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Financial Technology in Moderating Influence Firm Size, Risk-Based Capital, Current Ratio, and Premium Growth Ratio to Financial Performance (Study on Sharia Insurance Companies in Indonesia in the period 2017-2021)

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ABSTRAK
Tujuan penelitian ini adalah untuk mengetahui pengaruh pengaruh *financial technology* dalam memoderasi *firm size, risk based capital, current ratio*, dan *premium growth ratio* terhadap *financial performance* pada perusahaan asuransi syariah di Indonesia. Sampel yang digunakan dalam penelitianini 39 perusahaan asuransi syariah yang terdaftar dalam AASI periode 2017-2021. Teknik analisis data yang digunakan adalah regresi data panel. Hasil analisis yang tepat digunakan dalam penelitian ini adalah *random effect model* (REM). Hasil penelitian ini menunjukkan bahwa *firm size, risk based capital* dan *premium growth ratio* tidak berpengaruh secara signifikan terhadap ROA, sedangkankan current ratio berpengaruh secara signifikan terhadap ROA. *Financial technology* mampu memoderasi pengaruh *firm size* dan *current ratio* terhadap ROA, sedangkan *financial technology* tidak mampu memoderasi *risk based capital* dan *premium growth ratio*.

Kata kunci : teknologi keuangan, ukuran perusahaan, modal berbasis risiko, rasio lancar, rasio pertumbuhan premi, kinerja keuangan

ABSTRACT
This research aims to determine whether Financial Technology influences Firm Size, Risk-Based Capital, Current Ratio, and Premium Growth Ratio on Financial Performance in Islamic Insurance Companies in Indonesia. The sample used in this study was 39 Islamic insurance companies registered in the AASI for the 2017-2021 period. The data analysis technique used is panel data regression. The results of the appropriate analysis used in this study are the Random Effect Model (REM). The results of this study indicate that firm size, risk-based capital, and premium growth ratios do not significantly affect ROA. In contrast, the current ratio has a significant effect on ROA. Financial Technology can moderate the effect of firm Size and current Ratio on ROA, while financial technology cannot average risk-based capital and premium growth ratios.

Keywords **:** *financial technology, firm size, risk based capital, current ratio, premium growth ratio, financial performance*

INTRODUCTION

Historically, the establishment of Islamic insurance in Indonesia three years before the formation of Tafakul Indonesia and grew after the inauguration of Bank Muamalat in 1991 (Puspitasari, 2015). The development of sharia insurance in recent years in Indonesia has been quite good (Munawaroh & Mukhhidad, 2019). Sharia insurance is developing positively because most of Indonesia's population is 87% Muslim (Hakim & Asiyah, 2020). Therefore Islamic insurance has good potential to improve the economy in this country, especially the Islamic economy.

Nama Akun (Miliar Rp)	Jun-20	Jun-21	Growth
1. Aset	5,980	6,285	5.11%
2. Kontribusi Bruto	793	1,001	26.34%
3. Klaim Bruto	334	287	-14.02%
4. Investasi	4,146	4,220	1.78%
5. Hasil Investasi	116	85	-26.70%
6. GDP	7,610	7,938	4.31%
7. Populasi Penduduk (Juta)	271	274	0.97%
8. Penetrasi	0.010%	0.013%	21.12%
9. Densitas	5,841	7,309	25.12%

Source: Financial Services Authority 2022 Quarter II

Figure 1
Sharia General Insurance Performance Quarter II

The table above shows developments in the value of Assets, Gross Contribution, Investment, GDP, Population, Penetration, and Density. This shows an increasing trend in Sharia General Insurance Performance in the second quarter. However, it can also be found that there is a decrease in Gross Claims and also Investment Returns. From the table above, it can be seen that there is an increase in the Gross Contribution and Gross Claim accounts. Meanwhile, accounts such as Assets, Investments, and Investment Results decreased. So there is a downward trend in the Performance of Sharia Reinsurance in the second quarter. So from the two tables above, there is an increasing trend in the Performance of Sharia General Insurance, while in the Performance of Sharia Reinsurance, there is a decreasing trend. To assist in developing Islamic insurance companies, every company must strive to improve every financial performance. Amani & Sukmaningrum (2019) Explain that company growth and development can measure and assess all success in achieving profits by analyzing and evaluating financial reports.

