

Comparison of Solvency Levels and Claim Payment Ability of PT Asuransi Dayin Mitra Tbk and PT Asuransi Jasa Tania Tbk Amidst 2023 Economic Conditions

Erlina Waruwu¹, Dyah Palupiningtyas²

^{1,2}Department of Management, STIEPARI Semarang, Indonesia

Article Info

Article history:

Received : January 28, 2025

Revised : May 17, 2025

Accepted : June 28, 2025

Published : July 01, 2025

Keywords:

General Insurance

Solvency

Claim Ratio

Macroeconomics

Insurance

ABSTRACT

This study aims to analyze the comparison of solvency levels and claim payment abilities between two general insurance companies in Indonesia, PT Asuransi Dayin Mitra Tbk (ASDM) and PT Asuransi Jasa Tania Tbk (ASJT), considering the macroeconomic conditions in 2023. The methods used are qualitative and quantitative comparative analyses based on the audited financial statements and annual reports of both companies, as well as a review of macroeconomic data from official sources. The findings indicate that ASDM and ASJT managed to achieve positive performance despite economic challenges, with ASJT recording higher growth in premiums and net income. Both companies maintained solvency ratios above regulatory thresholds and controlled claims ratios. Business strategy adaptation, sound governance, and effective risk management contributed to these achievements. Macroeconomic factors such as inflation, interest rates, and exchange rates were found to influence the performance of both companies, with varying levels of sensitivity depending on their market segment focus. These findings provide valuable insights into the dynamics of the insurance business in Indonesia and highlight opportunities and challenges that industry stakeholders need to anticipate..

Corresponding Author:

Dyah Palupiningtyas,

Management Department, STIEPARI Semarang

Bendan Ngisor, Kecamatan Gajah Mungkur Semarang

Email: dyahpalupi@stiepari.ac.id



1. INTRODUCTION

The insurance industry is one of the key pillars of a country's economy. Insurance companies play a vital role in providing protection against financial risks that may be experienced by individuals or businesses [1]. Therefore, the financial performance of insurance companies garners significant attention from policyholders, investors, and regulators alike. Two critical indicators often used to assess the financial health of insurance companies are the solvency ratio and claims ratio. Solvency indicates the company's ability to meet its long-term obligations, while the claims ratio measures the company's ability to pay customer claims [2].

In 2023, Indonesia's economy faced numerous challenges, both domestically and globally. The ongoing impact of the Covid-19 pandemic, which began in early 2020, continued to affect various sectors, including the insurance industry. Additionally, global geopolitical uncertainty, commodity price volatility, and the risk of recession in several developed countries also influenced macroeconomic

stability and the domestic business climate [3]. Under these circumstances, it is intriguing to examine the solvency performance and claim payment ability of two major players in the national general insurance sector: PT Asuransi Dayin Mitra Tbk (ASDM) and PT Asuransi Jasa Tania Tbk (ASJT).

Based on the 2023 financial reports, several interesting phenomena can be observed from both companies. ASDM's solvency ratio decreased from 0.70 in 2022 to 0.61 in 2023. Meanwhile, ASJT's solvency ratio remained relatively stable in the range of 0.64–0.65. In terms of premium income, ASDM recorded a 9.2% increase, from IDR 1,193 billion to IDR 1,303 billion. ASJT, on the other hand, posted a higher premium growth of 15.8%, from IDR 164.7 billion to IDR 190.6 billion. Conversely, ASDM's claims expenses decreased by 16.9%, from IDR 113.6 billion to IDR 94.5 billion, while ASJT's claims expenses surged by 26.1%, from IDR 73.3 billion to IDR 92.4 billion.

These phenomena raise several questions:

What factors contribute to the differences in performance between the two companies? Are these differences due to market segment variations, business strategies, risk management, or other factors? To what extent did the macroeconomic conditions of 2023 influence each company's achievements? Answering these questions is crucial for stakeholders in the insurance industry to gain a more comprehensive understanding of competitive dynamics and future business prospects.

Previous studies have extensively examined factors influencing solvency and profitability levels of insurance companies, such as company size, product type, ownership structure, corporate governance, and macroeconomic conditions [4]; [5]; [2]; [6]. However, most of these studies employed quantitative approaches with panel data encompassing multiple companies over a specific period. Few studies have specifically compared the performance of individual companies in the same year while considering their unique characteristics and the economic context of that year. This research aims to address this gap.

