



## The Influence of GDP and Interest Rate on the Return on Assets of Sharia Life Insurance Companies in Indonesia During the COVID-19 Pandemic

Donafeby Widyani<sup>1\*</sup> <sup>1</sup>Macquarie University, Sydney

Received: October 9, 2023

Revised: November 1, 2023

Accepted: November 29, 2023

Online: December 20, 2023

### Abstract

This paper examines the relationship between the effect of GDP and Interest Rate on the Return on Assets of Islamic insurance companies in Indonesia during the COVID-19 pandemic, using the period 2020 to 2022. Multiple linear regression is used to test the degree of relationship between macroeconomic factors and company performance. The results of the study show that GDP and Interest Rate have no significant effect on the ROA of Islamic life insurance companies in Indonesia. There are three reasons provided, the sharia insurance industry has different characteristics from other industries, the social behavior factor during the COVID-19 pandemic, and there are also other factors that affect the ROA of sharia insurance companies. The findings contribute to the operation of Islamic insurance in Indonesia for regulators, investors, and policyholders.

**Keywords:** COVID-19, Gross Domestic Product, Interest Rate, Return on Asset, Sharia Insurance

### INTRODUCTION

The majority of Indonesia's population is Muslim. Nearly 13% of the world's total Muslim population is in Indonesia, with an estimated 231 million Muslims, or 86.7% of Indonesia's population (Sukmaningrum et al, 2022). Meanwhile, Sharia financial institutions are one of the economic drivers in countries with a majority Muslim population (Mensari & Dzikra, 2017). In fact, Indonesia is also one of the countries in Asia with the highest growth in the Sharia insurance industry (Sari, 2020). This large Muslim population has implications for the increasing need for Islamic transactions. The majority Muslim population will be a large market for sharia financial institutions, both in the form of banks and non-banks. This is in line with the data on the growth of Sharia insurance assets, which has continued to grow from 2015 to 2019 (AASI, 2022).

However, the Coronavirus Disease 2019, or COVID-19 pandemic, has spread in Indonesia since March 2020, causing a negative economic growth rate (Aisy, 2021). In 2020, Sharia insurance assets have decreased. In 2015, the assets of Sharia insurance were IDR 24,638 billion and increased to IDR 44,588 billion in 2019. However, in 2020, Sharia insurance assets decreased by 6.67% to 41,613 billion Rupiah (AASI, 2022). This shows that the country's economic conditions may have an impact on the profitability of insurance companies.

Profitability, as defined by Rose (1999), is a bank's net income after tax which is generally measured by the Return on Assets and Return on Equity ratios. In his research, Akotey et al. (2013) also mentioned that the profitability of insurance companies is influenced by two factors, namely the company itself (internal factor) and macroeconomics (external factors). Management needs to pay attention to the profitability of Sharia insurance companies and consider the impact of the country's macroeconomic conditions. Kanwal and Nadeem (2013) found that Gross Domestic Products has a significant positive effect on ROA, while Interest Rate has a negative relationship with ROA in financial institutions. Furthermore, Hailegebreal (2016) found that GDP has a positive

### Copyright Holder:

© Donafeby Widyani (2023)

Corresponding author's email: donafeby@gmail.com

### This Article is Licensed Under:



and significant relationship with the profitability of the insurance industry. Meanwhile, [Ismail et al \(2018\)](#) stated that GDP and Interest Rate affect the performance of insurance companies. The macroeconomic situation of the country also needs to be considered in the business practices of Sharia insurance companies, considering that internal and external factors both affect the profitability of the company. An example of an internal factor is the company's financial condition. Although internal factors are often researched by company management in determining company policy, external factors are rarely researched ([Haiss & Sumegi, 2008](#)).

### Research purposes

This study aims to examine macroeconomic factors that contribute strongly to company profitability. Therefore, this study aims to investigate the relationship between the influence of GDP and Interest Rate on the Return on Assets of Sharia insurance companies in Indonesia during the COVID-19 pandemic over the period 2020 to 2022. Insurance performance is important to study because performance reflects the results and achievements of the company and is the main concern of the company's owners and stakeholders. This research will provide education to the public about insurance, especially Sharia insurance.