Nama Akun (Miliar Rp)	Jun-20	Jun-21	Growth
1. Aset	2,181	2,086	-4.37%
2. Kontribusi Bruto	407	470	15.56%
3. Klaim Bruto	361	446	23.49%
4. Investasi	1,570	1,552	-1.17%
5. Hasil Investasi	46	43	-4.90%

Source: Financial Services Authority 2022 Quarter II

Figure 2
Quarterly Sharia Reinsurance Performance II

As explained in the Global Islamic Economy Indicator Report 2020/2021, it is known that Islamic financial assets globally have shown a positive upward trend in the last five years. In fact, until 2019, Islamic financial assets had reached USD 2.88 trillion and are projected to continue to increase to USD 3.69 trillion in 2024. However, the Covid pandemic has impacted Islamic insurance, from decreasing assets to increasing gross contributions. This impact is not only due to Covid but other factors such as conventional insurance, governance structures, and many more (Alsakinah & Fasa, 2022). Islamic insurance, as one of the pillars of the economy, requires good financial performance (Hasanatina *et al* ., 2021). Financial Performance stability will impact the company in utilizing its resources. The company is said to be healthy if it can maintain and maintain financial performance (Almajali *et al* ., 2012). Therefore, it is essential to maintain financial performance in insurance for the company's sustainability to maintain it well.

Several previous researchers, such as research by Stephanie & Ruslim (2021), Fadila & Novianti (2017), and William & Colline (2022), showed that risk-based capital has a significant positive effect on financial performance. However, in Pramestika (2019), Risk-Based Capital does not affect financial performance. Furthermore, the liquidity variable in research from Stephanie & Ruslim (2021) shows that liquidity affects financial performance. Whereas Djamaluddin (Djamaluddin et al., 2019), Hidayati & Baehaqi (2018), and Rafi & Syaichu (2019), liquidity has no significant effect on financial performance. William & Colline (2022) Premium Growth Ratio positively affect financial performance. However, Stephanie & Ruslim (2021), Fadila & Novianti (2017), and Rafi & Syaichu (2019) Premium Growth Ratio have no positive effect on financial performance. For this reason, this research aims to determine whether financial technology can moderate the effect of firm size, risk-based capital, current ratio, and premium growth ratio.

Literature Review
Financial Technology

Financial Technology, or Fintech, refers to innovation in financial services using technological sophistication in today's modern era. This was stated by (Chrismastianto, 2017). FinTech sharia is a service and a financial solution used by technology companies or fintech start-ups based on Islamic laws (Syariah) (Komala & Lestari, 2020) So in practice Fintech, sharia must comply with economic principles in the teachings of Islam, which are also regulated in the DSN-MUI fatwa, namely fatwa No: 117/DSN-MUI/II/2018 concerning Information Technology-Based Financing

Services Based on Sharia Principles of the Indonesian Indonesian Ulema Council (2018). Ln measures Fintech [non-interest operating costs] (Uddin et al., 2020).

Firm Size

Brigham & Houston (2010:4) and Agnewiranti (2020) said that firm size or company size could be interpreted as the size of the company seen in equity, sales, and asset values that act as context variables that regulate the demands for services or products produced by a company (Muharramah *et al* ., 2021).