Financial Performance of Insurance Companies

Insurance companies, like other business entities, aim to generate profit and maximize shareholder value. However, the nature of risk management in the insurance business creates a distinct business model compared to other industries [7]. Insurance companies collect premiums from policyholders, which are then managed and invested to pay future claims. Thus, the financial health of an insurance company is often evaluated using two key indicators: solvency and profitability [8].

Solvency refers to the ability of an insurance company to meet its long-term obligations, including paying claims. It is often measured by the ratio of capital to total assets or total risk exposure [9]. A higher solvency ratio indicates a greater capacity to absorb unexpected losses. In Indonesia, the regulator mandates a minimum solvency margin ratio of 120% [10].

Profitability reflects the ability of an insurance company to generate profit from its operations. Common indicators include the claim ratio, combined ratio, and investment yield [9]; [8]; [11]. The claim ratio is calculated by dividing total claims expenses by total premium income, indicating the proportion of premium income returned to policyholders as claims. The combined ratio measures the total claims and operating expenses against premium income, with a ratio below 100% indicating an underwriting profit.

Factors Affecting Financial Performance of Insurance Companies

Previous studies have identified various factors influencing the financial performance of insurance companies. These factors can be grouped into firm-specific characteristics and external conditions [4].

Firm-specific factors include company size, type of insurance offered, capital structure, liquidity, and corporate governance. Larger insurance companies tend to benefit from economies of scale, bargaining power, and better risk diversification [12]; [2]. General insurance typically carries higher risk and variability than life insurance, affecting its risk profile and performance [12]. Capital adequacy, measured by the equity-to-asset ratio, indicates a company's ability to absorb losses and correlates positively with profitability [2]. Companies with good liquidity can meet short-term obligations and avoid default risk [6]; [13]. Strong corporate governance, such as independent board members and the presence of audit and risk management committees, also enhances financial performance [14]; [5]. External factors involve macroeconomic variables that, while beyond the company's control, significantly affect the insurance industry. High inflation can increase claim values and reduce the real value of investments [6]. The central bank's interest rate influences investment returns, as a significant

portion of insurance funds is invested in fixed-income instruments like bonds and deposits [1]. Higher economic growth boosts demand for insurance products, positively impacting company performance [12]. Exchange rate fluctuations, particularly depreciation of the Rupiah, can increase claim values in foreign currencies for companies with international exposure [6].

Impact of Macroeconomic Conditions on the Insurance Industry

The insurance industry is closely tied to economic development. As financial intermediaries, insurance companies link surplus units (households/investors) with deficit units (businesses) through premium collection and fund allocation [15]. Collected premiums are invested in various financial instruments, contributing to real sector growth [16]. Conversely, macroeconomic conditions affect insurance business performance through several channels.

First, economic growth and per capita income are key determinants of insurance demand. Higher income levels increase disposable income available for purchasing insurance [17]; [18]. Second, inflation affects insurance profitability by raising claim costs while reducing real premium income [6]. Third, central bank interest rates significantly influence the investment income of insurance companies, as rate hikes improve returns on fixed-income instruments like bonds and deposits [1]. Fourth, exchange rate fluctuations impact insurance companies with foreign currency exposure, as Rupiah depreciation raises the cost of foreign currency claims [6].

Thus, analyzing the financial performance of insurance companies requires considering both firm-specific factors and macroeconomic variables that reflect the business environment dynamics. Understanding the relationship between macroeconomic conditions and financial indicators such as solvency and profitability can help insurance companies develop adaptive strategies to navigate external changes.

Based on the phenomena, urgency, and research gaps outlined above, this study addresses the following research questions:

- a. How do the solvency levels and claim payment abilities of PT Asuransi Dayin Mitra Tbk and PT Asuransi Jasa Tania Tbk compare in 2023? What factors account for differences or similarities in their performance?
- b. How do Indonesia's macroeconomic conditions in 2023 impact the solvency and claim payment abilities of these two companies?

