



The Role of Foreign flow in Mediating the Influence of Firm Profitability, Firm Valuation, and Stock Liquidity on Stock Return

Peran Arus Dana Asing dalam Memediasi Pengaruh Profitabilitas Perusahaan, Valuasi Perusahaan, dan Likuiditas Saham terhadap Return Saham

Ahmad Zulham Hamdan¹ Nur Khusniyah Indrawati² Mychelia Champaca³

Faculty of Economics and Business, University of Brawijaya

Email Korespondensi Penulis: zulhamhamdan@student.ub.ac.id

Article History	Received (October 6 th , 2025)	Revised (November 15 th , 2025)	Accepted (December 28 th , 2025)
-----------------	--	---	--

News Article

Keyword:

Firm
Profitability;
Firm Valuation;
Stock Liquidity;
Foreign Flow;
Stock Return.

Abstract

This study aims to examine and explain the influence of firm profitability, firm valuation, and stock liquidity on stock return, both directly and indirectly through foreign flow. This research is expected to enrich and complement the body of knowledge in the field of financial decision-making, particularly in signaling theory, and to provide valuable insights for both academics and practitioners. The population of this study consists of financial sector companies listed on the Indonesia Stock Exchange that reported positive profits and had foreign flow in their stocks during the period from 2022 to 2024. The sample for this study follows a census sampling method, where the entire population is selected as the sample. The total sample includes 77 financial companies over a three-year period, resulting in 231 observations for analysis. The analytical methods used are descriptive analysis and panel data regression with path analysis, utilizing STATA 17 software. The results indicate that stock liquidity and foreign flow have a significant effect on stock return, while firm profitability and firm valuation do not significantly impact stock return. Stock liquidity also significantly affects foreign flow, while firm profitability and firm valuation do not have a significant effect on foreign flow. Additional tests show that foreign flow has a mediating role in effect of firm valuation on stock return, but does not mediate the effect of firm profitability and stock liquidity on stock return.

Kata Kunci:

Profitabilitas
Perusahaan;
Valuasi
Perusahaan;
Likuiditas
Saham;
Foreign flow;
Return Saham

Abstrak

Penelitian ini bertujuan untuk mengetahui dan menganalisis pengaruh profitabilitas perusahaan, valuasi Perusahaan, dan likuiditas saham terhadap return saham, baik secara langsung maupun tidak langsung melalui foreign flow. Penelitian ini diharapkan dapat memperkaya dan melengkapi khasanah ilmu pengetahuan di bidang pengambilan keputusan keuangan terutama teori sinyal (signaling theory), sehingga dapat bermanfaat bagi para akademisi dan praktisi. Populasi dalam penelitian ini adalah perusahaan sektor keuangan yang terdaftar di bursa efek Indonesia yang memperoleh laba positif dan memiliki foreign flow pada sahamnya selama tahun 2022-2024. Sampel dalam penelitian ini

masuk dalam kategori sensus sampling, dimana seluruh populasi penelitian dijadikan sampel dalam penelitian ini. Sampel dalam penelitian ini berjumlah 77 perusahaan keuangan dikalikan dengan tiga tahun rentang waktu, sehingga jumlah observasi yang dapat diolah sebesar 231. Metode analisis yang digunakan adalah analisis deskriptif dan analisis regresi data panel dengan menggunakan aplikasi software STATA 17. Hasil penelitian menunjukkan likuiditas saham dan foreign flow berpengaruh signifikan terhadap return saham, tetapi profitabilitas perusahaan dan valuasi perusahaan tidak berpengaruh signifikan terhadap return saham. Likuiditas saham juga berpengaruh signifikan terhadap foreign flow, tetapi profitabilitas perusahaan dan valuasi perusahaan tidak berpengaruh signifikan terhadap foreign flow. Pengujian lain menunjukkan bahwa foreign flow mampu memberikan peran mediasi pada pengaruh valuasi perusahaan terhadap return saham, tetapi tidak mampu memberikan peran mediasi pada pengaruh profitabilitas perusahaan dan likuiditas saham terhadap return saham.

