

THE INFLUENCE OF MICROECONOMIC AND MACROECONOMIC ON PREMIUM INCOME WITH FIRM AGE AS MODERATION VARIABLE

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Abstract: The study was conducted to examine the effect of microeconomics and macroeconomics on premium income with company age as a moderating variable. Research with a quantitative approach. Total sample of 853 combined national and general insurance years 2006 - 2017. Data analysis using panel data regression and eviews approach. The results of the study state that company size has a negative effect on premiums, solvency has a negative effect on premiums, national income has an effect on premiums, inflation has a negative effect on premiums, and risk-based capital has an effect on premiums. Company age cannot moderate inflation and risk-based capital

Keywords: Microeconomic, Macroeconomic, Premium Income, Firm age.

Introduction

Insurance companies are part of a country's financial system structure that protects against risks for parties who want security for their savings and investments (Rose & Hudgins, 2010). The deposit insurance system is designed to prevent the rush of deposits when financial institutions confront a danger of bankruptcy. The deposit insurance system allows depositors to secure their own fixed amount of deposits systematically and at the same time, financial institutions can prevent the instability of the financial system caused by sudden deposit withdrawals. From a risk management perspective, the insurance company's position is often referred to as the party receiving the risk transfer from the party proposing protection or the insured (McNeil, Frey & Embrechts, 2015). The party that transfers the risk pays the premium to the insurance company that accepts the risk. According to Sabbir (2002) insurance industry transfers risk to provide security that enhances peace of mind and give formidable protection against losses to the insurer. While in many developed countries insurance is mandatory (particularly health insurance) and supported by associated laws, however, the size of the insurance industry in most of the developing countries still remains small and unpopular. As a result of this, the risk of vulnerability remains high in those developing countries and it is highly unlikely to recover the possible losses that may take place in future.

As far as the managerial efficiency of insurance sector is concerned, it is different from other sectors in a way that the production function of insurance industry is different from other sectors (Rahman, 2018). The efficiency of insurance sector depends upon the effective utilization of money received as premium and optimization of marketing regime activities. Therefore, production function of insurance industry stands on two pillars: (i) marketing

activities and investment activities (Hwang & Tong-Liang, 2006). Thus, the factors that determine the managerial efficiency of insurance companies revolves around the organizational activities that involves conversion of investment in various resources to output in the form of achievement of objectives (Naushad et al., 2020). Paying the premium is an obligation that the insured must fulfill. As evidence of the transfer of risk from the insured to the insurer, the insurer issues a contract agreement called an insurance policy. If there is a loss due to risk, the insurer will provide compensation, the amount of which has been determined in the insurance policy (Financial Fervices Authority, 2016).

The premiums received by the insurance company is one of the parameters in assessing the performance of the insurance company. The higher the insurance company's premium, the better its performance (Borch, 1990). According to Barros, Nektarios & Assaf (2010), one of the measures used to assess an insurance company's performance in terms of premiums is net premiums. Net premium is the gross premium minus commissions and deducted by paid reinsurance premiums, which have been deducted by the reinsurance commission received (Financial Fervices Authority, 2016).

Haiss & Sumegi (2008) stated that insurance growth in terms of premiums is closely related to economic growth in 29 European countries, and in different periods, premium growth in the future needs to be supported by adequate macroeconomic policies. Thus, these findings indicate a reciprocal relationship between premiums and economic growth. Mansor and Radam (2000) conduct study to evaluate the productivity of life insurance companies in Malaysia and find that the life insurance companies' productivity is lower than the actual economic growth in Malaysia. Although the duo finds that the life insurance company is productive, the authors also mention that the growth of this industry will follow a similar trait of the manufacturing sector for relying on its efficient ability at the time of competition. The authors further infer that both technical efficiency and technical progress contribute to the overall productivity growth of the industry. Whereas, efficiency study of life insurance Company by Saad, Idris, and Edzalina (2011) analyse insurance industries five years' data of Brunei and Malaysia through DEA and explore the influence of technical and efficiency change to the overall productivity in the life insurance industry. The authors conclude that total factor productivity (TFP) of the studied industry is mainly attributed to efficiency and technical changes where the main source of efficiency change is contributed by the scale efficiency rather than pure efficiency (Masud et al., 2019)

