ANALYSIS OF THE FINANCIAL PERFORMANCE OF INSURANCE COMPANIES BEFORE AND DURING THE COVID-19 PANDEMIC BASED ON EARLY WARNING SYSTEM AND RISK-BASED CAPITAL

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KEYWORDS: Financial performance, Pandemic, Early Warning System, Risk-Based Capital

ABSTRACT
This study aims to provide empirical evidence regarding the comparison of the value of the Early Warning System and Risk-Based Capital in measuring the financial performance of insurance companies before and during the COVID-19 pandemic. The Early Warning System measurement indicator uses the claim expense ratio. Sampling using purposive sampling method and obtained a sample of 18 insurance companies listed on the Indonesia Stock Exchange (IDX) for the period 2017-2022. The type of data used is secondary data in the form of financial reports collected through the company's official website and the Indonesia Stock Exchange (IDX). The data analysis method uses non-parametric statistics, namely the Wilcoxon Sign Rank Test with the help of SPSS version 27. The results prove that there is a significant increase in the value of the Early Warning System during the pandemic compared to before the Covid-19 pandemic. The Risk-Based Capital value did not experience a significant decrease during the pandemic compared to before the Covid-19 pandemic. In addition, in this study, the Early Warning System is considered more accurate than Risk-Based Capital because it has a smaller standard error.

INTRODUCTION
Coronavirus Disease 2019 or Covid-19 is a new disease that can cause respiratory distress and pneumonia. This disease is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) infection. The first Covid-19 case in Indonesia was detected on March 2, 2020, and continues to increase every day, so Presidential Decree Number 11 of 2020 concerning the Determination of a Covid-19 Public Health Emergency was made, where the government took a policy to carry out lockdown and social distancing rules to prevent the spread of Covid-19. (Kompas.com, 2022). The policy has had an impact on the economic downturn in Indonesia and the sustainability of companies in various sectors including the industrial sector. The financial industry sector is one of the sectors affected by Covid-19, including the insurance sector. The performance of the insurance industry is influenced by many factors, one of which is the economy and income. COVID-19 has caused economic growth and income to fall so that the demand for insurance automatically falls and finally the insurance industry can experience losses (Marpaung, 2020).

The Covid-19 pandemic may provide two different possibilities for the insurance industry. First, insurance is a tertiary need that may not be chosen due to the economic crisis. Second, with future uncertainties about health and the economy, insurance may be an option
to guarantee future uncertainties. This uncertainty will certainly affect the future of insurance companies in terms of premium income (Pratiwi & Agustina, 2022). Based on statistics from the Indonesian Life Insurance Association (AAJI), the first quarter of 2020 recorded a 4.9% decline in premiums and at the end of the second semester of 2020, it is estimated that it will experience negative growth as a result of the physical distancing policy which causes people to work from home (Marpaung, 2020).

In addition to the decline in insurance premiums, insurance companies have experienced an increase in their solvency level. In a pandemic condition where the economy is unstable, the company's solvency level should have decreased due to the increase in the value of company risks such as an increase in the value of claims, thus increasing the capital used to cover these risks. The following is a graph that shows the movement of the solvency level based on the Risk-Based Capital indicator:

![Risk-Based Capital Data of Indonesian Insurance Companies](image)

**Figure 1**
Risk-Based Capital Data of Indonesian Insurance Companies
Source: OJK, processed by researchers (2023)

The graph above shows that the solvency level of the insurance industry has fluctuated before and during the pandemic, but experienced an increase at the beginning of the pandemic in 2021 where the solvency level should have decreased. The Financial Services Authority sets specific standards for assessing the performance of insurance companies, one of which is the provision of the Solvency Level. Solvency level can be proxied by Risk-based capital (Ulfan et al., 2018). According to Roncalli (2020) in Winata & Awaloedin (2023), states that the research standards for financial risk in insurance companies are different from those of banking or other similar financial institutions, namely using the Solvency Framework. Based on POJK Regulation Number 5 of 2023 concerning the Second Amendment to POJK Number 71 / POJK.05 / 2016, Risk-based capital is a solvency level limitation technique used to evaluate the ability of insurance companies to fulfill all their business obligations (Winata & Awaloedin, 2023).