To cite this article: Ahmad Zulham Hamdan, Nur Khusniyah Indrawati, Mychelia Champaca. (2025). "The Role of Foreign flow in Mediating the Influence of Firm Profitability, Firm Valuation, and Stock Liquidity on Stock Return". *Jurnal Ilmiah Gema Perencana*, Volume 4(2), Page: 1837 – 1852.



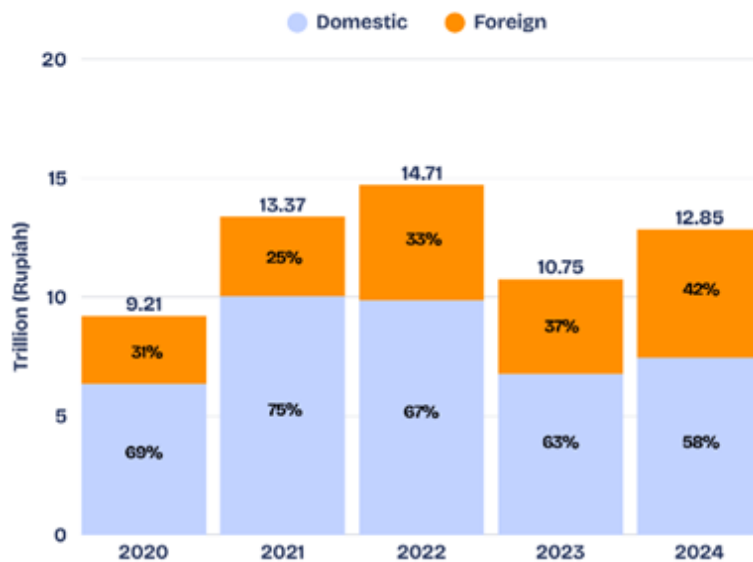
This article is licensed under a [Creative Commons Attribution 4.0 International License](#) ©2025 by author/s

INTRODUCTION

Background of the Problem

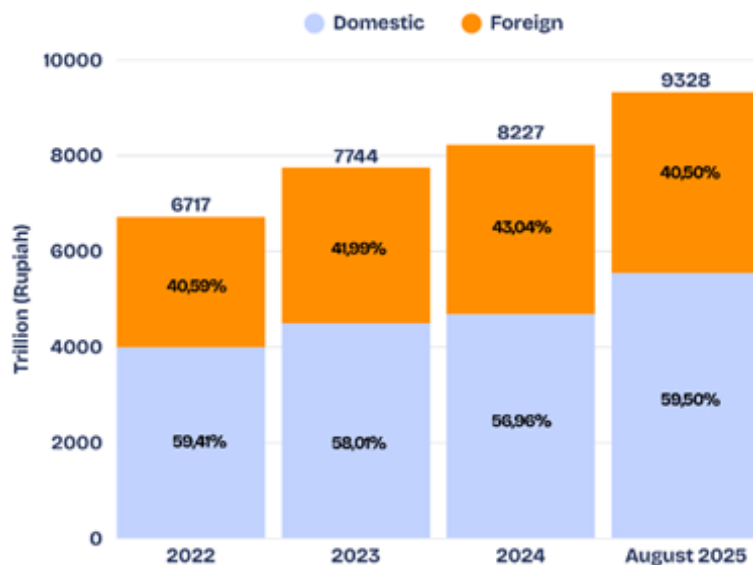
The dynamics of the capital market and investment have undergone significant changes in recent years, particularly with a growth of 393.58% in the number of individual investors (SID) from 2020 to October 2025 (IDX, 2025). The contribution of retail investors (individuals with smaller funds) has been increasing; however, the dominance of foreign investors remains a key force driving stock prices, particularly in large-cap and liquid stocks. With significantly larger managed funds, foreign investors exert a stronger influence on stock price movements, which can affect the market as a whole (KSEI, 2025).

