Factors Impacting Profits in Indonesian Reinsurance Companies

Markonah Markonah[*] and Hedwigis Esti Riwayati

Management Department, Perbanas Institute, Jakarta, Indonesia, Jl. Perbanas, RT 006/007, Karet Kuningan, Setiabudi, Jakarta Selatan 12940.

Abstract: Reinsurance involves a company that offers risk management services to insurance companies. This investigation delves into how the performance of underwriting, returns on investments, and risk-based capital (RBC) affect the profits of reinsurance companies in Indonesia under the supervision of the Financial Services Authority (OJK). The research approach employed here relies on regression analysis using panel data, which is processed using Eviews-10. This study encompasses all reinsurance firms in Indonesia, totaling four entities: (1) PT Reasuransi Nasional Indonesia; (2) PT Reasuransi Indonesia Utama; (3) PT Maskapai Reasuransi Indonesia; (4) PT Tugu Reasuransi Indonesia. The research period spans nine years, from 2013 to 2021, providing a dataset of 36 points. Data collection involved extracting information from these companies' annual reports. The study's results suggest that underwriting performance and investment returns have a significant and positive impact on the profitability of reinsurance companies in Indonesia. However, it appears that risk-based capital (RBC) does not significantly affect the profitability of these firms. The recommendation for reinsurance companies is to prioritize improving their underwriting performance and investment returns to enhance profitability.

Keywords: Reinsurance, investment returns, risk-based capital, underwriting performance, profitability.

INTRODUCTION

Reinsurance is a company that offers risk management services to insurance companies (Aniseh, Mardani, and Salim 2019). Insurance involves financial risk protection, where the insured pays a certain amount to the insurance company, and the insurance company pays specific costs in case of certain risks to the insured. In accordance with the provisions outlined in Law Number 40/2014, insurance represents a well-defined contract between two involved parties: the insurance company and the policyholder or the party being insured (Undang-Undang No. 40 Tahun 2014). The concept of insurance has ancient origins, with the Code of Hammurabi, established by King Hammurabi, being an early example. During that time, the concept of insurance was used in Babylonia with Chinese merchants. Chinese traders paid an additional fee, which provided them with security in case their goods were stolen. In the medieval period, insurance began to emerge, particularly in 1347, when it offered protection for sea vessels. In Indonesia, insurance was introduced during the Dutch colonial era (Super Min 2021).

The first insurance company in Indonesia was established in 1859, known as Nederlandsch-Indische Levensverzekerings en Lijfrente Maatschappij, or Nillmij (Super Min 2021). Insurance can be categorized into two types: general insurance, also known as property and casualty insurance, which provides protection for our assets (Allianz Indonesia 2020; Cermati 2020). There are various types of general insurance,

including fire insurance, vehicle insurance, cargo insurance, and more. Life insurance is another commonly used type among Indonesians, covering financial losses due to death or living too long (Allianz Indonesia 2020; Cermati 2020).

In the insurance industry, risk spreading principles are divided into two methods: reinsurance and co-insurance (Indonesia Financial Services Authority 2022). Both are essential components of the insurance business. Reinsurance is one way insurance companies distribute risk by sharing their risks with other insurance companies (Indonesia Financial Services Authority 2022). The purpose of this risk-sharing among insurance companies is to reduce losses in case of an incident affecting their policies. This distribution means that some of the risks covered by an insurance company will be borne by the company itself, while others will be shared with other insurance companies. Each insurance and reinsurance company receives a proportion of the premium for their role (Indonesia Financial Services Authority 2022).

Profit is a critical factor for insurance and reinsurance companies to support their future development. Profit is the most vital element for these companies as it represents the success or failure of their operations.

Based on the data I have obtained, reinsurance company profits in Indonesia experienced fluctuations over the years. For example, in 2014, profits declined, especially for PT. Reasuransi Indonesia Utama, previously known as PT Reasuransi Internasional Indonesia. However, profits increased in 2016, with PT Reasuransi Nasional Indonesia, commonly known as Nasre, experiencing a significant surge. PT Maskapai Reasuransi Indonesia's profits remained relatively stable without significant fluctuations. PT. Tugu Reasuransi Indonesia faced a profit decline in 2018 but saw profits re-