At the height of the COVID-19 pandemic in Indonesia, thirteen insurance companies came under the special supervision of the Financial Services Authority (OJK). This was done as a result of several problems faced by the insurance companies, one of which was that the companies were unable to fulfill their client obligations. Sourced from Katadata (2022), Thirteen insurance companies including seven life insurance companies and six other general
insurance and reinsurance companies, are under the special supervision of the regulator. With a letter KEP-71/D.05/2022, the Financial Services Authority has revoked the business license of PT Asuransi Jiwa Adisarana Wanaartha due to problems paying claims and customer losses. PT Asuransi Jiwa Adisarana Wanaartha was penalized for violating the minimum solvency level, minimum investment adequacy ratio, and minimum equity. PT Asuransi Jiwa Kresna Life also experienced defaults on two of its insurance products as well as alleged embezzlement of customer insurance. PT Asuransi Jiwasraya also experienced 10 corruption cases that harmed customers, and PT Asuransi Bumiputera also experienced cases of default (Katadata, 2022).

From the existing phenomenon, it is necessary to analyze the performance of financial performance of insurance companies before and during the COVID-19 pandemic because these problems make companies, policyholders, and investors suffer losses. Insurance companies must measure and know the company's financial performance so that they can identify problems and make the right decisions. PSAK No. 28 concerning Loss Insurance Accounting, lists the Early Warning System method that can be used as a financial performance measurement tool in the insurance industry. In this study, the Early Warning System is used as a tool to detect the financial performance of insurance companies with measurement indicators using the claim expense ratio. In the Early Warning System, the claim expense ratio is considered capable of representing the profitability, liquidity, and premium stability of insurance companies, so that it can signal potential financial problems (Nyoman Winata, 2021).

Previous research conducted by (Zahra et al., 2023) and (Hida & Baskoro, 2022) shows that there is a significant difference in financial performance in the form of an increase in the value of the Early Warning System of insurance companies before and during the Covid-19 pandemic. Based on research (Pratiwi & Agustina, 2022) shows that there is a significant difference in financial performance in the form of an increase in the value of the Early Warning System of insurance companies before and during the Covid-19 pandemic. Meanwhile, based on research conducted by (Prawesti, 2022); (Antoni, 2021); and (Irhamni & Karya, 2021) shows the result that there is no significant difference in the financial performance of insurance companies before and during the COVID-19 pandemic based on the Early Warning System. Based on research (Pratiwi & Agustina, 2022) and (Hida & Baskoro, 2022) Comparative analysis of financial performance using Risk-Based Capital shows a significant difference in the form of an increase in value. While the research results (Winata & Awaloedin, 2023); (Prawesti, 2022); (Antoni, 2021); and (Irhamni & Karya, 2021) shows the result that there is no significant difference in the financial performance of insurance companies before and after the COVID-19 pandemic based on Risk-Based Capital.

Based on the results of previous research, it can be concluded that there are differences in research results from the measurement indicators of the Early Warning System and Risk-Based Capital. Therefore, further research is needed. To obtain more comprehensive results. The results of this study can be useful for insurance companies in managing their financial health and for regulators in monitoring the solvency of the insurance industry. Researchers use insurance companies listed on the Indonesian stock exchange because they are more vulnerable to market movements and economic conditions and describe more clearly the information and transparency of pandemic-related risks so that it can help assess the potential risks and stability
of the company more deeply. This research is a development of Zahra et al's research (2023), researchers added Risk-Based Capital measurements to show whether differences in the financial performance of insurance companies can be understood by evaluating their solvency levels. Based on the number and vulnerability of insurance companies that experience claim defaults, this study focuses on looking at the Early Warning System by using the claim expense ratio to find out whether only by looking at this ratio can detect the company's financial problems in the face of the Covid-19 pandemic or other economic instability. In addition, this study also analyzes the accuracy of the Early Warning System and Risk-Based Capital in assessing the financial performance of insurance companies.

**RESEARCH METHODS**

In this study, the type of research method used is quantitative research. The quantitative research method in this study uses comparative research. According to (Sugiyono, 2019), Comparative research is research that compares the existence of one or more variables in two or more different samples, and or at different times. The types of variables used are independent variables in the form of Early Warning Systems and Risk-Based Capital. This study uses secondary data, namely data in the form of numbers derived from the financial statements of insurance companies listed on the Indonesia Stock Exchange for the period before the COVID-19 pandemic, namely the 2017 and 2019 periods and the period during the COVID-19 pandemic, namely in the period 2020 to 2022. The financial statements are sourced from the company's website and the Indonesia Stock Exchange. The type of data required is data that meets the criteria for calculating the Early Warning System and Risk-Based Capital of insurance companies listed on the Indonesia Stock Exchange (IDX) for the period 2017-2022.