Figure 1. illustrates the comparison between domestic and foreign daily transactions in the stock market from 2020 to 2024. Foreign transactions show a significant contribution, ranging from 25% in 2021 to 42% in 2024. In this context, the continuous increase in foreign transactions clearly has a substantial influence on daily trading, particularly in stocks experiencing foreign inflows. Although foreign participation does not exceed 50%, this dominance is considerable, considering that domestic participation consists of many individual investors who do not play a major role in driving stock prices. Conversely, when foreign investors trade stocks, they can influence stock prices due to their large managed funds as institutional investors. This is supported by the following data.



Source: Indonesia Central Securities Depository (2025)

Figure 1. Foreign-Domestic Daily Transaction Participation



Source: Indonesia Central Securities Depository (2025)

Figure 2. Foreign Ownership in Public Stocks on the IDX

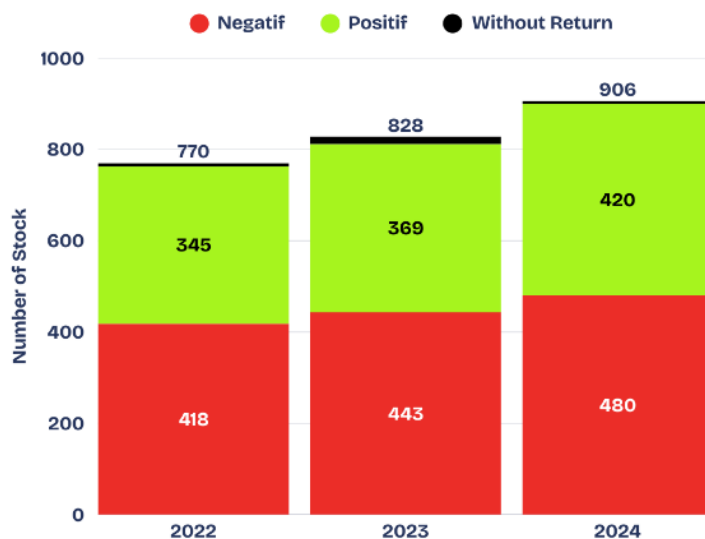
Figure 2 illustrates the growth in the value of assets in stocks on the IDX. Foreign ownership of stocks from 2022 to 2024 has shown significant growth. Foreign ownership increased from 40.59% in 2022 to 43.04% in 2024. This percentage reflects the market dominance of foreign investors in the total market capitalization of Indonesian stocks, which in 2024 was recorded at IDR 12,336 trillion. The amount of stock assets owned by foreign investors reached IDR 5,309 trillion out of the total market capitalization. This figure is substantial and represents a significant portion of Indonesia's capital market. If such a large amount of stock were to exit the Indonesian capital market, the impact would be considerable. The market would experience a significant liquidity shortfall, as domestic demand from local investors would not be sufficient to absorb such a large amount of capital (KSEI, 2025).

Empirically, *foreign flows* in Indonesian stocks can be traced through indices published by several institutions that serve as key benchmarks for foreign investors' decisions to invest in Indonesian equities, such as MSCI, FTSE, and S&P. These indices consistently

assign the largest sectoral weight to the financial sector (FTSE, 2025; MSCI, 2025; S&P, 2025).

Identification Problem

According to the data provided by the IDX in Figure 3., it can be seen that between 2022 and 2024, many stocks on the IDX experienced negative *returns*. In 2022, there were 418 issuers with negative *returns*, which increased to 443 issuers in 2023, and reached 480 issuers in 2024, accounting for more than 60% of the total stock (IDX, 2025). Despite the decline in the IDX Composite (IHSG) in 2024, some stocks showed price spikes that were not accompanied by strong fundamental performance, reflecting inefficiencies in the Indonesian capital market (Fama, 1970). This contrasts with the capital markets of developed countries, such as the United States, which are more efficient in reflecting the intrinsic value of companies. The inefficiencies in the Indonesian market may be attributed to factors such as low liquidity and foreign capital flows, which can significantly affect stock price fluctuations.