*Address correspondence to this author at the Management Department, Perbanas Institute, Jakarta, Indonesia, Jl. Perbanas, RT 006/007, Karet Kuningan, Setiabudi, Jakarta Selatan 12940;
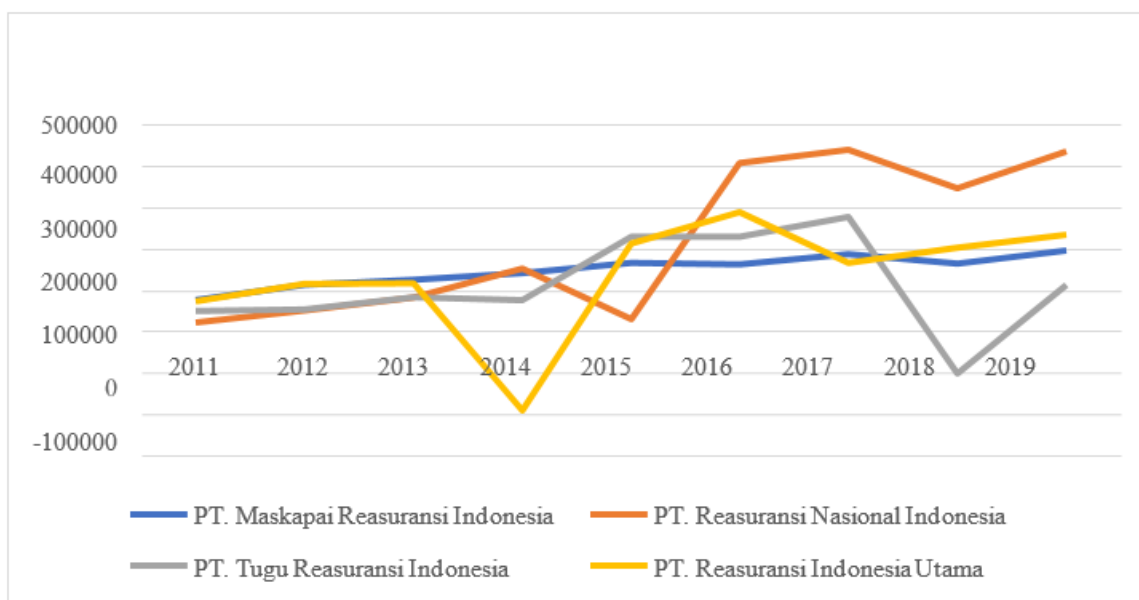E-mail: markonah@perbanas.id

Fig. (1). Illustrates the growth of reinsurance company profits in Indonesia.
Source: (Indonesia Financial Services Authority 2022).

bound in 2019 (Indonesia Financial Services Authority 2022).

The profit trend in reinsurance companies, as depicted in the graph, warrants serious attention. Research on profits is essential because high profits indicate that a company can efficiently optimize its earnings. This ability is likely to attract and maintain public trust in insurance companies, which, in turn, can affect reinsurance companies because of their interconnectedness. Different outcomes might be observed among insurance companies concerning their investment returns, underwriting performance, and RBC when compared to reinsurance companies operating in Indonesia.

According to Wahyudin & Mauliyana, underwriting involves the assessment and classification of insured risks, while investment risk arises from an insurance company's efforts to manage premium funds through various forms of investment (Wahyuddin and Mauliyana 2021). In accordance with Regulation No. PER-09/BL/2011 issued by the Chairman of the Capital Market Supervisory Agency and Financial Institution, insurance and reinsurance companies are required to maintain a minimum solvency level of 120% (Kementerian Keuangan 2011). Prior research has explored the factors affecting insurance companies, but discrepancies in results have been observed. Permatasari's findings indicated that insurance companies benefit from positive impacts from underwriting outcomes, investment returns, and RBC (Sastri, Sujana, and Sinarwati 2017), while Pratiwi & Azib found that underwriting results do not significantly affect profitability (Pratiwi and Azib 2018), and Mutmainnah et al. concluded that investment returns do not positively impact insurance companies (Mutmainnah, Puspitaningtyas, and Puspita 2019). The discrepancies in prior research findings have prompted the undertaking of this present study, which seeks to explore how underwriting results, investment returns, and risk-based capital affect the earnings of reinsurance firms in Indonesia. The results are anticipated to offer valuable insights for enhancing the operational efficiency of

reinsurance companies and may also serve as a foundation for future research endeavors.

MATERIALS AND METHODOLOGY

Profit

Profit is of utmost importance for any company or entrepreneur because it serves as an indicator of whether a company is successful or not (Markonah and Prasetyo 2022). Profit has various purposes, such as creating reserves for company investments, covering company debts, financing operational activities, and gauging the company's future prospects. In the realm of pure economics, profit, gain, or earnings are described as the growth in an investor's financial assets arising from their capital investment, with expenses linked to that investment subtracted (Yulianto 2018). According to Markonah, profit is considered a guideline for dividend policies and profit distribution within a company (Markonah 2021). Profit is generally viewed as an investment metric and a decision-making guide. In the context of insurance and reinsurance companies, profit is determined by the difference between premiums received and claims to be paid. Profit can be classified into various forms, such as operational profit, gross profit, pre-tax profit, and net profit after taxation.

Risk-Based Capital (RBC)

RBC is employed to evaluate a company's financial well-being. As per Government Regulation No. 63/2004, RBC serves as a measure indicating the financial safety or health threshold that insurance companies are obliged to maintain, with a minimum standard set at 120% (Pratiwi and Azib 2018). The higher the RBC health ratio of an insurance company, the more robust its financial state. According to the OJK No. 71/POJK.05/2016, in the theoretical context of Financial Health in Article 2 (Otoritas Jasa Keuangan (OJK) 2016), (1) Companies are obligated to continuously meet

financial health criteria. (2) The measurement of a company's financial health, as mentioned in paragraph (1), encompasses: a). Solvency level, b). Technical reserves, c). Adequacy of investments, d). Equity, e). Guarantee funds, f). Other provisions related to financial health. Article 3 (Otoritas Jasa Keuangan (OJK) 2016), (1) Firms must always uphold a Solvency Level of at least 100% of the Minimum Risk-Based Capital (MMBR). Companies must establish their internal Solvency Level targets annually. (2) The internal Solvency Level target, as stated in paragraph (2), must be at least 120% (one hundred and twenty percent) of the MMBR (Agustin, Suangga, and Sugiharto 2018; Alamsyah and Wiratno 2017).

