



The Model of Insurance Companies Risk Based Capital

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ABSTRACT

Purpose of this research is to find out effect of investment, premium revenue, claims, and profit company partially and together on risk based capital (RBC) of the loss insurance company. Population of this research are insurance companies registered in the financial services authority and publish complete financial statements both on print media and corporate website period of 2013–2017 amounted 16 companies. Based on purposive sampling, there are 10 companies which fulfilled the sample requirements. The data used is the annual financial statements (audited). This research uses panel data regression and hypothesis testing using Eviews 8 application. Based on this research result Investment has positive relation but not significant to RBC while premium revenue, claims, and profit company have insignificant negative relation to RBC. Independent variables of investment, premium revenue, claims, and profit company are simultaneously unable to effect the dependent variable RBC significantly. The ability of independent variables of investment, premium revenue, claims, and profit company to explaining the dependent variable RBC as parameter is 10.9%, while the rest equal 89.1% explained by other causes outside research model.

Keywords: Investment, Premium Revenue, Claims, Profit Company, Risk Based Capital

JEL Classifications: G12, G22, G31

1. INTRODUCTION

The development of the insurance industry is highly dependent on the credibility of the industry itself. The credibility of the indemnity insurance industry can be reflected from the ability of the insurer to convince the public that the insurer will be able to fulfill its obligations in the payment of claims to the policyholder. If the insurance industry has a good credibility, then the trust of the people, especially the policyholders, will increase. Consequently they will be willing to pay a premium to the insurance company (May et al., 2004).

The ability of the insurance company to fulfill its obligations can be reflected through the financial health contained on its financial statements. Financial health of insurance company is one important indicator for the community in taking the decision to buy insurance products. The community as policyholders expects the money invested in the insurance products could benefit or obtain future

claims as promised by the insurance company in the loss event (Dady et al., 2017).

Public awareness of the importance of insurance grows rapidly as one form of self-protection against various uncertainties. This is allegedly caused by several reasons such as the increase of community education, the enhancement of community income and the uplift of public living standards. The development of insurance awareness must be supported by the presence of professionals and reliable insurance companies (Ukil, 2016).

The function of the insurance business is to encounter risk diversions from the insurance policyholders (insured) to the insurance company (the insurer). The insurance company will guarantee as well as protect the objects as the insurance policyholders and their financial interests against the possibility of the loss risk. Accordingly it will provide tranquility (peace of

mind) for the insured (users of insurance services) towards the possibility of the loss risk (Ramasamy et al., 2012).

The terms of bearing risks by an insurance company will be associated to the financial health of the company. The government, as a regulator acted in conforming the developments, take place in the national insurance industry and make a comprehensive adjustment to the provisions on the financial health of insurance companies and reinsurance companies in Indonesia. This is determined by value of risk based capital (RBC) stipulated in regulation of the minister of finance No. 53/PMK.10/2012. According to minister of finance regulation no. 53/PMK.10/2012, it is explained that insurance companies are required to maintain the lowest solvency target target of 120% of risk-based minimum capital (Siahaan et al., 2016).

2. LITERATURE REVIEW

Investment in insurance business is fund collected from premium payment for payment of claim on risk in the future. The insurance industry, as one of the financial institutions managing public funds in large numbers, depends on the success of managing in an effort to realize the company's goals. In insurance companies, an investment is very important to maintain the financial health of companies to solvency level maintained, meaning able to meet its obligations and operating costs (Effendi et al., 2017).

Premiums are the obligation of a customer or policy holder in paying a fee to an insurance company in accordance with an agreed agreement as has been made in the contract. For the purpose of indemnifying or substituting a loss, a loss occurs to the policyholder or customer (Dady et al., 2017).

Claims are entitlements submitted by the insured to the insurance company for losses suffered as a result of the loss or damage of an insured property. Claims are compensation paid or liabilities to the insured or ceding company as the insured object of insurance, including approved claims, claims in progress, claims incurred but not reported, and settlement charges, recognized as claims expense at the time an obligation arises to fulfill the claim in respect of the incurred loss (Dady et al., 2017).

Profit is the value of a company's financial achievements and the ability of the company's ability to run its operations optimally. Measurement of profit is not only important for determining company performance but also important as information for profit sharing and investment policy determination (Mousavi, et al., 2012).

