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THE EFFECT OF SOLVENCY LEVEL ON CLAIM RATIO IN INSURANCE COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT

This study aims to determine the effect of the level of solvency on the claim ratio in insurance companies listed on the Indonesia Stock Exchange. The variables in this study are the level of solvency as the independent variable (X) measured in percent units and the claim ratio as the dependent variable (Y) measured in percent units. The population is all the financial reports of insurance companies listed on the Indonesia Stock Exchange and a sample of 3 companies for five years, from 2020-2023. Data collection is done by documentation and observation techniques. The collected data is processed using solvency and claim ratio calculation formulas, simple linear regression analysis techniques, and product-moment correlation. Based on the results of a simple linear regression analysis, the equation $\hat{Y}$ = 47.262+0.033X means that a constant value of 47.262 is the percentage of the claim ratio achieved regardless of the high or low level of solvency or, in other words, if the solvency level (X) = 0 then the percentage of claims ratio (Y) is constantly at 47.262 percent. While the value of the regression coefficient is 0.033, which means that for every 1 percent increase in the solvency level (X), there will be an increase in the claim ratio (Y) of 0.033 percent. The results of the product-moment correlation analysis obtained a value of r = 0.498 which means that the level of solvency has a moderate relationship to the claim ratio of insurance companies listed on the Indonesia Stock Exchange. While the coefficient of determination (r2) = 0.248 or 24.8 percent, which means that the effect of the level of solvency on the claim ratio is 24.8 percent. While the remaining 75.2 percent (100% - r2) is influenced by other factors not included in this study. So that the hypothesis put forward "Allegedly that the level of solvency has a significant effect on the claim ratio in insurance companies listed on the Indonesia Stock Exchange" was declared rejected.

Keywords: Solvency; claim ratio

1. INTRODUCTION

Individuals and the business world in Indonesia are increasingly feeling the need for insurance services. Insurance is a financial means of managing household life, both in facing fundamental risks such as the risk of death or the risk of property owned. The insurance business as a non-bank financial institution has an essential role in economic development because insurance companies collect public funds from premium receipts apart from risk protection activities.

In an effort to form a strong and reliable insurance business, laws and regulations in the field of insurance business have stipulated quite stringent requirements, both in terms of issuing business licenses, capital, expertise, company professionalization through specialization, financial soundness, coaching and supervision. The nature of the insurance business requires a large investment of money. Sources of funds to pay for losses are paid-in capital, premiums and surpluses for services rendered. The insurance business is held to safeguard the interests of policyholders and therefore needs guidance and supervision.

In order to protect the interests of policyholders, the government through laws and regulations requires that all insurance companies must always be in good health (solvent), have a reasonable premium rate, have good investment performance (liquid, safe and productive), pay claims on time. , does not make it difficult for policyholders, submits financial reports correctly and on time, and does not violate existing regulations.Supervision of companies in the insurance industry is very necessary. The main reason for this oversight is the fact that the entire value of promises sold to the public by insurance companies lies in the company's financial condition in the future.

Guidance and supervision of insurance companies is carried out by the Ministry of Finance. Every insurance company is obliged to maintain financial soundness and conduct business in accordance with sound insurance principles. As an effort to foster and supervise, the Government issued Law Number 2 of 1992 concerning Insurance Businesses. In addition, Government Regulation Number 73 of 1992 concerning the Implementation of Insurance Business has also been issued where in article 11 paragraph (1) quoted by Muhammad (2011: 332), it states that "insurance companies and reinsurance companies are required to maintain their solvency level at all times".

Furthermore, in the Decree of the Minister of Finance Number 424/KMK.06/2003 article 2 paragraph (1) concerning the Financial Soundness of Insurance Companies and Reinsurance Companies which states that "insurance companies and reinsurance companies are required at any time to meet a solvency level of at least 120 percent of the risk of losses incurred. may arise as a result of deviations in the management of assets and liabilities.

The meaning of the number 120 percent is that the insurance company must have an adequate solvency level of at least 120 percent of the minimum solvency level limit (BTSM) which is the minimum amount of funds needed to cover the risk of losses that may arise as a result of deviations from the management of assets and liabilities, so that insurance companies can fulfill their obligations to policyholders or other stakeholders and are declared healthy (solvent) by the government.

Based on the background of the problems, the main problem is how does the level of solvency influence the claim ratio of insurance companies listed on the Indonesia Stock Exchange?" In connection with the formulation of the problem above, the objectives to be achieved in this study are to determine the effect of the level of solvency on the claim ratio in insurance companies listed on the Indonesia Stock Exchange. For the government, as input material to enhance its role as a coach and supervisor of the national insurance business so that it is in accordance with the development of society and the global insurance industry and to increase public awareness for insurance.