Investment

Investment refers to the allocation of capital into an activity with a relatively long-term horizon across various business sectors (Kurniawan 2016). Capital investment, in a restricted context, involves particular undertakings, whether they are tangible or intangible, such as building factories, roads, bridges, constructing buildings, research, and development initiatives (Kurniawan 2016; Sari 2020). Marwansyah & Utami describe investment as the profits or losses arising from fluctuations in the value of investments during a particular timeframe. These returns are typically represented as percentages (%) or multiples (Marwansyah and Utami 2017). When investment performance is strong, policy values increase, ensuring that there is sufficient capital to cover all expenses, and there is cash value that can be utilized. Conversely, when investment performance weakens and policy values decrease, there may not be enough funds to cover insurance costs. Investment income is derived from investment earnings minus investment costs, and the result is then divided by investment costs (Nasution and Nanda 2020).

Underwriting

Underwriting is a crucial process in the field of insurance (Wahyuddin and Mauliyana 2021). Every potential insurance policyholder undergoes an underwriting process to determine whether the insurance company will accept the risk, ultimately impacting the company's profitability (Deyganto and Alemu 2019; Djamaluddin, Budiman, and Herawaty 2019). Among the risks considered, some are deemed acceptable (acceptance of risk), while others are not. According to Angima & Mwangi, underwriting is the primary determinant of a company's profit position (Angima and Mwangi 2017). Holtam further defines underwriting as the process of accepting or rejecting risks (Djamaluddin et al. 2019; Reschiwati and Solikhah 2018). Therefore, the underwriting process functions to filter insurance policy applicants. This process determines whether an insurance company will approve or decline an applicant, ultimately influencing the company's profit (Pratiwi and Azib 2018; Wahyuddin and Mauliyana 2021). If the underwriter makes an incorrect decision in accepting a risk for the company, the company may suffer losses. Conversely, if the underwriter makes the right choice in accepting a risk for the company, the company will profit because no claims are incurred. Underwriting results arise from the contrast between premium revenue and expenditures like claims, commissions, and other underwriting costs. These underwriting outcomes are determined by computing

the results of insurance operations, which encompass premium income net of commissions, claims, and deductions from premium income.

Previous Research and Hypothesis Development

Sastri et al. stated that premium income, underwriting results, investment returns, and risk-based capital all exert a noteworthy positive influence on insurance company earnings (Sastri et al. 2017). Wulandari's findings pointed out that investment returns have a considerable impact, whereas underwriting results and claims expenses don't affect profits (Wulandari 2018). Pratiwi and Azib proposed that risk-based capital significantly affects both profit and stock prices, whereas premium income, claims expenses, and underwriting results don't influence these factors (Pratiwi and Azib 2018). Suud asserted that underwriting and solvency significantly contribute to reinsurance company profits (Suud 2016). Mutmainnah suggested that premium income and underwriting results have a substantial positive effect on general insurance company profits in Indonesia (Mutmainnah 2015). Angima & Mwangi discovered that underwriting significantly impacts profits in insurance companies across Africa (Angima and Mwangi 2017). Nasution & Nadia's research demonstrated that RBC affects company profits, while investment results do not affect the earnings of Islamic insurance companies in Indonesia (Nasution and Nanda 2020). In their study, Wahyudin & Mauliyana found that underwriting results, investment returns, and risk-based capital all have a positive and significant impact on profits in insurance companies registered in Indonesia between 2017 and 2019 (Wahyuddin and Mauliyana 2021).

Drawing from existing theory and research, this study posits the following hypotheses and framework:

H1: Underwriting outcomes significantly influence earnings in a positive manner.

H2: Investment outcomes significantly enhance earnings.

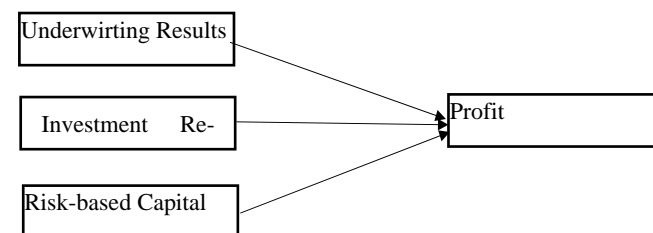H3: Risk-based capital makes a positive contribution to earnings.

Fig. (2). Conceptual Framework.

Methodology

This research utilizes a quantitative approach (R Luki Karunia, Darmawansyah, et al. 2023; Riyanto and Prasetyo 2021) to validate the relationships between variables (R Luki Karunia, Budiaji, et al. 2023; Riyanto, Janiah, and Prasetyo 2021). The study focuses on four reinsurance companies in Indonesia with complete financial records for the research period from 2013 to 2021, specifically (1) PT Reasuransi Nasional Indonesia; (2) PT Reasuransi Indonesia Utama; (3) PT Maskapai Reasuransi Indonesia; (4) PT Tugu Reasuransi

Indonesia. The data employed in this investigation are considered secondary data (R. Luki Karunia et al. 2023), sourced from the annual financial reports of these reinsurance companies spanning the 2013-2021 period, as available either through the companies themselves or on their respective websites. This study utilizes secondary data (R. Luki Karunia et al. 2023) and employs a documentation method to extract information from the annual financial reports of each reinsurance company, encompassing underwriting results, investment outcomes, risk-based capital, and earnings, all calculated using specific formulas. Regression analysis is the chosen method, and the data panel is processed using Eviews-10 (Markonah et al. 2019).

