unemployment rate on the financial performance for Jordanian Islamic insurance companies. So, the researchers recommend that Islamic insurance companies are advised to enhance the quality of their assets and improve return on assets to accomplish high levels of financial performance.

Keywords: Islamic insurance, financial performance, business environment, internal and external variables, and Jordan.

1. Introduction

Business and financial sector is advancing in Jordan during the time, especially Islamic financial sector, such as Islamic banks and Islamic insurance companies. In Jordan there are two Islamic insurance companies according to Amman Stock Exchange data which are the Islamic insurance and first insurance.

In this research we are going to analyze the impact of business environment on those companies. The financial performance will be presented by return on equity as a dependent variable, while the independent variable will be divided into two groups which are internal and external variables.

The internal business environment variables are presented by return on assets, companies' size, equity ratio, and debt ratio. On the other hand, the external business environment variables are presented by GPD growth rate, inflation rate, and unemployment rate during 2008 - 2015.

2. Literature Review

Akhter and Zia-ur-Rehman (2011) conducted a study about financial performance of Pakistan insurance industry in global scenario, during the period 2001-2005 in an attempt to assess future growth and potential. Analysis of Pakistan insurance industry shows that overall financial performance of the industry has increased in the last few years. Moreover, Pakistan share in the world insurance market was 0.02% in 2004 that has grown to 0.03% in 2006. It indicates that insurance industry in the country is growing and potential exists for future growth of Takaful as well.

Furthermore, a research about factors affecting the financial performance of Jordanian insurance companies listed at Amman stock exchange by Amal Y. Almajali and others (2012) mentioned that the factors that mostly affect financial performance of Jordanian insurance companies. The population was all insurance companies (conventional not Islamic companies) listed at Amman Stock Exchange during 2002-2007. The results showed that the following variables which are leverage, liquidity, size, management competence index have a positive statistical effect on the financial performance of Jordanian Insurance companies.

The researchers recommended that a high consideration of increasing the company assets will lead to a good financial performance, and there is a need to have highly qualified employees in the top of managerial staff.

In a study about the non-financial factors influencing the performance of Islamic insurance in Kenya, a case study of Takaful insurance of Africa (AHMED, 2013) independent variables were legal and regulatory framework, and unethical practices, while the dependent variable was performance of Islamic insurance. The first objective of the study was the legal and regulatory framework and out of the secondary findings it was



found out that the sharia boards were considered to have a strong authority on the performance of Islamic insurance and also it defines the extents and limits of its operations. The second objective of the study was, unethical practice has shown that due to the flexibility of the insurance market on allowing intermediaries to plays match makers some of the agents and brokers have used these avenues to exploit customers hence affecting the performance of the insurance companies.

Moreover, in a study on the performance of insurance companies in Ethiopia (Sambasiv and Ayele, 2013) that study examined the effects of firm specific factors which are age of company, size of company, volume of capital, leverage ratio, liquidity ratio, growth, and tangibility of assets. Profitability measured by return on assets. The sample of that study includes nine of the listed insurance companies for nine years during 2003-2011.

From the regression analysis, the researchers received that growth, leverage, volume of capital, size, and liquidity were identified as most important determinant factors of profitability, and hence growth, size, and volume of capital were positively related. In contrast, liquidity ratio and leverage ratio were negatively but significantly related with profitability. The age of companies and tangibility of assets are not significantly related with profitability (ROA).

Finally, some studies compare between Takaful and conventional insurance (Hachemi, and others, 2014) the general findings of that article show that obvious differences between Takaful and conventional insurance in protecting individual and society. For example, Takaful is more just than conventional, this can be seen from the definition and objectives of Takaful for joint action to protect and help each other in the community by investing in the charity fund which depends on certain risks and shariah-compliant. Takaful and conventional insurance have the same goal which is to manage the risk. However, fundamental difference in the initial contract set the Takaful apart from insurance. Takaful based on risk-sharing among the participants which is fairer than conventional that applies a risk transfer from the participants to the company.

3. Research Hypotheses

In this section we are going to present the null hypotheses for this research to clarify the picture of research variables, the external and internal business environment variables will be conducted.

H₀: There is not a significant impact of business environment on the financial performance of Islamic insurance companies in Jordan.

 $H_{0.1}$: There is not a significant impact of return on assets on the financial performance of Islamic insurance companies.

