

Indonesia's insurance industry: financial conditions during and after covid-19

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Abstract

The purpose of this study is to look at the bankruptcy of the insurance industry in Indonesia using the Altman, Springate, Zmijewski, and Grover models. This study examines how Islamic and conventional insurance companies have differences in financial distress during and after the COVID-19 pandemic in Indonesia. This research uses data from insurance companies in Indonesia registered with the Financial Services Authority (OJK) between 2019 and 2022. This study used purposive sampling samples, data documentation and Difference Test. The results of this study show that there are differences in financial conditions between conventional and sharia insurance companies during and after Covid-19 using the Altman Z-score model, Springate model, and Zmijewski model. Meanwhile, there is no difference in financial condition between conventional and sharia insurance companies during and after Covid-19 using the Grover model

Keywords: Insurance in Indonesia, Altman, Springate, Zmijewski, Grover

INTRODUCTION

In the past five years, the COVID-19 pandemic has been one of the most significant and world-changing events. This pandemic not only poses a threat to public health around the world, but also has a major impact on various sectors of the economy, including the insurance industry, both conventional and sharia. In this regard, the risk of bankruptcy of the insurance company is one of the main problems.

The development of sharia business is increasing along with the awareness of Muslims to run a business based on Islamic guidelines (Husaini et al., 2019) including the insurance industry, both conventional and sharia. This is critical to protecting individuals, companies, and other organizations from unexpected threats. To protect their policyholders financially, they manage risk and pay claims. However, the COVID-19 pandemic brought unprecedented challenges. Insurance companies must consider the impact of lockdowns on the economy, a drop in demand for insurance, and sometimes an increase in claims.

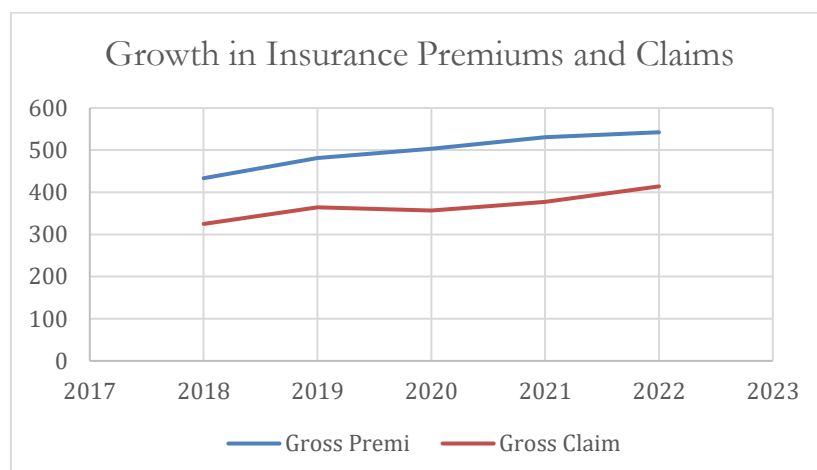


Figure 1: Growth in Insurance Premiums and Claims

According to the Financial Services Authority (OJK) the total gross premium of insurance companies in 2019 rose 11% from the previous year. Then in 2020 and 2021 it stagnated with an increase of 5% and in 2022 it slowed down with a growth of 2%. Meanwhile, the number of gross claims in 2019 increased by 12% and decreased by 2%. then in 2021 claims increased by 6% and increased again by 10% in 2022.

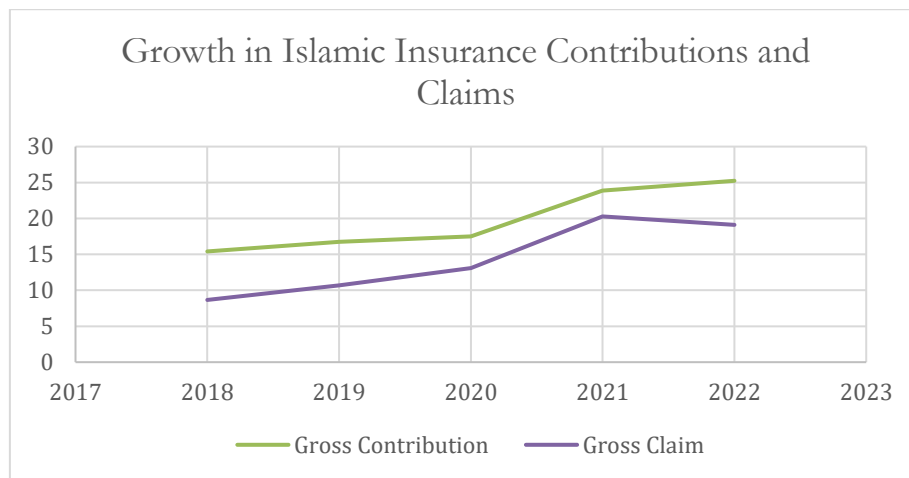


Figure 2: Growth in Islamic Insurance Contributions and Claims

Then the total gross contribution of Islamic insurance companies in 2019 rose 9% from the previous year. Then in 2020 it increased by 5% and 2021 increased with an increase of 36% and in 2022 it slowed down with a growth of 6%. Meanwhile, the number of gross claims in 2019 increased by 23% and decreased by 22%. then in 2021 claims increased by 55% and decreased by 6% in 2022.

In terms of supporting businesses, the insurance ecosystem continues to develop following the development of the Indonesian insurance industry. As of the end of 2022, there are 155 insurance brokerage companies and 41 reinsurance companies. This is together with other supporting companies such as Loss Assessors and Actuarial Consulting Firms.