The results of (Grégoire et al., 2015) found that solvency oversight should also consider each account, not only endogenous factors (good management, good estimation of technical reserves, etc.) but also exogenous factors (rate of return, unemployment rate and others) and the uniqueness of individual market insurance countries. The results of (Rampini and Viswanathan, 2013) found that RBC systems are somehow useful when used by regulators in combination with more accurate screening systems and that pressure politics on increasing RBCs cause relatively low accuracy of RBC formulas.

(Jacques and Nigro, 1997) provides an empirical analysis between insurer and insurer with insignificant RBC. The study concluded that half of the insurance companies that eventually went bankrupt were insurance companies that had low RBC values. Meanwhile, according to the results of research from (El-Sayed Ebaid, 2009) found that the RBC value obtained by the company can not only be interpreted by the size of the number. Indeed, the low value of RBC suggests that the insurance company has a poor performance although the high value of RBC also not necessarily indicates that the company is the best. The reality of Risk Based Capital RBC value of most insurance companies is much higher than the applicable provisions which only amounted to 120%.

Similar research was also conducted by (Fama & French, 2004) which in his research found that the premium income had a positive effect on RBC, while the claim load had a negative effect on RBC. The same result also obtained by (El-Sayed Ebaid, 2009) which her research found that profit have positive effect to RBC.

Results contrary to previous research above obtained by (Fama & French, 2004). Her research found that premium income has a negative effect on RBC. The same result was also obtained by (Gauthier et al., 2012). Her research mentioned that the profit and the ratio of investment returns negatively affect towards RBC. Another research result also obtained by (Dady et al., 2017) that claimed have a positive effect on RBC.

3. METHODOLOGY

This research uses quantitative research methods that is an objective research approach, including the collection and analysis of quantitative data and using statistical testing methods. The analysis used in this study is multiple regression analysis to test the premium income, the ratio of investment return and claims to RBC. Year of research used is 2012 until 2016 with the object of research that is insurance company loss.

The population in this study are insurance companies registered in the financial services authority and publish financial statements both on print media and corporate website period of 2013–2017. The sample in this study obtained the number of sample objects in accordance with certain criteria are 10 insurance companies registered in the financial services authority. Based on the time of collection this study uses data pooling because the company studied more than one and the period of the company >1 year.

This study uses secondary data that is data obtained from financial reports published and published on print media and corporate website. While the source of data used in the study obtained from clipping financial statements of loss insurance companies and downloaded from the website of the loss insurance companies during 2013–2017 periods. Data collection method that is done in this research is documentation method, that is data obtained from various documents or literature related to the problem under study. After documentation is collected, selected and then processed.

4. RESULTS AND DISCUSSION

Based on the results of the study, variable premium income, claims, and company profits have a negative relationship that is not significant to RBC. While the investment results have a positive relationship that is not against RBC in national private insurance companies in Indonesia. The results of testing between the dependent variables and independent variables can be analyzed in the following discussion:

4.1. Effect of Investment Results on RBC

Investment Results are the results of the company's operations from investing in or placing assets, either in the form of assets or funds, in something that is expected to provide income results or will increase its value in the future. Investment expenditures made by managers must have taken into account the return that will be received and it will definitely choose the most profitable option for the company (Lehner, 2013; Rampini and Viswanathan, 2013; Wetzel, 1983).

Based on the results of the regression analysis it turns out that the investment yield variable has a non-significant positive relationship to RBC in the national private insurance company in Indonesia (amounting to 1.999429 with $P = 0.0516 > 0.05$). This positive relationship is in accordance with the first hypothesis that investment returns have a positive and significant effect on RBC on national private insurance companies in Indonesia. This third hypothesis refers to the accounting theory that a large investment will increase the investment asset in the balance sheet and will affect the calculation of the level of solvency in the permitted wealth. This is also in accordance with minister of finance regulation No. 53/PMK.10/2012 so that this theory is possible to influence the amount of RBC. It's just that different investment placements in each investment instrument will affect BTSM, namely on schedule A about wealth management failure, where each investment instrument has different factors in the calculation according to the level of risk, so the greater the risk, the greater the amount of deviation which causes a decrease in RBC.

4.2. Effect of Premium Income on RBC

Premium is a payment of a sum of money made by the insured to the insurer to replace a loss, damage, or loss of expected profit due to the emergence of an agreement on the transfer of risk from the insured to the insurer (transfer of risk). The amount of the premium is determined from the results of the risk selection carried out by the underwriter or after the company has made a risk selection at the request of the prospective insured. Thus the prospective insured will pay the insurance premium in accordance with the level of risk for each condition.