**Population and sampling technique**

The population is an insurance company listed on the Indonesia Stock Exchange (IDX) for the period 2017-2022. The existing population is 18 companies. This study uses a sampling technique using the purposive sampling method which is included in the nonprobability sampling. The characteristics of the sample in this study include:

a. Insurance companies listed on the Indonesia Stock Exchange (IDX)
b. Insurance companies that publish audit financial reports during the 2017-2022 period.

Based on the characteristics of the existing research sample, 18 insurance companies listed on the Indonesia Stock Exchange (IDX) were obtained as research samples.

The data analysis technique used is a nonparametric statistical method because it has a small sample size or data that does not meet the assumption of normality. The data in this study were processed using IBM SPSS Statistics 27 software. The data analysis used the Wilcoxon signed ranks test which is used to evaluate certain treatments on two observations, between before and after certain treatments.

**Data collection techniques**

In this study, the documentation method was used to collect data. This means that data is collected by quoting, recording, or viewing directly from journals, media, documents, and financial reports of insurance companies listed on the Indonesia Stock Exchange (IDX).
a. Early Warning System

An Early Warning System is a system used to find out early the financial condition of insurance companies. In this calculation, it can measure the financial performance and health level of the company and its measurement using financial ratios. In this study, the Early Warning System uses the claim expense ratio indicator. The Claims Expense Ratio is a ratio that shows how capable a company is of generating profits by taking into account the claims incurred by the company. The smaller this ratio, the better the company’s financial health. The claim expense ratio formula is based on PSAK No. 28:

\[
\text{claims - free ratio} = \frac{\text{claim - free}}{\text{premium opinion}} \times 100\%
\]

In this study, the claim expense ratio is used as an indicator in measuring the Early Warning System because the claim expense is one of the largest aspects of the insurance company's operating costs so it provides an overview of the company in managing risk, a sharp increase in claim expenses can be a potential sign of problems in the insurance portfolio, and uncontrolled claim expenses can threaten the liquidity and solvency of insurance companies.

b. Risk-based capital

Risk-based capital is the minimum amount of solvency level set, which is the number of funds needed to cover the risk of losses that may arise as a result of changes in the management of assets and liabilities. Based on POJK Regulation Number 5 of 2023 concerning the Second Amendment to POJK Number 71/Pojk.05/2016, to calculate risk-based capital, the following formula is used:

\[
\text{Risk Based Capital} = \frac{\text{Permitted assets} - \text{Liabilities}}{\text{Total Minimum Risk} - \text{Based Capital}} \times 100\%
\]

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistical analysis is used to determine the description of the variables that will be sampled. The results of descriptive statistical calculations that have been processed using SPSS Version 27 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the Pandemic Early Warning System</td>
<td>54</td>
<td>.25</td>
<td>2.41</td>
<td>90.11</td>
<td>34.08</td>
</tr>
<tr>
<td>During the Pandemic Early Warning System</td>
<td>54</td>
<td>.34</td>
<td>2.69</td>
<td>105.74</td>
<td>50.32</td>
</tr>
</tbody>
</table>

Source: SPSS output (2024)

Based on the results of descriptive analysis, describing the total data used in this study,
namely 54 before and 54 during the pandemic obtained from the financial statements of insurance companies for the period 2017-2022. The Early Warning System value before and during the pandemic has a standard deviation value lower than the mean value. This shows that the variable is homogeneous, which means that the data contained in the variable has low variation. The Early Warning System in this study uses the claim expense ratio indicator, so that the smaller the Early Warning System value, the better the company's financial performance, especially in terms of managing claims risk and potential profitability.

Early Warning System data before the pandemic, namely the lowest Early Warning System value of 0.25 at PT Bintang Tbk 2017, the company earned an operating profit of Rp17.85 Billion which is equivalent to 4.53% of total premium production. This is due to an increase in underwriting results and an increase in premium production of Rp393.7 billion, which is equivalent to 87.49% of the target. The largest Early Warning System value before the pandemic was 2.22 at PT Harta Aman Pratama Tbk in 2019, the company experienced a net loss of Rp115.5 Billion, one of the biggest contributors to the net loss was due to the correction of bad debt write-offs worth Rp36 Billion and the company had a high claim expense.

