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COMPARISON ANALYSIS OF RISK-BASED CAPITAL (RBC) PERFORMANCE AND ITS EFFECT ON ISLAMIC INSURANCE PROFITABILITY IN INDONESIA AND MALAYSIA

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Abstract

The minimum value of risk-based capital of Islamic insurance is 30% in Indonesia, while Malaysia is 130%. RBC is one of indicator to measure people interest in Islamic insurance products. This paper aims to compare the risk-based capital (RBC) of Islamic insurance companies in Indonesia and Malaysia and analyze its financial ratios. This study used quantitative approach through two analysis techniques, the Mann-Whitney test and multiple linear regression. The results of this study showed that there is difference in risk between capital (RBC) of Indonesian and Malaysian Islamic insurance. Further, RBC, liquidity and investment balance ratios have a significant impact to the profitability of Islamic Insurance in Indonesia, while investment returns have no significant impact. In the other hand, RBC, liquidity, investment balance ratio, and investment returns have significant impact to the profitability of Islamic Insurace in Malaysia.

Keywords*: RBC; Financial Ratio; Islamic Insurance; Indonesia; Malaysia*

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Abstrak

Nilai minimum risk based capital asuransi syariah Indonesia yang ditetapkan sebesar 30% sedangkan malaysia sebesar 130%. Penetapan risk based capital (RBC) asuransi syariah Indonesia yang berubah-ubah membuat minat masyarakat akan produk keuangan syariah kurang ditanggapi oleh industri asuransi syariah sedangkan Malaysia nilai risk based capital (RBC) perusahaan merupakan salah satu penilaian masyarakat terhadap minat untuk membeli produk asuransi syariah. Penelitian ini bertujuan untuk membandingkan risk based capital (RBC) perusahaan asuransi Syariah di Indonesia dan Malaysia dan menganalisa rasio keuangan asuransi syariah. Metode penelitian ini dengan menggunakan pendekatan kuantitatif dengan dua teknik analisis, pertama dengan uji beda atau independent sample t-test yang kedua dengan regresi linear berganda. Hasil penelitian ini dengan uji beda menunjukkan adanya perbedaan risk based capital (RBC) asuransi shariah Indonesia dan Malaysia.

***Kata kunci**: Risk Based Capital (RBC); Rasio Keuangan; Asuransi Shariah; Indonesia; Malaysia*

INTRODUCTION

Insurance company is a financial institution that collects funds from the public in the form of premiums and transfers the risk from the insured, so that the insured is obliged to pay the premium in accordance to the period of the agreement. Based on premiums paid by the insured (customer), insurance company is responsible for the risks that occur to the customer in accordance with the type of product paid by the customer. To maintain the continuity of insurance in paying the customer's risk, the insurance company needs to maintain the minimum solvency level limit using the Risk-Based Capital (RBC) method. Robbi (2016) mentioned that risk-based capital has been regulated in the regulation of the finance ministry number 53 of 2012.

Islamic Insurance or takaful in Malaysia was established in 1984 under the supervision of Bank Negara Malaysia. Hence, the applicable rules such as the level of insurance company health are regulated by Bank Negara Malaysia. It is mentioned that Risk-Based Capital (RBC) of the insurance company in Malaysia is equal to Capital Adequacy Ratio (CAR), which is at least 130% of the Capital Adequacy Ratio (CAR) owned by the insurance company (Yusofa et al, 2015).

Risk-based capital shows the criteria to determine whether the company is healthy and guaranteed or not. Risk-Based Capital that meets its standards can be used as a promotional tool to attract the public to join the insurance company (Nurfadila et al., 2015). This risk-based capital is important and needs to be known by policyholders (customers) when they will submit a claim. This risk is also important for insurance companies because this is risk mitigation that can occur at any time. According to Kirmzi and Agus (2011), the profit of an insurance company can increase the RBC ratio at the level of 120%.

There are fewer researches on risk-based capital (RBC) of Islamic insurance companies. Prakoso and Siswantoro (2014) investigate the impact of the application of PMK Number 11/PMK.010/2011, about the financial health of insurance businesses and reinsurance businesses with sharia principles, on the level of solvency of Islamic insurance. Nurfadila, Hidayat and Sulasmiyati (2015) show that financial ratio analysis and Risk-Based Capital meet the limits, except the return on investment ratio that still below the minimum limit.

