e-Jurnal Apresiasi Ekonomi Volume 13, Nomor 2, Mei 2025 : 406-418 ISSN Cetak : 2337-3997
ISSN Online : 2613-9774

ANALYSIS OF THE EFFECT OF FINANCIAL RATIOS AND THE COVID-19 PANDEMIC ON FINANCIAL DISTRESS OF JOINT VENTURE LIFE INSURANCE COMPANIES IN INDONESIA

Husein Triarso[1)], Harjum Muharam[2)]

[1]Faculty of Economics and Business, Diponegoro University
email: ahzamirza@gmail.com
[2]Faculty of Economics and Business, Diponegoro University
email: harjummuharam@lecturer.undip.ac.id

ABSTRACT

The study was conducted to analyze the effect of financial ratios and the Covid pandemic on the financial distress of joint venture life insurance companies in Indonesia during the period 2017 to 2021. The quantitative approach is a research method used through testing with logistic regression analysis in the SPSS 25 program. The data source comes from the annual audit report and has been submitted to the Financial Services Authority. The type of data used is secondary data based on the financial statements of joint venture life insurance companies.The study concluded that the ROA and Equity ratio indicators have a significant negative effect on financial distress. Furthermore, other financial ratios, namely Liquidity, RBC, RKI, Claim ratio and the Covid Pandemic, do not affect the financial distress of joint venture life insurance companies. This study provides suggestions for OJK to continue using Equity and add ROA to the Early Warning System (EWS) used so that it can provide comprehensive information regarding the health condition of insurance companies.

Keywords: ***Financial Distress, Financial Ratios, Joint Venture Life Insurance***

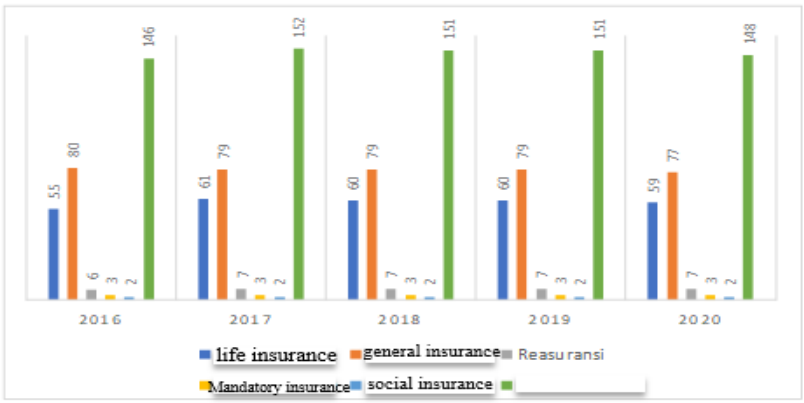
INTRODUCTION

One of the important economic driving sectors in Indonesia is the financial services industry. The financial services industry has made a significant contribution in providing funding sources for national economic development. The Covid-19 pandemic has also had an impact on the financial services industry. The Covid-19 pandemic has put heavy pressure on the financial services sector worldwide and has created macroeconomic turmoil and triggered a global economic recession.(Feyen et al., 2021).

Insurance as one of the industries in the financial services sector is also affected by the Covid pandemic. Research on the relationship between the Covid-19 pandemic and insurance has been widely conducted. ResearchFarooq et al., (2021)in Australia, Canada, Germany, the United States, the United Kingdom, Brazil, India, and Indonesia found that both short-term and long-term stock returns were affected by Covid-19. Other studies have shown that in developing countries, such as Bangladesh, the Covid-19 pandemic has contributed significantly to a contraction in the insurance sector.(Haque et al., 2021). The results of the study showed that quarterly premium growth, there was a significant decline in insurance density and penetration during Covid-19.

The insurance industry is an industry of trust. The most important thing in insurance is maintaining the trust of policyholders/insured. This trust is maintained if the insurance company can fulfill its obligations in the form of payment of claims filed by policyholders/insured. The financial health of the insurance company as stated in the financial report is a picture of the company's strength in paying off its obligations. In running a business, insurance companies face problems, including business uncertainty, liquidity difficulties and high operating costs. These problems can cause the insurance industry to experience financial difficulties.

Based on OJK data, there were 148 insurance companies as of December 31, 2020. This number consists of 77 general insurance companies, 59 life insurance companies, 3 mandatory insurance companies, 7 reinsurance companies, and 2 social insurance companies. The development in the last 5 years of the number of insurance companies can be seen in the following table:



Sumber : Statistik Perasuransian 2020 (OJK, 2021)

Figure 1. Number of Insurance Companies

Based on Figure 1. it is known that life insurance as of 2016 amounted to 55 companies, increased to 61 companies in 2017, then decreased in 2018 and 2019 to 60 companies and in 2020 decreased to 59 companies. General insurance amounted to 80 companies in 2016, then in 2017 to 2019 decreased to 79, and in 2020 the number of companies decreased to 77. For reinsurance, mandatory insurance, and social insurance, the number is relatively the same from 2016 to 2020. Based on this description, there is a tendency for the total number of insurance companies to decrease in the last 5 years. The companies that experienced a decrease were life insurance and general insurance. The cause of the decrease in the number of companies was the revocation of business licenses by the OJK. The basis for the revocation of business licenses comes from the return of licenses or the level of financial health of the company.