Early Warning System data during the pandemic, namely the lowest Early Warning System value of 0.34 at MSIG Life Insurance in 2021. The company recorded a decrease in profit of IDR257 billion compared to 2020. This was due to an increase of IDR200 billion in claims from death claims and health claims due to Covid-19 and due to unrealized losses on changes in “Fair Value through Other Comprehensive Income”. The highest value of the Early Warning System during the pandemic of 2.69 was in PT Harta Aman Pratama Tbk in 2022. The company booked a net loss of Rp7.05 Billion. The largest expense for the net loss booked came from an increase in health insurance claims due to the COVID-19 pandemic and as a result of a decrease in underwriting results.

Table 2
Results of Descriptive Statistical Analysis of Risk-Based Capital

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the Pandemic</td>
<td>Risk-Based Capital</td>
<td>54</td>
<td>128</td>
<td>1.649</td>
<td>493.07</td>
</tr>
<tr>
<td>During the Pandemic</td>
<td>Risk-Based Capital</td>
<td>54</td>
<td>139</td>
<td>2.527</td>
<td>596.31</td>
</tr>
<tr>
<td></td>
<td>Risk-Based Capital</td>
<td></td>
<td></td>
<td></td>
<td>430.47</td>
</tr>
<tr>
<td></td>
<td>Risk-Based Capital</td>
<td></td>
<td></td>
<td></td>
<td>535.38</td>
</tr>
</tbody>
</table>

Source: SPSS output (2024)

Based on the results of descriptive analysis, describing the total data used in this study, namely 54 before and 54 during the pandemic obtained from the financial statements of insurance companies for the period 2017-2022. The Risk-Based Capital value before and during the pandemic has a standard deviation value lower than the mean value. This shows that the variable is homogeneous, which means that the data contained in the variable has low variation.

Risk Based Capital data before the pandemic, namely the lowest value of Risk Based

Capital of 128% at PT Harta Aman Pratama Tbk in 2019. Risk Based Capital in 2019 decreased by 32% from the previous year. This occurred due to an increase in the number of liabilities by 18% resulting in a decrease in the level of solvency. The highest value of Risk-Based Capital before the pandemic was 1,649% at the company PT Panin Financial in 2019. This value was 57% higher than the business plan. This was mainly due to lower Premium reserves of Rp600 Billion or 14.2%, which affected the calculation of Minimum Risk-Based Capital.

Risk-based capital data during the pandemic, namely the lowest value during the Covid-19 pandemic was 139% at the company PT Bintang Tbk in 2020. In 2020 there was an increase in Risk Based Capital compared to the previous year. The increase occurred because there was an increase in allowable assets and liabilities. The highest Risk-Based Capital value during the pandemic was 2,527% at PT MSIG Life Insurance in 2022. This value has increased 61% compared to the previous year, the high Risk-Based Capital value occurs due to a high increase in assets, a decrease in liabilities, and good risk management so that the risk value is low.

Data Normality Analysis

In this study, to detection of data normality, can be done with the Shapiro-Wilk test because it has a sample size of less than 50. The results of the Shapiro-Wilk Test are as follows:

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Results of Data Normality Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early Warning System</td>
</tr>
<tr>
<td></td>
<td>Before the Pandemic</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Test</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)²</td>
<td>.008</td>
</tr>
<tr>
<td>Shapiro-Wilk</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)²</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: SPSS output (2024)

Based on the results obtained, the significance value is lower than 0.05 or it can be interpreted that the residual value of the Early Warning System and Risk Based Capital before and during the Covid-19 pandemic is not normally distributed. thus, the hypothesis test used is the Wilcoxon Signed Rank Test.

Uji Hipotesis

Berikut adalah hasil uji hipotesis Early Warning System dan Risk based Capital mengunakan Wilcoxon Signes Ranks dengan menggunakan software SPSS Versi 27:

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Wilcoxon Signes Ranks Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hipotesis</td>
<td>Asymp. Sig (2-tailed)</td>
</tr>
<tr>
<td>H1: Early Warning System</td>
<td>.004</td>
</tr>
<tr>
<td>H2: Risk-Based Capital</td>
<td>.395</td>
</tr>
</tbody>
</table>

Source: SPSS output (2024)
The results of the Wilcoxon Signed Rank Test on the Early Warning System showed a significant value of 0.004 or (0.004 < 0.05), meaning that there was a significant increase in the value of the Early Warning System during the pandemic compared to before the Covid-19 pandemic. Therefore, the hypothesis is supported.