### Research questions

1. Do Gross Domestic Product and Interest Rate have a relationship with the performance of Sharia insurance companies in Indonesia?
2. Do Gross Domestic Product and Interest Rate influence the performance of Sharia insurance companies in Indonesia?

## LITERATURE REVIEW

### Sharia Insurance

[Insurance Law No. 40 \(2014\)](#), which applies in Indonesia, defines Sharia insurance as "a collection of agreements; agreements between Sharia insurance companies and Sharia policyholders, and agreements between policyholders, in managing contributions based on Sharia principles for mutual help and protection. The business is run according to Islamic principles, which are free from gambling (*maisir*), uncertainty (*gharar*), or interest (*riba*).

- *Gharar* (uncertainty) – Islamic law prohibits sales that pose a risk to the buyers unless the risk is normal or reasonable. Some believe that traditional insurance policies do not eliminate uncertainty because how much, and when, a policy will pay out remains uncertain ([Chartered Insurance Institute, 2019](#)).
- *Maisir* (gambling) – Traditional insurance policies are considered a kind of gambling because some policyholders receive payouts while others do not. Gambling is prohibited under Islamic law ([Chartered Insurance Institute, 2019](#)). Gambling and uncertainty are not allowed because both can cause injustice to one or both parties involved in a transaction ([Husin & Rahman, 2016](#)).
- *Riba* (interest) – Islamic law also prohibits making money out of money, such as through interest. Wealth can only be acquired through asset trading and investment ([Chartered Insurance Institute, 2019](#)).

Sharia insurance is different from conventional insurance. The main principle of Sharia insurance is mutual sharing between insurance policyholders who avoid risks with the help of insurance companies as managers ([Hidayati, 2021](#)). Meanwhile, conventional insurance prioritizes materialistic profits with the insurance company as the manager of its business field ([Hidayati,](#)

2021).

### **Gross Domestic Product**

Gross domestic product (GDP) is the total expenditure on final goods and services produced in a country during a specific period of time (Abel et al, 2020). Four main categories of expenditure are added to obtain GDP: consumption, investment, government purchases of goods and services, and net exports of goods and services (Abel et al, 2020).

In symbols,

$Y$  = GDP = total production (or output)

$C$  = consumption;

$I$  = investment;

$G$  = government purchases of goods and services;

$NX$  = net exports of goods and services

With these symbols, the expenditure approach to measuring GDP is as follows

$$Y = C + I + G + NX$$

### **Interest Rate**

The interest rate is the return requested to represent the cost of money (Gitman & Zutter, 2014). The interest rate is the compensation expected by the supplier of funds that must be fulfilled (Gitman & Zutter, 2014). Interest rates are usually applied to debt instruments such as bank loans or bonds. From the borrower's perspective, the interest rate can also be defined as the compensation paid by the borrower of funds to the lender (Gitman & Zutter, 2014).

### **ROA**

Return on total assets (ROA) is used to measure the overall effectiveness of management in generating profits with available assets (Gitman & Zutter, 2014). The higher the company's return on total assets, the better it is (Gitman & Zutter, 2014). The formula is as follows:

$$ROA = \frac{\text{Income Available to Shareholders}}{\text{Total Assets}}$$

### **Research Hypotheses**

H1: There is a significant relationship between Gross Domestic Product and the performance of Sharia insurance companies in Indonesia.

H2: There is a significant relationship between Interest Rates and the performance of Sharia insurance companies in Indonesia.

H3: There is a significant influence of Gross Domestic Product on the performance of Sharia insurance companies in Indonesia.

H4: There is a significant influence of Interest Rates on the performance of Sharia insurance companies in Indonesia.

## **METHODOLOGY**

### **Research Sample**

This study investigates the influence of GDP and Interest Rates on the Return on Assets of

---

Sharia insurance companies in Indonesia during the COVID-19 pandemic. The sample of this study is 21 Sharia insurance companies registered with the Financial Services Authority (OJK) by utilizing their annual reports published through each company's official website in 2020-2022. Relevant financial data for this study were obtained from the annual financial statements published through each company's official website. This study uses a purposive sampling approach, where data samples are taken according to several predetermined criteria.