The list of insurance and reinsurance companies whose business licenses were revoked by the OJK for the period 2016 to 2020 is shown in the following table:

Table 1. Revocation of Business License

Name	Type of business	Decree	Reasons for Revocation of Permit
Bakrie Life Insurance	PAJ	KEP-76/D.05/2016 dated 15 September 2016	Financial Health
CIMB Sun Life	PAJ	KEP-108/D.05/2016 dated December 27, 2016	Return of Business License
Indonesian International Reinsurance	PR	KEP-1/D.05/2017 dated January 20, 2017	Return of Business License
Raya Insurance	PAU	KEP-48/D.05/2017 dated July 5, 2017	Financial Health
Fairfax Insurance Indonesia	PAU	KEP-85/D.05/2017 dated 2 October 2017	Return of Business License
AXA Life Indonesia	PAJ	KEP-2/D.05/2018 dated January 19, 2018	Return of Business License
Himalaya Protector Insurance	PAU	KDK-41/KDK.05/2019 dated April 30, 2019	Financial Health
AXA Insurance Indonesia	PAU	KEP-5/D.05/2020 dated February 17, 2020	Return of Business License
Recapital Insurance	PAU	KEP-45/D.05/2020 dated 16 October 2020	Financial Health
FWD Life Indonesia	PAJ	KEP-54/D.05/2020 dated December 1, 2020	Return of Business License

Source: OJK (processed)

Table 1. explains that during the 5-year period of 2016 - 2020, there were 10 insurance or reinsurance companies whose business licenses were revoked by the OJK. In 2016, 2 Life Insurance Companies (PAJ) had their business licenses revoked, in 2017, 1 Reinsurance Company (PR) and 2 General Insurance Companies (PAU) had their business licenses revoked. In 2018, 1 PAJ and 2019, 1 PAU had their business licenses revoked. Finally, in 2020, 2 PAU and 1 PAJ had their business licenses revoked. Of that number, 4 or 40% of companies were revoked for reasons of financial health. Financial distress is defined as a state of financial difficulty for a company indicated by low liquidity, inability to pay debts, dividend distribution restriction policies, increased capital costs, restrictions on funding sources, and low credit ratings (Agostini, 2018).

Based on the data above, it shows the existence of a gap phenomenon,it is known that there is a phenomenonin the period 2016-2020 the trend in the number of insurance companies showed a decline. One of the things that caused the decline was the financial health of the insurance company which was not in accordance with the provisions. This shows that the company's solvency and equity ratios cause financial distress so that the company will not be able to meet the obligations that arise.

This research is also to fill**research gap**in literaturethat the influence of financial ratios on the possibility of financial distress in insurance. Research on the influence of the Covid-19 pandemic on insurance companies has also been conducted. The research objects were general, life, sharia and conventional insurance types. However, research on the influence of financial ratios and the Covid-19 pandemic on the probability of financial distress in joint venture (JV) life insurance companies has never been conducted.Table 2. Summary of Previous Research Objects and Research Gaps as follows.

Table 2. Research Gap

Topics Researched	Researcher	Research Object	Conclusion
Factors in general insurance companies in Australia that cause financial distress.	(Sharpe and Stadnik, 2007)	Financial ratios in general insurance companies in Australia that influence the probability of financial distress.	Small insurance companies, low return on assets, and low cession ratios are more likely to experience financial distress.
The threat of insurance company failure to the financial environment (Jordan)	(Salameh, 2021)	Testing 28 indicators selected from 11 financial failure parameter models to validate the use of the model in predicting financial distress of insurance companies.	It is proven that 22 indicators from 11 significant parameters. The study also validated the use of financial failure model as a stable predictor of financial distress of ASE-listed insurance companies.
Testing financial ratios in insurance companies that affect financial distress conditions	(Amiruddin et al., 2020)	The research was conducted on 36 sharia insurance companies and 49 conventional insurance companies in Indonesia, selected using the purposive sampling method.	Comparison of retained earnings to total assets (RETA), Comparison of profit before tax and interest to total assets (EBITTA), Comparison of book value of equity to total debt are significant variables that determine a company's financial distress.
Testing the financial ratios of insurance companies that have an influence on the potential for financial distress.	(Harjadi & Sihombing, 2020)	The research was conducted on 10 insurance companies listed on the Indonesia Stock Exchange during 2015 – 2019.	Several financial ratios in insurance companies, namely underwriting, claims, liabilities to current assets, technical reserves and net premium growth as well as risk-based capital, have an impact on the potential for financial distress.
Impact of Covid-19 on the insurance industry in Bangladesh	(Haque, et al, 2021)	Life and general insurance companies in Bangladesh	His research shows that quarterly premium growth, insurance density and penetration during the Covid-19 pandemic experienced a significant decline.

Source: Previous research journal (processed, 2022)

Referring to Table 2. Research gap on the influence of financial ratios and Covid-19 on the possibility of financial distress. Sharpe and Stadnik's (2007) research with general insurance as the research object. Salameh (2021) conducted research on insurance companies listed on the Amman Stock Exchange. Isayas (2021) conducted research on insurance companies in Ethiopia. Amiruddin and Nustini (2021) conducted research on sharia insurance and conventional insurance. Research from Harjadi and Sihombing (2020) with the object of insurance companies that are issuers on the Indonesian Stock Exchange. The research

object ofFarooq et al., (2021)AndHaque et al., (2021)is life and general insurance.

