Factors that Affect the Investment Performance of Takaful Industry: Malaysia Evidence

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Abstract

Uniqueness of finance industry in Malaysia is where the industry operated parallels between conventional practice and Islamic practice. This also involved the Insurance industry in Malaysia. In Malaysia, insurance companies operates in 2 types, either by conventional or Islamic insurance, which also known as Takaful. Those two types of companies is almost similar, but in terms of operational and investment level, the Islamic insurance must be in tune with the Shariah principles. The policyholders, investors and regulators are interested in the performance of this industry. By focusing for the Islamic insurance industry, this study aims to investigate the investment performance of Islamic insurance industry in Malaysia. Eight independent variables had been selected comprises of company-specific factor and macro factors in this study. The period of this study was between years 2011 until 2020, a ten years study. Panel regression was employed on five selected Islamic insurance (Takaful) operators in Malaysia. The result reveals size (CS), liquidity (LIQ) and equity return (EQUIR) are significant in relation with the investment performance of Islamic insurance company in Malaysia.

Keywords: Investment Performance, Islamic Insurance, Takaful

Introduction

As for Malaysia, insurance industry was operated in two types, conventional and Islamic. As dated until 15 August 2022, there 15 takaful operators available in Malaysia (Source; Bank Negara Malaysia). Either it is conventional or Islamic insurance; it is believed that the industry can give contribution to the economy. Weisbart (2018) had mentioned that the contribution may fall under categories such as security, financial stability and development. Contrary from the conventional insurance, the investment funds from Islamic and conventional insurance companies are very huge and therefore play essential roles as players of investments in Malaysia. It also contributes to the financial stability and development of the country. Under the Islamic Financial Services Act (2013), the Islamic insurance companies are required to separate the shareholders and policyholders' fund to comply with the Shariah requirements. Islamic insurance companies are obligated to maintain assets, liabilities, incomes and expenses separately and also preserve and manage the takaful fund on behalf of the participants. Thus these companies can only generate returns of the capital mainly from the

investment activities as compared to conventional insurance companies that could benefit from underwriting activities.

As the Islamic insurance companies operated differently from the conventional, there is possibility that the investment performance shall be affected by different factors. In addition, Islamic insurance companies must ensure that both operational activities and investment activities are Sharia-compliant. In short, these activities must not be involved with non-permissible (haram) funds or activities. Organizational form and investment policy in Islamic insurance industry may give impact to the investment performance.

Due to Islamic insurance industry in Malaysia has grown at a rapid rate, their ability to generate investment incomes are far below those in the conventional insurance companies. The arguments had motivates this paper to examine the determinants that affecting the investment performance in the Islamic insurance industry.

Literature Review
Takaful or Islamic insurance is an Islamic alternative to traditional insurance, founded on the principles of social solidarity, cooperation and mutual indemnification of members' losses, (Scholar & Pasha, 2011). The fundamental goal of Takaful in the Islamic system is to ensure equities for all parties concerned, and the contract's goal is to assist the policyholder under challenging circumstances.

Literature that focuses on the external or internal factors affecting the insurance or takaful industry is rated lowly especially for Malaysia. The focus is more on the evidence within the conventional insurance companies. Most related study for Islamic insurance industry focusing on the adoption of Takaful. Therefore, this study should be able to add literature in the field of study.

A numerous number of factors have been identified and discussed in the literature as potential factors that able to effect the investment performance of insurance industry. Based on the previous study, we selected few variables for further investigation in this study.

1. Size and Investment Performance
Larger company generally may outperform the smaller company as the companies utilize the economies scale. Companies with a considerable scale will find it simpler to enter the capital market. Meanwhile, new and tiny businesses will face numerous challenges in gaining access to the capital market, limiting their capacity to receive cash and loans, (Utami, 2021). Shiu (2004) stated that large insurance companies generally have the economies of scale in terms of labour cost which will improve the investment performance of the companies. However, Ismail (2013) found that small insurance companies have better investment performance.
H1: Size has a significant effect on investment performance on Islamic Insurance company

2. Return on asset (ROA) and Investment Performance
Return on asset (ROA) is a measurement on how profitable a company's assets are used (Hargrave, 2021). Empirical evidence by Abdou et al (2014) showed within the terms of

financial results and management effectiveness, found the conventional insurance performs significantly in their ROA variables.

