

Comparison of the Accuracy of the Risk-Based Capital and Early Warning System Method in Assessing the Financial Performance of Sharia Life Insurance

Ahim Abdurahim ^{1,*} Rezki Setiawan¹

¹*Universitas Muhammadiyah Yogyakarta, Indonesia*

^{*}*Corresponding author. Email: ahim@umy.ac.id*

ABSTRACT

The purpose of this study is to compare the accuracy of the Risk-Based Capital (RBC) and Early Warning System (EWS) methods in measuring the financial performance of sharia insurance. The study's subjects were Islamic life insurance companies registered with the Financial Services Authority (OJK) in 2018. Measurement of financial performance with Risk-Based Capital (RBC) used solvency ratios, and Early Warning System (EWS) employed solvency ratios, liquidity ratios, rentability ratios, and technical ratio. The analysis technique utilized a paired sample test. The results showed that the EWS method had a greater deviation than RBC. It means that the RBC method is more accurate than the EWS method.

Keywords: *Accuracy, Performance, Finance, Insurance, Sharia.*

1. INTRODUCTION

Economic growth in Indonesia encourages the growth of financial institutions such as insurance companies. Insurance companies provide protection against insurance participants' losses caused by previously unexpected circumstance [1]. In this case, the large number of Muslim communities in Indonesia opens opportunities for the growth of insurance that operates based on sharia principles [2]. The following is data on the development of the sharia insurance business in Indonesia from 2013 to 2019.

Table 1. Growth of the Insurance Industry with Sharia Principles in 2013-2019

No	Keterangan	2013	2014	2015	2016	2017	2018	2019
1.	General insurance	2	2	3	4	5	5	5
2.	Life insurance	3	3	5	6	7	7	7
3.	Reinsurance	0	0	0	1	1	1	1
	Total	5	5	8	11	13	13	13

(Source: Sharia IKNB Directory; Financial Services Authority, 2019)

The number of sharia insurance companies experienced significant growth from 2013 to 2017. However, from 2017 to 2019, there was no increase in the number of insurance companies. Meanwhile, based on data on the number of assets under management, it

uncovered that the amount of asset growth has continued to increase, as shown in Table 2 follow:

Table 2. Total Assets of Sharia Insurance Companies from 2015-2019

No	Type of Insurance	2015	2016	2017	2018	2019
1.	General insurance	21.614	27.079	33.484	34.474	37.487
2.	Life insurance	3.786	4.797	5.370	5.621	5.903
3.	Reinsurance	1.119	1.368	1.666	1.864	2.063
	Total	26.519	33.244	40.520	41.959	45.453

(Source: Sharia IKNB Directory; Financial Services Authority, 2019)

Sharia insurance managed asset data increased significantly from 2015 to 2017 in line with the increase in the number of sharia insurance companies. Nevertheless, the growth of assets under management of sharia insurance, namely from 2017 to 2019, experienced a slowdown. The increase in the number of companies and the number of assets under management indicated an increase in public awareness of the importance of using insurance in anticipating future risks [3], [4], [5]. The community's consideration of using insurance benefits is for investment activities, solving financial problems, financial security, meeting business requirements, retirement planning, and investing for the future [6]. Besides, people's motivation to use sharia insurance is because they have superior products under sharia

principles [7], [8], [9]. Therefore, disclosing information through financial reports will increase public knowledge and awareness to utilize sharia insurance services [10].

It is interesting to examine the fluctuations in the growth of assets under management of sharia insurance to reveal the dominant factors affecting the growth of assets under management of sharia insurance companies. It is because Islamic insurance companies are required to carry out sound financial management to provide satisfaction and security for the participants [11]. To find out the quality of Islamic insurance management, one of the indicators is by analyzing financial statements [12].

