

**NASKAH PUBLIKASI**

**ANALYSIS OF FINANCIAL PERFORMANCE ON  
PROFITABILITY IN GENERAL INSURANCE**

**I NYOMAN AUGUST WIDIASTRA  
1113701316**



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## **ANALYSIS OF FINANCIAL PERFORMANCE TOWARDS PROFITABILITY IN GENERAL INSURANCE**

### **ABSTRACT**

This study is aimed to test the effect of the level of financial health, the value of the risk borne, the level of investment returns and the level of premium growth on the profitability in general insurance companies.

This research uses descriptive quantitative approach, which is measured using multiple linear regression based method use Eviews 11. The population of this study is the general insurance company in 2016 until 2019. The sample was determined based on the purpose sampling method, with a total sample of 45 general insurance companies, so that the total observation in this study was 180 observations. Data collection techniques using the method of documentation by taking data related to research variables, in this case the data that is in the financial statements of a company in the period 2016 - 2019 sourced from insurance company publications reports. Hypothesis testing are using t test.

The results prove that the level of financial health (RBC) has no effect on porphitality (ROE). This is because RBC is a form of measurement of financial health where there are other things that can affect the value of the RBC. The rate of return on investment (IYR) also has no effect on the value of ROE, considering that in General Insurance Companies, an investment portfolio that is easily liquidated is required. The premium growth rate (PGR) also has no effect on ROE because insurance companies are also required to implement an adequate risk selection process. This risk selection process will determine whether the Insurance Company will benefit or suffer losses, so that the acquisition of high premiums does not guarantee that the Insurance Company will get a profit. Furthermore, the value of risk borne (SMR) affects the profitability of general insurance companies. A good SMR value indicates that the company is sufficient to carry out risk selection and allocate sufficient funds to develop its business. Both of these can increase the Company's profits.

**Kata kunci : general insurance, profitability, RBC, SMR, IYR dan PGR**

# CURRICULUM VITAE

## Personal Data

Name : I Nyoman August Widiastra  
NPM : 1113701316  
Place and date of birth : Malang, August 18th, 1988  
Religion : Islam  
Nationality : Indonesia  
Address : Permata Cimanggis, Cluster Mutiara, Blok C3/9, Cimpaeun, Tapos, Depok  
Phone : 081281116370  
Email : nyomanlk@gmail.com

## Formal Education

SDN Bareng X, Malang : 2000  
SLTP 8, Malang : 2003  
SMAN 1, Malang : 2006  
STAN, Tangerang : 2009

Work : Employee  
Office Address : Wisma Mulia 2, Kuningan, Jakarta Selatan

# CHAPTER I INTRODUCTION

## 1.1. Background

Financial factor components that can also affect the value of the return on equity (ROE) in insurance companies can be reviewed by analyzing the EWS (Early Warning System) financial ratio. EWS is a system of analysis tools that produces financial performance ratios of insurance companies. The ratio is calculated based on the information contained in the company's financial statements in order to facilitate the identification of important matters related to the financial performance of the insurance company. Financial ratios according to the EWS analysis include Solvency Margin Ratio (SMR), Investment Yield Ratio (IYR) and Premium Growth Ratio (PGR) or Premium Growth Ratio (Rahajeng and Djazuli, 2012).

The ratios that can affect the ROE of general insurance companies are RBC, SMR, IYR and PGR. General insurance performance in the period 2014-2019 shows the value of ROE which is decreasing every year. However, the value of the ratios that can affect the ROE value in 2014-2019 shows unstable fluctuation.

Furthermore, in 2014–2016, the RBC value experienced a decline followed by a decline in ROE. However, in 2017 - 2019, RBC experienced an increase, while in the same period the ROE value continued to decline. Thus, the value relationship between the RBC value and the ROE value fluctuates, so that it shows a gap phenomenon. Furthermore, in 2014-2016, the SMR value showed a continuing downward trend, followed by a decreasing ROE value in the same period. However, in the 2017-2019 period, SMR has increased while ROE has decreased. This shows that there is a gap phenomenon, in which the relationship between the SMR value and the ROE value is inconsistent. IYR experienced an increase in the 2014-2015 period and decreased until 2019. The decrease in IYR was followed by a decrease in ROE in the 2014-2019 period. This inconsistent relationship between IYR and ROE indicates a gap phenomenon. Furthermore, the ratio that is quite consistent with the movement in ROE value is the Premium Growth Ratio (PGR). Where in 2014-2019, PGR experienced a decline in value and was followed by ROE which also experienced a decline in value.

Based on previous research that has been carried out, several gaps were found between the studies, namely as follows. Research conducted by Dorofti and Jakubik (2015) shows that SMR has a positive effect on the value of ROE. Similar results can also be found in research conducted by Widiyana (2017). Furthermore, research has been conducted by Kirmizi and Agus (2011), as well as research conducted by Supriyono (2013). Where both have stated that the RBC value can have a negative effect on the ROE value of the insurance company.

Research by Dorofti and Jakubik (2015) states that the IYR value has a positive effect on ROE. This is generally similar to the discussion above, where a decrease in IYR value was also followed by a decrease in ROE value, although in 2014 there was an increase in IYR. However, the IYR value continued to decline until 2019. Furthermore, research conducted by Dorofti and Jakubik (2015) as well as research

conducted by Kirmizi and Agus (2011) also produced relatively the same results, that the PGR value had a negative effect on ROE value.