Definition of Solvency Level

One measure of the financial health of an insurance company is its solvency ratio. Riyanto (2001: 32) argues that "a company's solvency shows the company's ability to fulfill all its financial obligations if it is liquidated at that time." Meanwhile, Jumingan (2006:74) states that "solvency is the extent to which the company's financial needs are financed with loans". Based on some of the definitions above, it can be concluded that the solvency level is a measure to assess whether an insurance company is healthy, related to its ability to fulfill its obligations to policyholders or other stakeholders.

Calculation of the Solvency Level of Insurance Companies

Currently, the strength of capital in insurance companies is an important factor in line with the increasing risk of investing. For this reason, the Government, namely the Ministry of Finance, must make changes to the provisions regarding the financial health of insurance companies so that they are more in line with existing developments. Prawoto (2003: 4) states that "the old financial health (solvency level) provisions based on the Net Premium Level were changed with the Risk Based Capital (RBC) system, which essentially means that the higher the risk faced, the capital must also be increased."

Based on some of the definitions above, it can be concluded that Risk Based Capital (RBC) is the ratio of the insurance company's capital adequacy to face any possible failure of asset management and all other risks related to the company's ability to complete all of its obligations including obligations to policyholders or other stakeholders. According to Prawoto (2003: 186), the Risk Based Capital (RBC) method is calculated using the formula:

$$RBC = \frac{Admitted\ Assets - \text{Kewajiban}}{\text{Batas Tingkat Solvabilitas Minimum}} \text{ x } 100\%$$

Furthermore, Prawoto (2003: 180) argues that: Risk Based Capital is calculated by comparing the total value of permitted assets minus all liabilities, both long term and short term, must be greater or at least equal to the specified minimum solvency level limit (BTSM). , namely at least 120 percent or in accordance with the stages determined by the government.

Strategies to Overcome Insolvable Conditions

An insolvable condition is a condition where a company no longer has the ability to pay its obligations on time. In this condition the company has experienced financial distress. Riyanto (2001:35), the level of solvency can be increased in the following ways:

1) Adding assets without increasing debt or adding relatively larger assets than additional debt.
2) Reducing debt without reducing assets or reducing debt is relatively greater than reducing assets.

Claim Ratio

If an event or risk agreed upon in the policy occurs, the insured or the policyholder or the party appointed to receive the benefits of the policy has the right to report and submit a claim to the branch office of the insurance company concerned and the insurance company is obliged to pay claims to the insured immediately. Fahmi (2011: 203) argues that an insurance claim is a claim from the insured in connection with a contractual agreement between the insurer and the insured, where each party binds itself to guarantee payment of compensation by the insurer if payment of insurance premiums has been made by the insured. when a disaster occurs to the insured party. Meanwhile, according to Ali et al, (2003: 55), "a claim is a request or demand from a policy owner against an insurance company for payment of compensation in accordance with the articles of a policy." Based on some of the definitions above, it can be concluded that the claim ratio is the percentage between the number of claims paid by insurance companies to policyholders compared to the amount of premiums received.

Claim Ratio Elements

Based on the definition of claim ratio in the Indonesian Insurance Book by the Capital Market and Financial Institution Supervisory Agency (Bapepam-LK) (2006:4), it can be

stated that the elements of the claim ratio consist of gross claims and gross premiums. These two elements can be explained as follows:

(1) Gross Claims

In PSAK No. 28 (2009:28.3) regarding loss insurance accounting states that "gross claims are claims whose amount has been agreed upon, including the costs of settlement of claims".

(2) Premium Brut

PSAK No. 28 (2009:28.3) concerning loss insurance accounting states, "Gross premiums are premiums obtained from direct closing and indirect closing. Direct coverage premiums include premiums obtained from closing joint policies. According to Ali et al, (2003: 248) states that "the premium is a periodic payment that is desired to keep the insurance policy valid". Gross premiums come from premium receipts from the insured, from brokers (intermediaries) or from other insurance companies.