Risk-Based Capital

According to Denovis (2022) and Sensi (2006), risk-based capital is a way to measure the soundness of an insurance company in terms of solvency to ensure insurance obligations with the Ratio of Working Capital to the risk borne. Based on the Regulation of the Minister of Finance of the Republic of Indonesia Number 53/PMK.010/2012, it says that the target level of solvency that an insurance company must have is a minimum of 120% of the minimum risk-based Capital (Supriyono, 2019)

Current Ratio

Current ratio according to Asmirantho (2013), Kasmir (2016), and Permatasari & Yuniarti (2021), current ratio, namely a ratio of liquidity ratios which has the aim of knowing the extent to which a company can pay short-term obligations which are approaching maturity using assets smoothly (Salsabila & Miranti, 2021)

Premium Growth Ratio

According to (Agustin *et al* ., 2018) premium growth ratio represents an increase and decrease in the volume of net premiums, which indicates a lack of stability in the level of activity of insurance companies. When premium growth is high, profitability rises, so if profitability rises, the company's quality will be good, and the source of investment will be even more significant (Fadila & Novianti, 2017).

Financial Performance

Financial performance describes the company's success in achieving activities aimed at complying with financial implementation regulations (Dewantara *et al* ., 2019) (Bahril & Maulayati, 2020). In sharia insurance, it can usually be presented in proxies, not premium earned, underwriting profit, annual turnover, return on investment, return on assets, and return on equity (Greene & Segal, 2004). Therefore the financial performance used in this study is the return on assets (ROA). Because ROA can evaluate how well a company uses the funds provided (Astuti et al., 2021).

METHODS

This study uses Tambunan's secondary, panel, and quantitative data Tambunan (2021). This data can be accessed through the website of each sharia insurance company registered with the Indonesian Sharia Insurance Association (AASI) for the 2017-2021 period. Current research uses a *purposive sampling* method. The population used is all sharia insurance companies registered with AASI, while the sampling criteria are: 1. Listings in the 2017-2021 research period; 2. Have financial reports; 3. There is a ratio needed in research. So that there are 39 companies taken in this study. The method used is multiple linear analysis, model feasibility test (F test), hypothesis test (t-test), and coefficient of determination test.

Table 1
Sample Selection Results

Sampling Criteria	Total
Sharia insurance company registered with AASI 2017-2021	54
Companies that do not report a complete financial report for 2017-2021	(8)
Companies that do not have the ratio needed by researchers	(7)
The number of companies that are sampled	39
Number of companies processed = 39x 5 years	195

Source: processed data

RESULTS

Table 2
Regression General Model Equations

Variable	B
Constant	-0.061950
X1	0.007111
X2	0.001078
X3	-0.006638
X4	0.000948
X1Z	-0.001088
X2Z	-0.0001122
X3Z	0.000901
X4Z	-0.000129

Source: processed data

Table 2 explains thar based on the tests conducted, the researchers used the random effect model as the selected test. So the regression equation is as follows: ROA = -0.061950 + 0.007111X1 + 0.001078X2 – 0.006638X3 + 0.000948X4 – 0.001088X1Z – 0.0001122X2Z + 0.000901X3Z – 0.000129X4Z + e. While Table 3 explains that a simultaneous test (F test) was conducted to determine the effect of firm size, risk-based Capital, Current Ratio, and premium growth ratio on ROA so that the f test can measure the effect of the independent variable on the dependent variable. Table 7 The results of the table data above show that the Prob. 0.00576, which means <0.05. So the independent variables simultaneously affect the dependent variable.

Table 3
F-test

F_{count}	Prob Value (sig)	Condition	Information
3.458278	0.000576	<0.05	Eligible Models

Source: processed data

Table 4
T-test Results

hypothesis	t_{count}	sig. value	Condition	Information
X1	1.567276	0.1188	<0.05	Rejected
X2	1.218465	0.2246	<0.05	Rejected
X3	-2.697973	0.0076	<0.05	Accepted
X4	0.304828	0.7608	<0.05	Rejected
X1Z	-2.442187	0.0155	<0.05	Accepted
X2Z	-1.491103	0.1376	<0.05	Rejected
X3Z	2.786111	0.0059	<0.05	Accepted
X4Z	-0.330954	0.7411	<0.05	Rejected

Source: processed data

Table 4 shows that hypotheses 1, 2, 4, 6, and 8 are rejected. It can be stated that X1, X2, X4, X2Z, and X8Z cannot affect financial performance. Moreover, hypotheses 3, 5, and 7 show that X3, X6, and X3Z can affect financial performance. While Table 5 explains that R-squared value is

0.0144012, or the equivalent of 14.4%, which means that the independent variable affects the dependent variable by 14.4%, and other factors influence the remaining 85.6%.