In accordance with the results of research by Haiss & Sumegi (2008), research by Nizar (2019) on life insurance companies in Indonesia found that life insurance premiums have a positive effect on economic growth. He concluded that insurance has an important role in the economy in Indonesia. Apart from being a business, insurance is also a financial intermediary that plays a role in carrying out the financial system's functions. As a business, insurance is beneficial in absorbing risk and allocating and transferring risks. Insurance services can also effectively reduce the negative impacts of volatility and uncertainty and flatten the economic cycle.

In terms of quantity, 2006-2017 was the year in which public insurance companies experienced an increase. Along with this increase, it should be balanced with premium growth. However,

if you look at the side of the premiums received by general insurance companies in Indonesia, both in the national general insurance group and joint general insurance, during 2006-2017, the net premium growth was less than ideal.

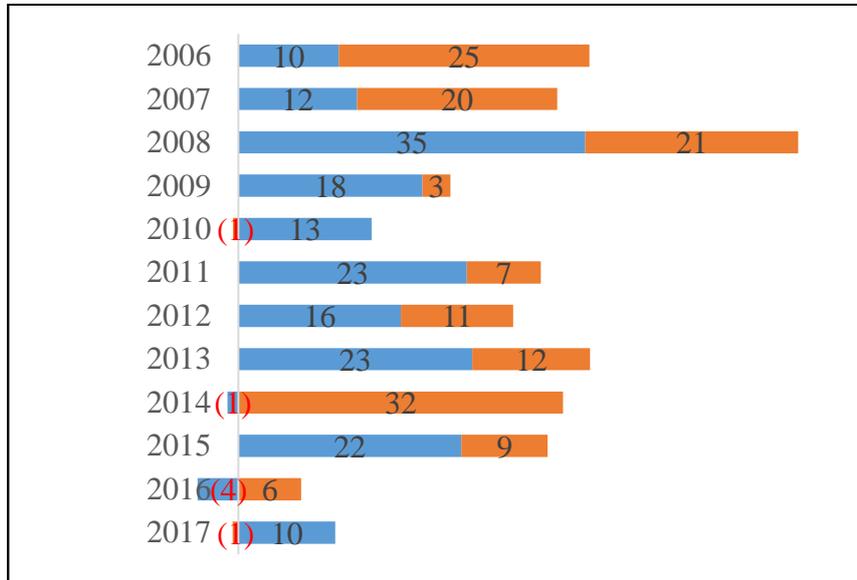


Figure 1. Premium Growth in General Insurance Companies in Indonesia (in %)

Information:

Blue: National General Insurance

Orange: Joint Venture General Insurance

The data shows that up to 2013, the growth in net premiums of national general insurance companies showed a reasonable trend, but from 2014 to 2017, it showed a unique growth trend, where growth showed two negative periods and two positive periods with a fairly high trend jump. A similar phenomenon is also shown by the trend of joint general insurance companies.

Such growth in net premiums turns out to be proportionally still below other types of insurance, which in terms of quantity are below general insurance companies. As described in the 2017 Indonesian insurance statistical report, the premiums of general insurance companies in Indonesia rank third out of four types of insurance in Indonesia. This means that the portion of premiums achieved by general insurance companies has a low contribution compared to life insurance premiums and social security insurance premiums.

Among other types of insurance, its low share impacts the contribution to national income, which is still low. OJK noted that during 2006-2017 the ratio between premiums to national income each year reached an average of only about 3%. In addition, the growth in the value of the ratio between premiums to national income shows a decreasing trend in 2017.