Then, no less important in terms of Sharia Insurance continues to experience significant growth since its launch. In 2022, Sharia Life Insurance has a market share of 5.6 percent of total Life Insurance assets, while Sharia General Insurance has a market share of 3.7 percent. 15 Sharia Insurance and Sharia Reinsurance Full Pledged companies and 43 Sharia Insurance and Sharia Reinsurance in the form of Sharia Business Units (UUS) support it. Financially, the role of Sharia Life Insurance in Indonesia is getting bigger, with sales contributing 11.8% in 2022, an increase from 5.8% in the previous year. Sharia General Insurance contribution only reached 3.8% in 2022.

However, reporting from (Wardana, 2021) At least in the 2019-2022 period there are five insurance companies that went bankrupt due to financial difficulties, namely Asuransi Jiwasraya, AJB Bumiputera 1912, WanaArtha Life Insurance, Kresna Life Insurance and Bakrie Life Insurance. Accountability is something that must be applied in all public services (Sari et al., 2017). Insurance company bankruptcy is a complex situation and often has far-reaching consequences, not only for policyholders and direct stakeholders, but also for the stability of financial markets as a whole. As a non-financial institution that plays a key role in managing risk, the bankruptcy of insurance companies can threaten the integrity of national and international financial systems.

Even after the new era of normalcy, the COVID-19 pandemic still has a strong impact. The financial condition of the company declining before bankruptcy or liquidation is the point at which the financial crisis occurs. This can happen to any company, but it usually happens if the economy of the country in which the company operates is experiencing a crisis or due to internal and external matters. (Amiruddin & Nustini, 2020)

Supportive calculations can help assess the bankruptcy rate of a company's financial distress. To consider the finance of the insurance industry, financial analysis uses several models of financial discrimination, including the Altman, Springate, Zmijewski, and Grover Models that can see and predict the financial health of a company.

Using the models of Altman, Springate, Zmijewski, and Grover, this study examines how Islamic and conventional insurance companies have differences in financial distress. This research looks at how the financial distress of insurance companies in Indonesia during and after the Covid-19 pandemic. This research is expected to analyze the financial health of the Islamic and conventional insurance company sectors during and after the COVID-19 pandemic. Thus, this research is expected to be a reference to be used in examining the financial condition of the insurance sector in Indonesia.

LITERATUR REVIEW

Agency theory

The contractual relationship between one or more persons acting as principals and another person or persons acting as agents is known as agency theory. This includes giving decision-making authority to agents and performing services for the principal's interests. Insurance companies are a place of customer trust in managing risks that will occur in the future. Customers pay premiums and expect a reciprocal insurance claim if bad things happen.

Therefore, as agents, insurance companies must always be honest about how they conduct their business under the direction of the principal. Financial statements are one form of accountability. Using these reports, people outside the business can assess the company's financial condition. If a company's profits increase in a relatively short period of time, it indicates that the business is operating well. Conversely, if the value of a company's profits and cash flow falls over a long period of time, people outside the business will assume that the business is not doing its job well. If this happens, the business will experience financial problems or financial difficulties. According to agency theory, it is expected to give confidence to investors, creditors, or customers that they will receive benefits for the funds they invest.

Signal theory

This research is based on signal theory, which explains how financial statements can give a positive or negative impression to its users. Managers as managers of the company know more about the Company's internal and prosperous information in the future than the owners (shareholders) (Fitranita, 2019).

Researchers argue that signal theory is relevant to this study because there is a relationship between factors that cause financial stress and factors that do not. This is because financial statements provide management with information about the financial condition and performance of the company, which makes it possible to predict future bankruptcies. Sustainability reporting is defined as a company's activities to report on the environmental, social, and governance impacts on its daily operational routines. (Usman, 2020) Financial statements, the result of the accounting process, allow interested parties to know about financial data and business actions.

Financial statements usually aim to provide information about the finances of a company, both at a certain time and within a certain period of time, and they can also be made periodically or quickly according to the needs of the company. Thus, financial statements have the ability to provide financial information to people who have interests inside or outside the company.

Sharia insurance and insurance

As per the Law of the Republic of Indonesia number 40 of 2014, insurance is a contract between the policyholder and the insurance company. This contract enables the insurance company to compensate the policyholder for any losses, damages, costs, profits, or legal liability that the policyholder may incur due to an uncertain event, or it can provide payments based on the insured's life with benefits that have been determined in full.

Sharia-compliant insurance is a group of contracts that sharia insurance companies and policyholders create to manage contributions according to sharia principles. The purpose of these contracts is to help and protect one another by paying participants' or policyholders' legal liabilities against third parties as well as any losses, harm, expenditures, or earnings.

- a. Social insurance
Social insurance is created by the government and provides social security for community members with the aim of improving public welfare, especially employees and retirees.
- b. Compulsory insurance
A compulsory insurance program is defined as a program required by law to protect a particular whole or group of people from certain threats; This does not include programs required by law to provide basic protection for communities through a system of cross-subsidies in the determination of benefits and premiums or contributions.
- c. Conventional and sharia reinsurance
Sharia reinsurance companies concentrate on managing risks faced by sharia insurance companies, sharia underwriters, or other reinsurance companies. Instead, the reinsurance company is responsible for the hazards faced by the insurer, underwriter, or other reinsurance company.
- d. Conventional and sharia general insurance
An unanticipated incident might result in loss, damage, expenditure, profit loss, or legal obligation to a third party. These are all covered by general insurance, a form of risk coverage that reimburses the insured or policyholder for these potential losses.
The fundamental idea behind Shariah general insurance is to support and shield one another by compensating participants or policyholders for any losses, damages, expenses, missed income, or third-party legal liability they may incur as a result of unforeseen circumstances.
- e. Conventional and sharia life insurance
A company called Life Insurance provides risk management services. These services include paying policyholders, the insured, or other eligible parties in the event that the insured passes away or survives, or paying policyholders, the insured, or other entitled parties at a later date based on the fund management results. The goal of Sharia Life Insurance is to help and protect one another through risk management based on Islamic principles. Payments are made to participants or other eligible parties upon their death or life, or at a predetermined time specified in the agreement. The amount of the payments is predetermined and/or determined by the fund management results.