Based on table 2. The research gap can be explained based on previous research.The influence of financial ratios and the Covid pandemic on the probability of financial distress in insurance has been widely carried out.However t**he novelty**from this research by referring to existing literature,research on the type of life insurance company with joint venture (JV) ownership has never been conducted. JV refers to the ownership of an insurance company whose shares are owned by a mixture of foreign and local. This study will use a sample of all life insurance in the form of JVs that have business licenses and are registered with the Financial Services Authority. The study was conducted over a period of 5 years, namely from 2017 to 2021.

FORMULATION OF THE PROBLEM

Based on the description of the problem, the formulation of the questions for this study is:

1. Does profitability have a negative impact on the financial distress of JV life insurance companies in Indonesia?
2. Does liquidity have a negative impact on the financial distress of JV life insurance companies in Indonesia?
3. Does solvency have a negative impact on the financial distress of JV life insurance companies in Indonesia?
4. Does the investment adequacy ratio have a negative impact on the financial distress of JV life insurance companies in Indonesia?
5. Does equity have a negative impact on the financial distress of JV life insurance companies in Indonesia?
6. Does the claim ratio have a positive influence on the probability of financial distress of JV life insurance companies in Indonesia?
7. Does the Covid-19 pandemic have an impact on the occurrence of financial distress in JV life insurance companies in Indonesia?

LITERATURE REVIEW

The Influence of Profitability (ROA) on Financial Distress

Isaiah (2021)stated in his research that profitability shows the effectiveness of a company in earning profit based on its sales and/or capital assets and measures the company's ability to generate income exceeding expenses. Profit can be measured using various approaches, one of which is ROA. ROA is obtained by comparing EBIT to total assets. A larger ROA ratio indicates that the company can maximize its assets in earning income. The ROA value can be an indication of whether or not there is financial distress in a company.

According to the previous discussion, it can be concluded that companies that have high ROA values will have a low possibility of financial difficulties. Based on this conclusion, the formulation of the hypothesis regarding the effect of ROA on financial difficulties is:

H1: ROA has a negative effect on the probability of financial distress in JV life insurance companies.

The Influence of Liquidity Ratio on Financial Distress

Liquidity ratio can be interpreted as a condition of whether or not a company is able to pay off its short-term debts. A high liquidity ratio value shows creditors and investors that the company is able to carry out its activities and is able to pay its obligations.(Maysaroh et al., 2022). Research result(Widhiari and Merkusiwati Lely, 2015)on the manufacturing industry which is an issuer on the stock exchange shows that there is a negative and significant relationship between the liquidity ratio and financial distress.

The liquidity ratio formulated by current assets divided by current liabilities, is the higher the liquidity ratio, the lower the possibility of financial distress and vice versa. Based on this conclusion, the hypothesis developed regarding the influence of the liquidity ratio on the occurrence of financial distress is:

H2: Liquidity ratio has a negative effect on the probability of financial distress in JV life insurance companies.

The Influence of Solvency Ratio (RBC) on Financial Distress

The leverage ratio describes the portion of the capital structure that comes from debt.(Waqas and Md-Rus, 2018).Wesa and Otinga (2018)defines leverage as capital that comes from loans and is used to finance company operations. Another definition of the leverage ratio is a measure of a company's ability to pay all short-term and long-term debts.(Maysaroh et al., 2022).

The possibility of financial distress becomes lower if the insurance company's RBC ratio value is higher. The lower the RBC ratio value, the higher the occurrence of financial distress. The hypothesis built regarding the influence of the RBC ratio on the occurrence of financial distress refers to the following conclusion:

H3: The RBC ratio has a negative effect on the probability of occurrence*financial distress*JV life insurance company.

The Influence of Investment Adequacy Ratio (RKI) on Financial Distress

RKI is a ratio to assess the adequacy of a company's investment assets plus current assets to pay the insurance company's obligations to its policyholders. The smaller the RKI indicates that the company's investment assets and current assets cannot pay obligations to policyholders. The condition of the company can be a sign that the company is experiencing financial distress.

Harjadi & Sihombing, (2020)in his research stated that RBC has a negative relationship with the occurrence of financial distress in insurance companies. The researchGreetings (2021)resulted that the solvency ratio is one of the significant indicators in predicting the failure of an insurance company. The effect of the solvency ratio on financial distress, the author concludes that a large RKI value indicates that the company is able to pay its obligations so that the possibility of financial distress occurring in the company is low. Conversely, if the RKI is small, the probability of financial distress occurring is high. The hypothesis formulated regarding the effect of RKI on the possibility of financial distress occurring is:

H4: RKI has a negative effect on the probability of financial distress in JV life insurance companies.

The Effect of Claims Ratio on Financial Distress

The claim ratio is the comparison between gross claims and gross premiums. Gross claims are payments of money from an insurance company to a policyholder without taking into account the portion that is the responsibility of the reinsurer. Gross premiums are premium income received by an insurance company minus commissions to parties entitled to receive commissions, such as agents and brokers.

Goddess and Mahfudz (2016)In his research on financial ratios in Indonesian general insurance companies, he stated that the claim ratio has a positive correlation and a significant influence on the probability of financial distress.Harjadi and Sihombing (2020)In his research on insurance companies that are issuers on the Indonesian stock exchange, he concluded that the claim ratio is positively related to the possibility of financial distress.

