



INSURANCE COMPANY PERFORMANCE ANALYSIS BEFORE AND DURING THE COVID-19 PANDEMIC (STUDY OF GENERAL INSURANCE COMPANIES LISTED ON THE IDX IN 2018-2022)

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ABSTRACT

The Covid-19 pandemic has slowed Indonesia's economic growth. The insurance sector directly affected by the Covid-19 pandemic. In the insurance industry, policyholders tend to decline due to economic pressure on people's purchasing power which causes premiums to rise, but claims actually increase during the Covid-19 pandemic. To see the financial performance of the insurance industry before and during the pandemic, the authors conducted an analysis of the performance of insurance companies which can be reflected in an early warning system which consists of several ratios, including cost loss ratio, equity ratio and overgrowth ratio. The purpose of this research is to find out how these three ratios affect the solvency of insurance companies before and during the Covid-19 pandemic. The solvency level of an insurance company is represented by Risk Based Capital (RBC). The base set used in this study is insurance companies registered in Indonesia for 2018-2022. As a research hypothesis, panel data analysis was tested using the Eviews program. The results of this study indicate that the Claim Expense Ratio, the Premium Growth Ratio and the Self-Retention Ratio affects the Solvency Level during the Covid-19 pandemic.

Keywords: Covid-19; Company Performance Analysis; Early Warning System; Insurance Industry

1. Introduction

The Covid-19 pandemic became a global epidemic after being declared by the World Health Organization (WHO). The spread of Covid-19 from person to person makes the spread of Covid-19 very fast in various parts of the world. It is known that Covid-19 first appeared in the city of Wuhan in the People's Republic of China in December 2019. Based on WHO data published on March 31st, 2022, on one of the government's web portals related to Covid-19, it is known that the number of people, there were 6,012,818 people confirmed positive for Covid-19 and 155,089 deaths, or 2.52% of all confirmed cases die.

The impact is that the world economy becomes stagnant and negative. The International Monetary Fund (IMF) report states that the Covid-19 pandemic has caused a world recession which is marked by an increase in unemployment and poverty rates in every country in the world. Furthermore, the Covid-19 pandemic has also caused unemployment and increased poverty levels in every country in the world.

The insurance industry is known as one of the industries affected by the Covid-19 pandemic. Even though the government has taken several steps to prevent the spread of Covid-19, Covid-19 has had an indirect negative impact, namely decreasing Indonesia's economic growth, because it reduces the effectiveness of fiscal and monetary stimulus measures.

The Covid-19 pandemic has slowed economic growth so that demand for insurance automatically decreases and ultimately the insurance industry experiences losses and even bankruptcy. Payments have decreased during the pandemic in almost all areas of insurance activity, both non-life insurance (general insurance) and life insurance. This is due to economic

pressure due to the pandemic which disrupts people's purchasing power, thus affecting insurance purchasing power. Therefore, during this pandemic, insurance interest tends to decrease, while insurance claims increase.

Based on the description of the background to the problem, it makes sense that insurance companies in Indonesia are being questioned about their performance during the Covid-19 pandemic, so this motivates this research. Assessing the financial performance of a company usually uses various methods or analytical tools. In Indonesia, the government has established a method used to assess the financial performance of insurance companies, the Risk Based Capital (RBC) method.

The Risk Based Capital (RBC) method is a measurement of The Solvency achievement ratio or risk-based minimum capital (MMBR) which is based on Minister of Finance Regulation Number 53/PMK.010/2012 concerning the Financial Health of Insurance Companies and Reinsurance Companies. RBC is the ratio of capital adequacy to the risks covered and is one of the main indicators in assessing the health of an insurance company.

Meanwhile, in many countries measuring The Financial Performance of insurance companies uses the Early Warning System (EWS) method, which is a calculation benchmark from The National Association of Insurance Commissioners (NAIC) or the United States insurance business supervisory agency in measuring financial performance and assessing the level of company health. The Risk Based Capital (RBC) method applied in Indonesia only reflects the level of solvency, even though a company's financial performance can also be seen from other aspects such as profitability, liquidity, and so on. The aim of this system is to provide early warning of financial conditions so that it can be used to analyze the financial performance of insurance companies.

Since the Covid-19 pandemic occurred, the OJK has issued a Counter Countercyclical Policy with the aim of maintaining financial system stability and mitigating systemic risks, one of which is for the Indonesian insurance industry as outlined in POJK no. 14, which regulates changes to the maturity date for insurance premium payments. In order to provide a respite to customers. In the Early Warning System ratio which is a benchmark for assessing the financial performance of insurance companies, the ratios related to premium payments are the Claim Expense Ratio, Premium Growth Ratio and Self Retention Ratio, so in this research the author chose these three ratios as independent variables related to the issued regulation on relaxing the Countercyclical Policy by The Financial Services Authority (OJK).