Calculation of Claim Ratio

In addition to measuring the performance of an insurance company from the financial aspect, it can also be seen from the operational aspect of the company. Claims are one of the operational activities of an insurance company that must be resolved between the insurer and the insured or the policyholder. As stated in the Indonesian Insurance Book published by the Capital Market and Financial Institution Supervisory Agency (Bapepam-LK) (2006: 5) that the following formula can calculate the claim ratio:

$$Claim\ ratio = \frac{\text{Klaim bruto}}{\text{Premi bruto}} \text{ x } 100\ \%$$

Linkage between Solvency Level and Claim Ratio

An insurance company is a non-bank financial institution that collects funds from the public through sales of promises to provide compensation (pay claims) to policyholders in the event of a loss stated in the policy. Therefore, the government as a regulator requires that every insurance company maintain its solvency level. The level of solvency is related to the company's ability to settle its financial obligations, where the insurance company must pay claims. The ability of an insurance company to pay claims to policyholders is determined by its ability to maintain its solvency level, bearing in mind that the insurance company's promise will only be realized if its financial conditions allow it.

Furthermore, Prawoto (2003: 180) argues that: Risk Based Capital is calculated by comparing the total value of permitted assets minus all liabilities, both long term and short term, must be greater or at least equal to the specified minimum solvency level limit (BTSM). , namely at least 120 percent or in accordance with the stages determined by the government.

2. METHODS

Research Variables

Variable is the most important element in research. According to Martono (2011: 55), "variables are the center of attention in research." The variables related to this research are:

a) Solvability level as the independent variable which is symbolized by (X).
b) Claim ratio as the dependent variable which is symbolized by (Y).

This study uses a type of quantitative research conducted at insurance companies listed on the Indonesia Stock Exchange from 2008 to 2012. After the data is obtained the next step is to analyze the solvency level using the Risk Based Capital (RBC) method and the claim ratio for each company. Furthermore, the data analysis technique used is simple linear regression analysis.

Operational Definition and Variable Measurement

1. Variable Operational Definition

Operational definitions are limitations on the scope of variables to avoid other interpretations of the variables studied.

The operational definition of this research variable is:

a) The solvency level is the total amount of assets allowed (admitted assets) reduced by all liabilities except for subordinated obligations of at least 120 percent or greater than the specified minimum solvency level limit (BTSM).

b) Claim ratio is the percentage of total claims paid by insurance companies to policyholders for each premium received.

2. Variable Measurement

The measurement variables used in this study are:

a) The level of solvency is calculated using the Risk Based Capital (RBC) method by comparing the difference between total permitted assets (admitted assets) and total liabilities except for subordinated obligations divided by the minimum solvency level (BTSM) as measured in percent (%). (Prawoto, 2003:186)

b) The claim ratio is calculated by dividing the total gross claims and premiums in one accounting period as measured in percent (%). (Bapepam-LK, 2006:5)

Population and Sample

1) Population, which is the population in this study are all the financial statements of insurance companies listed on the Indonesia Stock Exchange in 2008 to 2012 as many as 11 companies.

2) Sampling, the sampling technique is based on judgment sampling for conditional samples determined by the following criteria:

   a. The insurance companies listed in the period 2008 – 2012 were pure insurance companies and did not change their business activities. It is intended for continuous data.

   b. Insurance companies listed on the Indonesia Stock Exchange have issued and published audited financial reports.

   c. Insurance companies listed on the Indonesia Stock Exchange which have complete data based on the variables studied.

   d. Insurance companies listed on the Indonesia Stock Exchange for the period 2006-2008 had an increase in the solvency ratio which was inversely proportional to the increase in the claim ratio.

To choose an insurance company that will be the sample, the above criteria can be presented in the following table:

Table 1. Insurance Companies Listed on the Indonesia Stock Exchange

No.	Insurance company	Criteria (a)	Criteria (b)	Criteria (c)	Criteria (d)
1	PT Asuransi Bina Dana Arta Tbk.	√	√	√	-
2	PT Asuransi Harta Aman Pratama Tbk.	√	√	√	-

3	PT Asuransi Multi Artha Guna Tbk.	√	√	√	-
4	PT Asuransi Jasa Tania Tbk.	√	√	√	-
5	PT Asuransi Dayin Mitra Tbk.	√	√	-	-
6	PT Asuransi Bintang Tbk.	√	√	√	√
7	PT Asuransi Ramayana Tbk.	√	√	√	√
8	PT Lippo General Insurance Tbk.	√	√	√	-
9	PT Maskapai Reasuransi Indonesia Tbk.	-	√	-	-
10	PT Panin Insurance Tbk.	√	√	√	√
11	PT Panin Financial Tbk.	-	√	-	-

Source : PIPM Makassar, 2008

Based on table 1, there are 3 insurance companies that meet the sample selection criteria and will subsequently become samples in this study, namely PT Asuransi Bintang Tbk. (ASBI), PT Asuransi Ramayana Tbk. (ASRM) and PT Panin Insurance Tbk. (PNIN).