Ismail (2013) mentioned that company size, re-takaful, and debt is statistically affecting determination the return on investment in a Malaysian general sharia insurance company, whereas, for conventional insurance variable profit/interest, equity return, company size, re-takaful, debt, liquidity, premium growth statistically determine investment returns except for equity returns. Akpan et all (2017) showed that the insurance company's capital structure in Nigeria had a significant and positive effect on insurance performance with RBC that incomplete the rules compared to RBC that comply with the rules.

Anggi and Dorkas (2009) showed that the performance of the insurance companies that go public on the IDX 2004-2008 was increasing, which reflected in the Risk-Based Capital (RBC) that was above the standard. Safitri and Suprayogi (2017) mentioned that the risk-based capital ratio has a significant effect on the profitability of Islamic insurance companies in Indonesia

According to Ramadhani (2015), the large Islamic insurance market share had reflected the high interest of Indonesian people in Islamic insurance but sometimes it is not responded to by the Islamic insurance industry. This is indicated by the insincerity of the spin-off process of Islamic Business Unit of conventional insurance hence it can be a full-fledged Islamic Insurance company. This is different from Malaysia, the development of the Islamic industry is supported by the government so that funds mostly come from government funds. Based on this background, it is interesting to conduct a study of risk-based capital (RBC) of Islamic insurance companies in Indonesia and Malaysia along with analysis of financial ratios, especially there are no studies comparing whether there are differences in RBC insurance companies in both countries.

RESEARCH METHODS

This study aimed to compare the value of risk-based capital (RBC) of Indonesian and Malaysian Islamic insurance companies, then analyze the company's performance on profitability, solvency, liquidity, investment balance and investment returns. The population in this study were Islamic insurance companies in Indonesia and Malaysia in 2017. The sampling technique used in this study was the census method. The number of samples of Indonesian Islamic insurance companies were 8 and 7 takaful Malaysia. The following table is Indonesian and Malaysian Islamic insurance sample data

Table 1. Research Sample

Indonesia Islamic Insurance Company	**Malaysia Islamic Insurance Company**
Sinarmas Syariah	AIA
Panin Life	Sunlife
Sun Life	Etiqa Family Takaful Berhad
Prudential	Great Eastern
Axa Financial	Zurich
Manulife	RHB Insurance
Marine	HSBC Amanah Takaful
Central Asia Raya	

The data used in this study are secondary data obtained from the financial statements website of the Indonesian sharia insurance companies registered with the Financial Services Authority (OJK) and Malaysian insurance companies registered at Bank Negara Malaysia (BNM). The analysis technique of this study was conducted twice, first with a different test or independent sample Risk-Based Capital (RBC) t-test using the Mann-Whitney Test Difference Test where U = N1.N2 + $\frac{N1(N1+1)}{2} - R1$

The second regression analysis technique is to measure the impact of solvency, liquidity, investment balance ratio and investment returns as independent variables to profitability as the dependent variable. Measurement of each variable is shown in table 2.

Table 2. Variable Measurement

Variable	**Formula**
Profitability	$\frac{\text{Earning after Taxes}}{\text{Equity}}$
Risk-Based Capital (RBC)	$\frac{\text{Solvability Level}}{\text{Minimum Level of Solvability}}$
Liquidity	$\frac{\text{Current Asset}}{\text{Current Liability}}$
Investment to Liability Balance Ratio	$\frac{\text{Investment, Cash, and Bank}}{\text{Technical Allowance + Claim Debt}}$
Investment Return	Total Investment Return

RESULTS AND DISCUSSION

Result Description

This study was using the financial statement of Islamic insurance companies (*takaful)* in Indonesia and Malaysia in 2017 which were published on each insurance company website. Based on AASI (Indonesian Islamic insurance association) data there are 43 Islamic Insurance Companies in Indonesia, whereas there are 11 takaful companies in Malaysia. The sample used in this study were Islamic life insurance companies that published financial reports in 2017. Thus this study only used 8 Indonesian Islamic insurance companies and 7 Malaysian takaful companies.