Source: Indonesia Stock Exchange (2025)

Figure 3. Comparison of Stock Returns on the IDX from 2022 to 2024

This study proposes the variables of firm profitability, firm valuation, and stock liquidity as independent variables to examine their effects on stock *returns*. Research by Hertina & Saudi (2019) and Novy-Marx (2013) show that firm profitability has a significant effect on stock *returns*, while Mahirun (2023) found that profitability does not significantly affect stock *returns*. Studies by Indrayono (2019), Balvers et al. (2017), and Penman & Reggiani (2013) suggest that firm valuation significantly affects stock *returns*, while Mahirun (2023) found that firm valuation does not significantly impact stock *returns*. Research by Datar et al. (1998) and Jun et al. (2003) show that stock liquidity significantly influences stock *returns*, whereas Chandra et al. (2019) found that stock liquidity does not significantly affect stock *returns*.

Previous studies show inconsistent results regarding the influence of firm profitability, firm valuation, and stock liquidity on stock *returns*, with some studies finding a significant effect while others do not. This inconsistency provides an opportunity for further research. *Foreign flow* is selected as a mediator to address the inconsistency in prior research findings. *Foreign flow* is influenced by profitability, valuation, and stock liquidity, and it also affects stock *returns*, as found in the study by Yan & Wang (2018), which shows that the higher the *foreign flow*, the higher the stock *returns*. This study

focuses on the Indonesian stock market in the financial sector (IDXFINANCE) due to the significant dominance of *foreign flow* in this sector, with the expectation that it will represent the role of *foreign flow* in mediating the effect of firm profitability, firm valuation, and stock liquidity on stock *return*.

Research Question

Drawing on the aforementioned phenomenon, this study formulates the following primary research questions:

1. Does firm profitability have a significant effect on stock returns?
2. Does firm valuation have a significant effect on stock returns?
3. Does stock liquidity have a significant effect on stock returns?
4. Does firm profitability have a significant effect on foreign flow?
5. Does firm valuation have a significant effect on foreign flow?
6. Does stock liquidity have a significant effect on foreign flow?
7. Does foreign flow have a significant effect on stock returns?
8. Does foreign flow mediate the relationship between firm profitability and stock returns?
9. Does foreign flow mediate the relationship between firm valuation and stock returns?
10. Does foreign flow mediate the relationship between stock liquidity and stock returns?

THEORITICAL AND CONCEPTUAL FRAMEWORK

Firm Profitability

The profitability of a firm refers to its ability to generate net profit. In this study, the firm's profitability is measured using ROA (*Return on Assets*). ROA is a ratio that measures the extent to which a firm generates net profit from its total assets (Kayakus et al., 2023). The profitability variable in this study is grounded in signaling theory. The higher the profitability of a firm, the better the signal it sends to the market, indicating the firm's ability to generate profits. This, in turn, increases investor interest in purchasing the company's stock, thereby leading to an increase in stock *returns* (Spence, 1978).

Firm Valuation

The valuation of a firm refers to the fair market value of the firm. In this study, the firm's valuation is measured using a ratio that compares its stock price with earnings per share (EPS). P/E (Price-to-Earnings) ratio is used as a measure of firm valuation in this study because it is commonly employed by investors to assess whether a company's stock is priced too high or too low relative to the earnings it generates (Neldi et al., 2023). Firm valuation provides information to investors about whether the company's stock is undervalued or overvalued. In the context of signaling theory, a low valuation or undervaluation may attract investors as it provides an opportunity for them to earn greater profits in the future (Spence, 1978).