Data Collection Technique

The data collection techniques used in this study are:

a. Documentation, namely collecting data in the form of documents related to research, namely in the form of financial statements of insurance companies listed on the Indonesia Stock Exchange which are samples in the study.

b. Observation, namely direct observation of the research object, namely the Indonesia Stock Exchange, in this case the Makassar Capital Market Information Center (PIPM) to seek information related to the research to be carried out.

Data Analysis Technique

Based on the formulation of the problem and the hypothesis that has been put forward, to prove the hypothesis in this study using data analysis techniques as follows:

1) To test the hypothesis, a simple linear regression analysis is used as suggested by Sugiyono (2007:244), namely:

$$\hat{Y} = a + bX$$

Where:

$\hat{Y}$ = Dependent variable (Claim ratio)
X = Independent variable (level of solvency)
a = Constant
b = Regression coefficient

3. RESULTS AND DISCUSSION

Solvency Level

The solvency level of an insurance company is a measure of the company's ability to meet its financial obligations. The ability of an insurance company to fulfill its obligations to policyholders is determined by the company's ability to maintain its solvency level. The higher the level of solvency, the better, because the company has more assets and wealth compared to total liabilities. The following presents data regarding the variables studied: the level of solvency and claim ratio in insurance companies listed on the Indonesia Stock Exchange.

Table 2. Data on the Influence of Solvency Level on Claim Ratio at Insurance Company Registered on the Indonesia Stock Exchange Becoming the 2008-2012 Research Sample

Insurance company	Year	Solvency Level (%)	Claim Ratio (%)
ASBI	2008	143,07	49,30
	2009	240,08	107,21
	2010	192,75	62,81
	2011	167,90	39,94
	2012	164,45	32,71
ASRM	2008	150,89	52,15
	2009	157,70	39,10
	2010	174,05	41,93
	2011	232,23	43,76
	2012	227,11	44,98
PNIN	2008	702,33	113,71
	2009	860,70	68,83
	2010	1165,09	81,25
	2011	1142,79	58,45
	2012	806,23	85,94

Source: PIPM Makassar, 2008

Based on the data in table 2, the results obtained from simple linear regression analysis, product moment correlation and t-test through the SPSS 17 (Statistic Product and Service Solution) program can be seen as follows:

a) Simple Linear Regression Analysis

Results of Simple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1.	(Constant)	47.262	9.021		5.239	.000
	Tingkat Solvabilitas	.033	.016	.498	2.069	.059

Source: SPSS 17(own work)

Based on the data in the table, a simple linear regression equation can be made where the a value obtained is 47.262 and the b value is 0.033. So when put into the equation, the results are as follows:

$$\hat{Y} = 47.262+0.033X$$

This equation means that a constant value of 47.262 is the percentage of the claim ratio achieved regardless of the high or low level of solvency or in other words, if the solvency level (X) = 0 then the percentage of a constant claim ratio (Y) is 47.262 percent. While the value of the regression coefficient is 0.033, which means that for every 1 percent increase in the solvency level (X), there will be an increase in the claim ratio (Y) of 0.033 percent. The results of the simple linear regression analysis are in line with the theory put forward by Prawoto (2003: 109) which states that "the greater the company's excess solvency level, the greater its ability to accept additional burdens which are usually in the form of claims from the insured". The results of the simple linear regression above show that for every 1 percent increase in the solvency level, there will be an increase in the claim ratio of 0.033 percent.

CONCLUSION

Based on the results of research on the effect of the level of solvency on the claim ratio in insurance companies listed on the Indonesia Stock Exchange, it can be concluded that: The results of a simple linear regression analysis show the equation $\hat{Y}$ = 47.262+0.033X, meaning that a constant value of 47.262 is the claim ratio achieved regardless of the high or low level of solvency or in other words if the solvency level (X) = 0 then the percentage of claim ratio (Y) is constantly at 47.262 percent. While the value of the regression coefficient is 0.033, which means that for every 1 percent increase in the solvency level (X), there will be an increase in the claim ratio (Y) of 0.033 percent.

Based on the results of the analysis that has been carried out, suggestions are proposed that can be taken into consideration in making decisions, namely: Insurance companies should make various efforts to increase the value of admitted assets by avoiding placing investment funds in parts whose risk is higher than the security and benefits, such as avoiding placing time deposits at banks with a low Capital Adequacy Ratio (CAR) and trying to increase the value of assets that are non-investment in nature from the acquisition of premium receivables and reinsurance receivables as well as implementing a policy of using debt based on priority proportions to reduce the amount of liabilities which will increase the level of solvency. So that the company is able to pay claims to policyholders quickly and properly and increase the insurance company's claim ratio.

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