Considering that Covid-19 is a new phenomenon that has had an international impact, the influence of the Covid-19 Pandemic on the performance of insurance companies requires an empirical study to conduct a comparative analysis of Financial Performance before and during the Covid-19 pandemic using ratios from the Early Warning System method.

2. Literature Review

2.1 Corona Virus Disease 2019 (Covid-19)

Corona Virus (Corona Virus Disease) is a virus that causes mild to severe illness. This virus originated in Wuhan, China and has now spread to various corners of the world, especially Indonesia. This virus causes a respiratory tract infection with various mild symptoms such as a runny nose, sore throat, cough and fever. In the current conditions, the corona virus is not an epidemic that can be simply ignored. If you look at the symptoms, lay people would think it was just ordinary influenza, but for medical analysis this virus is quite dangerous and deadly.

As mentioned, this disease was first discovered in December 2019 in Wuhan, the capital of China's Hubei Province, and has since spread globally, resulting in the 2019-2020 coronavirus pandemic. The World Health Organization (WHO) declared the 2019-2020 coronavirus outbreak an International Public Health Emergency (PHEIC) on January 30 2020, and a pandemic on March 11 2020. Covid-19 was first reported in Indonesia on March 2 2020

with two cases. Data for March 31 2020 shows that there were 1,528 confirmed cases and 136 deaths. The Covid-19 mortality rate in Indonesia is 8.9%, this figure is the highest in Southeast Asia.

Until the end of 2022, the corona virus case has spread widely and infected many victims in various countries. The government has implemented strict restrictions to break the chain of spread of the virus. A number of countries are isolated with a lockdown system and infected patients are closely monitored. The system that is implemented certainly influences the running of a country's economy. Since the outbreak of Covid-19, the government has always been vocal about Social Distancing, which also means not touching other people, including shaking hands. Physical touch is the most likely way a person is exposed to SARS-CoV2 (the new coronavirus) and the easiest way to spread it. Remember, keep a distance of 2 meters and do not touch. Social distancing will not prevent 100 percent of transmission, but by following these simple rules, individuals can play an important role in slowing the spread of the virus. With the increasing spread of people affected by Covid-19, social distancing has been replaced by physical distancing, meaning maintaining physical distance is very important in helping to prevent the spread of Covid-19. If people do not heed this and continue to defy orders from the government, it will have a devastating effect on Indonesian society. and currently the Government through the Ministry of Health has issued Minister of Health Regulation no. 9 of 2020 concerning Guidelines for Large-Scale Social Restrictions in order to simplify and speed up the handling of Covid-19. These restrictions include closing schools, campuses, workplaces, restrictions on religious activities, restrictions on public places or facilities, socio-cultural restrictions, restrictions on modes of transportation, and restrictions on other activities that can cause crowds or gatherings. This was done solely not to limit the movement of various interested parties, but rather to be an effective method for breaking the chain of spread of Covid-19.

2.2 *Countercyclical Policy POJK RI No. 14/POJK.05/2020*

The Covid-19 pandemic has threatened Indonesia's economic condition with a crisis. However, the government has quite swiftly issued several policies by providing stimulus to the business world and society to minimize the risks caused by the ongoing Covid-19 pandemic. However, the economic problems currently facing Indonesia are different from previous crises. Firstly, because the key to economic problems is the epidemic, so the conditions must be to be able to control the epidemic itself and economic experts have agreed that saving lives must take priority over the economy, because if you cannot control the epidemic then all theories that rely on economic policy will be invalid.

The Financial Services Authority (OJK) has issued a regulation on relaxing the Countercyclical Policy as a strategy implemented by the regulator to reduce the impact of the economic cycle on the financial sector, both bank and non-bank financial institutions. This policy aims to slow credit growth and assets when the economy is experiencing expansion and increasing credit growth when the economy is experiencing contraction. In the context of Non-Bank Financial Institutions, Countercyclical policies are implemented to maintain financial system stability and prevent financial crises. This policy includes steps such as adjusting the solvency ratio calculation, easing investment, and adjusting capital requirements. In the Countercyclical Policy issued by OJK, the relaxation provided for insurance companies is stated in POJK RI No. 14/POJK.05/2020 which is explained as follows:

- a. Assets permitted in the form of investment in the form of debt securities can be valued based on amortized cost, previously valued based on market value.
- b. Restrictions on assets permitted in non-investment form in direct closing premium claims are extended from 2 (two) months to 4 (four) months from the due date of payment as long as:

- Insurance/reinsurance companies (including sharia) provide policyholders/participants/customers with an extension of the time limit for 4 (four) months.
 - Only valid for premium bills or contributions that came into effect in February 2020.
- c. Assets arising from a finance lease contract can be recognized as assets that are allowed to be up to a maximum of the liabilities arising from the finance lease contract.