Stock Liquidity

Stock liquidity refers to the market's ability to execute large trades without affecting the price. More liquid stocks allow for buy and sell transactions without causing high price volatility. In this study, liquidity is measured by trading volume, which is the number of shares traded over a specific period, serving as an important indicator of stock market liquidity (Guasoni & Weber, 2017). This variable is based on the stock liquidity theory proposed by Amihud and Mendelson. Stocks with high liquidity signal to investors that they can buy or sell shares with ease, thereby increasing demand and driving stock *returns* (Amihud & Mendelson, 1986).

Foreign flow

Foreign flow refers to the inflow of foreign funds into a country's stock market (net inflow) or the outflow of funds from the country's stock market (net outflow). In this study, *foreign flow* is measured using net foreign buy. Net foreign buy refers to the total amount of shares purchased by foreign investors, minus the sales of the same shares. According to Yan & Wang (2018), large foreign capital flows can signal positive prospects for a country's economic and political stability, which can increase demand for company stocks and drive up stock prices. This variable is based on the foreign capital flow theory proposed by Robert Mundell and Marcus Fleming. This theory posits that foreign investors tend to seek companies with strong prospects, as reflected in the firm profitability, valuation, and stock liquidity. These three factors simultaneously influence foreign capital flows, as companies with strong performance, fair market value, and easily tradable stocks are more attractive to foreign investors, potentially increasing international fund flows and positively affecting stock *returns* (Froot, 2008).

Stock Return

Stock *return* refers to the *return* obtained by investors from changes in stock prices and dividends received over a specific period. According to Dladla & Malikane (2019), stock *return* is one of the key indicators in assessing the investment performance of a stock. This is due to the fact that stock *returns* reflect the profits or losses experienced by investors. Stock *returns* can be influenced by various factors, including company performance, market conditions, and foreign capital flows (Martin & Wagner, 2019).

Previous Study and Hypothesis

Building on the conceptual foundations above, the following hypotheses are derived to empirically examine how firm profitability, firm valuation, and stock liquidity influence *foreign flow* and its role flow in mediating the effect of firm profitability, firm valuation, and stock liquidity on stock *return*. Hertina & Saudi (2019) found that a firm's profitability significantly impacts stock *returns*, with investors using valuation ratios in investment decisions. Fama (1970) also emphasized profitability as a key indicator of stock *return* variations, and Novy-Marx (2013) reinforced that a firm's profitability has a significant impact on stock *returns*, highlighting its importance in portfolio analysis and investment management.

Several studies have shown that a firm's valuation significantly impacts stock *returns*. Balvers et al. (2017) found that valuation ratios influence investment decisions, while Fama (1970) and Fama & French (1992) identified valuation as a key factor in explaining stock *return* variations. Indrayono (2019) also supported the idea that a firm's valuation significantly affects stock *returns* and plays a crucial role in investment analysis.

Amihud & Mendelson (1986) found that stocks with high liquidity tend to have more stable *return* growth, as investors can buy or sell without significant price risk. Studies by Datar et al. (1998) and Jun et al. (2003) also show that stock liquidity significantly affects *returns*, with highly liquid stocks exhibiting higher *returns* and lower volatility.

Research by Vo (2017) shows that stock purchases by foreign investors, or *foreign flow*, can have a direct impact on stock *returns*. This is because *foreign flow* strengthens positive expectations regarding a firm's performance and growth potential. Additionally, several other studies have highlighted the significant role of *foreign flow* in influencing stock *return* movements. Research by Yan & Wang (2018) reveals that *foreign flow* can lead to an increase in stock *returns*. This occurs because foreign investors bring different information and expectations, which can drive stock price movements both in the short and long term. Based on the review of previous literature and the theoretical foundations outlined, the following hypothesis is presented:

H1: Firm profitability significantly affects stock *returns*.

H2: Firm valuation significantly affects stock *returns*.