Analysis of the financial health level of Islamic insurance can be carried out using two methods, namely Risk-Based Capital (RBC) [13], [14] and the Early Warning System (EWS) method [15]. The Risk-Based Capital (RBC) method is used to assess an insurance company's financial performance from the aspect of capital adequacy so that the public will use this capital adequacy in determining or choosing an insurance company [16]. Meanwhile, the Early Warning System (EWS) method was introduced by The National Association of Insurance Commissioners (NAIC) to measure insurance companies' financial performance. Research that measures insurance companies' performance using the Early Warning System (EWS) method has been conducted [1], [17]. Regarding the two methods of measuring financial performance, this article discusses the comparison of the accuracy of the performance appraisal of Islamic life insurance companies between the Risk-Based Capital (RBC) method and the Early Warning System (EWS) method.

2. THEORETICAL FRAMEWORK

In this article, two fundamental theories are used to build a frame of mind, namely Stakeholder theory and Stewardship Theory. Stakeholder theory was introduced [18], which explains how management balances all stakeholders' needs. The stakeholder theory concept is clearly different from agency theory, prioritizing capital owners' interests compared to other stakeholders [19]. From the perspective of an insurance company, many parties are interested in the insurance company; besides management, there are also interests of participants who entrust their funds to be managed by the insurance company.

Stewardship theory arises with the assumption that basically, human nature can be trusted (mutual trust), has a desire to act responsibly, has high integrity, and behaves honestly towards others. Stewardship theory contrasts with agency theory, which emphasizes selfishness and moral hazard in analyzing stakeholder interests' fulfillment [19]. The theory of stewardship, according to Donaldson and Davis, is a theory that describes a state of behavior that shows managers act in

the best interests of everyone [20]. Stewardship theory is suitable for building a framework of thinking that the management of an Islamic insurance company will try to manage finances for the current and future common interests; in this case, management has the motivation to behave according to principles well [21].

Stewardship theory can be understood in Islamic life insurance companies. Sharia life insurance company as principal entrust customers as a steward in managing funds that should be accommodated for common interests. Individuals must have good and well-formed behavior always to be involved in collaboration within the company in accordance with sharia principles. Besides that, they must also have behavior that upholds togetherness with higher benefits than working individually and have the willingness to cooperate and help each other.

Stewardship theory was employed to explain the relationship *between* executives' duties and responsibilities, in this study, in carrying out Islamic life insurance companies' performance as servants using the Risk-Based Capital method or the Early Warning System. It aims to compare which methods are the most effective for measuring financial performance so that Islamic life insurance companies can optimally improve their financial performance.

Sharia Life Insurance

Sharia insurance is insurance with operational principles based on the existence of Islamic law with Al-Qur'an and Al-Sunnah as references [2]. The following is one of the fatwas related to sharia insurance.

" O you who have believed, fear Allah. And let every soul look to what it has put forth for tomorrow - and fear Allah. Indeed, Allah is Acquainted with what you do. (Q.S Al Hasyr:18)

Surah Al-Quran above explains that a Muslim should think about what the future will be. Sharia insurance activities are activities that pay attention to life for tomorrow in accordance with the principles set out in Islam. It can be the basis that insurance is someone's action to pay attention to risks in the future.

The basic principle contained in sharia insurance is *ta'awun*, which means "protect" and "help." *Ta'awun* is a principle in life to protect and help each other. The element that contains the risk is borne by the insurance member, meaning that each member becomes the guarantor for the other members [22]. Sharia insurance stated by Islamic economic experts consists of three main principles, among others [22]:

1) Mutual responsibility

Sharia insurance members have a shared responsibility to help each other, including helping other

members who experience disasters or losses, based on sincere intentions.

2) To mutually cooperate and help each other.

Cooperating with each other and helping each other among members of Islamic insurance, especially in overcoming difficulties or losses that are being experienced due to a disaster that befell

3) Avoiding the elements of *gharar* (fraud), *maysir* (gambling), and usury

Sharia insurance, as an institution with Islamic principles, must be able to avoid elements of *gharar*, *maysir* and usury.