Resource-based theory suggests that company resources are heterogeneous and productive services derived from company resources provide unique characteristics for each company. If the company can make maximum use of its resources, then the company has a competitive

advantage and can compete against its competitors. The company's resources are an important means of maximizing growth. Based on this assumption, an analysis of the company's behavior in utilizing its resources and its effect on performance can be carried out (Arsyad & Kusuma, 2014).

The goal of growth maximization implies that the company seeks to maximize the growth rate of a number of areas in its activities, such as sales/income, profits, assets, or stock value. One of the orientations in an insurance company is premium growth (Cummins & Doherty, 2006). Related to resources in supporting companies' competitiveness, resources are defined as firms' inputs to produce output. These resources include the assets and capital owned by the company. The higher the level of company ownership of unique resources and good relationships between company elements, the company tends to have higher competitiveness (Arsyad & Kusuma, 2014).

Some researchers found that company resources in the form of assets owned by insurance companies have an effect on company growth. Research results from (Hardwick & Adams 2002) found that smaller life insurance companies tended to grow faster than larger ones in the 1987–1990 period and that larger life insurance companies tended to grow faster than smaller ones in 1990–1993. And the period 1993–1996. In terms of firm-specific determinants of asset growth, they found evidence in 1987–1996 and 1987–1990 that the more diversified life insurance companies experienced higher average growth rates than the more specialized life insurers.

Other empirical evidence regarding the relationship between assets and growth is also presented in the study (Choi & Cho, 2019). They find strong evidence that assets as a proxy for firm size impact the company's growth consistently over the short and long term. Their findings also reveal that relatively young companies with large assets are growing faster than older firms. Thus, it can be concluded that the company's assets will determine the insurance company's growth.

Based on the problems and previous studies, the focus of this study seeks to examine the effect of independent variables, namely microeconomics (firm size, solvency, and risk-based capital) and macroeconomics (national income and inflation) on the dependent variable (premium income) with a moderating variable (Age Company).

Literature review

Increased investment is believed to have a contribution as a lever towards the movement of the economic development of a nation. In macroeconomics, investment also acts as one component of national income, Gross Domestic Product (GDP). The effect of investment on a country's economy is reflected in the country's national income, the investment is positively correlated with GDP; in general, it can be said, if investment rises, then GDP tends to increase. Or conversely, if investment falls, GDP tends to decrease. Some economists consider investment formation to be an essential factor that plays a strategic role in a country's economic growth and development. When entrepreneurs, individuals or the government invest, there will be a

certain amount of capital invested, and there are some purchases of goods that are not consumed, but are used to produce goods and services in the future. Even economic growth that can result in economic inequality in the community can also be minimized (Salim et al., 2020). According to Eisenhardt (1989) states that there are three basic human nature assumptions to explain agency theory, namely: (1). Humans are generally selfish (self-interest), (2). Humans have limited thinking power regarding future perceptions (bounded rationality), (3). Humans always avoid risk (risk-averse). This human nature creates several problems in company operations that can occur if manager's cover-up information to investors or the manager's performance is not transparent because of the tendency to get maximum satisfaction, both in terms of finance and the risks that may be faced in the future, causing the presence of asymmetric information.

Houston et al (1997) analyzed friction factors of the market and the internal capital market in the banking industry to investigate the relationship between total lending and deposit insurance, including profitability of bank, self-basis weight, and liquidity. Froot and Stein (1998) emphasized the need for risk management in terms of funding and capital structure by studying the structure of banks' risks, capital and budgets. Cebenoyan and Strahan (2004) found that banks tend to have less capital than others and tend to increase lending to firms that are seeking risk. Thus, if there is a safety net such as deposit insurance, banks will have a more risk-seeking type of capital structure. Angkinand and Wihlborg (2010) analyzed specifically how government ownership, foreign ownership and shareholder rights affect the disciplinary effect of partial deposit insurance systems in a cross-section analysis of industrial and emerging market economies.