### Research Design

This study uses a quantitative research method with a correlational approach because the data is presented in the form of numbers. The data includes cross-sectional data for statistical analysis to explore the relationship between GDP and Interest Rates on the Return on Assets.

### Research Measurement Tools

In this study, macroeconomic variables are represented by Gross Domestic Product (GDP) and Interest Rate (IR). Meanwhile, company performance is represented by Return on Assets (ROA). ROA measures the profit earned per dollar of assets and reflects how well insurance management uses the insurance company's real investment resources to generate profits (Lee, 2014).

### Research Instruments

Pearson correlation coefficient and regression analysis are conducted to measure the relationship between variables. The results are then processed using IBM SPSS Statistics 25.

### Research Procedures

This study consists of 3 stages. The first stage is collecting financial statements from 24 life insurance companies with Sharia business units registered with the Financial Services Authority (OJK). Of the 24 companies, only 21 companies have complete data. Financial statements consisting of net profit and total assets are then calculated using ROA. Meanwhile, macroeconomic variables are calculated using GDP and IR. The second stage is analyzing using regression. The third stage is compiling the research results.

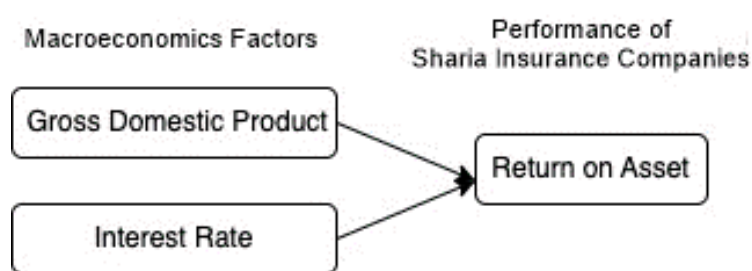


Figure 1. Research variables

## FINDINGS AND DISCUSSION

### Findings

Table 1. Pearson correlation results for ROA

Variable	Pearson coefficient correlation	p-value
Gross Domestic Product	0.037	0.775

---

Interest Rate	0.148	0.247
---------------	-------	-------

---

The relationship between variables can be seen from the Pearson coefficient correlation value. The correlation coefficient is a statistical measurement of covariance or association between two variables whose magnitude ranges from -1 to +1. If the correlation coefficient value is closer to 1, the relationship between variables is very strong. On the other hand, if the correlation coefficient value moves away from 1, the relationship between the variables is very low. A detailed interpretation of the correlation coefficient value can be seen in the table below.

**Table 2.** Interpretation of Pearson correlation coefficient

Pearson coefficient correlation	Level
0.00-0.199	Very Weak
0.20-0.399	Weak
0.40-0.599	Moderate
0.60-0.799	Strong
0.80-1	Very Strong

Based on Table 1, the correlation coefficient is 0.037, meaning that the level of relationship (correlation) between the GDP variable and ROA is 0.037 or falls into the very low criteria. In addition, based on the p-value of  $0.775 > 0.05$ , the relationship between GDP and ROA is also not significant.

Meanwhile, the correlation coefficient between the Interest Rate variable and ROA is 0.148, meaning that the level of relationship (correlation) between the Interest Rate variable and ROA is 0.148 or falls into the very low criteria. In addition, in the relationship between the two variables, a significance value of 0.247 is obtained, the value is  $> 0.05$ . Therefore, the relationship between GDP and ROA is also not significant.

**Table 3.** R&F test results

Measurement	Value
R <sup>2</sup>	0.030
F Statistic	0.916
P-Value	0.406

Hypothesis testing is used to determine whether the independent variable influences the dependent variable, either partially or simultaneously, as well as how much influence the independent variable has in the regression model. This study uses multiple linear regression analysis tests to predict how much GDP and Interest Rate influence ROA. The results of the hypothesis test are divided into two, namely, the coefficient of determination with R Square and the simultaneous test using f. The following are the results of hypothesis testing.