By answering these questions, this research aims to provide both theoretical and practical contributions. Theoretically, it enriches the literature on risk management and the financial performance of insurance companies, particularly in the Indonesian context. Practically, the findings offer insights for company management, investors, and regulators in evaluating and formulating policies to support the sustainable growth of the insurance industry.

2. METHOD

Types and Research Approach

This study is qualitative in nature, employing a case study approach. A case study was chosen to achieve an in-depth understanding of contemporary phenomena or issues within real-life contexts [19]. Specifically, the cases studied are the financial performance of two insurance companies, PT Asuransi Dayin Mitra Tbk and PT Asuransi Jasa Tania Tbk, considering the unique business contexts of each company and the macroeconomic dynamics of Indonesia in 2023.

Data Sources

The data used in this research are secondary data, which refers to data collected by other parties and available for analysis [20]. The primary sources are the audited financial statements and annual reports of PT Asuransi Dayin Mitra Tbk and PT Asuransi Jasa Tania Tbk for the fiscal years 2023 and 2022. These reports were published on the companies' websites and the Indonesia Stock Exchange website. Supporting data include macroeconomic statistics of Indonesia, such as inflation rates, the Bank Indonesia benchmark interest rate, exchange rates, and economic growth, obtained from official publications of Statistics Indonesia (BPS) and Bank Indonesia [3].

Data Collection Technique

Data collection was conducted using a documentation study technique. A documentation study involves examining documents to gather data or information related to the research problem [21]. The documents serving as data sources in this study include financial statements, annual reports, and the economic statistics publications mentioned in the data sources section. Data collection was conducted using a documentation study technique. A documentation study involves examining documents to gather data or information related to the research problem [21]. The documents serving as data sources

in this study include financial statements, annual reports, and the economic statistics publications mentioned in the data sources section.

Data Analysis Technique

The collected data were analyzed using the following techniques:

- Financial Ratio Analysis. The financial statements of both companies were analyzed by calculating relevant financial ratios, particularly the solvency ratio and claims ratio. The solvency ratio was calculated by dividing total equity by total assets, and the claims ratio by dividing claim expenses by net premium income. The calculated ratios were then interpreted and compared against regulatory requirements and industry averages.
- Qualitative Comparison. The annual reports of both companies were thoroughly reviewed to obtain qualitative information such as company risk profiles, ownership structures, governance practices, risk management implementation, and responses to macroeconomic dynamics. This information was then compared to identify similarities and differences between the companies.
- Quantitative Comparison. Key financial performance indicators, such as premium growth, underwriting results, and net profit, were quantitatively compared across companies and time periods (2022 vs. 2023). Descriptive statistical techniques, such as percentages, were used to clarify performance trends and changes.
- Descriptive Analysis. Indonesian macroeconomic data were analyzed descriptively to provide an overview of trends and dynamics in macroeconomic variables such as inflation, interest rates, exchange rates, and GDP growth in 2023. The results were then linked to the performance of the two companies using relevant theoretical frameworks.

Research Procedure

This research followed a systematic procedure as follows:

- Identifying and formulating the research problem.
- Collecting and reviewing relevant literature.
- Determining the research design and data collection methods.
- Collecting data from financial statements, annual reports, and economic statistics publications.
- Analyzing data using predetermined analysis techniques.
- Interpreting and discussing the analysis results.
- Drafting the research conclusions and recommendations.

The research process adhered to the principles of scientific integrity and academic ethics, including avoiding plagiarism, ensuring data accuracy, and presenting research results objectively and fairly.

3. RESULT AND ANALISIS (10 PT)

Financial Ratio Analysis

Based on the financial statements of PT Asuransi Dayin Mitra Tbk (ASDM) and PT Asuransi Jasa Tania Tbk (ASJT), the results of the solvency and claims ratios for both companies for the years 2023 and 2022 are presented below.

a. Solvency Ratio:

ASDM: 0.61 (2023) and 0.70 (2022)

ASJT: 0.65 (2023) and 0.64 (2022)

The solvency ratio of ASDM decreased from 0.70 in 2022 to 0.61 in 2023. However, this ratio still exceeds the minimum OJK requirement of 120% (equivalent to a ratio of 0.55). Meanwhile, ASJT's solvency ratio remained relatively stable at around 0.64-0.65 during the same period. Both companies can be considered to have sufficient capacity to meet their long-term obligations.