This study is based on two problems, namely the existence of data gaps in financial ratio data in general insurance companies and the existence of research gaps from several previous studies. In addition, this research will focus more on the General Insurance industry in Indonesia.

With regard to the matters mentioned above, the researcher feels the need to conduct research with the title of financial performance analysis on profitability in general insurance.

## **1.2. Problem Formulation**

1. How does the level of financial health of general insurance companies affect the profitability of general insurance companies?
2. How does the amount of risk value borne by general insurance companies affect the profitability of general insurance companies?
3. How does the level of return on investment in general insurance companies affect the profitability of general insurance companies?
4. How does the general insurance company premium growth rate affect the profitability of general insurance companies?

## **1.3. Research Purposes**

1. Analyze the effect of financial soundness on profitability in general insurance companies.
2. Analyze the influence of the value of the risk borne on the profitability of general insurance companies.
3. Analyze the influence of the level of return on investment on profitability in general insurance companies.
4. Analyze the influence of the size of the premium growth rate on profitability in general insurance companies.

## **1.4. Benefits of Research**

This research is expected to be useful for investors, company management, regulators and academics.

## **CHAPTER II LITERATURE REVIEW**

### **2.1. Review of Previous Research Results**

There are studies that have been conducted by several researchers regarding several factors that may affect the ROE value. These studies produce a conclusion. Furthermore, the conclusions referred to will be used as reference material and comparisons contained in this study.

Research conducted by Ismail (2013) aims to determine whether the SMR value that is too high with poor fund management can affect revenue and ROE. The research conducted resulted in conclusions that showed that there were several negative effects between the SMR value that was too high or less optimal in its use on income efficiency and also the ROE value.

Research conducted by Dorofiti and Jakubik (2015) on an insurance company in Canada which was listed in Best via Win Trac in 2000. The population used in this study were 174 companies, while the sample was 68 companies. The purpose of this research is to study several factors that may affect the ROE value of an insurance company. The results of these studies indicate that the SMR value has a negative effect on the ROE value. Furthermore, the ratio of underwriting and auto concentration has a significant negative effect on the ROE value. In addition, IYR (Investment Yield Ratio) and Adjusted Loss Reserve to NPW have a positive and significant effect on ROE.

Then, Dorofiti and Jakubik (2015) have also conducted a similar study on general insurance companies in Canada. The total population used in this study were 244 companies. Furthermore, the sample used was 107 companies. This study concludes that the Surplus value to NPW or SMR and Group Membership has a positive but insignificant effect on the ROE value. Furthermore, the Investment Risk Ratio, Investment Yield, and Index of Premium have a significant positive effect on the value of ROE. Meanwhile, the Underwriting Ratio, Adjusted Loss Reserves to NPW, Growth in NPW have a negative effect on the ROE value.

Research conducted by Kirmizi and Agus (2011) on the general insurance industry in Indonesia in the period 2000 to 2007 aims to test and analyze several factors that affect the value of RBC, ROE and Net Premium Growth. This study concluded that capital growth itself has a positive effect on the RBC value. The growth in asset value has a negative effect on the RBC value. Furthermore, the growth in the amount of own capital and the growth in the value of the insurance company's assets have a positive effect on ROE. However, the RBC value and the value of net premium growth have a negative effect on the ROE value. The study also concluded that there was a positive effect of RBC on net premium growth. The same thing also happened to the growth in asset value, which also had a positive effect on the value of net premium growth. However, capital growth itself has a negative effect on the value of net premium growth.

Research conducted by Supriyono (2013) at PT Asuransi Tafakul Umum and PT Asuransi Tafakul Keluarga. This study used a research period of seven years, from 2004 to 2010. The purpose of this study was to determine the effect of RBC on

the value of profitability. This study concluded that the RBC value has a negative effect on the ROA value and the ROE value of the insurance company.

## **2.2. Theoretical basis**

### **2.2.1. General Insurance**

General insurance company is an insurance company whose function is to cover the possibility of a loss on the insured property or interest due to an event that occurs in the future whose occurrence is uncertain. The general insurance company as the insurer is obliged to compensate for a loss that has been experienced by the insured. To get protection against this risk, the insured must first pay a premium to the insurer. Thus, if at any time an event occurs that can result in losses on the part of the insured, the insurance company will compensate for the loss through payment of claims in accordance with the insurance contract.

### **2.2.2. Financial Ratio**

General insurance has a fairly different form of financial statements for life than other types of companies. This happens partly because there are financial ratios in particular only in the insurance industry. One of the analytical tools that can be used to analyze financial statements and then process them into useful information is to use the calculation of the return on equity ratio (ROE), Solvency Level Achievement Ratio (RBC), Solvency Margin Ratio (SMR), Investment Yield Ratio (IYR) and Premium Growth Ratio (PGR).

#### **2.2.2.1. Profitability**

The profitability ratio is the result of financial management policies and decisions on the business operations of a company. One form of profitability ratio is the return on equity (ROE) ratio. ROE can measure returns to shareholders as a percentage of the amount of their investment in the company.