2.3 Insurance

According to the Criminal Code article 246: “Insurance or coverage is an agreement in the name of an insurer binding himself to the insured, by accepting a premium, to provide compensation to him for a loss, damage or loss of expected profits, which he may suffer due to an unexpected event. "Of course, the insured is free from losses due to losses, losses or lack of expected profits which may be suffered due to an uncertain event.”

Insurance as finance in a business sector that collects funds from the community and public funds actually has no different from other financial institutions. It's just that insurance companies are required to report their company's performance to the public. The main function of insurance is to overcome the risks faced by members of society. Other definitions of insurance can be found in various literature put forward by experts.

Based on the definition above, it can be concluded that insurance has an important role in economic life and is a way of transferring risk to certain parties, namely insurance companies, where all insurance participants pay premiums periodically to certain insurance companies.

In insurance companies, the monitoring and guidance system for the financial reports issued mostly uses the Early Warning System, which uses a series of test ratios which are applied to the insurance company's financial reports to measure the company's financial capabilities and performance.

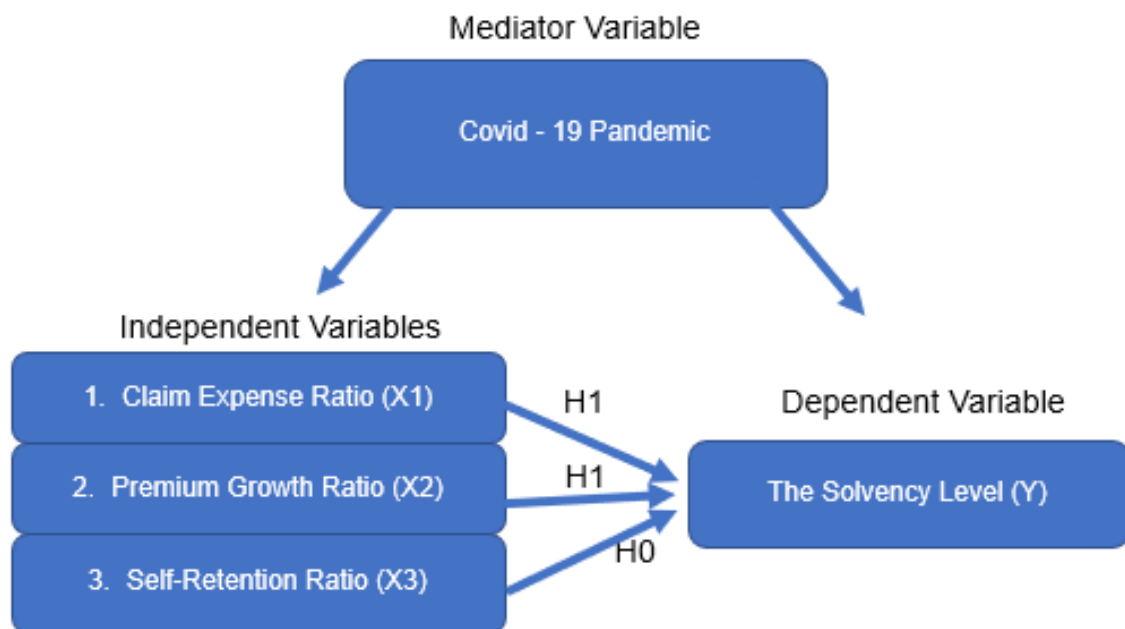
2.4 Solvency Level

Solvency is a company's ability to measure the extent to which company assets are financed using debt. The low level of solvency of a company illustrates that the company is funded more by internal funds than external funds (low debt). This shows that the lower the company's solvency level, the lower the risk of the company's failure to repay its debts and the company's profitability will increase, because the debt burden that must be borne will be lower. Solvency describes a company's debt to capital or assets. Solvency can describe the extent to which the industry is financed by debt or external parties with the company's expertise interpreted by capital. Risk Based Capital is one way to measure the Solvency level limit in measuring the level of financial health of an insurance company. Minister of Finance Decree No. 424/KMK.06/2003 dated 30 September 2003 states that insurance companies are required to maintain a solvency ratio calculated using the Risk Based Capital approach. Understanding Risk Based Capital According to Government Regulation (PP) no. 63 of 2004 states that the RBC health ratio is a measure that informs the level of financial security or health of an insurance company which must be met by loss insurance companies at 120%. The greater the RBC health ratio of an insurance company, the healthier the company's financial condition. In accordance with Minister of Finance Decree No.424/KMK/2003 concerning the Financial Health of Insurance Companies and Reinsurance Companies, the government has determined that insurance companies in Indonesia are currently required to have a Solvency Level Limit (RBC) of at least 120%.