b. Claims Ratio:

ASDM: 60,54% (2023) and 87,44% (2022)

ASJT: 70,94% (2023) and 69,55% (2022)

The claims ratio of ASDM improved from 87.44% in 2022 to 60.54% in 2023, indicating a decrease in the proportion of net premiums paid as claims. On the other hand, ASJT's claims ratio slightly increased from 69.55% to 70.94%, reflecting a higher claims burden in 2023. However, overall, the claims ratios for both companies are still within reasonable limits and do not exceed 100%, which would indicate underwriting losses.

c. Qualitative Comparison

From the annual reports, several similarities and differences between ASDM and ASJT in qualitative terms can be observed. Both operate in the general insurance business with diversified portfolios, ranging from property insurance, motor vehicles, to transportation. However, ASDM has a larger share of its business in the corporate segment, while ASJT focuses more on serving the retail and SME segments.

In terms of governance and risk management, both companies have adequate organizational structures, including audit and risk monitoring committees. The proportion of independent commissioners has also met the minimum requirement of 30%. Nevertheless, ASDM's annual report provides relatively more detailed information on the implementation of risk management and internal control systems.

Regarding ownership structure, ASDM is predominantly owned by PT Equity Development Investment Tbk, a parent company engaged in the financial services sector. Meanwhile, ASJT's shares are mainly held by PT Paninvest Tbk, which is also active in the insurance and financial industries. Both companies are listed on the Indonesia Stock Exchange, with public ownership of 23.65% (ASDM) and 43.33% (ASJT).

In response to Indonesia's challenging economic conditions in 2023, both ASDM and ASJT have implemented strategic measures. ASDM focuses on improving services and developing products for the corporate segment, while enhancing operational efficiency through digitalization. Meanwhile, ASJT intensifies its penetration into the retail and SME segments through digital distribution channels and partnerships with financial technology (fintech) companies.

d. Quantitative Comparison

Quantitatively, there are some significant differences in the performance of ASDM and ASJT. In 2023, ASDM's gross premium grew by 9.24%, reaching IDR 1.30 trillion, compared to IDR 1.19 trillion in 2022. ASJT recorded a higher premium growth of 15.76%, from IDR 164.69 billion to IDR 190.65 billion.

However, in terms of underwriting results, ASDM showed improvement with a decrease in the combined ratio from 96.25% to 91.22%, driven by a reduction in the claims ratio. On the other hand, ASJT's combined ratio slightly increased from 82.17% to 83.94%, due to higher claims expenses. Nevertheless, both companies still recorded positive underwriting profits.

In terms of profitability, ASDM's net income grew by 13.40%, from IDR 18.55 billion to IDR 21.04 billion. Meanwhile, ASJT achieved a remarkable net income growth of 598.86%, from IDR 574 million to IDR 4.02 billion. The surge in ASJT's profit was mainly due to the increase in net premiums, investment income, and a proportional decrease in claims expenses.

e. Macroeconomic Conditions

The year 2023 remained a challenging year for Indonesia's economy. According to data from the Central Statistics Agency (BPS), Indonesia's economic growth in 2023 was recorded at 4.85%, slightly lower than the 2022 achievement of 5.03%. This slowdown was mainly due to the weakening global economy, which impacted export performance.

In terms of inflation, BPS reported an annual inflation rate of 3.61% at the end of 2023, higher than the 3.03% in 2022. Rising food prices and energy tariffs were the main contributors to inflation. To control inflation, Bank Indonesia (BI) gradually raised the BI 7-Day Reverse Repo Rate to 5.50% by the end of the year. This policy affected the increase in interest rates on loans and deposits.

The exchange rate of the Rupiah experienced a slight depreciation against the US dollar, with an average exchange rate of IDR 15,235 per USD in 2023, compared to IDR 14,815 in 2022. This depreciation was caused by the global strengthening of the US dollar amidst the normalization policies of the Federal Reserve and recession concerns in developed countries.