Previous Research

Research on measuring Islamic insurance companies' financial performance using the Risk-Based Capital method and Early Warning System has been widely carried out with various models and findings. The effect of risk-based capital financial ratios and early warning systems on the solvency of Islamic life insurance companies in Indonesia, concluding that simultaneously, the RBC and EWS variables affected financial solvency [23]. The results also revealed that the ratio of surplus changes, the ratio of claims expense, and risk-based capital did not affect financial solvency. Meanwhile, the ratio of management fees, liquidity ratios, and growth influenced financial solvency.

The same research, namely comparing the financial performance of conventional insurance companies and sharia insurance in Indonesia using the Early Warning System (EWS) and Risk-Based Capital (RBC) methods, which employed the financial report data of sharia insurance companies for the period 2012-2016 [23], [2]. This research exposed differences in nine ratios: solvency margin ratio, underwriting ratio, claim expense ratio, commission ratio, investment return ratio, liquidity ratio, investment to technical reserve ratio, premium growth ratio, and risk-based capital. Meanwhile, there was no significant difference in the ratio of self-restriction and technical reserve to financial performance. Meanwhile, research results from [2] deduced that there were differences in financial performance between Islamic and conventional insurance.

By using different periods, [12] the differences in the financial performance of conventional insurance companies and sharia insurance based on Risk-Based Capital (RBC) and Early Warning System (EWS) using their financial reports for the period 2015-2016. The results exhibited that the solvency margin ratio of Islamic companies was better than conventional life insurance companies, the self-retention ratio of conventional life insurance companies was better than Islamic life insurance companies, while the ratio of claims expense

and liquidity ratios had no significant difference. With the same research objectives but using different data and periods, namely insurance companies nominated for Best Life Insurance 2016, there were significant differences in the financial performance of conventional insurance and sharia insurance with the EWS method using a fund adequacy ratio, claim expense ratio, and own retention ratio, while using the liquidity ratio, there was no significant difference [24].

The use of EWS and RBC methods to assess individual and group insurance companies' financial performance and compare conventional insurance companies and Islamic accounting companies has been widely practiced. However, this article discusses from a different side, namely comparing the accuracy of the EWS method and the RBC method in measuring the financial performance of Islamic life insurance companies in Indonesia for the 2018 period.

3. METHODOLOGY

The data used in this study were the financial statements of seven sharia life insurance companies in 2018 applied by the Financial Services Authority. This study employed sharia life insurance companies registered with the Financial Services Authority in 2018. The technique of taking the subjects in this study utilized a purposive sampling technique to select subjects according to the research criteria. Measurement of financial performance based on the RBC method used a solvency ratio. This ratio is a proxy for the insurance company's ability to bear the risk of loss. The RBC value calculation used the following formula:

$$RBC = \frac{\text{solvency level}}{\text{minimum solvency level limit}}$$

The solvency level was calculated by finding the difference between assets and liabilities, while the Minimum Solvency Level Limit value has been determined based on the Decree of the Minister of Finance Number 424/KMK.06/2003, namely 120%. If the RBC value is higher than 120%, it means that the financial performance is good, and if the RBC value is less than 120%, it indicates that the financial performance is not good.

Financial performance analysis based on the EWS method used four ratios: the solvency ratio (using the solvency margin ratio), the liquidity ratio, the profitability ratio, and the technical ratio. Solvency ratio analysis employed the Solvency Margin Ratio, explaining how much the company's financial ability to respond to closed risks. The solvency margin ratio has a minimum-normal limit of 33.3%. The calculation formula for the solvency margin ratio is as follows:

$$\text{Solvency Margin Ratio} = \frac{\text{stockholders' funds}}{\text{net payments}}$$

If the value of the solvency margin ratio is higher than 33%, it means that financial performance is good, and if the value of the solvency margin ratio is less than 33%, it signifies that the financial performance is not good.

Moreover, the Liquidity Ratio was to determine whether the companies could meet their liabilities with existing asset ownership. This ratio has a normal limit of at most 120%. The formula for calculating the asset liquidity ratio is as follows:

$$\text{Liquidity Ratio} = \frac{\text{total liabilities}}{\text{Total assets used}}$$

If the liquidity ratio value is less than 120%, it means that the financial performance is good, and if the liquidity ratio value is higher than 120%, it denotes that the financial performance is not good.