H2: ROA has a significant effect on investment performance on Islamic Insurance company

3. Return on equity (ROE) and Investment Performance

The measurement for return on equity normally by dividing a company's net income by its shareholders' equity to see its efficiency at creating profits, (Mcclure, 2021). Indrarini, Canggih & Rusmita (2019) revealed that their study found ROE has a considerable impact and conclude that the greater the ROE, the more efficient the Islamic insurance organizations. Shiu (2004) also stated that the general insurance companies link insurance performance with return on equity.

H3: ROE has a significant effect on investment performance on Islamic Insurance company

4. Liquidity and Investment Performance

Liquidity can be measured as the ability to fulfill immediate obligations without having to liquidate financial assets. According to Hasanuddin et al (2021), liquidity has a favourable and significant impact on profit growth towards the general firms. Limited liquidity might incentivize takaful operators to enhance their financial performance. Almajali, Alamro and Al-Soub (2012) found that there is a positive relationship between liquidity and the performance of insurance companies in Jordan. Shiu (2004) also found that liquidity has a positively significant relationship to the performance of insurance companies. According to agency theory, it is suggested also, higher liquidity able to affect the lower performance of insurance companies. Ismail (2013); Adam and Buckle (2003) concluded the same view of liquidity and the insurance company. Adam and Buckle (2003) found that the liquidity of an insurance company has inverse effect on the performance. Meanwhile, Ismail (2013) also found high liquidity of Islamic insurance company leads lower financial performance.

H4: Liquidity has a significant effect on investment performance on Islamic Insurance company

5. Gross Domestic Product (GDP) and Investment Performance

Gross domestic product (GDP) is broadly used as the general measurement of economic condition and activity of a country. During the integration period, Kozak (2011) found that there was a beneficial influence of GDP growth rate and market share of foreign-owned enterprises on the profitability of insurance companies and a significant impact of GDP on the performance of insurance companies. As for Malaysia, Abdou, Ali and Lister (2014) discovered that GDP has a significantly positive relationship on Islamic insurance companies. The positive relationship indicates that an upward trend of the general economy will yield better returns on the investment of both conventional and Islamic insurance companies.

H5: GDP has a significant effect on investment performance on Islamic Insurance company

6. Interest/profit rate and Investment Performance

A low or high interest/profit rate environment may give impact to the many several sectors in the economy including the conventional insurance and Islamic insurance. Shiu (2004) found a negative impact of interest rate to the performance of general conventional insurance

companies. Akoytey et al (2013) found that interest rate has a statistically inverse relationship with the investment income performance of life conventional insurance companies in Ghana. Ismail (2013) found that there is no significant impact of the profit rate to the investment performance of Islamic insurance companies in Malaysia, meanwhile for conventional , the result are contrast.

H6: Interest/profit rate has a significant effect on investment performance on Islamic Insurance company

7. Equity return and investment performance
Stock market also able to affect the performance of insurance industry which leads to lower investment returns. Financial market downturn will affect the companies' investment returns and slightly affect their investment performance. Ismail (2013); Shiu (2004) found a positive relationship between equity returns and investment yield of general insurers, but it is not significant relationship. While previous literatures conclude that increase in equity returns led to higher returns on the investment portfolio.

H7: Equity return has a significant effect on investment performance on Islamic Insurance company

8. Inflation and Investment Performance
According to Ahmad et al (2019), inflation directly affects the investment success of traditional and Islamic insurance businesses. High level of inflation could reduce the value of equities in the investment performance of insurance companies. Hemrit (2020) claimed that inflations leads to higher financial performance in conventional, but not for Islamic insurance. It is supported also by Mener and Getaneh (2019) which also found that inflation not affect the investment performance of firm.
H8: Inflation has a significant effect on investment performance on Islamic Insurance company

Based on the literature review, the conceptual framework of this study can be presented as follows:
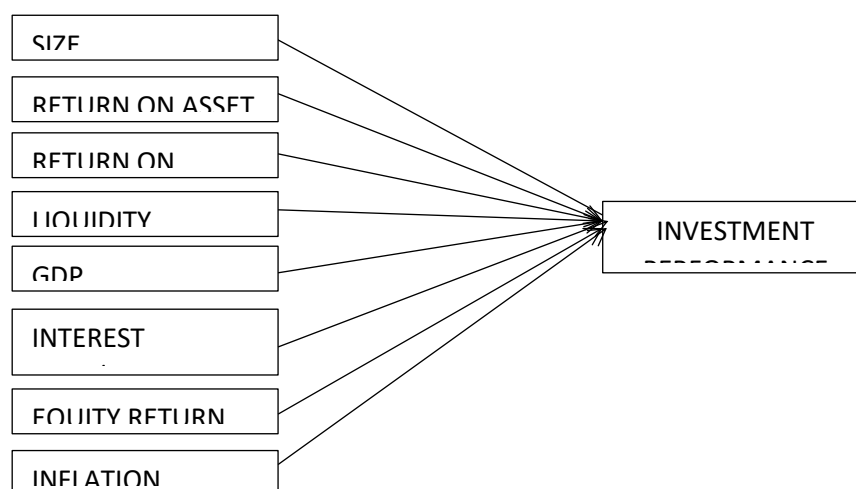
Methodology