The results of the Wilcoxon Signed Rank Test on Risk-Based Capital show a significant value of 0.395 or (0.395 > 0.05), meaning that there is no significant decrease in the value of Risk-Based Capital during the pandemic compared to before the Covid-19 pandemic. Therefore, the hypothesis is not supported.

Discussion

Early Warning System Before and During the Covid-19 Pandemic

The results of the Wilcoxon signed rank test show that there is a significant increase in the value of the Early Warning System during the pandemic compared to before the Covid-19 pandemic or the financial performance of insurance companies has decreased significantly with a significant value smaller than 0.05, namely 0.004. The results of this study are in line with the research proposed by (Zahra et al., 2023) and (Pratiwi & Agustina, 2022) which states that there is a significant difference in the form of an increase in the significant value of the Early Warning System during a pandemic compared to before Covid-19.

The increase in the value of the Early Warning System during the pandemic is in line with the background of the problem of this study, namely the number of insurance companies that have received special supervision from the Financial Services Authority due to the company's inability to fulfill its obligations to policyholders. This indicates that only by using the claim expense ratio indicator as an Early Warning System, companies can detect potential financial problems in facing the COVID-19 pandemic.

The increase in the value of the Early Warning System during the pandemic occurred due to an increase in the burden of health claims and a decrease in people's purchasing power as well as a result of the Financial Services Authority's policy regarding the determination of asset quality in the form of financing and financing restructuring which caused a decrease in the company's premium income.

Financial Services Authority Regulation Number 14/POJK.05/2020 concerning countercyclical policies related to determining asset quality in the form of financing and financing restructuring in insurance companies can have a direct impact on premium income and claim expenses, depending on the effectiveness of performance measures and the financial condition of debtors or policyholders. Financing restructuring can help debtors improve their financial situation, thereby minimizing the risk of debtor bad debts, and can reduce claim expenses and increase company premium income.

A significant increase in the value of the Early Warning System in insurance companies listed on the Indonesian stock exchange from 90.11 to 105.74. Based on signal theory, it can be considered a negative signal to the market and policyholders regarding the company's ability to overcome problems. Judging from the average value of the Early Warning System with the claim expense ratio indicator which is above the reasonable limit or is above 100%. This reflects the company's poor ability to manage claim expenses through premium income and risk management.
In addition to the many companies that experienced a decline in performance due to the Covid-19 pandemic, some companies experienced an increase in performance such as PT MSIG Life Insurance Tbk, Lippo General Insurance Tbk, Panin Financial Tbk, Panivest Tbk, and others. This is due to an increase in premium income. Premium income can increase because the company has a business continuity plan that focuses on digital technology innovation in both product development and customer experience.

**Risk-Based Capital Before and During the Covid-19 Pandemic.**

Risk-Based Capital has increased, which has an average value before the pandemic of 493.07 and during the pandemic of 596.31. The results of the Wilcoxon signed rank test hypothesis test obtained showed that there was no significant decrease in Risk-Based Capital during the pandemic compared to before the Covid-19 pandemic in insurance companies listed on the Indonesia stock exchange with a significant value greater than 0.05 or (0.395 > 0.05). The results of this study are in line with the research (Prawesti, 2022) which states that there is no significant average difference in Risk-Based Capital value before and during the pandemic. In the research (Hida & Baskoro, 2022) which states that the financial performance of insurance companies based on Risk-Based Capital is in a healthy condition and has increased during the pandemic.

Based on the results of data processing and descriptive statistical calculations, Risk-Based Capital before COVID-19 has an average value of 493%. This shows that insurance companies before the pandemic had a good and controlled financial performance. The average value of Risk-Based Capital during a pandemic is 596%, which means an increase compared to the period before the pandemic. This happened because the company experienced an increase in assets allowed during the pandemic so that it could reduce the increase in risk related to the pandemic. The increase in assets occurred due to the Financial Services Authority regulation number 14/POJK.05/2020 concerning countercyclical policies regarding countercyclical policies related to the calculation of the solvency level of insurance companies. Where the valuation of assets allowed in the form of investments in the form of corporate bonds, sukuk, government-issued securities, and government-issued sharia securities can be valued based on amortized acquisition value. In addition, restrictions on assets allowed in the form of non-investment in the form of premium bills or tabarru’ contribution bills and direct closing fees (for sharia insurance companies) which were previously based on the age of the bill 2 months to 4 months and the value of assets arising from finance lease contracts is calculated as part of the assets allowed in the form of non-investment, namely at most the value of liabilities arising from finance lease contracts. This policy is valid until December 31, 2020, which causes the increase in Risk-Based Capital value at the beginning of the pandemic year and in the following year, it decreases again.