Empirically, research on risk-based capital and net premiums is a topic that is highlighted by researchers in the insurance sector, including (Beenstock, Dickinson, & Khajuria 1986), examining the factors that determine life insurance premiums in Germany, Japan, England, France, Italy, Australia, the Netherlands, and Sweden in the period 1970-1981. The results of his research found that life insurance premiums are determined by the variable life expectancy, age distribution of the population, dependency ratio, interest rates, and income per capita but are inversely related to social security coverage.

In the 2000s, research on the factors that determine insurance premiums was also studied by (Lazar & Denuit 2012), who examined the factors that determine insurance premiums based on variables of national income and interest rates using vector error correction model (VECM) analysis. That national income and interest rates have a long-term effect on insurance premiums. Similar to previous studies, this study focuses on macroeconomic variables in explaining insurance premiums. Then, (Dietz & Walker 2017) also researched premiums. They found that insurance premiums are determined by risk factors that occur in various general insurance products. Therefore, they recommend a formulation to determine the premium rate based on risk in the insurance company product. Besides, the results of his research also recommend the need for risk-based capital allocation. Insurance was developed as a way of transferring the risk away from its premium-payers. The primary goal of insurance is to provide the premium-payers with a sense of certainty, which is almost always preferred to uncertainty.

With this maxim of an insurance program can ensure an enhanced security of digital banking services no matter what country or economy we live in. Like previous researchers, Balcilar et al. (2018) conducted a study on the factors determining insurance premiums based on macroeconomic aspects consisting of per capita gross domestic income and economic policy uncertainty in Japan's insurance companies. The study, which was conducted using VECM, also found that per capita gross domestic income and the uncertainty of Japan's economic policies are also factors that determine insurance premium income in the long term.

Furthermore, the problem in macroeconomic growth is the problem of unemployment, which will have a universal impact on improving the quality of life; this can also be tangent to the economic growth of a region or even a country. This causality is very closely related, given that labor is one of the essential aspects of classical economic production (man, capital, and land). The main unemployment problem is identified by the role of adequate education to shape the demand for skilled workers in the labor market (Kudasheva et al., 2015), so that an essential aspect in government policy issues requires the education aspect as one of the principal investments to welcome skilled workers to reduce unemployment and overcome income inequality (Halvarsson et al., 2018).

Research on several components of insurance asset and liability management associated with insurance premiums has been conducted by a number of researchers, including research conducted by (Horowitz, Loughran, & Savin 2000), who examined companies on the NYSE, Amex, and NASDAQ exchanges during 1979-1995. The results of his research found that companies with small assets have a high average rate of return in the long run compared to companies with large assets.

Method

The method used in this research is the method of causality. Saunders, Lewis, & Thornhill (2007) stated that the causality method is a method that seeks to guide researchers regarding the relationship between independent and dependent variables. Besides, to provide empirical support for the causality relationship, this study also uses descriptive analysis, which aims to obtain an empirical picture of the variables under study, so that finally, a condition assessment of these variables can be carried out (Kothari, 2004).

The operational variables in the study include, the independent variable is the size of the company with the parameter of the size of TA year t - TA year $t-1$ / TA year $t-1$, solvency with the parameter of the size of Total Debt / Total Assets, gross domestic product with the parameter of the size of Annual GRDP, inflation with the parameter of annual inflation, risk-based capital with the parameter of the measure of Solvency margin, while the dependent variable is the net premium with the parameter of gross premium - reinsurance premium and the moderating variable of company age is Age of company = Year of Research - Year of Establishment. This research focuses on Indonesia's insurance companies, consisting of 52 national general insurance companies and 22 joint general insurance companies. Given the relatively small number of insurance companies, all insurance companies were sampled by

observing in 2006 - 2017. The data collection technique used by researchers was the documentation method.

In accordance with the objectives and empirical research model proposed in this study, the data analysis technique was performed using unbalance panel data regression analysis. The main consideration in choosing to unbalance panel regression is that the researcher wants to obtain accurate periodic research results according to Indonesia's insurance companies' existing conditions.