These macroeconomic conditions have had a considerable impact on the insurance industry. Higher inflation increased the value of claims, particularly for property and motor vehicle insurance. Rising interest rates contributed to better investment returns, given the dominance of fixed-income instruments in the insurance portfolio. On the other hand, the Rupiah's depreciation could increase foreign-currency-denominated claims. Nevertheless, the general insurance industry as a whole was still able to achieve single-digit growth, driven by retail and corporate premiums.

f. Synthesis

Based on the financial ratio analysis, qualitative and quantitative comparisons, and considering the macroeconomic conditions, it can be concluded that ASDM and ASJT have demonstrated relatively strong performance in 2023 despite facing various challenges. Both companies recorded growth in gross premiums and net income, with ASJT showing higher growth.

In terms of solvency, both ASDM and ASJT are in solid positions, with solvency ratios above the regulatory requirements. Their ability to pay claims is also maintained, as evidenced by claims ratios below 100%. The adaptation of business strategies, such as product development, digitalization, and expansion into new market segments, appears to have effectively driven growth amidst the slowing economy.

However, ASDM and ASJT need to continue monitoring macroeconomic dynamics moving forward. The potential increase in inflation and interest rates may raise claims values and financial burdens. The Rupiah's depreciation also needs to be mitigated through prudent foreign exchange risk management. Additionally, both companies must continue to improve operational efficiency, strengthen governance and risk management, and optimize investment strategies to sustain profitability.

Overall, this study indicates that the performance of insurance companies is not only determined by internal factors such as business strategies and risk management but is also influenced by macroeconomic dynamics. The ability of companies to adapt to changes in the business environment is crucial for maintaining sustainable growth and profitability. These findings are expected to provide valuable insights for stakeholders in the insurance industry to understand and respond to the challenging business dynamics.

4. DISCUSSION/CONCLUSION

The research findings indicate that PT Asuransi Dayin Mitra Tbk (ASDM) and PT Asuransi Jasa Tania Tbk (ASJT) were able to achieve relatively strong performance in 2023 despite facing various macroeconomic challenges. Both companies recorded growth in gross premiums and net income, with ASJT demonstrating higher growth. These findings are consistent with the argument by Lee et al. (2018)[16], that insurance companies can continue to grow in unfavorable economic conditions through appropriate business strategy adaptations.

From a solvency perspective, both companies are in a solid position, with solvency ratios above the regulatory threshold. This confirms the importance of strong capital as a buffer against risk, as emphasized by Mwangi & Murigu (2015)[2]. Both companies also maintained their ability to pay claims, as evidenced by claims ratios below 100%. However, the difference in the market segments served—corporate for ASDM and retail for ASJT—seems to contribute to the differing claims ratios, in line with the findings of Alhassan & Biekpe (2016)[12].

From the governance and risk management aspects, ASDM and ASJT both have adequate structures that meet regulatory requirements. However, differences in the level of information disclosure in their annual reports indicate variations in governance practices, which could impact investor perception and stakeholder confidence, as suggested by Dewi & Mahfudz (2017)[14]. Moving forward, enhancing transparency and reporting quality should be continually promoted.

In response to challenging economic conditions, ASDM and ASJT adopted slightly different strategies. ASDM focused on consolidating its corporate business through product differentiation and efficiency improvements, while ASJT aggressively targeted the retail segment through digital distribution expansion. This approach reflects both companies' efforts to maximize their competitive advantages in line with their target market characteristics, consistent with the views of Alomari & Azzam (2017)[4].

However, macroeconomic factors such as inflation, interest rates, and exchange rates have proven to affect the performance of ASDM and ASJT to varying degrees. The rise in inflation could potentially increase claims, especially in the retail segment, which is the focus of ASJT. On the other hand, rising interest rates positively impacted investment returns, which significantly contributed to ASDM's profitability. These findings confirm the complexity of the interaction between micro and macro factors in determining insurance company performance, in line with the proposition of Suvvari et al. (2019)[6].

The implications of these findings for company management highlight the need to strengthen a holistic and dynamic risk management system. In addition to underwriting and market risks inherent in the insurance business, management must also anticipate systemic risks arising from economic and financial volatility. The development of stress testing models and scenario analysis can help companies assess their resilience in various extreme conditions.

For investors, this research emphasizes the importance of considering not only a company's fundamental factors but also the macroeconomic context when evaluating investment prospects in the insurance sector. Meanwhile, for customers, the positive performance of ASDM and ASJT can increase confidence in the companies' ability to meet claim obligations. However, customers should still be prudent in choosing products that match their risk profiles.