RESULTS

Data analysis is a process within the research framework aimed at providing guidance to obtain information for decision-making (Riyanto and Prasetyo 2021). In this study, the data analysis method employed is panel data regression. According to Amaliah et al., three tests are utilized to select the panel data estimation technique (Amaliah, Darnah, and Sifriyani 2020). Initially, the F-statistic test is employed to make a selection between fixed effect or common effect approaches. Secondly, the Hausman test is utilized to determine whether to opt for fixed effect or random effect methods. Finally, the Lagrange Multiplier (LM) test helps in the decision between common effect or random effect methodologies (Amaliah et al. 2020).

The research comprises four Reinsurance companies in Indonesia spanning from 2013 to 2021. To process and analyze the secondary data, the researcher used Microsoft Excel and Eviews 10 software (Amaliah et al. 2020). Data processing with Microsoft Excel and panel data analysis using Eviews 10 were conducted (Amaliah et al. 2020). The analysis of data from four reinsurance companies in Indonesia spanning from 2013 to 2021 provided some key statistics. The average profit over this period was 120.438, with the lowest recorded value being 0.00, and there was a degree of variation indicated by the standard deviation of 29.758. For the variable 'underwriting results,' the average was 122.075, and again, the lowest value observed was 0.00, with some variability shown by the standard deviation of 21.625. In terms of 'investment outcomes,' the average was 116.261, with the lowest value also at 0.00, and some variation represented by the standard deviation of 20.957. Lastly, the average RBC value was 103.270, with a minimum of 88.944, and a standard deviation of 3.809. To determine the most suitable regression model for the panel data, various models like the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) were considered (Markonah 2021; Markonah and Prasetyo 2022).

Based on the outcomes of the three model selection tests, it was evident that two of these tests recommended employing the fixed effect method. This leads to the conclusion that the fixed effect approach is the most suitable panel data regression estimation method for this research.

Table 1. Outcomes of Model Selection in Panel Data Regression

Method	Test	Results
Chow Test	Common Effect vs Fixed Effect	Fixed Effect
Hausman Test	Fixed Effect vs Random Effect	Fixed Effect

According to Ghozali, classic assumption tests are essential for evaluating the suitability of linear regression models (Ghozali 2018). These tests in the study cover normality, autocorrelation, multicollinearity, and heteroskedasticity (Ghozali 2018). The normality test assesses the data population's normality through graphical analysis to check if residual values follow a normal distribution. In this test, the Jarque-Bera (JB-test) was employed, resulting in a probability value of $(0.746827) > 0.05$, suggesting that the data follows a normal distribution (Ghozali 2018).

Additionally, the Durbin-Watson (DW) test was executed to detect autocorrelation, utilizing the following criteria: If $du < DW < (4 - du)$, it implies there is no autocorrelation, and if $dl < DW < du$ or $(4 - du)$, it implies that no definitive conclusion can be drawn (Ghozali 2018). Based on the results of the Durbin-Watson test presented in Table **2**, the DW value is determined to be 1.687751. Comparing this value with the table values using a significance level of 5%, a sample size (n) of 36, and the number of independent variables (k) of 3, the table values for (dl) and (du) are found to be 1.2953 and 1.6539, respectively. Calculating 4-du results in $(4 - 1.6539) = 2.3461$. The DW value (1.687751) is greater than the upper limit (du) of 1.6539 and less than the value (4-du) of 2.3461, indicating the absence of autocorrelation (Ghozali 2018).

Table 2. Regression Test Results.

R-squared	0.960647	Mean dependent var	120438.6
Adjusted R-squared	0.952505	S.D. dependent var	9758.92
E. of regression	6485.469	Akaike info criterion	0.56518
Sum squared resid	1.22E+09	Schwarz criterion	20.87309
Log likelihood	-363.1733	Hannan-Quinn criter.	20.67265
F-statistic	117.9865	Durbin-Watson stat	1.687751
Prob(F-statistic)	0.000000		