Referring to the discussion related to the claim ratio and previous research, the relationship between the claim ratio and financial distress can be concluded. A high claim ratio value results in a higher probability of financial distress. The formulation of the hypothesis regarding the effect of the claim ratio on financial distress is:

H5: The claim ratio has a positive effect on the probability of financial distress in JV life insurance companies.

The Effect of Equity on Financial Distress

In normal operational activities, the company's equity should increase due to the addition of profits. The increase in equity can also be caused by the addition of capital from shareholders. Decreased equity can indicate that the company is experiencing losses from operational activities or also as a result of capital withdrawals from shareholders. Research fromIsaiah (2021)regarding financial distress in insurance companies in Ethiopia stated that capital adequacy is negatively related to financial distress. However, the effect of capital adequacy on the probability of financial distress is not significant.

From the discussion above, the greater the amount of equity from insurance, the smaller the possibility of financial distress and vice versa. So the hypothesis formulated related to the influence of equity on the possibility of financial distress is:

H6: Equity has a negative effect on the probability of financial distress in JV life insurance companies.

The Impact of the Covid-19 Pandemic on Financial Distress

The occurrence of the Covid-19 pandemic has an impact on the decline in global economic growth. This affects the performance of financial services institutions including insurance companies. Reduced premium income and increased claims cause insurance companies' profits to decline or even make losses. This condition can cause insurance companies to have difficulty in fulfilling their obligations.

The results of Feyen et al.'s (2021) research stated that financial institutions experienced pressure as an effect of the Covid-19 pandemic. In addition, Covid-19 had a negative impact on stock returns in insurance companies.Haque et al., (2021)In a study in Bangladesh, it was stated that the Covid-19 pandemic contributed significantly to the contraction in the insurance sector.

Based on the description above, it can be concluded that the financial distress of insurance companies is also influenced by the Covid-19 pandemic. The formulation of the hypothesis regarding the effect of the pandemic on financial distress is:

H7: The Covid-19 pandemic affects the probability of financial distress in JV life insurance companies.

Theoretical Framework

Based on the results of previous research, the theoretical framework and 49 (forty-nine) hypotheses referred to, the following is the theoretical framework in this research.

ISSN Cetak : 2337-3997
ISSN Online : 2613-9774

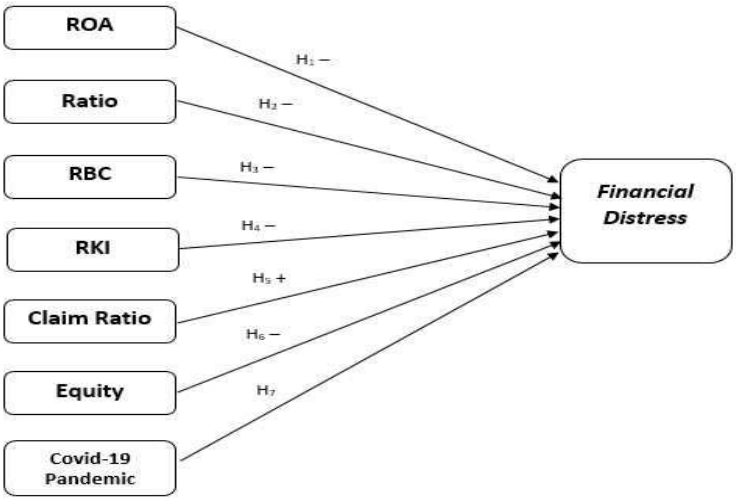


Figure 2. Framework of Thought

RESEARCH METHODS

Research Design

The design of this research is quantitative and aims to analyze whether Roa, liquidity, RBC, RKI, claim ratio, equity and the Covid-19 pandemicinfluence on the financial distress of joint venture life insurance companies in Indonesia.

Types and Sources of Research Data

The type of data source used in the research is a secondary data source.which comes from OJK. The type of information used is quantitative data such as ROA data, liquidity ratio, RBC, RKI, claim ratio, equity and the Covid-19 pandemic. The quantitative data to be studied is time series data sourced from audited financial reports from 2017 to 2021

Population and Sample

The population in this study is all joint venture life insurance companies that have business licenses at the OJK during the period 2017 - 2021 and still have business licenses until the end of 2021. Given the relatively small population, observation of the entire research population is possible. Therefore, the research sampling uses a census technique where all research object data will be processed.

Method of collecting data

Secondary data used in the study comes from internal OJK sources which come from the company's audited annual financial report and have been submitted to OJK.

Data Analysis Techniques

The analysis technique used in this study uses the Logistic Regression method used because this model will analyze whether the possibility of the dependent variable can be predicted from the independent variable. The binary logistic regression method is used because there are only two possibilities in the dependent variable, namely not or experiencing financial distress.

RESEARCH RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistical testing of the dependent and independent variables produced data as shown in Table 3 below.