Financial distress concept

Financial distress is defined as the level of efficiency of current asset management and the rate of acquisition of new assets (Saiful et al., 2023). A financial crisis occurs when a person or company is in such a bad financial state that they cannot pay debts borrowed from creditors. According to Anggarini and Ardiyanto (2010), there are several situations that will occur in businesses that experience financial difficulties.

If the company faces financial problems, there are several situations that will occur. When a company cannot pay overdue debts to its creditors, it is the first condition. The second condition is a condition that is not solvable. Insolvable conditions occur when a person or entity is unable to pay debts on time or when the amount of debt exceeds assets.

a) **Almant's Model of Financial Distress**

Edward I. Altman, Ph.D., developed the Altman Z-Score method in 1968, which used 33 samples of bankrupt and non-bankrupt companies. With a value of 95% accuracy, this model can be used to predict the bankruptcy of the Company. (Amiruddin & Nustini, 2020) The study shows that there is a big difference between Islamic insurance companies and conventional insurance companies. Therefore, the variables used in this model are very important for measuring the level of financial stress. (Edi & Tania, 2018) explains, Altman's model can explain by 12%.

b) **Springate's Model of Financial Distress**

Gordon L.V. Springate created the Springate model in 1978. This model uses forty manufacturing companies in Canada, twenty each that are in good health and twenty that are experiencing financial difficulties. Finally, Springate found four ratios that had an accuracy rate of 92.5% to predict signs of corporate bankruptcy. (Edi & Tania, 2018) The study found that, with a variable explanation of 69%, the springate model was the best for identifying financial distress in companies listed on the Indonesia Stock Exchange.

c) Zmijewski's Model of Financial Distress

The Zmijewski model was first developed in 1983. A total of 800 companies that are still operating and 40 companies that have the potential to go bankrupt are the results of twenty years of research. (Gunawan et al., 2017) in this study explained that the best model in determining financial distresses is the Zmijewski model for manufacturing companies as little as 46%. While in the study (Edi & Tania, 2018) the variables in this model only explained 8.1%.

d) Grover's Model of Financial Distress

Jeffrey S. Grover developed Grover's model in 2001. Using 70 company samples, 35 companies were in good health and 35 companies were in unhealth. (Pertwi, 2020) based on this study explained that the Grover Model is the best model in determining financial distress with an accuracy rate of 100% and a type I error and type II error rate of 0%. (Edi & Tania, 2018) stated that the Grover model only has a model accuracy rate of 42%.

Research Hypothesis

H1: There are differences in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the prediction of the Altman model.

H2: There are differences in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the Springate model prediction.

H3: There are differences in the financial condition of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using Zmijewski's model predictions.

H4: There are differences in the financial condition of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using Grover's prediction model..

The Conceptual Framework

Based on the following literature, the conceptual framework of this study is illustrated in Figure 3.

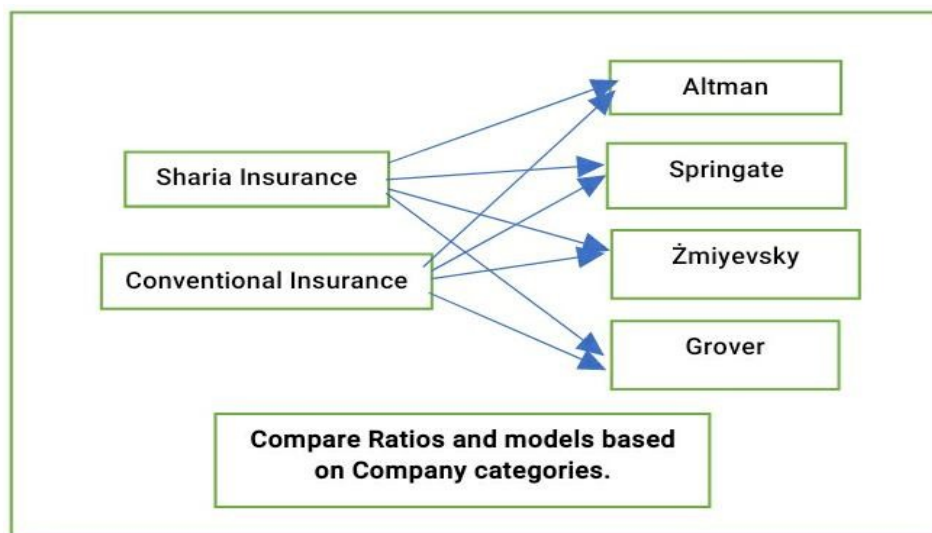


Figure 3. The Conceptual Framework

Source: Self processed

RESEARCH METHODS

Data types and sources

Quantitative data were used in this study. Secondary data is obtained from financial services authorities, their respective company websites, and various other sources.