This study applies panel cross-sectional regression. Data was collected from company's annual report and also the World Bank data. Initially, there are fifteen Takaful operators available in Malaysia. However, due to data constraints, we only select five (5) out of fifteen (15) selected Islamic insurance operators in Malaysia were chosen. There are [1] Zurich Takaful Malaysia Berhad, [2] Hong Leong MSIG Takaful, [3] Etiqa Family Takaful, [4] Sun Life Malaysia Takaful Berhad and [5] Takaful Ikhlas Berhad. The duration of this study is 10 years with data collection from year 2011 until year 2020.

The dependent variable in this study is the investment performance and the independent variables consist of company size, return on asset, return on equity, liquidity, gross domestic product, interest rate/profit rate and equity return. The variables are measured as follows:

Table 1
The measurement of the variables

Variables	Formulae/Measurement
Dependent variable: Investment performance (IP)	Net Investment Income / Average Investment Asset
Independent Variable:	
Company size	Total asset
Return on Asset	Net Income / Total Assets
Return on Equity	Net Income/Shareholder's Equity
Liquidity	Total Assets / Total Liabilities
Gross Domestic Product	$(GDP_t - GDP_{t-1})/GDP_{t-1}$
Interest Rate/Profit rate	5-year Government Investment Issue Yields (Islamic Insurance)
Equity Return	FTSE Bursa Malaysia EMAS Shariah
Inflation	$(CPI_t - CPI_{t-1})/CPI_{t-1}$

The regression model expressing the relationship as below:

$$IP = \beta_0 + \beta_1 CS + \beta_2 ROA + \beta_3 ROE + \beta_4 LIQ + \beta_5 GDP + \beta_6 IR + \beta_7 EQUIR + \beta_8 INF + \varepsilon$$

Where β_0 denotes the intercept of the regression equation, and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_8 are the regression coefficient related.

Analytical Procedures

The collected data were analysed using Eviews software. This study employs correlation analysis to determine the relationship between the variables. In addition panel regression abalysis was conducted to gauge the effect of the independent variables on the dependent variable.

Data Analysis and Results

Descriptive Statistics

Table 2 highlights the summary of descriptive statistics for the dependent and independent variables for the samples. It shows that Investment Performance (IP) has an average equals to 0.0324 and a standard deviation of 0.014. The highest IP is 0.0643 and the lowest is 0.0006. Size (CS) has an average value of 3681104. Its standard deviation is 4775959, while the maximum value is 15242733, and minimum is 339755. The Return on Asset (ROA) has an average value of 0.0105 with standard deviation of 0.0332. The maximum value for ROA is 0.1866 and the minimum value is -0.1002. The mean value for Return for Equity (ROE) 0.5321, and its standard deviation is 3.3949. Its range of value is from minimum value of -0.1465 to the maximum value of 0.1866. As for Liquidity (LIQ), the mean is 0.9297, maximum value is 8.4249 and minimum value is 0.0763. Its standard deviation is 1.0888. Gross domestic product (GDP) has a mean value of 0.042. The maximum value of GDP is 0.0601 and the minimum value is -0.0559. GDP's standard deviation is 0.0328. For the interest rate (IR), the mean value is 0.0306 and the standard deviation is 0.017. Interest rate (IR) has maximum value of 0.0481 and minimum value of -0.0047. The mean value for Equity return is 1.24E+13 with a standard deviation of 3.77E+13. Inflation (INF) has a range value from -0.0114 to the maximum value of 0.0387.