ROE is a part of the profitability ratio for analyzing financial statements in order to determine the company's financial performance. Brigham and Houston (2012) state that Return On Equity is the ratio of net income to the value of ordinary equity or measures the rate of return on investment returns from ordinary shareholders. Furthermore, Harahap (2015) states that Return On Equity can show what percentage of net income can be obtained when measured from owner's capital. If it's bigger, the better. From the definition referred to above, it can be concluded that the value of the company's Return On Equity can show the company's ability to generate profits from its capital.

The return on equity or Return On Equity is a ratio used to measure net income to equity. The higher the ratio value, the better, and vice versa. Shareholders expect to get a return on their investment in the company. ROE can show the amount of return value when



viewed from the side of accounting records. A high ROE value can illustrate the number of high returns on the amount of their investment in the company.

#### **2.2.2.2. Financial Health**

The Financial Services Authority Regulation number POJK 71/POJK.05/2016 concerning the Financial Health of Insurance Companies and Reinsurance Companies sets the minimum standard for the amount of Risk Based Capital (RBC) that must be achieved by insurance companies is 120%. A company has an RBC value of 120% or more, which means that the company is able to pay its obligations, particularly claims obligations to the insured.

RBC is a measure of the financial health of insurance. The higher the RBC health ratio, the more it reflects the insurance company's financial health. Along with this, the profits earned will also increase (Bogar; 2016). RBC is obtained by calculating the difference between allowable assets (AYD) and liabilities plus the risk-based minimum capital.

#### **2.2.2.3. Value of Risk Covered**

Solvency Margin Ratio (SMR) is calculated to assess the level of financial and capital capacity of a company to bear the risk of the premiums it receives in the event that the company will cover an insurance coverage.

SMR is used to calculate the financial capacity of a general insurance company to support the liabilities that may occur from risk coverage by the company, using the SMR calculation. This ratio is one of the ratios in the early warning system. A low SMR will indicate a high enough risk as a result of the high value of premium receipts.

A high SMR value reflects the company's operations in not optimal use of capital. SMR can have a negative effect on the value of ROE, this is because the large amount of capital owned by the insurance company can not be used optimally in generating operating profits.

#### **2.2.2.4. Investment Return Rate**

The average investment is the total investment in the current year and investment in the last year divided by two. IYR is used to assess the results of the investment policy implemented by the company. Considering that some investment instruments carry a high enough risk, investments made by companies must be placed in safe instruments.

Apart from being used for making claims payments, a part of the funds raised by insurance companies comes from premium income. In the event that the company receives quite a lot of claims,

the return from the investment can be relied on to help pay claims and maintain the company's financial health so that the investment made must also provide fairly high returns. In addition, the placement of investment instruments must also have sufficiently high liquidity, that is, they can be withdrawn at any time without experiencing significant loss of value.

#### **2.2.2.5. Premium Growth Rate**

Furthermore, the premium growth ratio (PGR) is an indicator that can be used to assess the company's development in the future. The increasing PGR is expected to benefit the company because it can increase revenue for the company which will eventually attract investors. In addition, PGR's growth can demonstrate a company's ability to be able to maintain and increase its economic value in economic growth as well as in the insurance industry or the market in which it operates. It is hoped that PGR will not be too low, considering that this can be seen as reflecting the company's poor growth, so that it can be considered as an underdeveloped company. However, the sharp and short increase in the number of premiums needs special attention. This is because the addition of premiums also increases the risk for the company in the future due to the possibility of quite large and sudden claims payments.

### **2.3. Relationship Between Research Variables**

#### **2.3.3. Effect of RBC Value on ROE Value**

The Financial Services Authority Regulation (POJK) number POJK 71 / POJK.05 / 2016 concerning the Financial Health of Insurance Companies and Reinsurance Companies sets the minimum standard for Risk Based Capital (RBC) of 120%. The RBC value is used to assess the level of capital capability that an insurance company can convey to policyholders, so that this is expected to increase the level of trust in the community towards the company. The high level of capital adequacy in fulfilling its obligations is reflected in the high RBC value as well. However, on the other hand, the high level of RBC also shows that the company is less efficient in managing its finances, because a very high level of solvency means there are idle funds. Research conducted by Kirmizi and Agus (2011) and research conducted by Supriyono (2013) also stated that the RBC value has a negative effect on the ROE value.

#### **2.3.4. Effect of SMR Value on ROE Value**

In accordance with research conducted by Ismail (2013), a very high Solvency Margin Ratio or SMR value tends to result in inefficient revenue. Considering if the value of the company's own capital is high enough, it is expected that this capital can support the company's operations in developing its business. However, if the capital owned by the company is high enough and not followed by a high premium value, then the company can be said to be inefficient in using existing funds.

The high level of company capital which is not followed by a high level of risk acceptance can also increase the SMR value. This is because low premiums will have an impact on the low risk received by the company. In the end, the low premium will have an impact on the company's profit. This inefficiency in using capital to increase the amount of premium can make the company's ROE value low. In addition, Ismail's research (2013) also states that the SMR value has a negative effect on the ROE value.