Based on the results of the coefficient of determination test above, the R<sup>2</sup> (R-Square) value of the regression model is used to determine the ability of the independent variable to explain the dependent variable. Based on the table above, it is known that the value of R<sup>2</sup> is 0.030. This means that 3% of the variation of the ROA's dependent variable can be explained by the variations of the

two independent variables, namely GDP and Interest Rate. Meanwhile, the remainder (100% - 3% = 97%) is influenced by other variables outside this study. At the sig. value, the result of 0.406 is obtained, and the value is > 0.05, which means that simultaneously the GDP and Interest Rate variables do not affect ROA.

**Table 4.** T test results

Variable	B	Std. Error	t-statistics	Sig.
(Constant)	-18.821	21.168	-.889	.377
Gross Domestic Product	0.0000001087	.000	.691	.492
Interest Rate	2.482	1.877	1.322	.191

Based on the T-Test results above, the following regression model is obtained:

$$Y = -18.821 + 0.000000187X_1 + 2.482X_2$$

Where:

Y = ROA

X1 = GDP

X2 = Interest Rate

Based on the multiple linear regression model above, the following information is obtained.

1. The constant is -18.821, which means that if there is no change in the value of the independent variable (GDP and Interest Rate), then the dependent variable (ROA) value is -18.821.
2. The regression coefficient on the GDP variable (X1) is 0.000000187 and positive, meaning that if the GDP variable increases by 1 point significantly and the other independent variables are constant, the GDP variable will increase the value of the ROA variable by 0.000000187. At GDP, the sig. value of 0.492 is obtained, the value is > 0.05, thus it can be decided that GDP has no significant effect on ROA.
3. The regression coefficient on the Interest Rate variable (X2) is 2.482 and positive, meaning that if the Interest Rate variable increases by 1 point significantly, and the other independent variables are constant, the Interest Rate variable will increase the value of the ROA variable by 2.482. At the Interest Rate, the sig. value of 0.191 is obtained, the value is > 0.05, thus it can be decided that the Interest Rate has no significant effect on ROA.

**Table 5.** Summary of the hypothesis analysis

Hypotheses	Findings	Conclusion
H1: There is a relationship between Gross Domestic Product and the performance of Sharia insurance companies in Indonesia.	The correlation coefficient is 0.037 and the p-value is 0.775	H1 is rejected
H2: There is a relationship between Interest Rates and the performance of Sharia insurance companies in Indonesia.	The correlation coefficient is 0.148 and the p-value is 0.247	H2 is rejected

---

H3: Gross Domestic Product influences the performance of Sharia insurance companies in Indonesia	The sig. value is 0.492	H3 is rejected
H4: Interest Rate influences the performance of Sharia insurance companies in Indonesia	The sig. value is 0.191	H4 is rejected

---

### Discussion

Based on the Pearson correlation and regression statistical tests, it is found that GDP and Interest Rate do not have a significant relationship and influence on the performance of Sharia insurance companies in Indonesia. Therefore, the four hypotheses in this study are rejected. Therefore, the ROA of Sharia insurance companies is influenced by factors other than GDP and Interest Rate. These results contrast with research results found by [Ismail et al. \(2018\)](#) and [Hasan et al \(2018\)](#). However, considering that both studies were conducted on conventional insurance companies, differences in characteristics and other features between conventional and Sharia insurance companies may play a role.

Referring to this possibility, five analytical results can justify the insignificant relationship and influence of GDP and Interest Rate on the performance of Sharia insurance companies in Indonesia with ROA as an indicator. First, the Sharia insurance industry has different characteristics from other industries. The ROA of Sharia insurance companies may be more influenced by specific internal factors such as Sharia risk management, compliance with Sharia principles, and operational efficiency of the company ([Akhter & Khan, 2017](#)). These factors may have a greater impact on ROA than GDP or interest rates.

Second, Sharia insurance companies operate by Sharia principles that prohibit *riba* (interest), *gharar* (excessive uncertainty), and *maysir* (gambling) ([Akhter et al., 2017](#)). Therefore, conventional interest rates or economic fluctuations reflected in GDP may not have a significant influence on the ROA of Sharia insurance companies. The ROA of Sharia insurance companies is more influenced by the quality of investments that comply with Sharia principles and good Sharia risk management.