Population from sample

This research uses data from insurance companies in Indonesia registered with the Financial Services Authority (OJK) between 2019 and 2022. Puposive sampling criteria are used. The criteria used are as follows:

1. Insurance companies registered with OJK
2. Has published annual reports and bank statements for 2019–2022, during and after the COVID-19 pandemic.
3. Financial statements that have been audited by a previous independent institution
4. The company owns all the data and information in the financial statements.
5. Granted permission by OJK before or during 2015.
6. OJK's insurance license was not revoked during the study

Variable Operational Definition

The variables used in this study are financial ratios as follows:

Table 1. Variable Operational

Financial Dicriminat Model	Rumus	Conclusion	Source
1 Model Altman	$Z = 1.2Z1 + 1.4Z2 + 3.3Z3 + 0.6Z4 + 0.999Z5$ Information: $Z1 = \text{Working capital}/\text{Total asset}$ $Z2 = \text{Retained earnings}/\text{Total asset}$ $Z3 = \text{Earnings before interest and taxes}/\text{Total asset}$ $Z4 = \text{Book value of equity}/\text{Book value of liabilities}$ $Z5 = \text{Sales}/\text{Total asset}$	$Z < 1,8 = \text{Financial Distress.}$ $Z = 1.81-2.99 = \text{Grey area.}$ $Z > 2,99 = \text{Non-Financial Distress}$	(Edi & Tania, 2018)
2 Model Springate	$S = 1.03A + 3.07B + 0.66C + 0.4D$ Information: $A = \text{Working capital}/\text{Total asset}$ $B = \text{Net profit before interest and tax}/\text{Total asset}$ $C = \text{Net before taxes}/\text{Current liabilities}$ $D = \text{Sales}/\text{Total assets}$	$Z < 0,862 = \text{Financial Distress.}$ $Z > 0,862 = \text{Non-Financial Distress}$	(Gunawan et al., 2017)
3 Model Zmijewski	$X\text{-Score} = -4.3 - 4.5X1 + 5.7X2 - 0.004X3$ Information: $X1 = \text{Return on asset (ROA)}$ $X2 = \text{Total liabilities}/\text{total assets (Leverage)}$ $X3 = \text{Current assets}/\text{Current liabilities}$	$Z > 0 = \text{Financial Distress.}$ $Z < 0 = \text{Non-Financial Distress}$	(Qisthi et al., 2013)
4 Model Grover	$G = 1,650X1 + 3,404X2 - 0,016ROA + 0,057$ Information: $X1 = \text{Working capital}/\text{Total asset}$ $X2 = \text{Net profit before interest and tax}/\text{Total asset}$ $X3 = \text{Return on asset (ROA)}$	$Z \leq -0,02 = \text{Financial Distress.}$ $Z \geq 0,01 = \text{Non-Financial Distress}$	(Fitriyah et al., 2022)

Data analysis techniques

The types of data analysis used in this study included descriptive statistics and difference tests. SPSS version 26.0 is used. For inferential statistics, this study used parametric analysis with independent t-test and non-parametric analysis with Mann-Whitney test. The independent sample test T-test aims to compare the average of two unpaired or different subjects with conditions to determine whether the data contain normal distribution. The Mann-Whitney test, which is not parametric, is used if the data does not have a normal distribution. The analysis used the covid-19 period starting from 2019-2021 and leveled the data and compared the data in 2022 which was the New Normal period.

RESULTS AND DISCUSSIONS

Result

Descriptive Statistics

The results of the descriptive statistical test are shown in the following table:

Table 2. Descriptive Statistical Results

Descriptive Statistics						
Model	Condition	N	Minimum	Maximum	Mean	Std. Deviation
ALTMANT	Covid-19	67	.53	16.43	2.2341	1.96267
	New Normal	67	-.85	18.14	2.2071	2.15891
SPRINGATE	Covid-19	67	.03	6.64	1.2485	.84162
	New Normal	67	-1.53	7.23	1.1916	.93735
ZMIJEWSKI	Covid-19	67	-24.82	1.05	-1.9969	3.12898
	New Normal	67	-20.44	1.11	-1.8660	2.71256
GROVER	Covid-19	67	.60	1.94	1.3464	.33990
	New Normal	67	-.11	1.91	1.3075	.42037
	Valid N (listwise)	67				

PT Sun Life Financial Indonesia, which uses the sharia life insurance system, received the smallest score from the Altman model's descriptive statistics, with a score of 0.53, while PT Asuransi Allianz Utama Indonesia, which is a sharia general insurance, received a score of 16.43. PT Sun Life Financial Indonesia received the lowest score, with a score of 0.53. This prediction was made during the COVID-19 pandemic. After that, the conventional general insurance company PT Asuransi Digital Bersama experienced financial difficulties with a value of -0.85. PT Asuransi Allianz Utama Indonesia, which implements a sharia general insurance system, obtained a score of 18.14.

The results of descriptive statistics during the COVID-19 pandemic showed that the company with the smallest predicted value of the Springate model, PT Sonwelis Takaful, a sharia general insurance company, received a score of 0.03. PT Asuransi Allianz Utama Indonesia, which uses the sharia general insurance system, reached a value of 6.64. PT Asuransi Digital Bersama, a conventional general insurance company, experienced a financial crisis with a value of -1.53, while PT Asuransi Allianz Utama Indonesia, a sharia general insurance company, received a value of 7.23.

The results of descriptive statistics show the results of Zmijewski's model predictions for the COVID-19 pandemic. Sharia public company PT Asuransi Chubb Syariah Indonesia received the smallest score with a score of 1.05, which indicates financial distress and PT Asuransi Allianz Utama Indonesia, which uses the sharia general insurance system, received a value of -24.82 which means non-financial distress. Furthermore, the situation during the new normal is comparable to the situation during the COVID-19 pandemic.

PT Sampo Insurance Indonesia, which uses the sharia general insurance system, received the smallest prediction for the COVID-19 pandemic, with a score of 0.60, according to the results of Grover's descriptive statistics. The company is not in a bad financial state. However, it became the company with the worst score. While PT Asuransi Loss Jasa Raharja, which is a conventional compulsory insurance company, got a value of 1.94, while PT Asuransi Digital Bersama, which is a conventional general

insurance company, got a value of -0.11, and PT Asuransi Jiwa Sinarmas MSIG Tbk, which is a sharia life insurance company, got a value of 1.91.