#### **2.3.5. Effect of IYR Value on ROE Value**

A low Investment Yield Ratio or IYR indicates that the investment management policies implemented by the company are not successful. One of the reasons for this is the risk of placing in an investment instrument that is not fixed. There is always a risk from placing an investment that can harm the company. Therefore, companies need to choose investment instruments that are not too risky and easy enough to redeem. Accuracy in making investment placements in accordance with the company's risk profile will provide optimal results for the company and will ultimately contribute to the company's profitability. Thus, if the level of profitability is indicated by an increase in company profits, this will affect the company's ROE value. High investment returns can contribute to the company's profit. Thus, it can be said that the IYR value corresponds to the ROE value. The results of research by Dorofiti and Jakubik (2015) show that IYR has a positive effect on ROE.

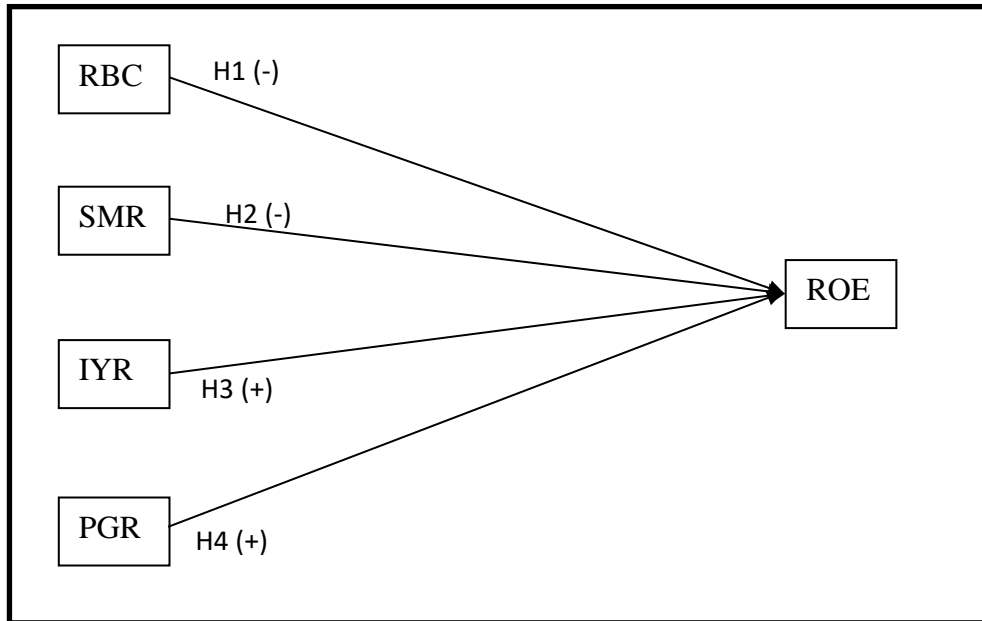
#### **2.3.6. The Effect of PGR Value on ROE Value**

Insurance companies collect public funds and allocate them to form technical reserves which are used to make claims payments and partially invested to provide returns in the form of returns to the company. The higher the risk that may be faced, the higher the return that can be accepted, and vice versa. The high premium growth value followed by the correct risk selection process will improve the company's performance in carrying out its operational activities which will ultimately increase the company's profit so that the company's ROE will also increase. Therefore, the higher the Premium Growth Ratio (PGR), the higher the company's ROE value.

#### **2.3.7. Research Conceptual Framework**

Based on the description of the relationship between variables as referred to above, it can be explained that the conceptual framework of this study is that Risk Based Capital (RBC) and SMR have a negative effect on the company's ROE, while the Investment Yield Ratio (IYR) and the Premium Growth Ratio (PGR) have a positive effect on ROE.

#### Research Conceptual Framework



## **CHAPTER III RESEARCH METHOD**

### **3.1. Research Strategy**

The data used in this study is secondary data in the form of pooling data. Pooling data is a combination of time series data and cross series section data for all variables used in the study. The variables in this study include ROE, RBC, SMR, IYR and PGR. The research period is for four years, from 2016 to 2019, which comes from public insurance company financial report data.

### **3.2. Population and Sample**

This study uses population data in the form of financial statements of general insurance companies during the study period, namely 2016 - 2019. Based on data from the Insurance Directory as of December 2019, it is known that there are 74 general insurance companies in Indonesia. The research sample was taken by purposive sampling.

### **3.3. Data and Data Collection Methods**

The data collection method used in this research is the Library Research method. The data related to this research variable is the data in the financial statements of insurance companies in the 2016-2019 period which are sourced from general insurance company publication reports. The financial data collected includes RBC data, total assets, profit / loss, premium income, equity, total investment and investment returns.

### **3.4. Operationalization of Variables**

The operational definition of the variables used in this study will be explained in this section. In this study, four ratios were used as independent variables. These ratios include RBC, SMR, IYR, and PGR. While the dependent variable used is ROE.

### **3.5. Data Analysis Methods**

The MS Excel 2016 software and Eviews 11 were used by researchers to process and collect data in this study. To answer the problems as stated in CHAPTER I, the authors use panel data regression method in analyzing existing problems. The data analysis method used is to determine the Regression Estimation model, data analysis, classical assumption test and significant test.

## **CHAPTER IV RESULTS AND DISCUSSION**

### **4.1. Overview and Development of Research Objects**

#### **4.1.1. *Return On Equity (ROE)***

ROE is a ratio that shows the company's ability to generate profit from its equity. ROE is calculated by comparing net income and equity. This ratio is often used to measure company performance, especially related to profitability, where the higher the ROE value, it shows that the company has a good performance in generating profits. The ROE value of insurance companies in general has decreased even though there was a slight increase in 2019. Even though in the 2016 - 2019 period the company's ROE decreased, the ROE value was not minus, which means that in general the insurance company still made a profit.