The use of unbalance panel data regression provides three choices of regression models which will be compatible with efforts to obtain practical answers from the interaction of the variables studied. Regarding this, (Muda et al. 2018) explain that there are three approaches in calculating the panel data regression model, namely: 1) Common Effect Model (The Pooled OLS Method = OLS); 2) Fixed Effect (FEM) Model; and 3) Random Effect (REM) Model.

Gujarati (2009), panel data has a number of assumptions that have been fulfilled in a regression equation, namely:

1. Combining cross-section data with time-series data to combine various research objects' behavior from time to time can eliminate heterogeneity so that data tends to be homoscedastic.
2. Combining cross-section data with time-series data provides more, more varied, less collinearity between variables,
3. Combining cross-section data with time-series data provides more degree of freedom and efficiency, thereby minimizing autocorrelation.
4. By studying repeated cross-section observations, panel data is most appropriate for studying the dynamics of change.
5. Analysis with panel data can detect and measure impacts that cannot be known with only cross-section data or time-series data, making it easier to study complex models.

Based on the assumptions inherent in the panel data regression described above, this study does not test the assumptions required in regression, such as the normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test.

The statistical hypothesis to be tested based on the panel data regression equation is as follows:

$H_0; \beta_0 = 0$, Firm size, solvency, national income, inflation, and risk-based capital do not significantly affect the premium income variable, which is moderated by firm age.

$H_a, \beta_i \neq 0$, Firm size, solvency, national income, inflation, and risk-based capital significantly affect the premium income variable, moderated by the company's age.

Result and Discussion

The description of the variables in this study aims to obtain an overview of the variables studied in providing support in explaining the relationship between variables consisting of variable company size (SIZE), solvency (SOLV), national income (PDRB), inflation (INFL), company age (AGE), risk-based capital (RBC), and premium (PREM), are as follows:

Table 1. Description of Research Variables

Variables	N	Average	Maximum	Minimum	Standard Deviation
SIZE (Million Rupiah)	853	950.623	12.106.173	1.810	1.832.681
SOLV (%)	853	27,76	1.212,84	0,42	72,11
GDP (Thousand Rupiah)	853	114.030	222.886	37.110	66.431
INFL (%)	853	6,40	13,33	3,53	2,83
SIZE (Year)	853	29	65	3	11
RBC (%)	853	398,78	7.080,61	-467,86	584,40
PREM (Million Rupiah)	853	256.776	3.079.376	123	418.112

Asset ownership as a proxy for an insurance company's size shows the large asset ownership of the national SIZE insurance company and the joint venture insurance company, with an average of 950 billion Rupiah achievement. The highest asset ownership is owned by the insurance company PT. Asuransi Kredit Indonesia (ASKI) in 2017, PT owns the company with the lowest asset ownership. International Starlite Insurance (STAR) in 2009. According to Mahdaleta, Muda & Nasir (2016), ownership can be a parameter to measure a company's ability to generate income. Therefore, the ownership of the assets of PT. Indonesian Credit Insurance (ASKI) is estimated to have the ability to generate higher premium income than companies with small asset ownership. The standard deviation value shows a value that is far above the average, this shows that the difference in asset ownership between companies is very high.

The second model in this study is the premium (PREM), which is thought to be influenced by the variable company size (SIZE), solvency (SOLV), national income (PDRB), inflation (INFL), and risk-based capital (RBC) which are moderated by the age of the company. The results of Chow and Hausmann's test to determine the best model between common effect and fixed effect, and common effect with random effect, are presented as follows:

Table 2. Chow Premium Test Results with Company Age Moderation

Testing Techniques	Prob.	Result	Description
Chow test	0,152	F-Test > 0.05, received H_0	Model Common Effect

Table 2 shows that the premium regression model with the company age moderated follows the common effect model. Furthermore, the model testing is continued with the Hausmann test to determine the best model between the fixed effect and random effect. The following is the Hausman test result:

Table 3. Test Results for Hausmann Premium with Age Moderation of the Company

Testing Techniques	Prob.	Result	Description
Hausman test	0,032	Prob $\chi^2 < 0,05$, rejected H_0	Model Common Effect

Table 3. Informs the premium regression model with the company age moderated following the common effect model. Thus, it is concluded that the Chow and Hausman test results that the best model to explain the effect of the independent variable on the dependent are the common effect. The results of the analysis using e-views 9.0 software, the RBC panel regression model with company age moderated is a common effect model which is presented as follows:

Table 4. Company Age Moderated Premium Panel Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Sig.
C	10.27450	2.606965	3.941175	0.0001	
SIZE?	1.088078	0.007574	143.6691	0.0000	***
SOLV?	0.010276	7.93E-05	129.5752	0.0000	***
PDRB?	0.730166	0.154926	4.713008	0.0000	***
INFL?	-0.007157	0.017235	-0.415239	0.6786	-
UMUR?	0.319386	0.122863	2.599524	0.0104	**
RBC?	0.000711	0.000158	4.499379	0.0000	***
SIZE?*AGE?	-0.003835	4.22E-05	-90.95216	0.0000	***
SOLV?*AGE?	-0.000617	6.54E-06	-94.35590	0.0000	***
PDRB?*AGE?	0.022098	0.006865	3.219015	0.0016	***
INFL?*AGE?	-0.000410	0.000881	-0.465053	0.6426	-
RBC?*AGE?	-4.92E-05	3.19E-06	-15.45284	0.0000	***
R-squared	0.994515				
Adjusted R-squared	0.994064				
F-statistic	2208.561				
Prob(F-statistic)	0.000000				

Table 4. Informs that the premium panel regression model has an R-Squared value of 0.9945. When compared with the R-Squared in the model without using moderation of 0.8968, there is an increase indicating that the company's age variable does have a function to moderate the influence of the variables SIZE, SOLV, GDP, INFL, and RBC on PREM. Thus, this model's R-Squared value explains that the PREM changes explained by the variables SIZE, SOLV, PDRB, INFL, and RBC are 99.45%, and other variables explain 0.55%. On the other hand, the influence strength of the variables SIZE, SOLV, PDRB, INFL, and RBC has a very strong influence on PREM.

The first hypothesis proposed in this study is that company size has a positive effect on premiums. Suppose you look closely, the calculation results in Table 5. In that case, statistically, the probability value test (prob) between the SIZE variable on PREM is smaller than a 1%, 5%, and 10% with a positive regression coefficient sign. The first hypothesis's findings concluded that firm size has a positive effect on the premium, accepted.

The second hypothesis proposed in this study is that solvency has a negative effect on premiums. Regarding this, Table 5 informs statistically the probability value test (prob) between the SOLV variables against PREM is smaller than a 1%, 5%, and 10% with a positive regression coefficient sign. The findings in the second hypothesis concluded that solvency has a negative effect on premiums, it is rejected.

The third hypothesis proposed in this study is that national income has a positive effect on premiums. When looking at the calculations' results in Table 5, statistically testing the probability value (prob) between the PDRB variable on PREM is smaller than a 1%, 5%, 10% with a positive regression coefficient sign. The findings in the third hypothesis concluded that national income has a positive effect on premiums, it is accepted.

The fourth hypothesis proposed in this study is that inflation has a negative effect on premiums. Regarding this, Table 5 informs the probability value test (prob) between the INFL and PREM variables greater than a 1%, 5%, and 10% with a negative regression coefficient sign statistically. The findings in the fourth hypothesis concluded that inflation has a negative effect on premiums, it is rejected.

The fifth hypothesis proposed in this study is that risk-based capital has a positive effect on premiums. Suppose you look at the calculation results in Table 5. In that case, statistically, the probability value test (prob) between the RBC variable on PREM is smaller than a 1%, 5%, and 10% with a positive regression coefficient sign. The findings in the fifth hypothesis concluded that risk-based capital has a positive effect on premiums, accepted.