Data Normality Test

Table 3. Data Normality Test Results

Model	Condition	Shapiro-Wilk			Information
		Statistic	df	Sig.	
ALTMANT	Covid-19	.469	67	.000	Data is not normally distributed
	New Normal	.444	67	.000	Data is not normally distributed
SPRINGATE	Covid-19	.649	67	.000	Data is not normally distributed
	New Normal	.640	67	.000	Data is not normally distributed
ZMIJEWSKI	Covid-19	.469	67	.000	Data is not normally distributed
	New Normal	.582	67	.000	Data is not normally distributed
GROVER	Covid-19	.917	67	.000	Data is not normally distributed
	New Normal	.898	67	.000	Data is not normally distributed

Data is declared to be normally distributed if the significance value is > 0.05 , otherwise the data is declared not normally distributed. From the results of the data normality test using the Shapiro Wilk test, all variables are declared abnormal. Then the Independent sample T-test cannot continue. And replaced with the non-parametric Mann-Whitney U test as an unpaired difference test.

Mann-Whitney Test

Altman

Table 4. Test Results Mann- Whitney U Altman

Model	Condition	Group	N	Mean Rank	Sig. (2-tailed)
ALTMANT	Covid-19	Conventional	34	39.54	0.018
		Sharia	33	28.29	
		Total	67		
	New Normal	Conventional	34	39.65	0.016
		Sharia	33	28.18	
		Total	67		

Based on the Mann-Whitney difference test shown in the table, it was found that the significance value of the altmant model during Covid-19 conditions was 0.018, smaller than 0.05, which means that there is a difference in financial distress between Islamic and conventional insurance companies.

Then the significance value from the time of new normal conditions is 0.016 smaller than 0.05 which means there is a difference in financial distress between Islamic and conventional insurance companies. This means that **H1 is accepted** that there are differences in the financial statements of Islamic and conventional insurance companies during Covid-19 and after Covid-19.

Springate

Table 5. Mann- Whitney Springate Test Results

Model	Condition	Group	N	Mean Rank	Sig. (2-tailed)
SPRINGATE	Covid-19	Conventional	34	40.32	0.007
		Sharia	33	27.48	
		Total	67		
	New Normal	Conventional	34	39.47	0.020
		Sharia	33	28.36	
		Total	67		

Based on the Mann-Whitney difference test shown in the table, it was found that the significance value of the Springate model during Covid-19 conditions was 0.007, smaller than 0.05, which means that there is a difference in financial distress between Islamic and conventional insurance companies.

Then the significance value of the almant model during new normal conditions is 0.020 smaller than 0.05 which means that there are differences in financial distress between sharia and conventional insurance companies, **H2 is supported** that there are differences in the financial statements of sharia and conventional insurance companies during Covid-19 and after Covid-19.

Zmijewski

Table 6. Hasil Uji Mann- Whitney Zmijewski

Model	Condition	Group	N	Mean Rank	Sig. (2-tailed)
ZMIJEWSKI	Covid-19	Conventional	34	43.43	0.000
		Sharia	33	24.29	
		Total	67		
	New Normal	Conventional	34	41.16	0.002
		Sharia	33	26.62	
		Total	67		

Then in the Zmijewski model, based on the Mann-Whitney difference test shown in the table, it was found that the significance value during Covid-19 conditions was 0.000 smaller than 0.05, which means that there is a difference in financial distress between Islamic and conventional insurance companies.

Then the significance value from the time of new normal conditions is 0.002 smaller than 0.05 which means there is a difference in financial distress between Islamic and conventional insurance companies. **H3 is accepted**, which means that there is a difference in financial distress between Islamic and conventional insurance companies during Covid-19 and after covid-19.

Grover

Table 7. Mann-Whitney Grover Test Results

Model	Condition	Group	N	Mean Rank	Sig. (2-tailed)
GROVER	Covid-19	Conventional	34	37.15	0.180
		Sharia	33	30.76	
		Total	67		
	New Normal	Conventional	34	36.87	0.221
		Sharia	33	31.05	
		Total	67		

Then in Grover's model, based on the Mann-Whitney difference test shown in the table, it was found that the significance value during covid-19 conditions was 0.180 greater than 0.05 which means that there is no difference in financial distress between sharia and conventional insurance companies during covid-19.

Then the significance value from the time of new normal conditions is 0.221 smaller than 0.05 which means that there is a difference in financial distress between Islamic and conventional insurance companies This indicates that **H4 is rejected**, there is no difference in financial distress between sharia and conventional insurance companies during Covid-19 and after Covid-19 occurs.

Discussion

The potential for financial distress in conventional and sharia insurance companies using the Altman Z-Score model during Covid-19 and the new normal.

Based on the Mann-Whitney difference test shown in table 3, it was found that the significance value of the almant model during COVID-19 conditions was 0.018 less than 0.05, indicating that Islamic and conventional insurance companies have different levels of financial stress. Furthermore, the significance value of the almant model during new normal conditions is 0.016 smaller than 0.05 which means that H1

is accepted that There are differences in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the prediction of the Altman model.

This indicates that there are differences in ratios that make up the altman model, namely, Working capital / Total assets, Retained earnings / Total assets, Earnings before interest and taxes / Total assets, Book value of equity / Book value of liabilities, and Sales / Total assets between conventional and sharia insurance companies during and after Covid-19.