In this study, the assessment for multicollinearity included the computation of correlation coefficients among the independent variables. When the correlation coefficient exceeds 0.85, it signifies the presence of multicollinearity within the model (Ghozali 2018). In the multicollinearity test, the largest value was 0.24, representing the relationship between investment outcomes and RBC. Therefore, in this study, there was no need to eliminate independent or control variables as their values were not greater than 0.85. It can be concluded that there was no indication of multicollinearity in the multicollinearity test (Ghozali 2018).
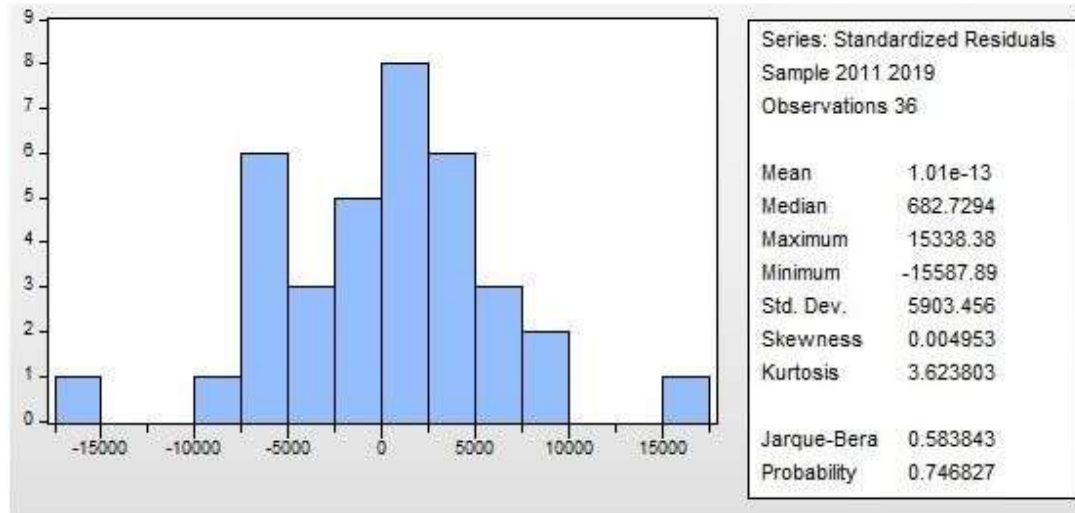
Fig. (3). Normality Test of Data.

Table 3. Multicollinearity Test Results.

	Underwriting Results	Investment Returns	RBC
Underwriting Results	1.000000	0.090289	-0.153255
Investment Returns	0.090289	1.000000	0.249871
RBC	-0.153255	0.249871	1.000000

Heteroskedasticity tests are conducted to determine if there is unequal variance of residuals among observations, and if this assumption is not met, the model is considered invalid (Ghozali 2018; Sugiyono 2019). Based on the heteroskedasticity test results shown in the output above, underwriting results (0.4514) > 0.05; investment outcomes (0.6652) > 0.05; RBC (0.0605) > 0.05, it can be concluded that there was no heteroskedasticity (Ghozali 2018; Sugiyono 2019).

Table 4. Heteroskedasticity Test.

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constanta	39480.14	17676.80	2.233443	0.0326
Underwriting Results	-0.021946	0.028783	-0.762438	0.4514
Investment Returns	0.013238	0.030311	0.436743	0.6652
RBC	-0.327003	0.168058	-1.945775	0.0605

In hypothesis testing, the F-model test is employed to evaluate the adequacy of the estimated regression model. The suitability of the model depends on the Prob (F-statistic) value (Ghozali 2018; Sugiyono 2019). If the Prob (F-statistic) value is less than the 5% significance level, the estimated regression model is considered appropriate. Conversely, if the Prob (F-statistic) value exceeds the 5% significance level, the estimated regression model is deemed inappropriate (Ghozali 2018; Sugiyono 2019). In Table 2 of the Eviews output, the Prob F-statistic is shown as 0.000000, which is less than 0.05. Therefore, it can be concluded that the estimated regression model effectively explains the impact of underwriting results, investment outcomes, and risk-based capital (RBC) on company profits.

Additionally, the coefficient of determination test in this study quantifies the percentage of the independent variables' influence on the dependent variable. Based on the results in Table **2**, it can be inferred that underwriting results, investment outcomes, and risk-based capital (RBC) collectively contribute to 95.25% of the influence on company profits within the Indonesian reinsurance sector. The remaining 4.75% is affected by factors beyond the scope of this research model.

Lastly, the t-test, or partial coefficient test, is applied to determine whether independent variables have a significant partial impact on the dependent variable (Ghozali 2018; Sugiyono 2019). A variable is considered to have a noteworthy influence on the dependent variable if the probability value (p-value) for each independent variable is less than the 5% significance level $\alpha = 5\%$ (Ghozali 2018; Sugiyono 2019).

Table 5. t-test Results.

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constanta	2193.990	35929.54	0.061064	0.9517
Underwriting Results	0.858872	0.052462	16.37144	0.0000
Investment Returns	0.992309	0.058469	16.97141	0.0000
RBC	-0.987412	0.343185	2.877198	0.0738

Based on the t-test results, we derived a multiple linear regression equation: Y = 2193.990 + 0.858872X1 + 0.992309X2 – 0.987412X3. This regression equation leads to the following conclusions:

1. When it comes to the impact of underwriting results on the profit of reinsurance companies in Indonesia (with a coefficient of 0.858872), there is a positive relationship. Specifically, if underwriting results increase by 1%, the profit is expected to increase by 0.868872%, assuming no other variables are at play.

2. Concerning the variable 'investment outcomes' and its influence on the profit of reinsurance companies in Indonesia (with a coefficient of 0.992309), there is a positive connection. If investment outcomes increase by 1%, the profit is projected to increase by 0.992309%, assuming no other variables are affecting it.