H3: Stock liquidity significantly affects stock *returns*.

H4: *Foreign flow* significantly affects stock *returns*.

According to research by Fama & French (1992), firms with high profitability tend to attract more foreign investment flows as they are perceived to have better prospects. Several studies have also shown that high profitability can drive foreign investment flows or stock purchases by foreign investors. For instance, research by Le (2020) states that a firm's profitability significantly affects *foreign flow*. Furthermore, studies by Bekaert & Harvey (2000) and Kang & Stulz (1996) demonstrate that firms with strong financial performance and high profitability are more attractive to foreign investors, leading to an increase in foreign capital flows due to their perceived growth potential.

Research by Jehan et al. (2023) found that a firm's valuation has a significant relationship with *foreign flow*, as it enhances the firm's attractiveness in the eyes of global investors. Other studies have also found a significant relationship between stock liquidity and *foreign flow*. Research by Liljeblom & Löflund (2005) shows that stocks with high liquidity tend to attract more purchases from foreign investors, as foreign investors seek stable and easily accessible markets to minimize transaction risks. Based on the review of previous literature and the theoretical foundations outlined, the following hypothesis is presented:

H5: Firm profitability significantly affects *foreign flow*.

H6: Firm valuation significantly affects *foreign flow*.

H7: Stock liquidity significantly affects *foreign flow*.

Several studies have shown that foreign investors are more likely to purchase stocks of firms with high profitability, as they believe these companies have better and more stable long-term prospects. Research by Le, B. (2020) reveals that firms with high profitability are more attractive to foreign investors. A firm's valuation reflects market expectations of its future growth and earnings potential, which can attract foreign investor interest. Research by Jehan et al. (2023) demonstrates that a firm's valuation influences *foreign flow*, as it is perceived to have better growth potential. Additionally, research by Liljeblom & Löflund (2005) indicates that stocks with high liquidity tend to attract greater *foreign flow*, as foreign investors seek stocks that are easier to trade without disrupting market prices. On the other hand, *foreign flow* is considered a positive signal for a firm's stock performance in the market. Research by Yan & Wang (2018) shows that stock purchases by foreign investors, reflected in *foreign flow*, can impact stock *returns*.

in both the short and long term. Based on the review of previous literature and the theoretical foundations outlined, the following hypothesis is presented:

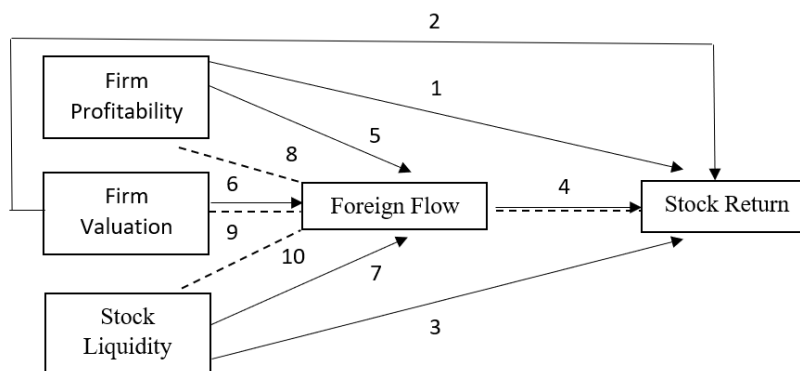
H8: *Foreign flow* mediates the influence of firm profitability on stock *return*.

H9: *Foreign flow* mediates the influence of firm valuation on stock *return*.

H10: *Foreign flow* mediates the influence of stock liquidity on stock *return*.

This section discusses the purpose of the literature review which represents the theoretical core of the article. Literature review not only presents a summary of previous relevant research, but also evaluates and synthesize the work of others reviewed by researchers.