Third, Sharia insurance products have different features and mechanisms from conventional insurance products. For example, Sharia insurance can involve *tabarru'* (donation) and *takaful* (mutual assistance contract) which can affect the arrangement of profits (surplus) and claims (deficit) ([Saeed et al., 2020](#)). In this context, the relationship between GDP or Interest Rate and ROA of Sharia insurance companies may be indirect or insignificant due to specific factors associated with Sharia insurance mechanisms.

Fourth, Sharia insurance companies often have businesses involving various types of Sharia insurance products such as Sharia life insurance, general insurance, or Sharia reinsurance. Each type of Sharia insurance product may have different factors affecting ROA. Therefore, the overall influence of GDP and Interest Rate on the ROA of Sharia insurance companies can be offset by portfolio diversification involving various Sharia insurance products.

Fifth, in the last year of this study, 2020-2021, a health crisis due to the COVID-19 pandemic occurred. This had an impact on economic conditions in Indonesia. Therefore, people prefer to withhold their income to fulfill their daily needs rather than to buy insurance.

### CONCLUSION

Based on the Pearson correlation and multiple regression tests, it is found that GDP and

Interest Rate do not have a significant relationship and influence on the performance of Sharia insurance companies in Indonesia with ROA as an indicator. These results contrast with research results found by [Ismail et al. \(2018\)](#) and [Hasan et al \(2018\)](#). However, considering that both studies were conducted on conventional insurance companies, it is possible that differences in characteristics and other features between conventional and Sharia insurance companies play a role. However, the results of this study are in line with research by [Faoziyyah and Laila \(2020\)](#) which found that the increase or decrease in GDP has no significant effect on the ROA value of general and Sharia insurance companies in Indonesia. Furthermore, [Lee \(2014\)](#) also mentioned that macroeconomic variables such as GDP have no significant effect on the profitability of insurance companies, especially in the property and liability unit.

This research has several limitations. First, this study only uses 21 Sharia life insurance companies that are registered with the Financial Services Authority and publish annual reports. The use of a larger coverage such as involving Sharia general insurance companies will provide a more comprehensive picture of the relationship between GDP, interest rates, and the performance of Sharia insurance companies. In addition, this study only uses GDP and interest rates as macroeconomic variables. Including other variables such as inflation, stock market index, and sectoral factors can provide a more complete understanding of the factors that influence the performance of Sharia insurance companies. This study also does not consider external factors such as political conditions, government regulations, and fiscal and monetary policies. It is recommended that other researchers expand the sample by using data from various sources, using more comprehensive variables, and considering external factors in the analysis. In addition, researchers can conduct a more in-depth analysis of the internal factors that influence the performance of Sharia insurance companies and conduct direct comparisons between Sharia and conventional insurance companies to gain deeper insights into the influence of macroeconomic factors on the performance of both.

## REFERENCES

- AASI. (2022). *Publikasi data perkembangan asuransi syariah*. Asosiasi Asuransi Syariah Indonesia. <https://aasi.or.id/id/data-industri>
- Abel, A. B., Bernanke, B. S., & Croushore, D. (2008). *Macroeconomics*. Pearson
- Aisy, D. R. (2021). Optimizing Tabarru'Funds in Sharia Insurance by Digital Donation-Based Crowdfunding. *International Journal of Emerging Issues in Islamic Studies*, 1(2), 40-46. <https://doi.org/10.31098/ijeis.v1i2.712>
- Akhter, W., & Khan, S. U. (2017). Determinants of Takāful and conventional insurance demand: A regional analysis. *Cogent Economics & Finance*, 5(1), 1291150. <https://doi.org/10.1080/23322039.2017.1291150>.
- Akhter, W., Pappas, V., & Khan, S. U. (2017). A comparison of Islamic and conventional insurance demand: Worldwide evidence during the Global Financial Crisis. *Research in International Business and Finance*, 42, 1401-1412. <https://doi.org/10.1016/j.ribaf.2017.07.079>.
- Akotey, J. O., Sackey, F. G., Amoah, L., & Manson, R. F. (2013). The financial performance of life insurance companies In Ghana. *The Journal of Risk Finance*, 14(3), 286-302. <https://doi.org/10.1108/JRF-11-2012-0081>
- Badan Pusat Statistik (2022). *BI Rate*. <https://www.bps.go.id/indicator/13/379/2/bi-rate.html>
- Chartered Insurance Institute (2019). *Insurance business and finance*. Great Britain: UK
- Faoziyyah, A. A., & Laila, N. (2020). Faktor Internal Dan Faktor Makroekonomi Yang Mempengaruhi Profitabilitas Asuransi Syariah di Indonesia Periode 2016-2018. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 7(6), 1146. <https://doi.org/10.20473/vol7iss20206pp1146-1163>