Table 5
Determination Coefficient Test (Adjusted R^2)

Adjusted R-Square	Information
0.144012	The independent variable can explain the dependent variable

Source: processed data

Effect of Firm Size on Financial Performance

Adhering to the research results that researchers have carried out shows that firm size does not significantly affect financial performance (ROA). The results of this study support research (Munawaroh & Mukhhidad, 2019).

Effect of Risk-Based Capital (RBC) on Financial Performance

The soundness level of an insurance company seen from the RBC level with an achievement ratio of 120% does not significantly affect ROA. Moreover, these results are supported by research by Permatasari & Yuniarti (2021). The resulting RBC ratio does not affect ROA. This illustrates that RBC's achievement level is separate from the company's efficiency in managing assets on debt.

Effect of Current Ratio (CR) on Financial Performance

Insurance company liquidity is a commitment to policyholders to pay current liabilities (debt). The results of this study on liquidity calculated by CR are affecting ROA significantly negatively. Stephanie & Ruslim (2021) also supports research at this stage. CR affects ROA. As for the results, the company can pay its current liabilities.

Effect of Premium Growth Ratio (PGR) on Financial Performance

The size of the premium earned at an insurance company can be calculated using the PGR. This study resulted in no significant positive effect on ROA. So it is the same as research from Stephanie & Ruslim (2021), Fadila & Novianti (2017), and Rafi & Syaichu (2019). PGR does not have a positive effect on ROA. Therefore the company must maintain its financial position in economic and industrial growth**.**

The influence of Financial Technology in moderating Firm Size on Financial Performance

The results show that Fintech can moderate the effect of firm size on financial performance. So that it can strengthen the influence of Firm Size in improving financial performance, this research is also supported by Muzdalifa et al. (2018). Financial service technology facilities will provide a lot of information exchange, such as financial inclusion.The influence of Financial Technology in moderating Risk-Based Capital (RBC) on Financial Performance.

The influence of Financial Technology in moderating Risk-Based Capital (RBC) on Financial Performance

FinTech in this study results that cannot play a role in the moderating variable on the effect of RBC on financial performance. So that these factors will weaken the influence of RBC on ROA, its position as a predictor makes Fintech unable to support open access to financial information in knowing the financial health condition of an insurance company (Irmawati et al., 2022).

The influence of Financial Technology in moderating the Current Ratio (CR) on Financial Performance

Research between FinTechs in moderating CR to ROA states that it can act as a moderating variable. So that it can strengthen the effect of CR on financial performance in a positive and significant way in the allocation of good funds, the supporters of the research are Wardani & Darmawan (2020) that business actors can apply Fintech, which will increase financial literacy so that it is easy to understand finance.

The influence of Financial Technology in moderating the Premium Growth Ratio (PGR) Ratio to Financial Performance

The research results show that FinTech cannot be a moderating variable in the effect of PGR on ROA. These results can weaken the effect of the PGR variable on ROA. So the understanding that its position as a predictor makes the presence of Fintech not support companies in gaining understanding and knowledge in managing premium growth (Irmawati et al., 2022).

CONCLUSION

Based on research conducted by current researchers on financial technology in moderating influence firm size, risk based capital, current ratio, and premium growth to financial performance (study on sharia insurance companies in Indonesia 2017-2021 period. Then it can be concluded as follows: (1) this research can prove that firm size, RBC, and PGR do not influence financial performance; (2) this research can prove that the CR variable only affects financial performance; (3) this research can prove that two variables can only be moderated by FinTech, vizFirm Size and CR, where the results can strengthen the influence of Firm Size and CR against financial performance. This shows that the research model can be tested using ROA as the dependent variable and FinTech as the moderating variable; and (4) this research can also prove that FinTech cannot moderate the effect of RBC and PGR on financial performance.

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