In this study, the value of Risk-Based Capital is influenced by an increase and/or decrease in the value of allowable assets and the value of liabilities. This is in line with the findings (Manggarini, 2023) which show that the components of the solvency level, namely the total assets and total liabilities variables, are proven to have the greatest influence on the calculation of the Risk-Based Capital ratio both partially and simultaneously.

In terms of permitted assets, investment management must have information disclosure regarding investment results and market analysis carried out to minimize the impact of financial
risks that may occur. The company can maintain a good-based Capital value because the company has a diversified investment portfolio that can help protect the value of assets and maintain solvency; The company has effective risk management so that it can assess and manage risks related to the pandemic; The company uses reinsurance so that it can limit the potential for large losses due to increased claims, and The company is conservatism in the valuation of assets and liabilities.

Based on signaling theory, the increase in Risk-Based Capital from 493.07 to 535.38 provides a positive signal that the company can adjust to changing conditions during the pandemic. Companies can manage risks well or even take advantage of unstable market conditions. Companies that experienced an increase in Risk-Based Capital value during the pandemic included PT MSIG Life Insurance Tbk, PT Bina Dana Arta Tbk, PT Dayin Mitra Tbk, and PT Ramayana Tbk. The increase in Risk-Based Capital value during the pandemic shows that insurance companies can still survive and thrive during economic instability such as the Covid-19 pandemic.

**Comparison of Early Warning System and Risk-Based Capital in Assessing the Financial Performance of Insurance Companies.**

Comparative analysis between the Early Warning System and Risk-Based Capital in assessing the financial performance of insurance companies is important because they have different focuses in identifying and measuring financial risks so that they cannot fully replace each other. The purpose of this analysis is to provide a better understanding of how well both function in identifying and managing the financial risks of insurance companies.

In seeing the level of accuracy of the Early Warning System and Risk Based Capital, can be seen based on the standard error value. Standard error is a measure of uncertainty in statistical estimation that measures how close the sample average is to the population average. The lower the standard error, the more accurate the estimate of the average population value. Based on the company's performance from 2017 to 2022, the standard error value is obtained as follows:

| Table 5
<table>
<thead>
<tr>
<th>Financial Performance During 2017-2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Early Warning System</td>
</tr>
<tr>
<td>Risk-Based Capital</td>
</tr>
</tbody>
</table>

*Source: SPSS Output (2024)*

In terms of standard error, the Early Warning System has a much lower standard error of 4.18 compared to the Risk-Based Capital of 46.79. This shows that the Early Warning System's average estimate is more stable and closer to the true value than Risk-Based Capital. Therefore, it can be concluded that the Early Warning System has a better level of accuracy than Risk-Based Capital because it has a lower standard error and a smaller mean difference.

This is in line with the research (Abdurahim & Setiawan, 2021) which shows that the Early Warning System method has a smaller error than the Risk-Based Capital method. This means that the Early Warning System method is more accurate than the Risk-Based Capital
method in measuring the company's financial performance. Although the Early Warning System is considered more accurate than Risk-Based Capital in assessing the company's financial performance. However, in decision making, it is important to consider these two approaches together, to provide a more precise assessment of the financial performance of the insurance company.

CONCLUSION

The conclusion that can be drawn from this research is that there has been a significant increase in Early Warning Systems during the pandemic compared to before the COVID-19 pandemic in insurance companies listed on the Indonesia Stock Exchange. This is due to an increase in claim expenses and a decrease in premiums due to the impact of the Covid-19 pandemic. There has been no significant decrease in Risk-Based Capital during the COVID-19 pandemic in insurance companies listed on the Indonesia Stock Exchange. The Risk-Based Capital value is in a good category because it is above the minimum value of insurance company performance health indicators set by the financial services authority. An Early Warning System is considered more accurate than Risk-Based Capital in assessing the financial performance of insurance companies. However, in decision making, it is important to consider these two approaches together, to provide a more precise assessment of the financial performance of insurance companies.

BIBLIOGRAPHY


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