Table 8. Altman's Prediction Results

Company	Conditions	During Covid	Percentage	New Normal	Percentage
Conventional	Financial Distress	10	29%	12	35%
	Grey	19	56%	16	47%
	Non-Financial Distress	5	15%	6	18%
Total		34	100%	34	100%
Sharia	Financial Distress	22	67%	21	64%
	Grey	6	18%	6	18%
	Non-Financial Distress	5	15%	6	18%
Total		33	100%	33	100%

Altman's model predicts that conventional-based insurance companies during COVID-19 will be 19% or ten companies that are declared to experience financial distress. then in the gray area as much as 56% or nineteen companies and companies that are not affected by financial difficulties amounted to five or about 15%. The following are the names of companies that are predicted to experience financial distress: PT Asuransi Digital Bersama, PT Bhinneka Life Indonesia d.h. PT Asuransi Jiwa Bumiputera, BPJS Kesehatan, PT Asuransi ASEI Indonesia, PT Reasuransi Indonesia Utama (Persero), PT Chubb General Insurance Indonesia (formerly PT Ace Jaya Protection), PT Equity Life Indonesia, PT Prudential Life Assurance, PT Asuransi Jiwa Manulife Indonesia, and PT AIA Financial.

Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties increased to twelve companies out of ten companies or around 35%. As for companies with gray areas, it dropped to sixteen companies or 47% and six or 18% of companies were declared not affected by financial difficulties. Two additional companies predicted financial distress are PT Asuransi Allianz Utama Indonesia and PT Chubb Life Insurance.

Meanwhile, predicting sharia-based insurance companies when Covid-19 occurs is 67% or twenty-two companies that are declared to experience financial distress. then in the gray area as many as 18% or six Companies and Companies that are not affected by financial difficulties amount to five or around 15%. The following are the names of companies that are predicted to experience financial distress: PT Sun Life Financial Indonesia, PT Asuransi Jasindo Syariah, PT Sampo Insurance Indonesia d.h. PT Asuransi Sampo Japan Nipponkoa Indonesia, Jasa Mitra Abadi, PT Asuransi Jiwa Syariah, Asuransi Chubb Syariah Indonesia, PT, Takaful Umum, PT Asuransi, Takaful Keluarga, PT Asuransi, PT Reasuransi Syariah Indonesia, Syariah Keluarga Indonesia, PT Asuransi, PT Asuransi Simas Jiwa (formerly PT Asuransi Jiwa Mega Life), PT Capital Life syariah, PT Asuransi Jiwa Syariah AL AMIN, PT Asuransi Umum Bumiputera Muda 1967, PT Avrist Assurance, PT BRI Asuransi Indonesia (formerly PT Asuransi Bringin Sejahtera Artamakmur), PT ASURANSI ASKRIDA SYARIAH, PT BNI Life Insurance, PT Asuransi Jiwa Central Asia Raya, PT AIA Syariah (financial), PT Asuransi BRI Life (formerly PT Asuransi Jiwa Bringin Jiwa Sejahtera), and PT Asuransi Jiwa Sinarmas MSIG Tbk.

Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties decreased to twenty-one companies or around 64%. Meanwhile, companies with gray areas amounted to six companies or 18% and six or 18% companies were declared not affected by financial difficulties. Companies that are expected to experience financial difficulties during the new normal: PT Sun Life Financial Indonesia, PT Asuransi Jasindo Syariah, PT Sampo Insurance Indonesia d.h. PT Asuransi Sampo Japan Nipponkoa Indonesia, Jasa Mitra Abadi, PT Asuransi Jiwa Syariah, Asuransi Chubb Syariah Indonesia, PT, Takaful Umum, PT Asuransi, Takaful Keluarga, PT

Asuransi, PT Reasuransi Syariah Indonesia, Syariah Keluarga Indonesia, PT Asuransi, PT Asuransi Simas Jiwa (formerly PT Asuransi Jiwa Mega Life), PT Capital Life syariah, PT Asuransi Jiwa Syariah AL AMIN, PT Asuransi Jiwa Generali Indonesia, PT Asuransi Umum Bumiputera Muda 1967, PT Avrist Assurance, PT Asuransi Reliance Indonesia, PT BRI Asuransi Indonesia (formerly PT Asuransi Bringin Sejahtera Artamakmur), PT ASURANSI ASKRIDA SYARIAH, PT BNI Life Insurance, PT Asuransi Jiwa Central Asia Raya, and PT AIA Syariah.

The potential for financial distress in conventional and sharia insurance companies using the Springate model during Covid-19 and the new normal.

Based on the Mann-Whitney difference test shown in table 4, it was found that the significance value of the Springate model during COVID-19 conditions was 0.007 less than 0.05, indicating that Islamic and conventional insurance companies have different levels of financial distress. Furthermore, the significance value of the springate model after COVID-19 conditions is 0.020 less than 0.05 which indicates H2 is accepted. There are differences in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the prediction of the Springate model

This indicates that there are differences in the results of the ratios that make up the springate model, namely, Working capital / Total assets, Net profit before interest and tax / Total assets, Net before taxes / Current liabilities, and Sales / Total assets between conventional and sharia insurance companies during and after Covid-19.

Table 9. Springate Model Prediction Results

Company	Conditions	During Covid	Percentage	New Normal	Percentage
Conventional	Financial Distress	6	18%	4	12%
	Non-Financial Distress	28	82%	30	88%
Total		34	100%	34	100%
Sharia	Financial Distress	13	39%	15	45%
	Non-Financial Distress	20	61%	18	55%
Total		33	100%	33	100%

Springate's model predicts that conventional-based insurance companies during Covid-19 will be 18% or six companies that are declared to experience financial distress. As many as 82% or twenty-eight companies are not affected by financial difficulties. PT Asuransi Digital Bersama, BPJS Kesehatan, BPJS Ketenagakerjaan, PT Reasuransi Indonesia Utama (Persero), PT Bhinneka Life Indonesia d.h. PT Asuransi Jiwa Bumiputera, and PT Chubb General Insurance Indonesia (formerly PT Ace Jaya Proteksi) are companies predicted to experience financial distress.

Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties decreased to four companies or around 12%. Meanwhile, thirty or 88% of companies are declared not affected by financial difficulties. PT Asuransi Digital Bersama, BPJS Kesehatan, BPJS Ketenagakerjaan and PT Reasuransi Indonesia Utama (Persero).

Then this model predicts sharia-based insurance companies when Covid-19 occurs by 39% or thirteen companies that are declared to experience financial distress. then Companies that are not affected by financial difficulties number twenty or around 61%. PT Sun Life Financial Indonesia, PT Reasuransi Syariah Indonesia, PT Sampo Insurance Indonesia d.h. PT Asuransi Sampo Japan Nipponkoa Indonesia, Sonwelis Takaful, PT Asuransi, Jasa Mitra Abadi, PT Asuransi Jiwa Syariah, Syariah Keluarga Indonesia, PT Asuransi, Asuransi Chubb Syariah Indonesia, PT, PT Asuransi Jasindo Syariah, Takaful Umum, PT Asuransi dan Takaful Keluarga, PT Asuransi.

Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties increased to fifteen companies or around 45%. As for eighteen or 55% of the Company was declared affected by financial difficulties. PT Sun Life Financial Indonesia, PT Reasuransi Syariah Indonesia, PT Sampo Insurance Indonesia d.h. PT Asuransi Sampo Japan Nipponkoa Indonesia, Sonwelis Takaful, PT Asuransi, Jasa Mitra Abadi, PT Asuransi Jiwa Syariah, Syariah Keluarga

Indonesia, PT Asuransi, PT Asuransi Jiwa Generali Indonesia, Asuransi Chubb Syariah Indonesia, PT, PT Asuransi Jasindo Syariah, Takaful Umum, PT Asuransi, PT Asuransi Umum Mega, Takaful Keluarga, PT Asuransi, PT Avrist Assurance, PT Asuransi Reliance Indonesia and PT Great Eastern Life Indonesia.

The potential for financial distress in conventional and sharia insurance companies using the Zmijewski model during Covid-19 and the new normal.

In the Zmijewski model, based on the Mann-Whitney difference test shown in table 5, it was found that the significance value during COVID-19 conditions was 0.000 less than 0.05, which shows that there is a difference in financial distress between Islamic and conventional insurance companies. Furthermore, the significance value during new normal conditions is 0.002 less than 0.05 which means H3 is accepted. There are differences in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the prediction of the Zmijewski model

This indicates that there are differences in the results of the ratios that make up Zmijewski's model, namely, Return on assets (ROA), Total liabilities / total assets (Leverage), and Current assets / Current liabilities between conventional and sharia insurance companies during and after Covid-19.

Table 10. Zmijewski Model Prediction Results

Company	Conditions	During Covid	Percentage	New Normal	Percentage
Conventional	Financial Distress	4	12%	4	12%
	Non-Financial Distress	30	88%	30	88%
Total		34	100%	34	100%
Sharia	Financial Distress	3	9%	6	18%
	Non-Financial Distress	30	91%	27	82%
Total		33	100%	33	100%

Zmijewski's model predicts that conventional-based insurance companies during the Covid-19 outbreak will be 12% or four companies that are declared to experience financial distress. As many as 88% or thirty companies are not affected by financial difficulties. PT Prudential Life Assurance, PT Asuransi Allianz Utama Indonesia, PT Equity Life Indonesia, and PT Bhinneka Life Indonesia d.h. PT Asuransi Jiwa Bumiputera.

Then the results show that during the new normal conditions, the number of conditions from the prediction is still the same as during Covid-19. It's just that the affected companies have changed. PT Prudential Life Assurance, PT Asuransi Allianz Utama Indonesia, PT AIA Financial, and PT Equity Life Indonesia.

Then this model predicts sharia-based insurance companies when Covid-19 occurs is 9% or three companies that are declared to experience financial distress. then Companies that are not affected by financial difficulties number thirty or about 91%. Asuransi Chubb Syariah Indonesia, PT, PT Asuransi Jasindo Syariah, and PT Asuransi Jiwa Syariah AL AMIN.

Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties increased to six companies or around 18%. Meanwhile, twenty-seven or 82% of companies were declared not affected by financial difficulties. Asuransi Chubb Syariah Indonesia, PT, PT Asuransi Jasindo Syariah, PT Sampo Insurance Indonesia d.h. PT Asuransi Sampo Japan Nipponkoa Indonesia, PT Asuransi Jiwa Syariah AL AMIN, PT Capital Life syariah, and PT Reasuransi Syariah Indonesia.

The potential for financial distress in conventional and sharia insurance companies using Grover's model during Covid-19 and the new normal.

In Grover's model, based on the Mann-Whitney difference test shown in table 6, it was found that the significance value during COVID-19 conditions was 0.180 greater than 0.05, which shows that there is no difference in financial distress between Islamic and conventional insurance companies. Furthermore,

the significance value during new normal conditions is 0.221 greater than 0.05 which means that H4 is rejected. There was no difference in the financial distress of Islamic and conventional insurance companies during Covid-19 and after Covid-19 using the prediction of the Grover's model.

This indicates that there is no difference in the results of the ratios that make up Grover's model, namely, Workingcapital/Total assets, Net profit before interest and tax/Total assets, and Return on assets (ROA) between conventional and sharia insurance companies during and after covid-19.