 $H_{0,2}$: There is not a significant impact of company size on the financial performance of Islamic insurance companies.

 $H_{0.3}$: There is not a significant impact of equity ratio on the financial performance of Islamic insurance companies.

H_{0.4}: There is not a significant impact of debt ratio on the financial performance of Islamic insurance companies.

H_{0.5}: There is not a significant impact of Gross Domestic Product growth rate (GDP growth rate) on the financial performance of Islamic insurance companies.

 $\mathbf{H}_{0.6}$: There is not a significant impact of inflation rate on the financial performance of Islamic insurance companies.

 $H_{0.7}$: There is not a significant impact of unemployment rate on the financial performance of Islamic insurance companies.

4. Data Analysis

In this section we are going to analyze the data by considering the financial performance as the dependent variable and it is measured by return on equity. Also, the independent variables are internal business environment and external business environment.

By categorizing the business environment to internal variables and external variables, internal variables contains return on assets, companies' size, equity ratio, and debt ratio. On the other side external variables contains GDP, inflation rate, and unemployment rate in Jordan from 2008 - 2015.





Figure (1) Research Model

Research Variables' Sources:

The internal variables were taken from Amman Stock Exchange for Islamic insurance companies during 2008 – 2015. On the other side, the external variables were taken from the official site of the World Bank for the same period.

Return on Equity = (Net Income / Total Equity) * 100%

Return on Assets = (Net Income / Total Assets) * 100%

Companies' size = Natural Logarithm (Total Assets)

Equity Ratio = (Total Equity / Total Assets) * 100%

Debt Ratio = (Total liabilities / Total Assets) * 100%

Matrix (1) Pearson Correlation Matrix for Research Variables

	ROE	ROA	Size	Equity	Debt	GDP	Infla.	Unem.
ROE	1							
ROA	.985**	1						
Size	.060	104	1					
Equity	073	.087	879**	1				
Debt	.073	087	.879**	-1.0**	1			
GDP	.779*	.843**	343	.236	236	1		
Infla.	.739*	.801**	399	.455	455	.567	1	
Unem.	019	.135	894**	.785*	785*	.386	.368	1

^{**.} Correlation is significant at the 0.01 level (1 - tailed).

Infla: inflation rate.

Unem: unemployment rate.

Firstly, from matrix (1) Pearson correlation matrix for research variables, we find positive and significant correlation at the 0.01 level between financial performance as measured by return on equity, and return on assets for Jordanian Islamic insurance companies. Also, we found positive significant correlation at 0.05 levels with each of GDP and inflation rate.

Secondly, we found positive and insignificant correlations with each of companies' size, and debt ratio, but negative and insignificant correlations with equity ratio, and unemployment rate.

Table (1) Descriptive Statistics

r=	Mean	Std. Deviation	N
ROE	5.6988	4.59299	8
ROA	4.0188	3.72322	8
Size	17.9813	0.16185	8
Equity	68.0163	8.05858	8
Debt	31.9838	8.05858	8
GDP	3.5708	1.79732	8
Infla.	4.3489	4.88902	8
Unem.	12.2500	0.74450	8

Infla: inflation rate.

Unem: unemployment rate.

^{*.} Correlation is significant at the 0.05 level (1 - tailed).



Table (2) Model Summary ^c

Model	Model R		Adjusted R Square	Std. Error of the Estimate	Durbin - Watson
1	0.985 ^a	0.971	0.966	0.84664	
2	0.999 ^b	0.998	0.997	0.27089	1.859

- a. Predictors: (Constant), ROA.
- b. Predictors: (Constant), ROA, Company Size.
- c. Dependent Variable: ROE.

Table (3) ANOVA a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.368	1	143.368	200.013	0.000 b
ļ	Residual	4.301	6	0.717		
	Total	147.669	7			
2	Regression	147.302	2	73.651	1003.707	0.000 ^c
	Residual	0.367	5	0.073		
	Total	147.669	7			

- a. Dependent Variable: ROE.
- b. Predictors: (Constant), ROA.
- c. Predictors: (Constant), ROA, Company Size.

By looking at table (1) descriptive statistics, the reader can notice the means and standard deviations for all research variables. Also, from table (2) model (1) the value of (R Square) is (0.971), and model (2) the value of (R Square) is (0.998) which means we could explain about (97.1%) and (99.8%) of the variations in the dependent variable which is the financial performance of Islamic insurance companies in Jordan.