Table 3. Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistics	Statistics	Statistics	Statistics	Std. Error	Statistics	Std. Error
ROA	115	0.00415	0.06547	-2,583	0.226	9,834	0.447
RKI	115	4279,17717	45846,860	10,724	0.226	115.00	0.447
RBC	115	12.49714	14.64703	2,628	0.226	6,776	0.447
Liquidity	115	6,01391	22,50714	10,174	0.226	106.89	0.447
Claim	115	0.65487	0.37611	0.466	0.226	14.20	0.447
Ln Equity	115	14,50075	1,17968	-0.208	0.226	-0.90	0.447
FD	115	0.18	0.388	1,665	0.226	0.78	0.447
PC	115	0.40	0.492	0.414	0.226	-1.86	0.447
Valid N (listwise)	115						

Source: Results of processing SPSS 25

The mean value of 0.18 in the FD variable indicates that there is 18% of data from the population experiencing Financial Distress. The standard deviation values of the ROA, RBC, RKI, and liquidity variables that are greater than the mean indicate wide variations in the data. Skewness and kurtosis that are close to zero mean the data is normally distributed (Ghozali, 2021:21). Based on the table above, only Equity data is normally distributed with a skewness value of 0.208 and kurtosis of 0.909.

Model Fit Test (Overall Model Fit)

*Log Likelihood Value*is a method for conducting a model fit test, namely comparing the initial -2LL value (block number = 0) with the final value (block number = 1). If the final -2 log likelihood value is smaller than the initial -2 log likelihood, the better the regression model (Ghozali, 2021:357).

Table 4. Model Fit Test

	Model 1	Model 2
-2Initial log likelihood	109,325	109,325
-2Log likelihood final	66,554	66,714

Source: Results of processing SPSS 25

According to Table 4. the regression analysis before the independent variables were entered showed that the initial -2Log likelihood value for both models was 109.325. After the six independent variables were entered, the final -2Log likelihood value dropped to 66.554 in model 1 and 66.714 for model 2. These results indicate that both models fit the data so that the regression model can be stated as appropriate.

Goodness of Fit Test

The measurement of the feasibility of a model uses Hosmer and Lemeshow's Goodness of Fit Test. If the test results show a p-value ≤ 0.05, it means that there is a significant difference between the model and its observation value. If the p-value ≥ 0.05, it means that there is no significant difference between the model and the data. This makes the model suitable for use in predicting its observation value.

Table 5. Model Feasibility Test

	Model 1	Model 2
Chi-square	10,815	10,653
Df	8	8
Sig.	0.225	0.222

Source: Results of SPSS 25 data processing

According to Table 5. the results of the Hosmer and Lemeshow test for model 1 produced a Chi-square of 10.815 with a significance of 0.225. The results of this test indicate a p-value (0.225) ≥ 0.05 so that model 1 is suitable for use to predict its observations. For model 2, a Chi-square value of 10.653 and a significance of 0.222 were obtained. These results indicate that the p-value (0.222) ≥ 0.05 so that model 2 can be used to predict observations.

Nagelkerke R Square Test

The R Square value is close to 1, indicating that the independent variable can explain the dependent variable. The R Square value of each model is shown in Table 6 below:

Table 6. Nagelkerke R Square Test

	Model 1	Model 2
-2Log likelihood	66,554	66,714
Cox & Snell R Square	0.311	0.310
Nails R Square	0.506	0.505

Source: Results of processing SPSS 25

According to Table 6. the independent variables in the first model, namely ROA, RKI, RBC, Claims, Equity, and PC produce an R Square value of 0.506. This indicates that the ability of the independent variables can explain the dependent variable, namely FD (Financial Distress) by 50.6%. Other variables outside the research model explain the remaining 49.4%. For the second model, with variables namely ROA, RBC, Liquidity, Claims, Equity, and PC, the R Square result is 50.5% and 49.5% is explained by other variables.

Classification Table

The logistic regression model can be used to predict the occurrence of Financial Distress in JV life insurance companies which is measured using a classification table.

Table 7. Classification table

Observed		Model 1 and Model 2		
		Predicted		Percentage
		No FD	FD	Correct
VASE	No FD	92	2	97.9
	FD	8	13	61.9
Overall Percentage				91.3

Source: Results of processing SPSS 25

According to Table 7. above, the model's ability to predict the occurrence of No Financial Distress or Financial Distress is 91.3%. The possibility of a company not experiencing Financial Distress is 97.9% of all JV life insurance company samples of 115 data and the possibility of a JV life insurance company experiencing Financial Distress is 61.9% of all data samples.

Wald Test (t-Statistic Test)

The ability of individual independent variables to influence dependent variables is measured using the Wald Test. The test results of each model are as follows:

Table 8. Wald Test Model 1

	B	SE	Wald	df	Sig.	Exp(B)
ROA	-22,866	7,445	9,432	1	0.002	0,000
RKI	0,000	0,000	0.023	1	0.879	1,000
RBC	-0.023	0.024	0.880	1	0.348	0.977
Claim	-0.691	0.793	0.760	1	0.383	0.501
Equity	-0.741	0.362	4,187	1	0.041	0.477
PC	0.803	0.666	1,457	1	0.227	2,233
Constant	9,184	5,116	3,223	1	0.073	9738,757

Source: Results of processing SPSS 25

Table 9. Wald Test Model 2

	B	SE	Wald	df	Sig.	Exp(B)
ROA	-23,193	7,437	9,726	1	0.002	0,000
RBC	-0.022	0.027	0.652	1	0.419	0.978
Liquidity	-0.008	0.027	0.086	1	0.769	0.992
Claim	-0.676	0.789	0.735	1	0.391	0.509
Equity	-0.732	0.361	4,104	1	0.043	0.481
PC	0.800	0.666	1,446	1	0.229	2,226
Constant	9,062	5,105	3,151	1	0.076	8618,822