The sixth hypothesis proposed in this study is that company size positively affects premiums, with company age being moderated. If you look closely, the results of the calculations in Table 5, statistically the probability value (prob) test between the SIZE variable against the PREM which is moderated AGE is smaller than a 1%, 5%, 10% with a negative regression coefficient sign. The findings in the sixth hypothesis, it is concluded that solvency has a negative effect on the premium with being moderated by company age, is accepted. This means that the company's age can be a factor that strengthens solvency on premiums.

The seventh hypothesis proposed in this study is that solvency has a negative effect on premiums, with company age being moderated. Suppose you look closely, the results of the calculations in Table 5. In that case, statistically, the probability value (prob) test between the SOLV and PREM-moderated variables AGE is smaller than a 1%, 5%, and 10% with a negative regression coefficient sign. The seventh hypothesis's findings concluded that solvency had a negative effect on premiums with being moderated by company age, accepted. This means that the company's age can be a factor that strengthens solvency on premiums.

The eighth hypothesis proposed in this study is that national income positively affects premiums, with the company age being moderated. If you look closely, the calculation results in Table 5, statistically testing the probability value (prob) between the GDP variable for PREM, which is moderated by AGE, is smaller than a 1%, 5%, 10% with a positive regression coefficient sign. The findings in the eighth hypothesis concluded that national income positively affects premiums, with the company's age being moderated and accepted. This means that the company's age can be a factor that strengthens national income on premiums.

The ninth hypothesis proposed in this study is that inflation has a negative effect on premiums, with company age being moderated. If you look at the calculation results in Table 5, statistically, the probability value (prob) test between the INFL and PREM-moderated variables AGE is greater than a 1%, 5%, and 10% with a negative regression coefficient sign. The ninth hypothesis's findings conclude that inflation has a negative effect on premiums with being moderated by company age and is rejected. This means that the company's age cannot be a factor that strengthens inflation's effect on premiums.

This study's tenth hypothesis is that risk-based capital positively affects premiums with company age being moderated. Suppose you look at the results of the calculations in Table 5. In that case, statistically, the probability value test (prob) between the RBC variable against PREM, which is moderated AGE, is smaller than a 1%, 5%, 10% with a negative regression coefficient sign. The tenth hypothesis's findings concluded that risk-based capital positively affects premiums, with the company's age being moderated and rejected. This means that the company's age cannot be a factor that strengthens the effect of risk-based capital on premiums.

The panel data regression analysis results found that the model considered appropriate to explain risk-based capital in terms of firm size, solvency, national income, and inflation, moderated by company age, was a common effect model. This means that this model assumes that each SIZE insurance company observed during 2006-2017 has the same intercept and slope or does not have differences in the time dimension (Muthén & Muthén, 2002). Thus, the resulting model applies to all insurance companies. Besides, the R2 value in the risk-based capital model, which is moderated by the company's age, results in a larger R2 value, meaning that the company's age plays a role in strengthening the relationship between the independent variable and the dependent variable.

These findings support company theory, which explains that company experience is a signal of better corporate governance. In another part, the findings of this study also provide support

for the research of (Noordin & Mohtar 2014; Githaiga & Yegon 2019; Markonah et al, 2019), who concluded that company age is one of the factors that determine company performance.

Conclusion

Based on the research results, it shows that company size has a positive effect on premiums, solvency has a negative effect on premiums, national income has a positive effect on premiums, inflation has a negative effect on premiums, and risk-based capital has a positive effect on premiums. Company age as a moderating variable turns out to moderate company size, solvency, and national income but cannot moderate inflation and risk-based capital. This study's results are similar to previous studies conducted by Noordin & Mohtar 2014; Giovani & Mulyana; Erdemir; Yegon & Githaiga; Markonah, Sudiro, Surachman, & Rahayu, 2019). For further research, it is necessary to test the research variables with a different frame of mind to differentiate from other studies.

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