Table 11. Grover Model Prediction Results

Company	Conditions	During Covid	Percentage	New Normal	Percentage
Conventional	Financial Distress	0	0%	1	3%
	Non-Financial Distress	34	100%	33	97%
Total		34	100%	34	100%
Sharia	Financial Distress	0	0%	0	0%
	Non-Financial Distress	33	100%	33	100%
Total		33	100%	33	100%

Grover's model predicts that conventional-based insurance companies during COVID-19 are 0% or no company is declared to experience financial distress. As many as 100% or thirty-four companies are not affected by financial difficulties. Then the results showed that during the new normal conditions, the number of companies experiencing financial difficulties increased to one company or around 3%. Meanwhile, thirty-three or 97% of companies are declared not affected by financial difficulties. PT Asuransi Digital Bersama.

Then this model predicts sharia-based insurance companies when Covid-19 occurs is 0% or no company is declared to experience financial distress. then Companies that are not affected by financial difficulties amount to thirty-three or 100%. Then the results showed that during the new normal the Company's condition was no different during Covid-19.

CONCLUSION

This study examines the differences in financial conditions between conventional and sharia insurance companies during and after the COVID-19 pandemic. Based on the results of the analysis and discussion above, it can be concluded that:

There are differences in financial distress between conventional and sharia insurance companies during and after covid-19 using the Altman Z-score model with the results of predictions of conventional insurance financial distress during covid-19 is 10 companies and after covid-19 is 12 companies. And sharia insurance during covid-19 is 22 Companies and after covid-19 is 21 companies.

There are differences in financial distress between conventional and sharia insurance companies during and after covid-19 using the Springate model with the results of predictions of conventional insurance financial distress during covid-19 is 6 companies and after covid-19 is 4 companies. And sharia insurance during covid-19 is 13 Companies and after covid-19 is 15 companies.

There are differences in financial distress between conventional and sharia insurance companies at the time and after covid-19 using the Zmijewski model with the results of predicting financial distress in conventional insurance at covid-19 as many as 4 companies and after covid-19 as many as 4 different companies. And sharia insurance when covid-19 as many as 3 companies and after covid-19 as many as 6 companies.

There is no difference in financial distress between conventional and sharia insurance companies during and after covid-19 using Grover's model with the results of predictions of conventional insurance financial distress during covid 0 Company and after covid-19 is 1 company. And sharia insurance during covid-19 is 0 Company and after covid-19 is 0 company.

According to the model of Altman, Springate, and Zmijewski there is a difference in financial distress between Islamic and conventional insurance companies. Meanwhile, according to Grover's model, there is no difference.

Based on the results of the study, it can be seen that there are differences between conventional and sharia insurance companies, although predictions from models state that some companies experience financial distress. But there are still many companies that are predicted not to experience financial difficulties. This implies that conventional and sharia insurance companies remain strong when hit by unforeseen circumstances. One of them is covid-19.

The limitation of this research is that it only compares financial difficulties between conventional and sharia insurance companies using several models. This study does not consider the effect of variable ratios on each model because it only focuses on testing differences between objects and models.

If you want to do more research on financial distress, you can add additional models such as Ohlson and Fulmer CA scores or compare the ratios of each model. In addition, to find out the most influential ratio for predicting financial distress is not limited to insurance companies.

REFERENCES

- Amiruddin, A. R., & Nustini, Y. (2020). Analysis of determinants of financial distress in sharia insurance companies and conventional insurance in Indonesia based on the Altman model (case study of insurance companies for the period 2015-2018). *Proceedings of National Conference On Accounting & Finance*, 2, 69–85. <https://journal.uin.ac.id/NCAF/article/view/16543/10394>
- Anggarini, Tifani Vota, & Ardiyanto, M. Didik. (2010). Pengaruh karakteristik komite audit terhadap financial distress. *Undergraduate Thesis*, Perpustakaan Fe Undip.
- Edi, E., & Tania, M. (2018). The accuracy of Altman, Springate, Zmijewski, and Grover's model in predicting financial distress. *Journal of Review of Accounting and Finance*, 8(1), 79. <https://doi.org/10.22219/jrak.v8i1.28>
- Financial Services Authority. (n.d.). Announcement. Retrieved from www.ojk.go.id: <https://www.ojk.go.id/id/berita-dan-kegiatan/pengumuman/Default.aspx>
- Fitranita, V. (2019). The effect of good corporate governance on accounting conservatism. *Journal of Applied Business Administration*, 3(2), 323–334. <https://doi.org/10.30871/jaba.v3i2.1731>
- Gunawan, B., Pamungkas, R., & Susilawati, D. (2017). Comparison of financial distress predictions using Altman, Grover and Zmijewski models. *Journal of Accounting and Investment*, 18(1), 119–127. <https://doi.org/10.18196/jai.18164>
- Husaini, Saiful, Saputra, J., & Albra, W. (2019). A study of supply chain management of board composition, enterprise risk management, and performance of non and Islamic companies in Indonesia. *International Journal of Supply Chain Management*, 8(5), 349–357.
- Pertiwi EP. (2020). Identifikasi kesulitan Guru paud di masa pandemi covid-19 dan solusinya. *PAUDIA: Jurnal Penelitian Dalam Bidang Pendidikan Anak Usia Dini*, 9(2), 40–50
- Saiful, S., Aziza, N., Husaini, H., Nikmah, N., & Fortuna, K. D. (2023). The impact of new financial instrument and lease accounting standard on financial performance of companies. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 7(1), 102–127. <https://doi.org/10.24034/j25485024.y2023.v7.i1.5565>
- Sari, N., Ghozali, I., & Achmad, T. (2017). The effect of internal audit and internal control system on public accountability: The emperical study in Indonesia state universities. *International Journal of Civil Engineering and Technology*, 8(9), 157–166.
- Usman, B. (2020). CSR performance, firm's attributes, and sustainability reporting. *International Journal of Business and Society*, 21(2), 521–539.
- Wardana, R. (2021). lifepal.co.id. Retrieved 10 3, 2023, from <https://lifepal.co.id/media/perusahaan-asuransi-yang-bangkrut/>