Table 3. Descriptive Statistics of Islamic Insurance

Variable	Islamic Insurance			
	Indonesia		Malaysia	
	Mean	Std. Deviation	Mean	Std. Deviation
RBC	1.3554E3	2189.10927	26.9243	46.85292
Liquidity	3.0288E2	216.95776	.0971	.07111
Balance Ratio	3.2028E2	369.58792	4.7057	3.57782
LN Investment Return	13.2725	1.95517	14.3700	1.18491
Profitability	19.5500	52.73854	.1443	.07368

Source: Data processed, 2017

In table 3 it can be seen that in average Indonesian Islamic insurance has an RBC ratio smaller than the mean RBC ratio of Islamic Malaysia insurance. Compare to the provisions of PMK No 11 / PMK / 010/2011, which minimum RBC of Islamic insurance company in Indonesia is 30%, and the provisions of Bank Negara Malaysia, that the best RBC for Islamic insurance company in Malaysia is 130%, then the RBC of Islamic Insurance companies from the two countries is not yet considered ideal because it below the provisions limit. Further, the standard deviation of RBC of Islamic Insurance company in both countries is relatively large compared to its mean value. With the value of data deviation, it shows that the RBC variable data is poor.

In average the liquidity of Islamic Insurance company in Indonesia is larger than Islamic Insurance Company in Malaysia. However, the liquidity level of Islamic insurance companies in both countries is considered not ideal, since it is below the provisions. The liquidity deviation standard of Indonesian Islamic insurance companies shows a relatively large deviation of data while in Malaysian Islamic insurance deviation standard is relatively small. With the magnitude of deviation of data, it indicates that the Islamic insurance liquidity data in Indonesia is considered to be poor while Malaysia's insurance liquidity is considered to be quite good.

The average of balance ratio' of Islamic Insurance company in Indonesia is smaller than Islamic Insurance Company in Malaysia. Islamic insurance ratio from the two countries is considered not ideal because refers to the BNM the minimum of investment in covering company liabilities is 75%. Thus, it does not meet the ideal ratio criteria. The deviation standard of balance ratio in the Islamic insurance companies in Indonesia shows a relatively large, meanwhile of Islamic Malaysia's insurance companies is relatively small. It shows that the Islamic insurance balance ratio data in Indonesia is considered to be poor while the Malaysian Islamic insurance balance ratio is considered quite good.

The average investment yield of Islamic Insurance companies in Indonesia is smaller than the mean yield of Malaysian Islamic insurance companies. Islamic's insurance investment from the two countries is considered to be quite good. Each Islamic insurance company in both countries invests in several investment products despite the highest investment in Sukuk or Islamic bonds. In addition, investments are made after the obligation fund such as claims are fulfilled. The deviation standard of investment return of Islamic insurance companies in both countries is considered small, it shows that the data on Islamic investment in Indonesia and Malaysia are considered to be quite good.

The average profitability ratio of Indonesian Islamic insurance companies is larger than Islamic Malaysia's profitability insurance ratio. Islamic's insurance profitability from each country is considered to have demonstrated the ability of paid-in capital to generate profits for shareholders. The deviation standard of profitability ratio in the Islamic insurance companies in Indonesia shows a relatively large, meanwhile of Islamic Malaysia's insurance companies is relatively small. It shows that the Islamic insurance balance ratio data in Indonesia is considered to be poor while the Malaysian Islamic insurance balance ratio is considered quite good.

Based on the Mann-Whitney test of RBC in Indonesia Islamic insurance companies and Malaysia Islamic insurance companies, the test result was 5 in Indonesia and 51 in Malaysia. It is necessary to look further at the Mann-Whitney table to confirm the differences between RBC data besides the score result. Using a significance level of 0.05 and the number of sample of 15 Islamic insurance companies, then the Mann-Whitney table is 10. Furthermore, the smallest Mann-Whitney test result is compared to the Mann-Whitney table. The smallest Mann-Whitney test result was U1=5 from Indonesia Islamic Insurance Companies RBC. Comparing the test result with the Mann-Whitney table value, it showed that the test value (UI =5) was smaller than the table value (10). Thus, it can be concluded that there were differences in risk-based capital (RBC) of Islamic Insurance Companies in Indonesia and Malaysia.