3. As for the RBC's variable and its impact on the profit of reinsurance companies in Indonesia (with a coefficient of -0.987412), there is a negative relationship. In this case, if risk-based capital increases by 1%, the profit is anticipated to decrease by 0.987412%, assuming no other variables are involved.

This analysis suggests that underwriting results and investment outcomes significantly and positively affect profit, whereas risk-based capital (RBC) does not have a substantial impact on profit..

DISCUSSION AND CONCLUSION

Based on the t-test analysis, it is evident that the p-value for the relationship between underwriting results and profit is 0.000, which is less than 0.05. This signifies a statistically significant and positive influence of underwriting results on profit. This aligns with the theory presented by Choon Tan et al., which posits that underwriting results are a determining factor affecting profit (Yan, Schulte, and LEE Kuo Chuen 2018). This is due to the substantial role played by underwriting results in shaping a company's profitability by filtering and assessing the risks assumed by the insurance firm. Underwriting, in the realm of insurance, is a critical process involving the identification and evaluation of risks associated with potential policyholders. The underwriter's decisions hold immense significance for the company as they directly impact the risks undertaken, thereby affecting the company's sustainability. These research findings are in harmony with the study conducted by Sastri et al., which similarly indicates a significant and positive impact of underwriting results on company profit (Sastri et al. 2017). However, it contradicts the results of the research conducted by Pratiwi & Azib, which claim that underwriting results do not affect company profit (Pratiwi and Azib 2018).

In the context of the t-test, the p-value for the relationship between investment results and profit is 0.000, which is less than 0.05. This demonstrates a statistically significant and positive correlation between investment results and company profit. In the insurance domain, short-term investments are employed as assets for wealth accumulation and growth within a company. Effective investment management, particularly when it yields substantial returns, leads to increased company profits. Investment results signify the degree of profit generated by an investor through their investment activities. Additionally, investment results play a crucial role in augmenting a company's capital. Furthermore, they can contribute to the overall development of a company and potentially elevate its stock value. Consequently, investment results exert a direct influence on company profit. These findings are consistent with the outcomes of the study conducted by Wulandari, which indicates a positive and significant in-

fluence of investment results on company profit (Wulandari 2018).

Based on the t-test analysis, the results pertaining to Risk-Based Capital (RBC) and its impact on profit reveal a p-value of 0.0738, surpassing the significance level of 0.05. This implies that Risk-Based Capital does not exert a statistically significant influence on profit. This aligns with the regulations outlined in Financial Services Authority No. 71/POJK.05/2016, as Risk-Based Capital primarily serves as an indicator of a company's financial health without a direct effect on profit growth. Risk-Based Capital is a calculation method stipulated by the Financial Services Authority for evaluating a company's financial health, taking into account various factors. These results are at odds with the findings of Markonah and Mubarok & Rahayu, who suggest a significant and positive impact of Risk-Based Capital on profit (Markonah 2021; Mubarok and Rahayu 2017).

In summary, this research concludes that underwriting results and investment outcomes exert a statistically significant and positive impact on the profit of reinsurance companies in Indonesia. Conversely, Risk-Based Capital does not exert a statistically significant influence on the profit of reinsurance companies in Indonesia. The recommendations that can be given are: 1) Reinsurance companies should focus on improving their underwriting practices as they have a significant positive impact on profitability. This may involve refining risk assessment techniques, optimizing pricing strategies, and minimizing underwriting expenses to maximize profits. 2) Companies should actively manage their investment portfolios to ensure they generate favorable returns. This can be achieved by diversifying investments, monitoring market conditions, and making informed investment decisions to increase profitability. 3) While RBC may not directly impact profits, it remains crucial for assessing a company's financial health. Reinsurance firms should continue to maintain a healthy RBC level in accordance with regulatory requirements to ensure their long-term sustainability and credibility. 4) As there are conflicting findings regarding the influence of RBC on profit, further research and analysis can help clarify this relationship. Additionally, exploring other factors that may affect profitability in the reinsurance industry could provide valuable insights for both practitioners and regulators.

CONFLICT OF INTEREST

No conflicts of interest exist in this research.

ACKNOWLEDGMENTS

REFERENCES

Agustin, Fira, Asri Suangga, and Bambang Sugiharto. 2018. "Pengaruh Premium Growth Ratio, Risk Based Capital Dan Hasil Investasi Terhadap Profitabilitas Perusahaan Asuransi Umum Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2014." *ACCRUALS* 2(2):53–65. doi: 10.35310/accruals.v2i2.13.

Alamsyah, Richard, and Adi Wiratno. 2017. "Pendapatan Premi, Rasio Hasil Investasi, Laba, Klaim Dan Risk Based Capital Perusahaan Asuransi Kerugian Di Indonesia." *Jurnal Riset Akuntansi & Perpajakan (JRAP)* 4(1):87–101. doi: 10.35838/jrap.2017.004.01.8.

Allianz Indonesia. 2020. "Asuransi Jiwa Dan Asuransi Umum: Yuk, Memahami Perbedaannya." *Allianz Indonesia*. Retrieved (https://www.allianz.co.id/explore/asuransi-jiwa-dan-asuransi-umum-yuk-memahami-perbedaannya.html).