- 
- Gitman, L. J. & Zutter, C. J. (2014). *Principles of Managerial Finance*. Pearson.
- Hailegebreal, D. (2016). Macroeconomic and firm specific determinants of profitability of insurance industry in Ethiopia. *Global Journal of Management and Business Research*, 16(7).
- Haiss, P. & Sümegi, K. (2008). The relationship between insurance and economic growth in Europe: A theoretical and empirical analysis. *Empirica*, 35(4), 405-431. [https://doi.org/10.1016/S2212-5671\(14\)00085-9](https://doi.org/10.1016/S2212-5671(14)00085-9)
- Hasan, M. B., Islam, S. N., & Wahid, A. N. (2018). The effect of macroeconomic variables on the performance of non-life insurance companies in Bangladesh. *Indian Economic Review*, 53, 369-383.
- Hidayati, N. K., Setyowati, R. F., & Mulyani, M. (2021). Hybrid Contract in Sharia Insurance Practices in Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 7(3), 1384-1399.
- Husin, M., Ismail, N., & Ab Rahman, A. (2016). The roles of mass media, word of mouth, and subjective norm in family takaful purchase intention. *Journal of Islamic Marketing*, 7(1), 59-73. <https://doi.org/10.1108/JIMA-03-2015-0020/>
- Insurance Law of Indonesia No. 40 (2018). [https://www.ojk.go.id/Files/201506/1UU402014Perasuransian\\_1433758676.pdf](https://www.ojk.go.id/Files/201506/1UU402014Perasuransian_1433758676.pdf)
- Ismail, N., Ishak, I., Manaf, N. A., & Husin, M. M. (2018). Macroeconomic factors affecting performance of insurance companies in Malaysia. *Academy of Accounting and Financial Studies Journal*, 22, 1-5.
- Kanwal, S. & Nadeem, M. (2013). The impact of macroeconomic variables on the profitability of listed commercial banks in Pakistan. *European Journal of Business and Social Sciences*, 2(9), 186-201.
- Ministry of Internal Affairs. (2022). *Produk Domestik Bruto*. <https://satudata.kemendag.go.id/data-informasi/perdagangan-dalam-negeri/produk-domestik-bruto>
- Lee, C. Y. (2014). The effects of firm specific factors and macroeconomics on profitability of property-liability insurance industry in Taiwan. *Asian Economic and Financial Review*, 4(5), 681-691.
- Mensari, R. D., & Dzikra, A. (2017). Islam dan Lembaga Keuangan Syariah. *Journal of Chemical Information and Modeling*, 3(1), 239-256. <http://dx.doi.org/10.29300/aij.v3i2.1577>
- Rose, P. (1999). *Commercial bank management*. U.S: McGraw-Hill International.
- Saeed, M., Izzeldin, M., Hassan, M. K., & Pappas, V. (2020). The inter-temporal relationship between risk, capital, and efficiency: The case of Islamic and conventional banks. *Pacific-Basin Finance Journal*, 62, 101328. <https://doi.org/10.1016/j.pacfin.2020.101328>
- Sari, W. P. (2020). Asset Growth on Sharia Insurance. *Britain International of Humanities and Social Sciences (BloHS) Journal*, 2(1), 172-178.
- Sukmaningrum, P. S., Hendratmi, A., Putri, M. R., & Gusti, R. P. (2023). Determinants of sharia life insurance productivity in Indonesia. *Heliyon*, 9(6), e16605. <https://doi.org/10.1016/j.heliyon.2023.e16605>.
-