Besides, the premium stability ratio in this study was based on the self-retention ratio. This ratio is shown based on the company's retention rate in bearing the risks that occur. The calculation formula is as follows:

$$\text{Payment Retention Ratio} = \frac{\text{premi netto}}{\text{premi bruto}}$$

The greater value of the self-retention ratio indicates that the company's retention rate performance is in good condition.

Meanwhile, the technical ratio is often called the technical liability ratio. This ratio describes whether the required reserves are sufficient in facing the obligations that will arise due to risk coverage. The formula for the technical liability ratio is as follows:

$$\text{Technical Liability Ratio} = \frac{\text{technical liability}}{\text{net payment}}$$

There is no normal limit for the technical liability ratio, but it is necessary to pay attention to this ratio level, whether it gives a good indication or not. If it is too low or too high, it indicates that financial performance is getting worse.

Data Analysis

Quantitative analysis in this study employed univariate analysis, aimed to explain or describe the research variables. A quantitative approach was used to describe performance appraisals' accuracy levels using the EWS and RBC methods. The data analysis steps in this article are as follows:

1. Calculating on financial ratios that are indicators of Sharia life insurance companies' performance appraisal using the Risk-Based Capital and Early Warning System methods
2. Gauging the financial performance of the Islamic insurance companies based on actual value using total assets

3. Analyzing the discrimination test analysis between the actual rank and the ranking based on the RBC and EWS ratios to see the deviation degree

The comparison of the deviation value of the actual and RBC ratings and the actual ratings with the EWS ratings determines the RBC and EWS methods' accuracy.

4. RESEARCH RESULTS AND DISCUSSION

Calculation of financial performance using the Risk-Based Capital (RBC) and Early Warning System (EWS) methods

By using the Risk-Based Capital (RBC) method, the calculation of the RBC value was carried out using the solvency level data and the minimum solvency level limit value for each Islamic life insurance company, as shown in Table 3 below:

Table 3. Solvency Ratio based on Risk-Based Capital

No	Company	Solvabilitas Level	BTSM	RBC
1	Capital Life Syariah	978.580.000	87.150.000	1.122,87%
2	Tafakul Keluarga	128.865.000.000	41.909.000.000	307,49%
3	Al Amin	131.960.790.000	67.622.310.000	195,14%
4	Amanah Jiwa Giri Artha	5.410.920.000	2.832.140.000	191,05%
5	Bumiputera	21.308.490.000	13.325.100.000	159,91%
6	Keluarga Indonesia	1.059.620.000	825.280.000	128,40%
7	Jasa Mitra Abadi	540.799.334	502.601.888	107,60%
<i>Cut off</i>				120%

Source: 2020 OJK IKNB statistical data (processed data)

Based on the table above, using the Risk-Based Capital method, it was found that there were six sharia life insurance companies with an RBC value above a minimum value of 120% or were performing well. In order of rank, they were insurance companies of Tafakul Keluarga, Al Amin, Amanah Jiwa Giri Artha, Keluarga Indonesia, Bumiputera and Capital Life Syariah. On the other hand, one sharia life insurance company had an RBC value below a minimum value of 120%, namely the Jasa Mitra Abadi company.

Furthermore, using the Early Warning System (EWS) method, the ratio calculation was performed four times in sequence, as follows:

- a. The solvency ratio in this study used the Solvency Margin Ratio. In table 4, the analysis results of the solvency ratio using the Solvency Margin Ratio in Islamic life insurance companies in 2018 are shown:

Table 4. Solvency Margin Ratio

No	Company	Shareholder's Fund	Premi netto	EWS
1	Capital Life Syariah	1.312.901.530.000	14.414.970.000	91,08%
2	Tafakul Keluarga	1.172.622.000.000	12.908.000.000	90,84%
3	Al Amin	156.838.700.000	4.288.800.000	36,57%
4	Jasa Mitra Abadi	1.439.033.335	552.900.319	2,60%
5	Keluarga Indonesia	1.156.139.113	-2.375.866.786	-0,49%
6	Amanah Jiwa Giri Artha	12.806.000.000	-6.977.000.000	-1,84%
7	Bumiputera	727.608.280.000	-7.268.610.000	-100,10%
<i>Cut off</i>				33,3%

Table 4 displays that three Islamic life insurance companies had a solvency margin ratio that exceeded the minimum limit of 33.3% or had a good performance, namely the Islamic Capital Life Company, Tafakul Keluarga, and Al Amin. On the other hand, four sharia life insurance companies had a solvency margin ratio of below 33.3%, respectively, including insurance companies of Jasa Mitra Abadi, Keluarga Indonesia, Amanah Jiwa Giri Artha, and Bumiputera.

- b. Liquidity ratio analysis explains how much the company's financial capability to meet its liabilities with existing asset ownership. The liquidity ratio has a normal maximum limit of 120%. The following are the analysis results of liquidity ratios in sharia life insurance companies in 2018:

Table 5. Liquidity Ratio

No	Company	Liabilities	Asset	Liquidity
1	Al Amin	361.518.220.000	623.688.510.000	57,96%
2	Jasa Mitra Abadi	64.753.962.799	179.014.551.425	36,17%
3	Keluarga Indonesia	28.512.745.418	89.604.995.767	31,82%
4	Amanah Jiwa Giri Artha	30.807.000.000	96.855.000.000	31,81%
5	Tafakul Keluarga	366.550.000.000	1.712.378.000.000	21,41%
6	Bumiputera	120.783.530.000	891.253.300.000	13,55%
7	Capital Life Syariah	80.879.010.000	1.964.847.040.000	4,12%
<i>Cut off</i>				120%

Source: 2018 Financial Report Data (processed data)

Based on the table above, it is known that all Islamic insurance companies had a liquidity ratio below the maximum value limit of 120%, meaning that all insurance companies had a good performance, seen from the liquidity ratio aspect.

- c. The premium retention ratio was obtained by dividing the net premiums and gross premiums. This ratio is shown based on the company's retention rate in bearing the risks that occur. This ratio does not belong to the normal limit, but the higher the value obtained, the better. The following are the analysis results of the premium stability ratio in Islamic life insurance companies in 2018:

Table 6. Premium Stability Ratio

No	Company	Net Payment	Gross Payment	Payment Stability
1	Capital Life Syariah	14.414.970.000	48.070.210.000	29,99%
2	Tafakul Keluarga	12.908.000.000	110.494.000.000	11,68%
3	Al Amin	4.288.800.000	77.509.130.000	5,53%
4	Jasa Mitra Abadi	552.900.319	14.793.287.169	3,74%
5	Keluarga Indonesia	-2.375.866.786	14.237.276.627	-16,69%
6	Bumiputera	-7.268.610.000	39.849.810.000	-18,24%
7	Amanah Jiwa Giri Artha	-6.977.000.000	13.269.000.000	-52,58%
<i>Cut off</i>				na

Source: Financial report 2018 (data processed)

Based on the table above, four sharia life insurance companies had premium stability ratios with positive values, comprising the Tafakul Keluarga company, Al Amin, Jasa Mitra Abadi, and Sharia Capital Life. Meanwhile, three companies had a premium stability ratio with a negative value: Amanah Jiwa Giri Artha, Keluarga Indonesia, and Bumiputera. It showed that the higher the value of the premium stability ratio, the company was deemed capable of maintaining the company's stability in bearing all risks that might occur, and vice versa.