Amaliah, Eka Nur, Darnah Darnah, and Sifriyani Sifriyani. 2020. "Regresi Data Panel Dengan Pendekatan Common Effect Model (CEM), Fixed Effect Model (FEM) Dan Random Effect Model (REM) (Studi Kasus: Persentase Penduduk Miskin Menurut Kabupaten/Kota Di Kalimantan Timur Tahun 2015-2018)." *ESTIMASI: Journal of Statistics and Its Application* 1(2):106. doi: 10.20956/ejsa.v1i2.10574.

Angima, Caren B., and Mirie Mwangi. 2017. "Effects of Underwriting and Claims Management on Performance of Property and Casualty Insurance Companies in East Africa." *European Scientific Journal* 13(13):358–73. doi: 10.19044/esj.2017.v13n13p358.

Aniseh, Nur, Ronny Malavia Mardani, and Agus Salim. 2019. "Pengaruh ROA, Resiko Underwriting Dan Reasuransi Terhadap Solvabilitas Perusahaan Asuransi." *E-Jurnal Riset Manajemen* 8(11):109–19.

Cermati. 2020. "Jenis-Jenis Asuransi Di Indonesia, Apa Saja?" *Cermati.Com*. Retrieved (https://www.cermati.com/artikel/jenis-jenis-asuransi-di-indonesia-apa-saja).

Deyganto, Kanbiro Orkaido, and Ayneshet Agegnew Alemu. 2019. "Factors Affecting Financial Performance of Insurance Companies Operating in Hawassa City Administration, Ethiopia." *Universal Journal of Accounting and Finance* 7(1):1–10. doi: 10.13189/ujaf.2019.070101.

Djamaluddin, Said, Budiman Budiman, and Aty Herawaty. 2019. "Determinants of Profitability of General Insurance Companies in Indonesia." *International Journal of Innovative Research and Development* 8(7):82–94. doi: 10.24940/ijird/2019/v8/i7/jul19031.

Ghozali, Imam. 2018. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*. Semarang: Badan Penerbit Universitas Diponegoro.

Indonesia Financial Services Authority. 2022. *Insurance Statistics 2021*. Jakarta.

Karunia, R Luki, Rahmad Budiaji, Reni Suzana, Kurnia Sari Dewi, and Johan Hendri Prasetyo. 2023. "Analysis of the Factors That Affect the Implementation of E-Government in Indonesia." *International Journal of Membrane Science and Technology* 10(3):46–54. doi: 10.15379/ijmst.v10i3.1216.

Karunia, R. Luki, Darmawansyah Darmawansyah, Kurnia Sari Dewi, and Johan Hendri Prasetyo. 2023. "The Importance of Good Governance in the Government Organization." *HighTech and Innovation Journal* 4(1):75–89. doi: 10.28991/HIJ-2023-04-01-06.

Karunia, R Luki, Darmawansyah Darmawansyah, Johan Hendri Prasetyo, Triyadi Triyadi, and Joko Ariawan. 2023. "The Effectiveness of Career Development in Mediating the Influence of the Working Environment and Training towards the Performance of Employee." *International Journal of Applied Economics, Finance and Accounting* 17(2):202–10. doi: 10.33094/ijaefa.v17i2.1098.

Kementerian Keuangan. 2011. *Peraturan Ketua Bapepam-LK Nomor:PER-09/BL/2011 Tentang Pedoman Perhitungan Batas Tingkat Solvabilitas Minimum Bagi Perusahaan Asuransi Dan Perusahaan Reasuransi*.

Kurniawan, Chandra. 2016. "Pengaruh Investasi Terhadap Perekonomian Indonesia." *Jurnal Media Wahana Ekonomika* 12(4):1–9.

Markonah, Markonah. 2021. "Analysis Relates to The Role of Premium Income, Claim Expenses, Investment Result and Risk Based Capital (RBC) Against the General Insurance Companies' Profits Income (Case Study on General Insurance Which Registered in The Indonesia Stock Exchange." *Dinasti International Journal of Economics, Finance & Accounting* 2(2):135–49. doi: 10.38035/DIJEFA.V2I2.856.

Markonah, Markonah, and Johan Hendri Prasetyo. 2022. "The Effect of Corporate Governance on Financial Performance: Evidence from Islamic Banks in Indonesia." *Journal of Asian Finance, Economics and Business* 9(6):45–52. doi: 10.2991/aer.k.201221.098.

Markonah, Markonah, Achmad Sudiro, Surachman, and Mintarti Rahayu. 2019. "The Effect of Corporate Governance and Premium Growth on the Performance of Insurance Companies in Indonesia." *European Research Studies Journal* XXII(Issue 2):359–75. doi: 10.35808/ersj/1450.

Marwansyah, Sofyan, and Ambar Novi Utami. 2017. "Analisis Hasil Investasi, Pendapatan Premi, Dan Beban Klaim Terhadap Laba Perusahaan Perasuransian Di Indonesia." *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis* 5(2):213–21. doi: 10.30871/jaemb.v5i2.533.

Mubarok, Nurul, and Dede Rahayu. 2017. "Pengaruhrisk Based Capital Terhadap Profitabilitas Perusahaana Asuransi Syariahstudy Padaperusahaan Asuransi Yang Terdaftar Di Aasi." *I-ECONOMICS: A Research Journal on Islamic Economics* 3(2):189–208. doi: 10.19109/ieconomics.v3i2.1455.