#### **4.1.2. *Risk Based Capital (RBC)***

Risk Based Capital is a method of measuring the level of solvency limit required by laws and regulations to measure the level of financial health of an insurance company. This measurement method is used to ensure the fulfillment of the insurance company's obligations by knowing the amount of capital required by the insurance company in accordance with the level of risk faced by the insurance company in managing its assets and liabilities. In accordance with article 3 of the Financial Services Authority Regulation number 71 /POJK.05/2016 concerning the Financial Health of Insurance Companies and Reinsurance Companies, the minimum RBC required is 120%. In general, the RBC value of insurance companies has decreased from 2016 to 2019, although slightly increased in 2017. However, overall the RBC value of general insurance companies is still above the required provision of 120%.

#### **4.1.3. *Solvency Margin Ratio (SMR)***

Solvency Margin Ratio shows how much the company's capital ability to bear the risks it has closed. Based on Aji Ahmad's research, Yunianto (2016) SMR has a normal limit, which is a minimum of 33.3%. The SMR value of insurance companies in general has increased from 2016 to 2019. The lowest SMR value was found from one company in 2016 which amounted to 44.3%, namely PT Asuransi Ramayana Tbk. However, in that year the overall company average was still at 166.8%.

#### **4.1.4. *Interest Yield Ratio (IYR)***

Interest Yield Ratio (IYR) shows the comparison between the investment returns obtained and the total investment the company has. The greater the IYR of a company, it indicates that the company is able to manage its investment instruments optimally.

The average IYR of insurance companies is quite good and stable even though it has decreased until 2019. IYR of general insurance companies is not too high because companies need to place their funds in investment instruments

that are quite liquid and have minimal risks such as deposits and government securities that do have yields. very high such as stocks and corporate debt securities.

#### 4.1.5. *Premium Growth Ratio (PGR)*

PGR provides an overview of the size of the change in premium income in the current year compared to the previous year. The results of the company's operational activities will be reflected in the premium income. The higher the performance of the company and the higher the insured's trust in the insurance company, the greater the premium that the insurance company will get. Furthermore, the premiums will then be collected and managed so that one of them is invested and prepared to make a claim payment. The average premium growth rate for insurance companies is quite unstable from year to year. It is known that in 2016, the PGR value was quite high, and experienced a significant decline in the following year. Furthermore, the PGR value was quite stable until entering 2019, which again increased. It is interesting to do further research.

## 4.2. Data Description

ROE variable is a ratio that can measure the amount of return received by shareholders on funds invested in the company. The ROE variable has a minimum value of -21,001% and a maximum value of 57,379%, an average value of 4,990% with a standard deviation of 7,760%. This average value means that for every Rp. 1 of money invested by investors as share capital, a net profit of Rp. 4,990 can be generated.

Furthermore, RBC is a form of measurement of the financial health of an insurance company which has been stipulated in law at a minimum of 120%. The RBC variable has a minimum value of 129.259%, a maximum value of 1,824.53%, an average value of 297.126% with a standard deviation of 228.305%. In general, the average RBC and minimum RBC values of general insurance companies are still above the prevailing regulations.

SMR is a ratio that is used to measure and assess the financial ability of general insurance companies to support liabilities that may arise from the risk coverage it has received. Measurement of SMR is done by comparing equity with premiums. The SMR variable has a minimum value of 30.487% and a maximum value of 1.928.03%, an average value of 383.4% with a standard deviation of 275.018%. This shows that the ability of the capital shown in the company's own capital to absorb the risks shown in the premiums that may arise from insurance coverage is still quite good.

IYR is used to assess a company's ability to manage its investment instruments. High investment returns indicate that the company is able to manage its investment well. The IYR variable has a minimum value of 0.217% and a maximum value of 17.784%, an average value of 6.441% with a standard deviation of 2.406%. The average value of return on investment of general insurance companies is quite good, slightly higher than the interest rate on bank deposits, this shows that the financial investment performance of insurance companies is quite stable.

Furthermore, PGR is a ratio that describes the rate of premium growth earned by insurance companies. The high premium growth rate indicates that the insurance company operational development is quite good. The PGR variable has a minimum value of -63,701% and a maximum value of 1,954.99%, an average value of 49,831% with a standard deviation of 162%. In general, insurance company premium growth has increased from time to time, although there are several insurance companies that experienced a decrease in premium growth. This is interesting to do in-depth research.

#### **4.3. Panel Data Regression Model Selection Test**

Panel data regression models have a combination of several characteristics, namely data that consists of more than one object and includes more than one time period. Such data has several advantages, namely mainly because it is strong against several types of violations that may occur, such as heteroscedasticity problems and normality problems. Panel data regression was performed using three models, namely CEM, FEM and REM. Each of these models has advantages and disadvantages as well as different characteristics. To choose the model, it really depends on the assumptions and data used by each researcher. In addition, this is done to meet the requirements for correct statistical data processing so that the data and results of data processing can be accounted for. In this regard, the first step that must be done is to select a model from the three available models.