- d. The technical ratio was gained by dividing the technical liabilities and the net premium. This ratio describes whether the required reserves are sufficient to meet the obligations that will arise due to risk coverage. This ratio does not have a normal limit, but it should be noted that the ratio is high and low. The following are the analysis results of technical liability ratios in sharia life insurance companies in 2018:

Table 7. Technical Ratios

No	Company	Technical Liabilities	Net Payment	Technical Ratio
1	Jasa Mitra Abadi	64.753.962.799	552.900.319	117,12%
2	Al Amin	361.518.220.000	4.288.800.000	84,29%
3	Tafakul Keluarga	366.550.000.000	12.908.000.000	28,40%
4	Capital Life Syariah	80.879.010.000	14.414.970.000	5,61%
5	Amanah Jiwa Giri Artha	30.807.000.000	-6.977.000.000	-4,42%
6	Keluarga Indonesia	28.512.745.418	-2.375.866.786	-12,00%
7	Bumiputera	120.783.530.000	-7.268.610.000	-16,62%
<i>Cut off</i>				na

Source: Financial report 2018 (data processed)

Based on table 7, it is seen that four Islamic life insurance companies had technical ratios with positive values: Jasa Mitra Abadi insurance companies, Al Amin, Tafakul Keluarga, and Sharia Capital Life. Meanwhile, three companies had a premium stability ratio with a negative value, namely Amanah Jiwa Giri Artha, Keluarga Indonesia, and Bumiputera.

Calculation Of Actual Financial Performance

The calculation of the actual rating of a Sharia insurance company's financial performance in this article used a ranking of the company's total value of assets. The

following is a ranking of the actual performance of a sharia life insurance company based on total assets:

Table 8. Actual Performance Rating

No	Company	Rating
1	Tafakul Keluarga	2
2	Al Amin	4
3	Amanah Jiwa Giri Artha	6
4	Jasa Mitra Abadi	5
5	Keluarga Indonesia	7
6	Bumiputera	3
7	Capital Life Syariah	1

Source: Financial report 2018 (data processed)

The results obtained revealed that based on the ranking of total assets owned, the insurance company Capital Life Syariah was in the first position, and Amanah Jiwa Giri Artha was in the last position.

Rank calculation based on RBC and EWS ratio

Table 9 presents the ranking of the financial performance of sharia life insurance companies using the RBC and EWS methods in the following order:

Table 9. Rank Calculation Results

No	Company	RBC	Rating	EWS	R
1	Tafakul Keluarga	307,49%	2	90,84%	
2	Al Amin	195,14%	3	36,57%	
3	Amanah Jiwa Giri Artha	191,05%	4	-1,84%	
4	Jasa Mitra Abadi	107,60%	7	2,60%	
5	Keluarga Indonesia	128,40%	6	-0,49%	
6	Bumiputera	159,91%	5	-100,10%	
7	Capital Life Syariah	1.122,87%	1	91,08%	

Source: Financial report 2018 (data processed)

Table 9 exhibits that based on the RBC method, it is known that Capital Life Syariah was in the best performance position, and Jasa Mitra Abadi was in the last position. Meanwhile, based on the EWS method, it is seen that Capital Life Syariah was in the first position, and Bumiputera was in the last position.

Calculating the level of accuracy in measuring the financial performance of Islamic life insurance companies

The analysis used was the discrimination test using paired sample t-test, aimed to test the difference in the accuracy of the use of the two methods. The test was carried out with a significance level of 0.05, meaning that the result of drawing conclusions has a probability of 95% or an error tolerance of 5%. This test compared the calculation results of the ranking on financial performance in the two methods with the rating that had been done based on total assets.

The calculation results of financial performance ratings obtained from calculations using financial indicators in the assessment components using the RBC and EWS methods are as follows:

Table 10. Rating of Sharia Life Insurance Companies.

No	Company	Actual Level	Calculation Result	
			RBC	EWS
1	Tafakul Keluarga	2	2	3
2	Al Amin	4	3	2
3	Amanah Jiwa Giri Artha	6	4	6
4	Jasa Mitra Abadi	5	7	1
5	Keluarga Indonesia	7	6	5
6	Bumiputera	3	5	7
7	Capital Life Syariah	1	1	4

Source: Financial report 2018 (data processed)

The ranking results from calculations using the RBC and EWS methods were compared with the total asset rankings to determine the deviation or deviation degree between the estimated ratings (RBC and EWS) and the actual ratings.