From a regulatory perspective, the solid performance of ASDM and ASJT amidst economic challenges indicates the effectiveness of the existing regulatory and supervisory framework. However, authorities must continue to calibrate policies to balance system stability and industry growth. Initiatives such as strengthening capitalization, product standardization, and improving financial literacy are expected to enhance the resilience and contribution of the insurance sector to the economy.

While providing empirical contributions, this study is not without limitations. First, the scope, which covers only two companies in a single year of observation, may not fully represent the dynamics of the general insurance industry. Second, the analysis focuses only on two key indicators (solvency ratio and claims ratio), thus not capturing the overall complexity of financial performance. Third, the qualitative comparison method based on annual reports may contain confirmation bias due to the self-reported nature of the reporting.

Therefore, future research could explore several potential areas. Expanding the sample size, both in terms of the number of companies and the observation period, could provide a more representative view of industry performance and trends. Including other financial indicators such as return on assets, return on equity, or risk-based capital would also enrich the analysis. From a methodological perspective, applying quantitative approaches with more advanced statistical tools could strengthen the inferential power of the findings.

Conclusion

This study provides empirical evidence regarding the performance of PT Asuransi Dayin Mitra Tbk (ASDM) and PT Asuransi Jasa Tania Tbk (ASJT) in 2023, considering macroeconomic factors. The results indicate that both companies were able to record positive growth despite facing challenges such as economic slowdown, inflation, and exchange rate depreciation. This achievement was supported by their ability to adapt business strategies, solid capital strength, and the implementation of adequate governance and risk management practices.

The comparative analysis reveals several similarities and differences between the two companies. ASDM excels in penetrating the corporate segment, while ASJT is more aggressive in targeting the retail market. These differences in market segment characteristics also influence the dynamics of claims ratios and each company's risk profile. On the other hand, superior investment performance significantly contributed to ASDM's profitability.

Overall, this study enriches the literature on the determinants of insurance companies' financial performance by offering a more contextual perspective. The findings not only confirm the relevance of previous theories and empirical results but also provide specific nuances regarding the companies' strategic responses to the dynamics of the business environment. However, the limitations of this study open the door for future research to explore this topic with a broader scope and more sophisticated approaches.

For stakeholders, the findings of this study can serve as a reference in formulating policies and making strategic decisions. For company management, the study highlights the importance of enhancing risk management capabilities, strengthening capital, and optimizing business portfolios in line with market dynamics. For investors, the positive performance of both companies may signal promising investment prospects, while still considering their respective risk profiles. As for regulators, the solid performance of the industry indicates the urgency of balancing regulatory tightening with growth incentives.

Ultimately, this research is expected to contribute to a more comprehensive understanding of the dynamics of the insurance business in Indonesia. By considering both micro and macro factors integratively, stakeholders can develop more anticipatory and accommodative policies in response to changes in the business environment. Only through close collaboration among industry players,

regulators, and academics can the national insurance industry realize its role as a pillar of economic stability and the well-being of society optimally.