Based on the results of the Chow test, the method chosen is FEM. Furthermore, after the Hausman test, the method chosen was REM. After that, the Lagrange Multiplier test was performed and the REM method was selected. Thus, in this study, the panel data regression model chosen was REM.

#### **4.4. Classic assumption test**

The classical assumption test was carried out by several tests, namely the multicollinearity test, heteroscedasticity test, autocorrelation test and normality test. The results of the test show that the panel data regression model does not experience multicollinearity symptoms, there is no heteroscedasticity problem, there is no autocorrelation problem and the assumption of normality can be ignored considering the large number of observational data.

#### **4.5. Hypothesis Testing with Panel Data Regression Analysis**

##### **4.5.1. Partial Test (t test)**

Furthermore, to assess the extent of the influence of the company's ratio variable partially on ROE, a partial test or t test can be used. This t test is used to test the effect of each value of the independent variable on the dependent variable. If the probability f value is less than 0.05, the result is significant, which means that there is an influence from the independent variable individually on the dependent variable. Hypothesis testing partially using the t test based on the REM method produces the panel data regression equation used in this study as follows:



$$\text{ROE} = 0,045696 + 0,006212 \text{ RBC} - 0,011070 \text{ SMR} + 0,390097 \text{ IYR} + 0,006164 \text{ PGR}$$

From the above equation, it can be concluded that the constant coefficient value is 0.045696, which means that if the RBC, SMR, IYR and PGR variables are assumed to be zero, then the ROE value is 4.56%. The regression coefficient value for the RBC variable is positive, namely 0.006212, which means that every 1% increase in RBC is expected to increase the ROE value by 0.62% assuming that the value of other variables is fixed. The regression coefficient value for the SMR variable is negative, namely 0.011070, which means that every 1% increase in SMR is expected to decrease the ROE value by 1.1%, assuming that the value of other variables is fixed. The regression coefficient value for the IYR variable is positive, namely 0.390097, which means that every 1% increase in IYR is expected to increase the ROE value by 39.0%, assuming that the value of other variables is fixed. The regression coefficient value for the PGR variable is positive, namely 0.006164, which means that every 1% increase in PGR is expected to reduce the ROE value by 0.6% assuming that the value of other variables is constant.

#### **4.5.2. Hypothesis Test**

Based on the panel data regression analysis that has been carried out which has the aim of knowing the measured relationship of the variables RBC, SMR, IYR, and PGR on ROE. It can be summarized that the relationships that exist in the independent variable on the dependent variable, namely RBC, IYR and PGR have no effect on ROE. However, the SMR variable has an influence on ROE.

#### **4.5.3. Coefficient of Determination (Adjusted R-Square)**

The coefficient of determination (Adjusted R-Square) is essentially to assess how far the calculation model's ability to explain the variation of the dependent variable. The adjusted R-square value that is close to 1 means that the ability of the independent variables can provide almost all the information needed to predict the dependent variation. The Adjusted R-Square number value is 0.176988. This shows that the percentage of the contribution of the influence of the independent variable on the dependent variable is 17.69% or in other words that the independent variable used in the model is able to explain, which is 17.69% of the dependent variable.

### **4.6. Interpretation of Research Results**

#### **1. Effect of Financial Soundness Level on Profitability**

The results of this study indicate that the value of financial soundness (RBC) has no effect on profitability (ROE). The results of this study are also consistent with research conducted by Leviany and Sukiati (2014) which states that the RBC value has no effect on the ROE value.

RBC is a measure of financial health that has been established by laws and regulations, namely a minimum of 120%. The components that make up this RBC include permitted assets, liabilities, and risk-based minimum capital. The RBC calculation method uses the standard accounting for Statutory Accounting Practice (SAP) where assets are valued lower than their economic value. This type of reporting is intended for regulators to carry out guidance and supervision functions. The focus of regulators in overseeing the financial performance of insurance companies is on the level of solvency, namely the ability to meet liabilities with the assets it owns. The recognition of wealth in SAP uses the concept of liquidity where not all wealth is recognized. Only assets with high liquidity are recognized in the calculation or also known as permitted assets (AYD). This is important in order to maintain the insurance company's financial capacity in fulfilling its obligation to pay claims to the insured which may occur at any time.

These regulatory provisions encourage insurance companies to always maintain their financial capacity, which is reflected in the form of assets that are allowed to fulfill obligations to customers. On the other hand, profitability, which is measured by the value of ROE, places more emphasis on high returns than on equity. In other words, if the company is unable to manage the funds it receives to increase its business, the funds obtained by the insurance company will only be placed in fairly conservative investment instruments. Thus, the insurance company's business operational activities which are expected to increase in order to achieve high ROE cannot be fulfilled. Some of the things that prevent a company from developing its business include:

- a. Inaccurate business strategies are carried out by insurance companies, both for technical and marketing functions, so that the company loses a lot of business potential in the market and;
- b. Lack of good risk management implementation so that companies tend to avoid businesses that may still be handled by the company, even though the company is still able to accept them. The company does not accept the business, one of which is because the company is not good at implementing risk management.