Source: Results of processing SPSS 25

HYPOTHESIS TESTING

1. **Hypothesis Testing H1**: ROA has a negative effect on the probability of Financial Distress in JV life insurance companies.
   The ROA variable in both models has a negative coefficient and a p-value <0.05 so that H1 is accepted for a value of α = 0.05. Thus, ROA has a significant negative effect on the probability of Financial Distress in JV life insurance companies.
2. **Hypothesis Testing H2**: Liquidity has a negative effect on the probability of Financial Distress in JV life insurance companies.
   The Liquidity variable in model 2 has a negative coefficient with a p-value > 0.05, therefore H1 is rejected for a value of α = 0.05. In conclusion, the Liquidity ratio does not affect the probability of Financial Distress in JV life insurance companies.
3. **Hypothesis Testing H3**: The RBC ratio has a negative effect on the probability of Financial Distress in JV life insurance companies.
   The RBC variable in both models has a p-value > 0.05 with a negative coefficient value so that H1 is rejected for a value of α = 0.05. Thus, the RBC ratio does not affect the possibility of Financial Distress in JV life insurance companies.
4. **Testing Hypothesis H4**: RKI has a negative effect on the probability of Financial Distress in JV life insurance companies.
   The RKI variable in model 1 has a positive coefficient and a p-value > 0.05 so that H1 is rejected for a value of α = 0.05. Thus, the probability of Financial Distress of JV life insurance companies is not influenced by RKI.
5. **Testing Hypothesis H5**: Claim ratio has a positive effect on the probability of Financial Distress in JV life insurance companies.
   The claim ratio indicator for both models has a negative coefficient with a p-value > 0.05 so that H1 is rejected for a value of α = 0.05. Thus, the Claim ratio has no effect on the possibility of Financial Distress in JV life insurance companies.
6. **Hypothesis Testing H6**: Equity has a negative effect on the probability of Financial Distress in JV life insurance companies.
   The Equity variable in both models has a negative coefficient with a p-value <0.05 so that H1 is accepted for a value of α = 0.05. Thus, Equity has a significant negative effect on the probability of Financial Distress in JV life insurance companies.
7. **Hypothesis Testing H7**: The Covid pandemic has an impact on the probability of Financial Distress in JV life insurance companies.
   The Covid Pandemic variable in both models has a positive coefficient with a p-value > 0.05 so that H1 is rejected for a value of α = 0.05. Thus, the Covid Pandemic has no effect on the probability of Financial Distress in JV life insurance companies.

DISCUSSION OF RESEARCH RESULTS

This study uses a logistic regression model with independent variables in the form of ROA, liquidity ratio, RBC, RKI, claim ratio, equity, and

the Covid-19 pandemic to predict Financial Distress in JV life insurance companies. The test results show that the model is feasible to use and all independent variables simultaneously affect the prediction of Financial Distress.

ROA plays an important role as an indicator of company profitability. A high ROA value reduces the possibility of Financial Distress because it shows the company's ability to generate operational profits. This study supports previous research (Waqas & Md-Rus, 2018; Sharpe & Stadnik, 2007; Amanah & Zamachsyari, 2016) which concluded that the profitability ratio has a significant negative effect on Financial Distress.

Liquidity describes the ability of an insurance company to pay short-term obligations. Although the liquidity of life insurance companies tends to be high due to accumulated premium receivables, the results of this study indicate that liquidity does not affect Financial Distress. This finding is in line with research (Maysaroh et al., 2022) but contradicts (Dewi & Mahfudz, 2016), which states that liquidity affects Financial Distress.

Risk-Based Capital (RBC), a measure of net capital adequacy to anticipate the risk of loss, also does not affect Financial Distress. JV life insurance companies maintain RBC values well above the minimum limit of 120%, thereby maintaining consumer confidence. This finding supports research (Isayas, 2021; Ismunawan & Nilasari, 2021) but differs from (Harjadi & Sihombing, 2020), which states that RBC has a negative effect on Financial Distress.

Investment Adequacy Ratio (IAR) shows the ability of a company's investment assets to meet policyholder obligations. Despite high investment, the results of the study show that IAR does not affect Financial Distress. Data shows that several companies with high IAR still experience losses, because low investment returns do not support the company's profits.

The claim ratio, which reflects the company's underwriting efficiency, also does not affect Financial Distress. The company is able to pay high claims with adequate investment returns, technical reserves, and assets. Even some companies with a claim ratio above 100% do not experience losses because ROA remains positive. These results support previous studies (Marliza & Prasetiono, 2014; Amanah & Zamachsyari, 2016).

Equity has a negative effect on Financial Distress, where an increase in equity indicates good company performance and reduces the risk of Financial Distress. This finding supports research (Isayas, 2021) which shows a negative relationship between capital adequacy and Financial Distress.

The Covid-19 pandemic did not significantly affect Financial Distress in JV life insurance companies. During the pandemic, capital adequacy remained strong with an average RBC of 1,086.95% and a claim ratio of 71.82%, indicating good underwriting management. This finding is consistent with studies (Pulawska, 2021; Ratmono & Umam, 2023), although different from (Feyen et al., 2021; Haque et al., 2021) which reported significant stress on financial institutions during the pandemic.