Table 11. Analysis of Paired Sample T-Test

Paired Samples Test									
		Paired Differences		95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper				
Pair 1	Aktual - RBC	.00000	1.52753	.57735	-1.41273	1.41273	.000	6	1.000
Pair 2	Aktual - EWS	.00000	2.88675	1.09109	-2.66980	2.66980	.000	6	1.000

The paired sample t-test analysis results uncovered that the standard deviation for both RBC and EWS had a standard deviation value. The deviation value between the Actual rating and the RBC rating was 0.52753, smaller than the actual rating deviation with an EWS rating of 1.09109. The standard deviation value of the standard error score showed that using the RBC method to rank Islamic life insurance companies' financial performance level was better than the EWS method.

5. CONCLUSION

The analysis results using the paired-sample t-test indicated that the RBC method had smaller errors than the EWS method. It means that the RBC method is more accurate than the EWS method in measuring Islamic insurance companies' financial performance.

6. LIMITATIONS, SUGGESTIONS, AND IMPLICATIONS

Several alternative parameters for the actual performance rating can be used, such as ratings issued by agencies of Islamic insurance company performance rating, such as those issued by the Insurance Media Research Institute (LRMA). Thus, this study's conclusions can be different when using ranking parameters from different sources. Therefore, it is suggested that in future studies, the accuracy of

performance appraisals based on the RBC and EWS can be re-tested by using other ranking parameters. Besides, to increase the validity of the research data results used, it can include several periods to analyze the deviation against the variance that occurs every year.

Sharia life insurance companies with a higher potential risk of experiencing bankruptcy must immediately make changes. Evaluation related to the company's financial condition is needed so that the causes of the company experiencing an unstable financial condition, which is in a position of unfavorable financial performance, can be seen. The existence of an evaluation can also improve the performance of sharia life insurance companies so that the level of risk is smaller and can maintain the company so that it can operate healthily. Financial performance that needs to be improved includes the Solvency Margin Ratio.

People who want to become potential customers (participants) in a sharia life insurance company can consider the amount of contribution that will be given to the company by seeing whether the company's financial condition is good or not based on the ranking of the RBC and EWS ratios, such as the Capital Life Syariah company which is ranked first both in terms of ranking RBC to EWS ratio. Due to good financial conditions, giving a high contribution will benefit prospective customers (participants).

ACKNOWLEDGMENT

Thank you to Universitas Muhammadiyah Yogyakarta, the ICOSI committee, and the 6th International Conference for Accounting and Finance committee, who have given us the opportunity to publish this article.