The solvency ratio shows the ability of a company's own capital to fulfill all its obligations. If this ratio is more than one, it shows that the owners' rights to the company's assets are greater than the claims held by creditors. Availability of own capital in the company is a must. Every company operating in any field requires its own capital to ensure the continuity, smoothness and safety of the company. Adequate capital conditions will ensure that the company can continue to run well as long as the company continues to increase profits. "Where the use of own capital and long-term debt in increasing its assets will have an influence on the state of a company's solvency level. Each additional capital will always increase its solvency level."

Risk Based Capital according to Government Regulation (PP) Number 63 of 2004 states that: "The Risk Based Capital health ratio is a measure that informs the level of financial security or health of an insurance company which must be met by the insurance company at 120%. The greater the health ratio of an insurance company's Risk Based Capital, the healthier the company's financial condition.

2.5 The Conceptual Framework



3. Research Methods

3.1 Data and Data Sources

In this research, the author uses secondary data, namely data obtained from published sources and can be used for research. The subject of this research focuses on insurance companies in Indonesia, with a sample of general insurance companies in Indonesia for the 2018-2022 period, whose financial reports were obtained from the IDX website. Sugiono (2015) states that population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. Meanwhile, Sunyoto (2016) states that population is the total of all values produced based on quantitative and qualitative calculations or measurements of certain characteristics regarding an object that are complete and clear. In this research, the population is all insurance companies listed on the IDX in 2018 - 2022.

According to Sugiyono (2015), the sample is part of the number and characteristics of the population. Meanwhile, according to Sunyoto (2016) a sample is a portion of data which is an object taken from the population. A study has limitations in terms of funds, energy and time,

so when research involves a large population, it is impossible for researchers to study all existing populations. The sample used is a sample that truly represents the population.

3.2 Research Model Specifications

The model used to analyze the performance of insurance companies before and during the Covid-19 pandemic uses Panel Data with the following equation specifications:

$$Y_{it} = \alpha + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 D1 + \beta_5 X1D1 + \beta_6 X2D1 + \beta_7 X3D1 + \epsilon_{it}$$

i : Number of General Insurance Companies

t : Time Period

α : Constant

$\beta_1 - \beta_3$: Regression Coefficient

Y : Solvency Level

X1 : Claim Expense Ratio

X2 : Premium Growth Ratio

X3 : Self Retention Ratio

D1 : Covid-19 pandemic

ϵ_{it} : Regression Error

3.3 Data Analysis Methods

In this research, researchers used several methods to analyze the performance of insurance companies before and during the Covid-19 pandemic (study of general insurance companies listed on the IDX in 2018 - 2022), Panel Data Regression, Estimation Models in Panel Data, Statistical Analysis

4. Research Findings and Discussion

4.1 Discussion

After carrying out the Chow test and Hausman test, it can be seen that the best model in this research is the Fixed Effect Model (FEM), so that the next analysis that will be carried out is based on the results obtained from the Fixed Effect Model (FEM). Hypothesis testing was carried out to test the relationship between the Claim Expense Variable, Premium Growth Variable and Personal Retention Variable on the level of solvency. Analysis is carried out by comparing the probability value with the level of significance value. If the probability value is 0.1, it means that the variable has a significant effect and has an influence on the dependent variable.

Table 4.1 *Fix Effect Model Regression Result*

Variable	Coefficient	Prob.
C	3650.421	0.0000
BEBANKLAIM?	-1445.536	0.2432
BEBANKLAIM?*DUMMY?	-1410.488	0.0000
PERTUMBUHANPREMI?	1001.259	0.0088
PERTUMBUHANPREMI?*DUMMY?	-1385.086	0.0218
RETENSIDIRI?	813.2822	0.3246
RETENSIDIRI?*DUMMY?	1549.897	0.0000
R-SQUARED	0.9077	
ADJUSTED R-SQUARED	0.8670	
PROB	0.0000	

4.2 Adjusted R Square

The Fixed Effect Model is used in this research because it is the best model for calculating the percentage of variance in the independent and dependent variables. The Adjusted R Square regression results show 0.086 when presented (%) meaning that 86% of the variation in the dependent variable can explain the independent variable claim burden, premium growth and Personal Retention and the remaining 14% is explained by other factors not included in the model.