RESEARCH LIMITATIONS

The research that has been conducted has limitations:

1. The objects studied are limited to joint venture life insurance companies, not all life insurance companies registered with the Financial Services Authority.
2. This study only uses the criteria of companies experiencing losses for 2 consecutive years as an indication of a company experiencing Financial Distress if, but has not included other criteria that may affect Financial Distress such as BOPO, liquidity, corporate governance, or Indonesia's macroeconomic conditions.

FUTURE RESEARCH AGENDA

Referring to the conclusions and limitations that occurred in the research that has been conducted, the following are suggestions that can be given to regulators, company management, the public, and also future research:

1. The regulator and supervisor of insurance companies, OJK, can still use equity and add ROA as an indicator in risk identification through the existing Early Warning System. This is because equity and ROA have a significant effect on the Financial Distress of insurance companies.
2. Insurance company management must maintain its performance and capital capabilities in order to avoid the possibility of Financial Distress.
3. When choosing an insurance company, the public can use the ROA and Equity ratios of the insurance company which can be obtained from the company's audited financial report to determine the health condition of the insurance company.
4. For future research, other criteria such as BOPO, governance and macroeconomic conditions in Indonesia can be added to determine insurance companies experiencing Financial Distress. In addition, the sample

used is all life insurance companies registered with the OJK, both local and joint venture.

CONCLUSION

Based on the results of this study, the conclusions drawn are:

1. All independent variables, namely ROA, RKI, RBC, Liquidity, Claim Ratio, Equity, and the Covid Pandemicsimultaneously affects the probability of the occurrence of Financial Distress in JV life insurance companies.
2. The ROA and Equity variables have a significant influence and are negatively correlated with the possibility of financial difficulties in JV life insurance companies.
3. Other independent variables, namely Liquidity, RBC, RKI, Claim Ratio, and the Covid Pandemic, have no effect on the probability of Financial Distress in JV life insurance companies.

REFERENCES:

Altman, E. I., Hotchkiss, E., & Wang, W. (2019). *Corporate Financial Distress, Restructuring, and Bankruptcy*. In *John Wiley & Sons, Inc* (Fourth Edi).

Amanah dan Zamachsyari. (2016). Pengaruh Kinerja Keuangan Dan Ukuran Perusahaan Terhadap Financial Distress. Jurnal Ilmu dan Riset Akuntansi, Volume 5, Nomor 11

Amiruddin, Rijal, A., & Nustini, Y. (2020). Analisis determinan financial distress pada perusahaan asuransi syariah dan asuransi konvensional di Indonesia berdasarkan model Altman (studi kasus pada perusahaan asuransi periode 2015-2018). *Proceeding of National Conference on Accounting & Finance*, *2*, 69–85.

Cahyaningtyas Icha, Untung, S., & Sri, U. S. (2016). Analisis Fianncial Distress Menggunakan Model Altman Z-Score Pada Perusahaan Asuransi yang Listing di Bursa Efek Indonesia. *Jurnal Ekonomi Dan Kewirausahaan*, *16*(1), 287–293.

Dewi, T. T. C., & Mahfudz. (2016). Effect of change in surplus ratio, incurred loss ratio, liquidity ratio, premium growth ratio, size and risk based capital to predict the possibilities of financial distress: The case of Indonesian non-life insurance listed in Indonesia insurance director. *Diponegoro Journal of Management*, *5*(8).

Dwijayanti, P. F. (2010). Penyebab, Dampak, Dan Prediksi Dari Financial Distress Serta Solusi Untuk Mengatasi Financial Distress. *Jurnal Akuntansi Kontemporer*, *2*(2), 191–205.

Elliott, B., & Elliott, J. (2017). Financial accounting and Reporting 18th Edition. In *Pearson* (18th ed.). Pearson Education Limited.

Farooq, U., Nasir, A., & Quddoos, M. U. (2021). The impact of COVID-19 pandemic on abnormal returns of insurance firms : a cross-country evidence. *Applied Economics*, *00*(00), 1–21.

Feyen, E., Alonso Gispert, T., Kliatskova, T., & Mare, D. S. (2021). Financial Sector Policy Response to COVID-19 in Emerging Markets and Developing Economies. *Journal of Banking and Finance*, *133*, 106184.

Fraser, L. M., & Ormiston, A. (2016). *Understanding Financial Statements* (11th ed.). Perason Education Limited. www.pearsonglobaleditions.com

Gibson, C. H. (2009). *Financial Reporting & Analysis Using Financial Accounting Informastion*. South-Western Cengage Learning. www.cengage.com

Gumanti, T. A. (2009). Teori Sinyal Dalam Manajemen Keuangan. *Manajemen Usahawan Indonesia*, *6*(28), 4–13.

Haque, A., Mohona, N. T., Sultana, S., & Kulsum, U. (2021). *The Impact Of Covid-19 On The Insurance Industry Of*. *July*. https://doi.org/10.46281/ijfb.v6i1.1243

Harjadi, & Sihombing, P. (2020). Financial Distress Analysis of Registered Insurance Companies in Indonesia Stock Exchange 2015-2019. *European Journal of Business and Management Research*, *5*(6), 1–6.