Statistic Result of Islamic Insurance Inner Model

RBC, liquidity and investment balance ratio have a significant effect on the profitability of Islamic insurance companies in Indonesia. Meanwhile, investment return does not have a significant effect on profitability. As for Islamic insurance companies in Malaysia, RBC, liquidity, investment balance ratio, and investment return have a significant effect on the profitability of Islamic insurance companies in Malaysia.

Comparison Analysis of Risk-Based Capital (RBC) Performance and Its Effect on Islamic Insurance Profitability in Indonesia and Malaysia

Based on the statistical result, it shows that RBC has a significant effect on the profitability of Islamic insurance companies both in Indonesia and Malaysia. The higher the RBC value, the more profitability gained. Each company in Indonesia has RBC value above the provisioning limit, hence it can be said that those companies are healthy. Accordingly, the Islamic insurance companies in Malaysia have a ratio above the BNM provision limit, thus its solvency is considered capable to anticipate the risk of losses arising from the management of assets or liabilities. A good ratio can be translated that the market share and people interest in Islamic insurance is also good. High market share leads to increased profitability. The result of this study is supported by Safitri and Suprayogi (2017), Anggi and Dorkas (2009), Nurfadila, Hidayat and Sulasmiyati (2015), and Yusofa, Laub, and Osman (2015)

Liquidity has a significant effect on the profitability of Islamic insurance companies both in Indonesia and Malaysia. Liquidity shows the ability of insurance companies to pay claims from liquid funds. The higher the liquidity, the higher the profitability. Since the ratio has a significant effect on profitability, it can be said that Islamic insurance is able to fulfill its short-term obligations. The results of this study are consistent with the research of Anggi and Dorkas (2009), Nurfadila, Hidayat and Sulasmiyati (2015), and Safitri and Suprayogi (2017).

Investment to liability balance ratio has a significant effect on the profitability of Islamic insurance companies both in Indonesia and Malaysia. In Malaysia, MFRS imposes revenue acquisition at a certain time is only to cover liabilities in the form of claims and services. Furthermore, BNM itself requires liability level of Islamic insurance companies in an uncertain claim of 75%. Most of the Islamic insurance companies make an investment in low-risk, moderate and relatively stable securities. Besides, the number of claims paid is lower than the premium received, hence the investment is more than the liability and the profitability increases. The results of this study are consistent with the research of Anggi and Dorkas (2009), Safitri and Suprayogi (2017), Kirmizi and Agus (2011), Fikri (2009) and Sastri et al. (2017) who found that investment returns have a positive effect on the profitability of insurance companies.

Meanwhile, the investment return does not have a significant effect on the profitability of Islamic insurance companies in Indonesia. The companies used in this study were an Islamic Business Unit instead of full-fledged, hence most of its investment, mutual fund, and venture capital, still follow its parent company the conventional insurance company one. The companies itself only invest in securities thus the investment returns do not affect profitability. It is consistent with the research of Safitri and Suprayogi (2007). However, investment return has a significant effect on the profitability of Islamic insurance companies in Malaysia.

CONCLUSIONS

Based on the analysis result and discussion above, it can be concluded that there are differences in RBC of Islamic insurance companies in Indonesia and Malaysia based on the Mann-Whitney test. Furthermore, for Islamic insurance companies both in Indonesia and Malaysia, RBC, liquidity, and investment balance ratio have a significant effect on the profitability of Islamic insurance companies in Indonesia. Meanwhile, investment return does not have a significant effect on profitability for Indonesian Islamic insurance companies but not for Malaysian Islamic insurance companies.

Since the RBC of Islamic insurance companies both in Indonesia and Malaysia is still far from the provision limit, it will be better for the Islamic insurance companies from each country to have solvency levels in accordance with the provisions of each country in order to avoid the risks that may occur. Besides, the companies should make diversification in an investment in order to enhance the impact of investment return toward the companies profitability. Further, the market share of Islamic insurance needs to be escalated in both countries. It can be done through offer various Islamic insurance product types to the public in Malaysia as well as enhance the number of full-fledged Islamic insurance companies in Indonesia.

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