4.3 T Test

The T test is known as a partial test, which is to test how each independent variable individually influences the dependent variable. The following are the results of the t-statistical test from this research:

- a. Claim Expense Ratio Variable Before the Covid-19 Pandemic
Based on the regression results above, it is clear that claim expenses before the Covid-19 pandemic had a coefficient value of -1445,536 and a probability of 0.2432. The probability value shows that $\alpha > 0.01$, meaning that before the Covid-19 pandemic, the claims expense variable had no effect on the solvency level.
- b. Claim Expense Ratio Variable After the Covid-19 Pandemic
Based on the regression results above, it is clear that the claim expense ratio after the Covid-19 pandemic has a coefficient value of -1410,488 and a probability of 0.0000. The probability value shows that $\alpha < 0.01$, meaning that the Claim Expense Ratio variable after the Covid-19 pandemic experienced a significant (negative) decrease in the solvency level.
- c. Premium Growth Ratio Variable Before the Covid-19 Pandemic
Based on the regression results above, it is clear that the Premium Growth Ratio before the Covid-19 pandemic had a coefficient value of 1001,259 and a probability of 0.088. The probability value shows that $\alpha < 0.1$, meaning that before the Covid-19 Pandemic the Premium Growth variable had a positive and significant effect on the solvency level.
- d. Premium Growth Ratio Variable After the Covid-19 Pandemic
Based on the regression results above, it explains that premium growth after the Covid-19 pandemic has a coefficient value of -1385,086 and a probability of 0.0218. The probability value shows that $\alpha < 0.1$, meaning that the Premium Growth variable after the Covid-19 pandemic experienced a significant (negative) decrease in the solvency level.
- e. Self-Retention Ratio Variable Before the Covid-19 Pandemic
Based on the regression results above, it is clear that the Self Retention Ratio before the Covid-19 pandemic had a coefficient value of 813,282 and a probability of 0.3246. The probability value shows that $\alpha > 0.1$, meaning that before the Covid-19 Pandemic the Self Retention variable had no effect on the level of solvency.
- f. Self-Retention Ratio Variables After the Covid-19 Pandemic
Based on the regression results above, it is clear that the Self Retention Ratio after the Covid-19 pandemic has a coefficient value of 1549,897 and a probability of 0.000. The probability value shows that $\alpha < 0.1$, meaning that the Self Retention variable after the Covid-19 pandemic experienced a significant (positive) increase in the level of solvency.

4.4 F Test

The F test is a test of the regression coefficients simultaneously. This test was carried out to determine the influence of the independent variables contained in the model together on the dependent variable.

Table 4.2 F-Statistic Test Result

F-statistic	Prob(F-statistic)
22.299	0.000

Based on the results of the F-Statistics test, it shows that Prob (F-Statistics) is $0.000 < 0.1$, meaning that H_0 is rejected, meaning that the independent variables claim burden, premium growth, self-retention together have a significant effect on the dependent variable, namely the level of solvency.

5. Conclusions

Based on the results of research examining the performance of general insurance companies before and during Covid-19 using the panel data method, it can be concluded as follows:

- a. The Claim Expense Ratio variable during the Covid-19 Pandemic influenced the Solvency Level of general insurance companies significantly and negatively. This means that when claim expenses increase, it will reduce the solvency level of general insurance companies. The Claim Expense Ratio is also the variable that most influences the Solvency Level.
- b. The Premium Growth Ratio variable during the Covid-19 Pandemic influenced the Solvency Level of general insurance companies significantly and negatively. This means that when claim expenses increase, it will reduce the solvency level of general insurance companies.
- c. The Self Retention Ratio variable during the Covid-19 Pandemic influenced the Solvency Level of general insurance companies significantly and positively. When the Self-Retention Ratio increases, the Solvency Level will increase due to an increase in total income and total public expenditure.
- d. The Covid-19 pandemic significantly affected the solvency level of general insurance companies, both negatively and positively. During the Covid-19 pandemic, this occurred due to several factors such as changes in economic policy, economic penetration and economic instability.
- e. Future researchers are advised to increase the research period from the beginning of the pandemic until the pandemic is still ongoing and use samples of companies in other sectors. For example mining, manufacturing, or banking. For further research, if the insurance industry can be tested using other Early Warning System indicators in full and can extend the research period so that the research results will be much more accurate.

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