## **2. The Effect of the Value of the Assured Risk on Profitability**

The results of the study indicate that the value of the risk borne (SMR) affects profitability (ROE). The ability of the insurance company to bear the risks received through the insured through a premium can be measured from the SMR. Good risk selection through an adequate underwriting process can prevent insurance companies from experiencing losses due to the bad risks borne by the company. In addition, a strong capital base strongly supports

insurance companies to expand their business and supports liabilities that may arise from premiums in the future. Good business development and risk selection can increase insurance company profits. The results of this study are also in line with the conclusions of the research conducted by Ullah & Zuhra (2016) which states that the solvency margin ratio affects profitability even though it has a weak impact.

### **3. The Effect Of The Level Of Investment Returns On Profitability**

The results of this study indicate that the value of the Return on Investment (IYR) has no effect on ROE. Maximizing IYR is a priority for investors in making investment placements. Likewise what is expected by an insurance company that makes an investment placement from the funds they have. Insurance companies certainly expect high yields to increase the profits they will get. The rate of return on investment is very much influenced by what investment instrument the fund is placed on. In general, investment options are divided into short term, medium term and long term investments. Of course, in general, the longer the maturity of an investment instrument, the higher the yields promised.

Investment governance in insurance companies cannot be separated from the nature of the insurance business itself. In this case, general insurance generally covers short-term coverage. For example, short-term coverage is motor vehicle insurance, property insurance, marine cargo insurance, and others with the coverage period of not more than one year. In contrast to life insurance, which generally has insurance products with a term of more than one year, such as death insurance, annuities, saving plans and so on.

Thus, in general, investment placements in short-term instruments will not generate significant investment returns which are expected to contribute to the profits of general insurance companies. The results of this study are also consistent with the research conducted by Wijaya (2013) which shows that IYR has no effect on ROE.

### **4. The Effect of Premium Growth Rate on Profitability**

The results of this study indicate that the PGR value has no effect on ROE. Premium growth is an important thing for insurance companies to achieve. One of the high growth in premiums indicates that the company has high trust from the public to have insurance in the company. However, in the insurance business, each premium contains a risk that must be managed by the insurance company properly.

One of the risk management processes in an insurance company is an underwriting activity in accepting a risk or closing coverage. Underwriting is done as a way to ensure that the prospective insured receives a premium amount that is appropriate to his / her risk. In other words, there is justice in the process of charging premiums as a risk transfer mechanism from the prospective insured to the insurance company. In addition, the imposition of

these premiums must not harm the insurance company. What is certain to be avoided is the existence of an insured with a high risk of getting insurance protection with a standard premium, even though if there is a risk (claim), it will be very detrimental to the company.

Insurance companies that get high premiums without an adequate underwriting process will of course generate high claims as well. High claims will directly affect the profits that the insurance company will get. Thus, high premium growth does not necessarily increase the insurance company's profit. The results of this study are also consistent with research conducted by Agus (2012) which showed that PGR had no effect on ROE.

## **CHAPTER V**

### **CONCLUSIONS AND SUGGESTIONS**

#### **5.1. Conclusions**

Based on the results of research on the effect of financial performance analysis on profitability in general insurance, each of which is represented by a variable (RBC), the value of risk borne (SMR), return on investment (IYR) and premium growth (PGR) on company profitability (ROE). general insurance for the period 2016 to 2019, the following conclusions can be drawn.

##### **1. RBC**

The level of financial health (RBC) has no effect on the profitability of general insurance companies. Some of the reasons for this are, among others, the RBC is a ratio that has been determined by the minimum value by law, which is 120%. Regulators set this figure to keep the company maintaining its ability to pay obligations to policyholders. This figure can be achieved by the company if the company is conservative enough in risk selection and in managing its investments. Thus, the freedom of the insurance company to develop its business will be slightly hampered because these funds must always be available with sufficient liquidity.

##### **2. SMR**

Furthermore, the results show that the value of risk borne by insurance companies (SMR) affects the profitability of general insurance companies. This is generally due to the fact that if the risk borne by the general insurance company as reflected in the premium is a good risk, then this will create a surplus which will increase the insurance company's profit..

##### **3. IYR**

The results showed that the rate of return on investment (IYR) had no effect on the profitability of insurance companies. This is because for general insurance companies, investment returns are not the company's main target to increase corporate profits. This is because the nature of the general insurance business is a short-term coverage, which the company should also invest in short-term instruments as well.

##### **4. PGR**

Finally, the research results also show that premium growth (PGR) has no effect on the profitability of insurance companies. The cause of this is because high premium income is not necessarily balanced with adequate risk selection. In this case, if the company tends to pursue a high premium income target but ignores adequate risk selection, it is likely that the company will experience quite a lot of claims in the future which of course will cause losses.

#### **5.2. Suggestions**

Insurance companies need to always maintain their financial health in the form of maintaining their solvency ratio. However, companies also need to find ways so that this level of solvency does not become too high so that funds that are deposited and less productive can be minimized. These funds can be used by the company to develop its business and other activities such as investing in information technology development for the company's future progress.

This research can be further developed by taking into account several other factors that are quite fundamental in the insurance industry, such as investment adequacy ratio, claims ratio and technical reserve adequacy. In addition, the appropriateness of the underwriting process in order to select risks for coverage received by insurance companies is also interesting to be studied more deeply because this is the core business of general insurance companies.