Based on the results of variable regression analysis, the premium has a significant negative effect on RBC on national private insurance companies in Indonesia (-1.262971 with a $P = 0.2131$). The results of this test are not in accordance with the second hypothesis, namely the premium has a positive and significant effect on RBC on national private insurance companies in Indonesia. Then it is not in line with the concept of income accounting theory, namely the size of the premium income will

affect the size of the investment in the insurance company. The amount of investment will increase the investment assets in the balance sheet which will affect the calculation of the level of solvency on the permitted wealth in accordance with the regulation of the minister of finance No. 53/PMK.10/2012 and can affect the amount of RBC.

The negative effect on RBC can be caused by several factors. One of these factors is the large number of claims that occur. Increasing the amount of premiums obtained will not mean much if followed by an increase in the number of claims. This is because the claim is a company burden so that even though the company records an increase in premiums but on the other hand it also receives a claim that is large enough that the revenue will be transferred to finance the claim. Thus the premium has a direct negative relationship to RBC at national private insurance companies in Indonesia (Fama and French, 2004).

4.3. Effect of Claims on RBC

Claim is the submission of rights made by the insured to the guarantor to obtain his rights in the form of coverage for losses based on the agreement or contract that has been made. Based on the results of regression analysis, the claim variable has a negative and significant influence on asset growth in private loss insurance companies in Indonesia (-1.232631 with a $P = 0.2241$, which means that the increase in claims will be related to the decrease in RBC loss insurance. Negative sign (-) shows a relationship that is inversely proportional between claims with RBC.

The results of this test are somewhat in accordance with the third hypothesis that claims have a negative and significant effect on RBC national insurance insurance in Indonesia. Also in line with the minister of finance regulation No. 53/PMK.10/2012 in the formation of claim reserves for types of loss insurance must meet the following conditions for reserves of claims that are still in the process of completion, calculated based on a reasonable estimate of claims that have occurred and have been reported but are still in the process of completion, the following insurance loss assessment service fee, deducted by claim expense which will be the part of the reinsurer. The amount of claim reserves will affect the amount of liabilities will increase the liability on the balance sheet that will affect the calculation of the small level of solvency, namely the permissible wealth in accordance with the Regulation of the Minister of Finance No. 53/PMK.10/2012 and can affect the small size of RBC. In addition, claims are also calculated on the BTSM on schedule C, which is the claim burden incurred and the estimated claim burden where there is a multiplier factor for each area that will increase the amount of deviation, this will reduce RBC (Dady et al., 2017).

4.4. Effect of Company Profit on RBC

Profit is the profit obtained by the company after experiencing the elimination process of several component which form it including income and expenses in a certain period. Based on the results of regression analysis the profit variable has a negative and significant influence on asset growth in private loss insurance companies in Indonesia (amounting to -0.209701 with a $P = 0.8348$, which means the increase in claims will be related to the decrease in

RBC loss insurance. Negative sign (-) indicates a relationship that is inversely proportional between claims and asset growth.

The results of this test are somewhat in accordance with the fourth hypothesis that earnings have a significant effect on RBC national insurance loss in Indonesia. Profit is the achievement value of a company's financial health and the company's ability to run its operational activities to its full potential. So it is important to measure profit growth to be the basis for a management to be able to decide whether the company will be maintained or will be improved. In general, profits are derived from the process of income and expense disbursement. In the insurance company financial statements, RBC is one component that can form the size of the profit (Ebaid, 2009).

5. CONCLUSIONS

Based on this research result Investment has positive relation but not significant to RBC while premium revenue, claims, and profit company have insignificant negative relation to RBC. Independent variables of investment, premium revenue, claims, and profit company are simultaneously unable to effect the dependent variable RBC significantly. The ability of independent variables of investment, premium revenue, claims, and profit company to explaining the dependent variable RBC as parameter is 10.9%, while the rest equal 89.1% explained by other causes outside research model.

It is expected that further research will use more samples. Subsequent research is also expected to be able to use different measurements in seeking RBC. In achieving the RBC, the company is expected to maintain the company's ability to allocate funds collected at various investment posts that are more profitable. The company is expected to maintain and continue to strive to increase its investment. This is aimed at the survival of the company in the future.

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