According to table (3) analysis of variance for the research variables, we found from model (1) that (F) calculated is (200.013) at (0.000) Significant level, and from model (2) we found (F) calculated is (1003.707) at (0.000) Significant level which mean the models are suitable.

 $ROE = \beta_0 + \beta_1 (ROA) + \beta_2 (Size) + \beta_3 (Equity) + \beta_4 (Debt) + \beta_5 (GDP) + \beta_6 (Inflation) + \beta_7 (Unemployment) + \epsilon$

According to model (1) and tables (4) and (6), the regression equation will be:

ROE = 0.814 + 1.216 (ROA) + 0.164 (Size) - 0.161 (Equity) + 0.161 (Debt) - 0.179 (GDP) - 0.142 (Inflation) - 0.155 (Unemployment)

ROE = 0.814 + 1.216 (ROA)

According to model (2) and tables (4) and (6), the regression equation will be:

ROE = -83.025 + 1.237 (ROA) + 4.657 (Size) - 0.074 (Equity) + 0.074 (Debt) - 0.043 (GDP) + 0.004 (Inflation) - 0.038 (Unemployment)

ROE = -83.025 + 1.237 (ROA) + 4.657 (Size)

Table (4) Coefficients ^a

		Unstandardized Coefficient		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	0.814	0.457		1.781	0.125
	ROA	1.216	0.086	0.985	14.143	0.000
2	(Constant)	83.025	11.451		-7.250	0.001
	ROA	1.237	0.028	1.002	44.723	0.000
	Size	4.657	0.636	0.164	7.322	0.001

a. Dependent Variable: ROE.

Table (5) Tolerance and VIF for the Predictors of the models ^a

1.0	able (3) Tolerance and vir to	i the i redictors of the model	3		
		Collinearity Statistics			
Model		Tolerance	VIF		
1	(Constant)				
	ROA	1.000	1.000		
2	(Constant)				
	ROA	0.989	1.011		
	Company Size	0.989	1.011		

a. Dependent Variable: ROE.



Table (6) Tolerance and VIF for the Excluded Variables ^a

		\\.				Collinearity	Statistics
Model		Beta In	t	Sig.	Partial	Tolerance	VIF
					Correlation		
1	Company Size	0.164 ^b	7.322	0.001	0.956	0.989	1.011
	Equity Ratio	-0.161 b	-6.098	0.002	-0.939	0.992	1.008
	Debt Ratio	0.161 ^b	6.098	0.002	0.939	0.992	1.000
	GDP	-0.179 ^b	-1.524	0.188	-0.563	0.289	3.462
	Inflation	-0.142 b	-1.287	0.255	-0.499	0.358	2.794
-	Unemployment	0.155 b	-4.605	0.006	-0.900	0.982	1.019
2	Equity Ratio	-0.074 °	-2.018	0.114	-0.710	0.228	4.390
	Debt Ratio	0.074 $^{\rm c}$	2.018	0.114	0.710	0.228	4.390
	GDP	-0.043 °	-0.901	0.419	-0.411	0.223	4.491
<u> </u>	Inflation	$0.004^{\ c}$	0.075	0.943	0.038	0.257	3.892
	Unemployment	-0.038 °	-0.732	0.505	-0.344	0.198	5.048

- a. Dependent Variable: ROE.
- b. Predictors: (Constant), ROA.
- c. Predictors: (Constant), ROA, Company Size.

The reader can notice the trends of the research variables from figure (2) until figure (9), after that figure (10) represents the Histogram for the dependent variable Return on Equity (ROE), figure (11) represents normal P-P plot of regression standardized residual for the dependent variable return on equity, and figure (12) is scatterplot.

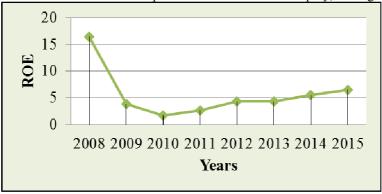


Figure (2) The Trend of ROE during 2008 -2015.

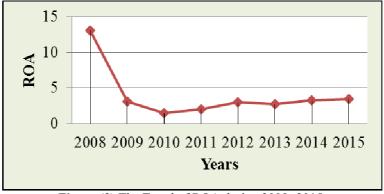


Figure (3) The Trend of ROA during 2008 -2015.