## APPENDIX A.

**Table A1.** ROA of Sharia Insurance Companies in Indonesia 2020-2022 (in millions of rupiah)

No	Company Name	2020	2021	2022
		ROA	ROA	ROA
1	PT. Takaful Keluarga	58%	101%	15%
2	PT. Prudential Life Assurance	486%	60%	583%
3	PT. Asuransi Allianz Life Indonesia	773%	689%	730%
4	PT. Asuransi Jiwa Sinar Mas MSIG	1339%	701%	808%
5	PT. BNI Life Insurance	65%	1049%	1508%
6	PT. AXA Mandiri Financial Services	-308%	-1395%	-601%
7	PT. Asuransi Jiwa Manulife Indonesia	614%	260%	401%
8	PT. Panin Dai-Ichi Life	584%	575%	557%
9	PT. AIA Financial	474%	187%	547%
10	PT. Avrist Anssurance	224%	41%	115%
11	PT. AXA Financial Indonesia	743%	-140%	-89%
12	PT. Asuransi Jiwa Central Asia Raya	242%	64%	417%
13	PT Asuransi Jiwa Amanahjiwa Giri Artha	45%	53%	99%
14	PT Asuransi Jiwa Syariah Jasa Mitra Abadi	2%	44%	51%
15	PT Capital Life Syariah	61%	48%	65%
16	PT Asuransi Jiwa Astra	355%	148%	330%
17	PT Asuransi Simas Jiwa	60%	35%	73%
18	PT BNI Life Insurance	1350%	5%	1496%
19	PT Great Eastern Life Indonesia	29%	229%	68%
20	PT Tokio Marine Life Insurance Indonesia	248%	214%	174%
21	PT Sun Life Financial Indonesia	191%	1247%	718%

**Table A2.** GDP dan Interest Rate Indonesia

No	Year	GDP	Interest Rate
1	2020	10722999	3.92
2	2021	11120077	3.52
3	2022	11710397	4.00

\*in billions of rupiah

Source: [Ministry of Internal Affairs \(2022\)](#)

**Table A3.** Net Profit and Total Assets of Sharia Insurance Companies in Indonesia 2020-2022  
(in millions of rupiah)

No	Company's name	2020			2021			2022		
		Net Profit	Total Asset	ROA	Net Profit	Total Asset	ROA	Net Profit	Total Asset	ROA
1	PT. Takaful Keluarga	10640	1821015	58%	18403	1826782	101%	2754	1844693	15%
2	PT. Prudential Life Assurance	439409	9046944	486%	606	101008	60%	39037	6700834	583%
3	PT. Asuransi Allianz Life Indonesia	313855	4062166	773%	280825	4078242	689%	31051	4255489	730%
4	PT. Asuransi Jiwa Sinar Mas MSIG	73176	546328	1339%	43155	616052	701%	57095	707044	808%
5	PT. BNI Life Insurance	127797	19554526	65%	105080	1001350	1049%	18075	1198311	1508
6	PT. AXA Mandiri Financial Services	-44351	1438489	-308%	-176737	1267042	-1395%	-71661	1192353	-601%
7	PT. Asuransi Jiwa Manulife Indonesia	65681	1069809	614%	25287	970725	260%	42322	1056015	401%
8	PT. Panin Dai-Ichi Life	12046	206121	584%	12761	221911	575%	12261	220307	557%
9	PT. AIA Financial	328882	6945156	474%	64583	3453960	187%	12594	2301246	547%
10	PT. Avrist Anssurance	43054	1920402	224%	3715	897023	41%	9866	857055	115%
11	PT. AXA Financial Indonesia	12557	168908	743%	-2083	148829	-140%	-1317	147384	-89%
12	PT. Asuransi Jiwa Central Asia Raya	3807	157569	242%	1024	161208	64%	8763	210085	417%
13	PT Asuransi Jiwa Amanahjiwa Giri Artha	434	96960	45%	508	95396	53%	1115	112679	99%
14	PT Asuransi Jiwa Syariah Jasa Mitra	53	239408	2%	1283	294050	44%	1500	293113	51%