## REFERENCES

- Agus, S. S. (2012). Pengaruh pertumbuhan modal dan aset terhadap Rasio *Risk Based Capital* (RBC), pertumbuhan premi neto dan profitabilitas perusahaan asuransi umum di Indonesia. *PEKBIS (Jurnal Pendidikan Ekonomi Dan Bisnis)*, 3(01).
- Aji Hermawan Dedi. (2012). Pengaruh *Debt To Equity Ratio*, *Earning Per Share* dan *Net Profit Margin* Terhadap Return Saham. *Management Analysis Journal* 1 (5) (2012).
- Ajija, Shochrul Rohmatul dkk. (2011). "Cara Cerdas Menguasai Eviews", Jakarta: Salemba Empat.
- Ariefianto, Moch. Doddy. (2012). Ekonometrika esensi dan aplikasi dengan menggunakan EViews. Jakarta: ERLANGGA.
- Bodie, Zvi, Kane Alex dan Alan Marcus.(2009). Investasi Edisi 6. Salemba Empat. Jakarta
- Bogar. S. (2016). Analisis Risk Based Capital (RBC) di Perusahaan Asuransi. *JRAK*. Vol. 7 No. 2
- Brigham E.F, Houston J, F. (2012). Dasar-dasar Manajemen Keuangan (Edisi 11) Jakarta : Salemba Empat. Terjemahan Ali Akbar Yulianto
- Fadila, F. (2018). Pengaruh Tingkat Kesehatan Perusahaan Asuransi (RBC) dan Rasio Pertumbuhan Premi terhadap Profitabilitas (ROA) pada Perusahaan Asuransi Kerugian yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2011-2016 (*Doctoral dissertation*, Universitas Komputer Indonesia).
- Ismail, M. (2013). Determinants of financial performance: The case of general takaful and insurance companies in Malaysia. *International Review of Business Research Papers*, 9(6), 111-130.
- Dorofti, C., & Jakubik, P. (2015). Insurance Sector Profitability And The Macroeconomic Environment.
- Ghozali, I. (2011). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 1. Badan Penerbit Universitas Diponegoro
- Gujarati, Damodar. 2003), *Ekonometri Dasar*. Terjemahan: Sumarno Zain, Jakarta: Erlangga.
- Harahap, Sofyan Syafri. (2015). Analisis Kritis atas Laporan Keuangan (Cetakan Kedua belas). Jakarta : PT. Raja Grafindo Persada

- Kasmir. (2012). Analisis Laporan Keuangan. (Cetakan Kelima). Jakarta : Penerbit PT Raja Grafindo Persada
- Keown, A. J. (2005). *Financial Management : Principles and Applications 10th Edition*. New Jersey: Pearson Prentice Hall.
- Kirmizi, & Agus, S. S. (2011). Pekbis Jurnal, Vol.3, No.1. *Pengaruh Pertumbuhan Modal Dan Aset Terhadap Rasio Risk Based Capital (RBC), Pertumbuhan Premi Neto Dan Profitabilitas Perusahaan Asuransi Umum Di Indonesia*, 391-405.
- Leviyany, T., & Sukiati, W. (2014). Pengaruh *Risk Based Capital* Terhadap Profitabilitas Pada Perusahaan Asuransi Jiwa. Jurnal ASET (Akuntansi Riset), 6 (1), 1-9.
- Marcela, R., & Tomas, L. (2009). Financial Stability Of The Czech Insurance Business.
- Rahajeng, R. P., & Djazuli, A. (2012). Penilaian Kinerja Keuangan Perusahaan Asuransi Umum Menggunakan *Early Warning System*. Jurnal Ilmiah Mahasiswa FEB, 1(1).
- Rosadi, Dedi. (2011). Analisis Ekonometrika dan Runtun Waktu Terapan Dengan R. Andi: Jakarta
- Simu, N., & Yulistyanto, A. (2013). Analisis Komparasi Kinerja Keuangan Perusahaan Asuransi Jiwa Nasional Dan Perusahaan Asuransi Jiwa Patungan. Seminar Nasional & *Call for Paper* Forum Manajemen Indonesia (FMI) ke-5.
- Supriyono, A. E. (2013). Pengaruh Risk based Capital Terhadap Profitabilitas Pada Perusahaan Asuransi Syariah.
- Ullah, G. M., Faisal, M. N., & Zuhra, S. T. (2016). Factors determining profitability of the insurance industry of Bangladesh. *International Finance and Banking*, 3(2), 138-147.
- Yunianto, Aji Ahmad. (2016). Pengaruh Early Warning System (EWS) dan Risk Based Capital (RBC) Terhadap Laba Perusahaan Pada PT. Asuransi Ramayana, Tbk. Jurnal Akuntansi Universitas Gunadarma .1-28.
- Widiyana, S. (2017). Pengaruh Penerimaan Premi, Beban Klaim, Dan *Risk Based Capital* Terhadap Laba Pada Perusahaan Asuransi Umum (*Doctoral dissertation*, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Wijaya, R. P. (2013). Pengaruh Pendapatan Premi, Hasil Investasi, Dan Klaim Terhadap Laba: Studi Kasus pada Perusahaan Asuransi Jiwa yang Memiliki Unit Syariah (*Doctoral dissertation*, Universitas Pendidikan Indonesia).
- Winarno, W.W. (2011). Analisis Ekonometrika dan Statistika dengan EViews. Edisi Ketiga, Cetakan pertama. UPP STIM YKPN. Yogyakarta