Isayas, Y. N. (2021). Financial distress and its determinants : Evidence from insurance companies in Ethiopia. *Cogent Business & Management*, *8*(1), 1–17.

Ismunawan, dan Nilasari, Agustina (2021). Pengaruh Kinerja Keuangan, Risk Based Capital, Ukuran Perusahaan Dan Makroekonomi Terhadap Financial Distress. Jurnal Ekonomi Bisnis dan Kewirausahaan, Vol.10, No. 1, 55-72

Ittelson, R. T. (2020). *Financial Statement A Step-by-Step Guide to Understanding and Creating Financial Reports* (Third Edit). Career Press. www.careerpress.com

Madhushani, I. K. H. H., & Kawshala, B. A. H. (2018). THE IMPACT OF FINANCIAL DISTRESS ON FINANCIAL PERFORMANCE Special Reference to Listed Non-Banking Financial Institutions in Sri Lanka. *International Journal of Scientific and Research Publications*, *8*(2), 393.

Marliza, dan Prasetiono. (2014). *Analisis Faktor-Faktor Yang Mempengaruhi Terjadinya Kondisi Financial Distress Perusahaan*

Asuransi (Studi Pada Perusahaan Asuransi Umum Yang Terdaftar Di Direktori Perasuransian Indonesia Tahun 2008 - 2012)

Mayangsari, R. (2018). Pengaruh Struktur Modal, Keputusan Investasi, Kepemilikan Manajerial, dan Komite Audit Terhadap Nilai Perusahaan Aneka Industri Yang Listing Di Bursa Efek Indonesia Periode 2012-2016. *Jurnal Ilmu Manajemen* , *6*(4), 477–485. www.idx.co.id

Maysaroh, W., Suhendro, S., Dewi, F. G., & Distress, F. (2022). Pengaruh Kinerja Keuangan Terhadap Financial Distress Perusahaan Asuransi di Indonesia Sebelum dan Saat Pandemi Covid-19. *E-Jurnal Akuntansi Universitas Udayana*, *32*(3), 788–802. https://doi.org/10.24843/EJA.2022.v32.i03.p18

OJK. (2021). *Pertemuan Tahunan Industri Jasa keuangan 2021*.

Platt, H. D., & Platt, M. B. (2002). Predicting corporate financial distress: Reflections on choice-based sample bias. *Journal of Economics and Finance*, *26*(2), 184.

Puławska, Karolina. (2021). Financial Stability of European Insurance Companies during the COVID-19 Pandemic. Journal of Risk and Financial Management 14.

Raihan, A. M., & Pascafiani, S. F. (2021). *Analisis financia distress dan prediksi kebangkurutan*. *12*.

Ratmono, D. dan Umam, K. (2023). Prediksi Financial Distress Pada Perusahaan Listed di Indonesia Akibat Pandemi Covid-19. Owner : Riset & Jurnal Akuntansi, Volume 7 Nomor 4. https://doi.org/10.33395/owner.v7i4.1582

Salameh, H. M. (2021). Failure threats of insurance companies: A case study of financial environments of Jordan. *Investment Management and Financial Innovations*, *18*(3), 113–126. https://doi.org/10.21511/imfi.18(3).2021.11

Sekaran, U., & Bougie, R. (2016). *Research Methods for Business* (Seventh Ed). John Wiley & Sons.

Sharpe, I. G., & Stadnik, A. (2007). Financial Distress in Australian General Insurers Author. *The Journal of Risk and Insurance*, *74*(2), 377–399.

Soekarno, S., & Azhari, D. A. (2009). Analysis of Financial Ratio to Distinguish Indonesia Joint Venture General Insurance Company Performance using Discriminant Analysis Theoritical Foundation Insurance. *The Asian Journal of Technology Management*, *2*(2), 100–111.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan Tindakan*. Alfabeta.

Sumartik, SE., M., & Misti Hariasih, SE., M. (2020). *Bank dan Lembaga Keuangan Lainnya* (Pertama). UMSIDA Press.

Supriyanto, J. (2021). Evaluasi Kinerja Keuangan Perusahaan dengan Menggunakan Metode Sistem Du Pont (Studi pada PT Tracon Industri Periode Tahun 2017-2019). *Jurnal Pajak Dan Keuangan Negara*, *2*(2), 142–149.

Vionita, & Lusmeida, H. (2019). Analisis Pengaruh Kinerja Keuangan Dan Good Corporate Governance Terhadap Financial Distress (Studi Kasus Pada Perusahaan Manufaktur Yang Terdaftar Di BEI 2014-2017). *Seminar Nasional & Call For Paper Seminar Bisnis Magister Manajemen*, 36–62.

Waqas, H., & Md-Rus, R. (2018). Predicting financial distress: Importance of accounting and firm-specific market variables for Pakistan's listed firms. *Cogent Economics and Finance*, *6*(1), 1–16.

Wesa, E. W., & Otinga, H. N. (2018). Determinants of Financial Distress Among Listed Firms at the Nairobi Securities Exchange, Kenya. *The Strategic Journal of Business & Change Management*, *5*(4), 1057–1073.

Widhiari, N., & Merkusiwati Lely, N. (2015). Pengaruh Rasio Likuiditas, *Leverage, Operating Capacity, Dan Sales Growth* Terhadap *Financial Distress*. E-Jurnal Akuntansi Universitas Udayana, 11(2), 456–469.