Abadi										
15	PT Capital Life Syariah	18761	3055349	61%	19337	3988679	48%	27742	4245491	65%
16	PT Asuransi Jiwa Astra	2714	76443	355%	2396	161699	148%	6147	186225	330%
17	PT Asuransi Simas Jiwa	6076	1010421	60%	10462	2963990	35%	26905	3669551	73%
18	PT BNI Life Insurance	116889	866021	1350%	480	1001350	5%	17923	1198311	1496
19	PT Great Eastern Life Indonesia	20579	7033128	29%	1267	55241	229%	417	60928	68%
20	PT Tokio Marine Life Insurance Indonesia	1954	78815	248%	1710	79993	214%	1372	78988	174%
21	PT Sun Life Financial Indonesia	14585	764230	191%	107328	860844	1247%	76891	1070603	718%

**Table A4.** Indonesian Interest Rate 2020

Variable	BI Rate												
	2020												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yearly
BI Rate	5	4.75	4.5	4.5	4.5	4.25	4	4	4	4	3.75	3.75	4.35

Source: [BPS \(2022\)](#)**Table A5.** Indonesian Interest Rate 2021

Variable	BI Rate												
	2021												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yearly
BI Rate	3.75	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.52

Source: [BPS \(2022\)](#)

**Table A6.** Indonesian Interest Rate 2022

Variable	BI Rate												
	2022												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Yearly
BI Rate	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.75	4.25	4.75	5.25	5.5	4.00

Source: [BPS \(2022\)](#)

**APPENDIX B. SPSS**

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Y
/METHOD=ENTER X1 X2.
```

**Table B1.** Regression

<b>Regression</b>		
<b>Notes</b>		
Output Created		12-JUL-2023 08:09:56
Comments		
Input	Data	C:\TAHUN 2023\7. JULI 2023\62. CLIENT LIA RLB\input.sav
	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	63
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Y /METHOD=ENTER X1 X2.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00
	Memory Required	2896 bytes
	Additional Memory Required for	0 bytes
	Residual Plots	

**Table B2.** Variables Entered/Removed

<b>Variables Entered/Removed</b>			
Model	Variables Entered	Variables Removed	Method
1	Interest Rate, GDP <sup>b</sup>	.	Enter

a. Dependent Variable: ROA

b. All requested variables entered.

**Table B3.** Model Summary

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.172 <sup>a</sup>	.030	-.003	4.81044

a. Predictors: (Constant), Interest Rate, GDP

**Table B4.** Anova

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.387	2	21.193	.916	.406 <sup>b</sup>
	Residual	1388.420	60	23.140		
	Total	1430.807	62			

a. Dependent Variable: ROA

b. Predictors: (Constant), Interest Rate, GDP

**Table B5.** Coefficients

<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients <sup>t</sup>		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	-18.821	21.168		-.889	.377
	GDP	1.087E-6	.000	.093	.691	.492
	Interest Rate	2.482	1.877	.177	1.322	.191

a. Dependent Variable: ROA

CORRELATIONS

/VARIABLES=X1 Y

/PRINT=TWOTAIL NOSIG

/MISSING=PAIRWISE.

**Table B6.** Correlations

<b>Correlations</b>		
<b>Notes</b>		
Output Created		12-JUL-2023 08:10:02
Comments		
Input	Data	C:\TAHUN 2023\7. JULI 2023\62. CLIENT LIA RLB\input.sav
	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	63
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=X1 Y /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,01

<b>Correlations</b>			
		GDP	ROA
GDP	Pearson Correlation	1	.037
	Sig. (2-tailed)		.775
	N	63	63
ROA	Pearson Correlation	.037	1
	Sig. (2-tailed)	.775	
	N	63	63

CORRELATIONS  
/VARIABLES=X2 Y  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.



**Table B7.** SPSS Result

<b>Correlations</b>		
<b>Notes</b>		
Output Created		12-JUL-2023 08:10:12
Comments		
Input	Data	C:\TAHUN 2023\7. JULI 2023\62. CLIENT LIA RLB\input.sav
	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	63
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=X2 Y /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,01

<b>Correlations</b>			
		Interest Rate	ROA
Interest Rate	Pearson Correlation	1	.148
	Sig. (2-tailed)		.247
	N	63	63
ROA	Pearson Correlation	.148	1
	Sig. (2-tailed)	.247	
	N	63	63