REFERENCES

- [1] O. J. Keuangan, "Perasuransian Indonesia: Satu dekade Otoritas Jasa Keuangan," *Otoritas Jasa Keuangan*, 2020. [Online]. Available: <https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/Perasuransian-Indonesia-2020/Perasuransian-Indonesia-2020.pdf>
- [2] M. Mwangi and J. . Murigu, "The determinants of financial performance in general insurance companies in Kenya," *Eur. Sci. J.*, vol. 11, no. 1, pp. 288–297, 2015.
- [3] B. Indonesia, "Tinjauan kebijakan moneter Maret 2023," 2023. [Online]. Available: <https://www.bi.go.id/id/publikasi/laporan/Pages/Tinjauan-Kebijakan-Moneter-Maret-2023.aspx>
- [4] M. Alomari and I. Azzam, "Effect of the micro and macro factors on the performance of the listed Jordanian insurance companies," *Int. J. Bus. Soc. Sci.*, vol. 8, no. 2, pp. 66–73, 2017.
- [5] X. Hu and J. Yu, "Managerial ownership and firm performance: Evidence from the insurance industry in China," *J. Appl. Bus. Res.*, vol. 31, no. 1, pp. 301–308, 2015, [Online]. Available: <https://doi.org/10.19030/jabr.v31i1.9004>
- [6] A. S. V Suvvari, R. D. Narasimha, and S. R. S. Babu, "Financial performance assessment of non-life insurance companies: An empirical study," *Int. J. Recent Technol. Eng.*, vol. 8, no. 3, pp. 4107–4112, 2019, [Online]. Available: <https://doi.org/10.35940/ijrte.c5819.098319>
- [7] J. D. Cummins and M. A. Weiss, "Analyzing firm performance in the insurance industry using frontier efficiency and productivity methods. In G. Dionne (Ed.), *Handbook of insurance* (pp. 795–861)," *Springer New York*, 2013, [Online]. Available: https://doi.org/10.1007/978-1-4614-0155-1_28
- [8] H. Malik, "Determinants of insurance companies profitability: An analysis of insurance sector of Pakistan," *Acad. Res. Int.*, vol. 1, no. 3, p. 315, 2011.
- [9] M. Eling and R. Jia, "Business failure, efficiency, and volatility: Evidence from the European insurance industry," *Int. Rev. Financ. Anal.*, vol. 59, pp. 58–76, 2018, [Online]. Available: <https://doi.org/10.1016/j.irfa.2018.07.007>
- [10] O. J. Keuangan, "Peraturan Otoritas Jasa Keuangan Nomor 71/POJK.05/2016 tentang kesehatan keuangan perusahaan asuransi dan perusahaan reasuransi," 2017.
- [11] G. T. Hidayatulloh, D. Palupiningtyas, and T. Maryani, "Dissecting Indonesian Insurance Profitability and Efficiency: Du Pont Diagnostic Tool," *Kompak J. Ilm. Komputerisasi Akunt.*, 2024, [Online]. Available: <https://api.semanticscholar.org/CorpusID:274452876>
- [12] A. L. Alhasan and N. Biekpe, "Determinants of life insurance consumption in Africa," *Res. Int. Bus. Financ.*, vol. 37, pp. 17–27, 2016, [Online]. Available: <https://doi.org/10.1016/j.ribaf.2015.10.016>
- [13] H. Ameliana and R. Octafian, "The Financial Performance Reviewed Through Liquidity and Market Ratio," *J. Int. Multidiscip. Res.*, vol. 2, no. 5, pp. 565–571, 2024, doi: 10.62504/jimr526.
- [14] R. S. Dewi and Mahfudz, "Effect of financial ratios, firm size and cash flow operating activities on income smoothing," *Diponegoro J. Account.*, vol. 6, no. 3, pp. 1–11, 2017.
- [15] P. Haiss and K. Sümegi, "The relationship between insurance and economic growth in Europe: A theoretical and empirical analysis," *Empirica*, vol. 35, no. 4, pp. 405–431, 2008, [Online]. Available: <https://doi.org/10.1007/s10663-008-9075-2>
- [16] C. C. Lee, C. W. Lin, and J. H. Zeng, "Financial liberalization, insurance market, and the likelihood of financial crises," *J. Int. Money Financ.*, vol. 62, pp. 25–51, 2016.
- [17] S. L. Dragos, "Life and non-life insurance demand: The different effects of influence factors in emerging countries from Europe and Asia," *Econ. Res. Istraživanja*, vol. 27, no. 1, pp. 169–180, 2014, [Online]. Available: <https://doi.org/10.1080/1331677X.2014.952112>
- [18] T. Trinh, X. Nguyen, and P. Sgro, "Determinants of non-life insurance expenditure in developed and developing countries: An empirical investigation," *Appl. Econ.*, vol. 48, no. 58, pp. 5639–5653, 2016, [Online]. Available: <https://doi.org/10.1080/00036846.2016.1181834>
- [19] R. K. Yin, "Case study research and applications: Design and methods (6th ed.)," *SAGE Publ.*, 2018.
- [20] M. P. Johnston, "Secondary data analysis: A method of which the time has come," *Qual. Quant. Methods Libr.*, vol. 3, no. 3, pp. 619–626, 2017.
- [21] J. W. Creswell and J. D. Creswell, "Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)," *SAGE Publ.*, 2018.