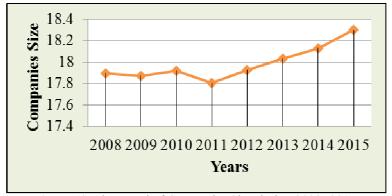


Figure (4) The Trend of Companies Size during 2008 -2015.

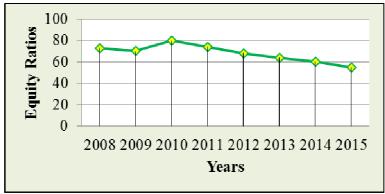


Figure (5) The Trend of Equity Ratios during 2008 -2015.

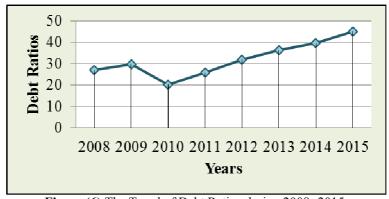


Figure (6) The Trend of Debt Ratios during 2008 -2015.

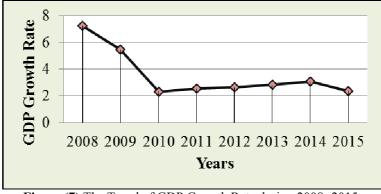


Figure (7) The Trend of GDP Growth Rate during 2008 -2015.



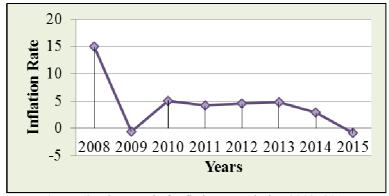


Figure (8) The Trend of Inflation Rate during 2008 -2015.

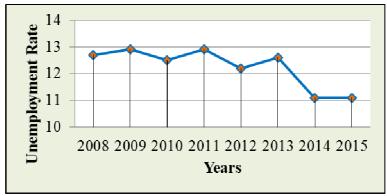


Figure (9) The Trend of Unemployment Rate during 2008 -2015.

5. Conclusions and Recommendations

This research focuses on Islamic insurance companies in Jordan which are Islamic insurance and first insurance companies during 2008 - 2015. At the end of this research, we found positive and significant impacts of return on assets and companies' size on the financial performance on Islamic insurance companies which is represented by return on equity at (0.001) significant level.

In addition, we found positive and insignificant impacts of debt ratio and inflation rate on return on equity. On the other side, we found negative and insignificant impacts of equity ratio, GDP growth rate, and unemployment rate.

We recommend and advise Islamic insurance companies in Jordan to improve their assets and increase their total assets because that can increase the yearly net income, and reflect on improving net income as a return on total equity which will give an advantage for return on equity (ROE). Moreover, that will enhance the prices of Islamic insurance companies' stocks in Amman Stock Exchange (ASE) as well.

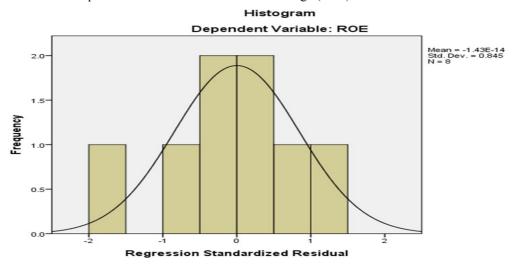


Figure (10) The Histogram for the dependent variable Return on Equity (ROE)



Normal P-P Plot of Regression Standardized Residual

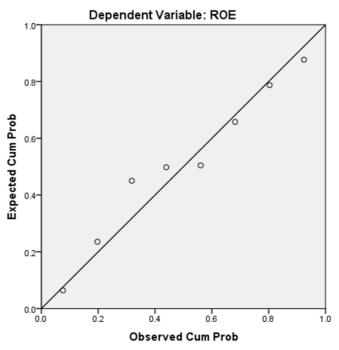


Figure (11) Normal P-P Plot of Regression Standardized Residual for the dependent variable Return on Equity (ROE)

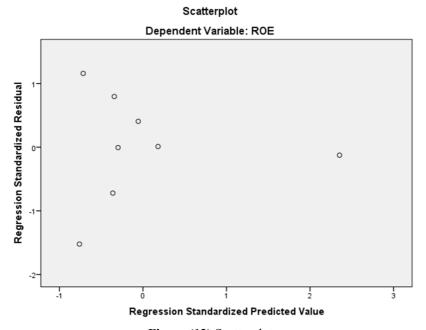


Figure (12) Scatterplot

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