It is important to consider the literature being reviewed and how to manage it. Some questions that researchers must take into account when first compiling a literature review are as follows: which aspects should be included in the literature review; how is the information in the literature review synthesized; how should the literature review be organized; what style should be used in compiling the literature review; and other significant questions to be answered.



Source: Author (2025)

Figure 4. Conceptual Model of Research

METHODOLOGY

This study is an explanatory research with a quantitative approach aimed at understanding the relationships between variables and testing the hypotheses formulated beforehand. The explanatory approach emphasizes the causal explanation of the relationships between the observed variables (Creswell & Creswell, 2023). This research identifies causal relationships among the variables involved, with the researcher striving to provide a deeper understanding of the effects, rather than merely describing the phenomenon (Sekaran & Bougie, 2016).

The population of this study consists of IDXFINANCE companies listed on the Indonesia Stock Exchange from 2022 to 2024, with the following criteria: 1) Financial companies listed on the IDX before the study period; 2) Companies with *foreign flow* in their stocks during the study period; 3) Companies reporting positive profits during the study period. Based on these criteria, 77 companies met the requirements. This study employs a non-probability sampling method, specifically saturated sampling or census sampling, as the number of eligible companies is relatively small. Saturated sampling is a technique where all population members are used as the sample (Lohr, 2021).

The exogenous variables used in this study include firm profitability, firm valuation, and stock liquidity for IDXFINANCE firms during the study period of 2022-2024. Firm profitability is measured by ROA, firm valuation by P/E, and stock liquidity by trading

volume. The endogenous variables, namely *foreign flow* and *stock return*, are also examined during the research period. *Foreign flow* is measured by net foreign buy, while *stock return* is measured by total stock *return*. This study uses secondary data various sources, including the websites www.idx.co.id and www.finance.yahoo.com and company website. The data analysis method employed is path analysis, processed and tested using STATA 17 software. STATA is a relevant statistical tool for processing panel data in path analysis, as it can test both direct and indirect effects in regression models. Path analysis is a method used to analyze the relationship patterns between variables to assess the direct and indirect effects of exogenous variables on endogenous variables (Riduwan & Kuncoro, 2008).

The research problem analyzed using path analysis can be formulated into a structural model through two steps, with the functional equations expressed as follows:

$$Y_1 = \rho Y_1 X_1 + \rho Y_1 X_2 + \rho Y_1 X_3 + \rho Y_1 X_4 + e_1$$

$$Y_2 = \rho Y_2 X_1 + \rho Y_2 X_2 + \rho Y_2 X_3 + e_2$$

(Agung, 2013)

In this study, the model is modified according to the number of variables and model specification.

1. Model 1: Independent Path Model

$$\text{Stock Return}_{it} = \rho_1 \text{Firm Profitability}_{it} + \rho_3 \text{Firm Valuation}_{it} + \rho_5 \text{Stock Liquidity}_{it} + \rho_7 \text{Foreign flow}_{it} + \varepsilon_1$$

2. Model 2: Mediated Path Model

$$\text{Foreign flow}_{it} = \rho_2 \text{Firm Profitability}_{it} + \rho_4 \text{Firm Valuation}_{it} + \rho_6 \text{Stock Liquidity}_{it} + \varepsilon_2.$$

RESULTS AND DISCUSSION

Results

Descriptive Analysis

The results presented in Table 1 show a total of 231 observations (N) for each variable analyzed. Firm profitability measured by ROA, the firm profitability variable has a mean of 2.432294 and a standard deviation of 3.005667. The minimum value is 0.02, while the maximum is 18.54. The relatively high standard deviation indicates significant variation in firm profitability data. Firm valuation measured by P/E, the firm valuation variable has a mean of 117.2474 and a very high standard deviation of 410.4295. The minimum value is 3.09, and the maximum is 3234.78, reflecting considerable variation in firm valuation data. Stock liquidity measured by the number of shares, stock liquidity has a mean of 3.73 billion shares and a standard deviation of 7.56 billion shares. The minimum value is 140,900 shares, while the maximum is 40.8 billion shares, indicating significant variation, with some firms having very high liquidity. *Foreign flow* has a mean of Rp.103 billion and a standard deviation of Rp.720 billion. The minimum value is Rp.-939 billion, and the maximum is Rp.5.3 trillion, indicating large fluctuations in foreign capital flows, with some firms experiencing substantial outflows. *Stock return* has a mean of -2.527158 and a relatively high standard deviation of 36.21313. The minimum *return* is -78.528, and the maximum is 130.159, indicating significant fluctuations in *stock return*, with high variability between the largest losses and gains.