REFERENCES

- [1]. Agustina, & Indah, M. (2011). *Analisis kinerja keuangan berdasarkan early warning system pada PT. Asuransi Central Asia Cabang Palembang*. POLTEK PalComTech Palembang. Skripsi.
- [2]. Ramdhana, D., & Tandika, D. (2019). Analisis Perbandingan Kinerja Keuangan Asuransi Syariah dan Konvensional Menggunakan Metode Risk Based Capital dan Early Warning System.
- [3]. Choudhury, M. A., & Harahap, S. S. (2009). Complementing community, business, and microenterprise by the Islamic epistemological methodology. *International Journal of Islamic and Middle Eastern Finance and Management*.
- [4]. Maysami, R. C., & Williams, J. J. (2006). Evidence on the relationship between Takaful insurance and fundamental perception of Islamic principles. *Applied Financial Economics Letters*, 2(4), 229-232.
- [5]. Olorogun, L. A., & Noor, A. M. (2014). Charting a course on the Islamic finance ocean: A survey of Islamic insurance literatures. *China-USA Business Review*, 13(12), 755-766.
- [6]. Ismanto, K. (2018). Understanding on and Need for Syaria Insurance: A Case Study in Pekalongan, Central Java, Indonesia. *Journal of Accounting and Investment*, 19(2), 137-148.
- [7]. Anwar, M., & Hussain, M. (1994). Comparative Study of Insurance and "Takafol" (Islamic Insurance) [with Comments]. *The Pakistan development review*, 33(4), 1315-1330.
- [8]. Coolen-Maturi, T. (2013). Islamic insurance (takaful): demand and supply in the UK. *International Journal of Islamic and Middle Eastern Finance and Management*.
- [9]. Rofiudin, M., Maslichah, M., & Afifudin, A. (2019). Analisis Pengaruh Rasio Keuangan Risk Based Capital dan Early Warning System terhadap Financial Solvency Pada Perusahaan Asuransi Jiwa Syariah di Indonesia. *Jurnal Ilmiah Riset Akuntansi*, 8(03).
- [10]. Husin, M. M., & Ab Rahman, A. (2016). Do Muslims intend to participate in Islamic insurance? *Journal of Islamic Accounting and Business Research*.
- [11]. Irvansyah, R. (2010). Analisis Kinerja keuangan Berdasarkan Rasio Keuangan Early Warning System (EWS) Pada Perusahaan Asuransi Yang Terdaftar di Bursa Efek Indonesia (BEI).
- [12]. Shinta, W. (2018). *Analisis Kinerja Keuangan Perusahaan Asuransi Jiwa Syariah dan Konvensional Berdasarkan Risk Based Capital (RBC) dan Early Warning System (EWS)*. Skripsi. Universitas Islam Negeri Sunan Kalijaga. Yogyakarta.
- [13]. Avery, R. B., & Berger, A. N. (1991). Risk-based capital and deposit insurance reform. *Journal of Banking & Finance*, 15(4-5), 847-874.
- [14]. Cummins, J. D., Harrington, S. E., & Klein, R. (1995). Insolvency experience, risk-based capital, and prompt corrective action in property-liability insurance. *Journal of Banking & Finance*, 19(3-4), 511-527.
- [15]. Salsabila, H. F., & Zulaikha, S. (2020). The influence of Early Warning System Ratio to Company Profitability of Islamic life Insurance in Indonesia. *Hamdard Islamicus*, 43(1.), 355-369.

- [16]. Nurfadila, S. (2015). Analisis Rasio Keuangan dan Risk Based Capital Untuk Menilai Kinerja Keuangan Perusahaan Asuransi (Studi pada PT. Asei Reasuransi Indonesia (Persero) Periode 2011-2013). *Jurnal Administrasi Bisnis*, 22(1).
- [17]. Sumartono, S., & Harianto, K. A. (2018). Kinerja Keuangan Perusahaan Asuransi di Indonesia dan Faktor-faktor yang Mempengaruhinya. *Future: Jurnal Manajemen dan Akuntansi*, 6(1), 1-14.
- [18]. Brenner, S. N., & Cochran, P. (1991). *The stakeholder theory of the firm: Implications for business and society theory and research*. Paper presented at the Proceedings of the international association for business and society.
- [19]. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- [20]. Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20-47.
- [21]. Anton, F. (2010). Menuju Teori Stewardship Manajemen. *Majalah Ilmiah Informatika*, 1(2).
- [22]. In'Ami, A. F. (2017). Pengaruh Persepsi Kualitas Produk, Besaran Premi dan Strategi Pemasaran terhadap Keputusan Nasabah Menggunakan Produk Jasa Asuransi Syariah Asuransi Jiwa Bersama Bumi Putera 1912 Kantor Cabang Tulungagung.
- [23]. Widyani, R. (2018). Analisis Perbandingan Kinerja Keuangan Perusahaan Asuransi Konvensional dan Asuransi Syariah di Indonesia dengan Metode Early Warning System (EWS) dan Risk Based Capital (RBC).
- [24]. Lamies, F. (2017). Analisis Perbandingan Kinerja Keuangan Perusahaan Asuransi Jiwa Konvensional dan Asuransi Jiwa Syariah dengan Metode RBC dan EWS (Studi pada Perusahaan Asuransi Jiwa Penyandang Gelar Best.