Mutmainnah, M., Z. Puspitaningtyas, and Y. Puspita. 2019. "Pengaruh Kebijakan Deviden, Keputusan Investasi, Ukuran Perusahaan Dan Kepemilikan Manajerial Terhadap Nilai Perusahaan." Universitas Jember.

Mutmainnah, Mutmainnah. 2015. "Analisis Pengaruh Pendapatan Premi, Beban Klaim, Hasil Underwriting, Cadangan Teknis, Dan Risk Based Capital Terhadap Laba Pada 20 Perusahaan Asuransi Umum Di Indonesia Periode 2009-2013." Universitas Hasanuddin.

Nasution, Nurul hidayati, and Satria tri Nanda. 2020. "Pengaruh Pendapatan Premi, Hasil Underwriting, Hasil Investasi Dan Risk Based Capital Terhadap Laba Perusahaan Asuransi Umum Syariah." *Jurnal Ilmiah Ekonomi Dan Bisnis* 17(1):41–55. doi: 10.31849/jieb.v17i1.3401.

Otoritas Jasa Keuangan (OJK). 2016. *Peraturan Otoritas Jasa Keuangan Nomor 71 /POJK.05/2016 Tentang Kesehatan Keuangan Perusahaan Asuransi Dan Perusahaan Reasuransi*. Indonesia.

Pratiwi, Olivia Sukma, and Azib. 2018. "Pengaruh Pendapatan Premi, Beban Klaim, Hasil Underwriting Dan Risk Based Capital Terhadap Laba Dan Harga Saham (Studi Kasus Pada Perusahaan Asuransi Yang Terdatar Di Bursa Efek Indonesia Tahun 2012-2016)." Pp. 1260–66 in *Prosiding Manajemen*. Vol. 4.

Reschiwati, R., and Rizki Putri Solikhah. 2018. "Random Effect Model: Influence of Income Premium, Claim Cost and Underwriting Results on Net Income in Insurance Company in Indonesia: Case Study of Insurance Company Listed on Indonesia Stock Exchange." *Interational Journal of Modern Trends in Business Research (IJMTBR)* 1(3):1–17.

Riyanto, Setyo, Samrotul Janiah, and Johan Hendri Prasetyo. 2021. "A Strategy to Strengthen the Organizational Citizenship Behaviour of Steel Industry's Employee in Indonesia." *Academy of Strategic Management Journal* 20(3):1–14.

Riyanto, Setyo, and Johan Hendri Prasetyo. 2021. "Factors Affecting Civil Servant Performance in Indonesia." *International Journal of Entrepreneurship* 25(5):1–15.

Sari, Indah. 2020. "Syarat-Syarat Penanaman Modal Asing (PMA) Di Indonesia Menurut Undang-Undang Nomor 25 Tahun 2007 Tentang Penanaman Modal." *Jurnal Ilmiah Hukum Dirgantara* 10(2):50–75. doi: 10.35968/jh.v10i2.462.

Sastri, Ida Ayu Ita Permata, Edy Sujana, and Ni Kadek Sinarwati. 2017. "Pengaruh Pendapatan Premi, Hasil Underwriting, Hasil Investasi Dan Risk Capital Based Terhadap Laba Perusahaan Asuransi." *Jurnal Ilmiah Mahasiswa Akuntansi* 7(1).

Sugiyono. 2019. *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta.

Super Min. 2021. "Sejarah Asuransi Dan Perkembangannya." *SuperYou*. Retrieved (https://superyou.co.id/blog/keuangan/sejarah-asuransi/).

Suud, Cynthia Fadila. 2016. "Pengaruh Underwriting Dan Solvabilitas Terhadap Laba Perusahaan Reasuransi." Universitas Lampung.

Undang-Undang No. 40 Tahun 2014. 2014. *Undang-Undang Tentang Perasuransian*.

Wahyuddin, and Mauliyana. 2021. "The Effect of Premium Revenue, Underwriting Results, Investment Results, and Risk Based Capital on Income in Insurance Company (Study On Corporate Insurance - The Listed on the Indonesia Stock Exchange)." *Quantitative Economics and Management Studies* 2(6):387–99. doi: 10.35877/454RI.qems382.

Wulandari, Mulya. 2018. "Pengaruh Pendapatan Premi, Hasil Underwriting, Hasil Investasi, Risk Based Capital, Dan Beban Klaim Terhadap Laba Perusahaan Asuransi Umum Di Indonesia Tahun 2012-2016." Universitas Islam Negeri Sultan Syarif Kasim Riau.

Yan, Tan Choon, Paul Schulte, and David LEE Kuo Chuen. 2018. "InsurTech and FinTech: Banking and Insurance Enablement." Pp. 249–81 in *Handbook of Blockchain, Digital Finance, and Inclusion, Volume 1*. Elsevier.

Yulianto, Zainal. 2018. "Analisis Biaya Volume Laba Untuk Perencanaan Laba Pada Perusahaan Es Batu Camplong Di Sampang." *Aktiva : Jurnal Akuntansi Dan Investasi* 3(1):76–89.