Table 2

Summary of Descriptive Analysis

	MEAN	MAXIMUM	MINIMUM	STD DEVIATION	SKEWNESS	Observation
IP	0.0324	0.0643	0.0006	0.014	-0.2288	50
CS	3681104	15242733	339755	4775959	1.4678	50
ROA	0.0105	0.1866	-0.1002	0.0332	2.4135	50
ROE	0.5321	24.0501	-0.1465	3.3949	6.8504	50
LIQ	0.9297	8.4249	0.0763	1.0888	6.7109	50
GDP	0.042	0.0601	-0.0559	0.0328	-2.5322	50
IR	0.0306	0.0481	-0.0047	0.017	-0.8575	50
EQUIR	1.24E+13	1.24E+14	-1.56E+10	3.77E+13	2.6667	50
INF	0.0185	0.0387	-0.0114	0.0139	-0.0642	50

Correlation Analysis

As showed in Table 3, investment performance significantly correlated with size, equity return, interest rate and inflation. Other variables; return on asset, return on equity, liquidity and gross domestic product indicate no significant correlation with investment performance. The correlation analysis showed investment performance and company size positively correlated.

Table 3
Pearson Correlation Analysis

	IP	CS	ROA	ROE	LIQ	GDP	EQUIR	IR	INF
IP	1.0000								
CS	0.3988**	1.0000							
ROA	-0.0819	0.0537	1.0000						
ROE	-0.0795	-0.0813	0.7775**	1.0000					
LIQ	0.2543	-0.1368	-0.4834**	-0.0234	1.0000				
GDP	-0.1318	-0.0732	0.0446	0.0556	0.0203	1.0000			
EQUIR	0.5652**	-0.0743	0.3139*	0.4281**	-0.0277	0.1294	1.0000		
IR	0.4592**	0.052	-0.2112	-0.2973	-0.0498**	-0.4259**	-0.6968**	1.0000	
INF	-0.2883*	-0.065	0.1056	0.1358	0.0461	0.7989**	0.3182*	-0.7981**	1.0000

Notes: **$p<0.01$, *$p<0.05$

Regression Analysis
In this study, panel-regression analysis was performed in order to evaluate the effect of independent variables on the dependent variable. Table 4 represents the outcome from the regression.

From the results, it shows that three out of eight independent variables has significant effect on the investment performance of Islamic insurance companies. The company size (CS) was seen to be significantly positive with investment performance (IP), thus H1 is supported. This is suggested that company size is one of the internal variables that are quite important for the investment performance of Islamic insurance company. Another internal variable that significantly affect the investment performance of Islamic insurance companies is the LIQ, liquidity which is positively related at 1% level of significance. Therefore, H4 is also supported. There is only one external variable that significantly related with the investment performance. EQUIR, equity return was found significantly related with the investment performance, negatively correlated at 1% level of significance. Hence, H6 is supported.

Table 4
Regression Results

	Coefficient	t-statistic	Prob.
CS	1.15E-09	3.9625	0.0003
ROA	0.156	1.6028	0.1167
ROE	-0.0003	-0.2961	0.7686
LIQ	0.0061	3.2996	0.002
GDP	0.0818	0.8639	0.3926
EQUIR	-2.15E-16	-3.0789	0.0037
IR	-0.0602	-0.213	0.8324
INF	-0.3446	-0.887	0.3802
F – STAT	8.3490 (0.000001)		
R-SQUARED	0.6196		
ADJUSTED R-SQUARE	0.5454		

The adjusted R-square is 0.5454. It shows that selected independent variable able to explain the relationship about 54.54% out of the model, meanwhile the balance shall be explain by other variables which is not include in the model. In addition, the panel regression in this study also shows a significant model. The model significant at 1% level of significance.

Conclusion
This study aims to investigate the determinants of investment performance for Islamic insurance companies in Malaysia. The analysis aims to determine which independent variable that has the possibility to affect the industry. Period of study is 10 years, from 2011 until 2020.

Eight independent variables selected consist of internal factors and external factors. There are size, return on asset, return on equity, liquidity, gross domestic product, equity return, interest rate and inflation. The result reveals that there are only three independent variables that are significant; [1] size (CS), [2] liquidity (LIQ) and equity return (EQUIR). Company size and liquidity positively significantly related to the investment performance of Islamic insurance companies in Malaysia. Meanwhile, the equity return (EQUIR) was significantly related with the investment performance of Islamic insurance companies.

The results shall have important implications not only to the Islamic insurance companies, but also to the investors and the regulators. While designing products or creating policy and procedures in relates to Islamic insurance in Malaysia, they shall consider these factors.

These findings should be able to add a growing body of literature on the investment performance, which is related to the Islamic insurance companies.

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