Table 1. Descriptive Analysis Result

Variable	Obs	Mean	Std. dev.	Min	Max
Firm Profitability	231	2.432294	3.005667	0.02	18.54
Firm Valuation	231	117.2474	410.4295	3.09	3234.78
Stock Liquidity	231	3,730,000,000	7,560,000,000	140,900	40,800,000,000
Foreign flow	231	103,000,000,000	720,000,000,000	-939,000,000,000	5,300,000,000,000
Stock Return	231	-2.527158	36.21313	-78.528	130.159

Source: Data processing by Author (2025)

The results presented in Table 1 show a total of 231 observations (N) for each variable analyzed. Firm profitability measured by ROA, the firm profitability variable has a mean of 2.432294 and a standard deviation of 3.005667. The minimum value is 0.02, while the maximum is 18.54. The relatively high standard deviation indicates significant variation in firm profitability data. Firm valuation measured by P/E, the firm valuation variable has a mean of 117.2474 and a very high standard deviation of 410.4295. The minimum value is 3.09, and the maximum is 3234.78, reflecting considerable variation in firm valuation data. Stock liquidity measured by the number of shares, stock liquidity has a mean of 3.73 billion shares and a standard deviation of 7.56 billion shares. The minimum value is 140,900 shares, while the maximum is 40.8 billion shares, indicating significant variation, with some firms having very high liquidity. *Foreign flow* has a mean of Rp.103 billion and a standard deviation of Rp.720 billion. The minimum value is Rp.-939 billion, and the maximum is Rp.5.3 trillion, indicating large fluctuations in foreign capital flows, with some firms experiencing substantial outflows. *Stock return* has a mean of -2.527158 and a relatively high standard deviation of 36.21313. The minimum *return* is -78.528, and the maximum is 130.159, indicating significant fluctuations in *stock return*, with high variability between the largest losses and gains.

Hypothesis Analysis

The interpretation of the path coefficients in Table 2 offers important insights into how the model explains the direct effect among the study variables directly effect, particularly in terms of both statistical significance and effect magnitude.

Table 2. Path Coefficient Analysis

Hypothesis	Path	Beta	t-Stat	P	Result
H1	Firm Profitability \Rightarrow Stock Return	-0.157	0.15	0.885	Rejected
H2	Firm Valuation \Rightarrow Stock Return	-0.003	-0.5	0.617	Rejected
H3	Stock Liquidity \Rightarrow Stock Return	-2.727	-2	0.045	Accepted
H4	Foreign flow \Rightarrow Stock Return	3.399	3.15	0.002	Accepted
H5	Firm Profitability \Rightarrow Foreign flow	-0.204	-0.61	0.546	Rejected
H6	Firm Valuation \Rightarrow Foreign flow	0.0003	0.53	0.602	Rejected
H7	Stock Liquidity \Rightarrow Foreign flow	1.079	3.50	0.001	Accepted

Source: Data processing by Author (2025)

The hypothesis testing for direct influence will be accepted if the p-value is less than the alpha level of 5% or 0.05. Based on the data processing results presented in Table 2, the

coefficient for the firm profitability variable is 0.157, and its significance is 0.885 ($p > 0.05$). Thus, the firm profitability does not significantly affect stock *returns*, and hypothesis H1 is rejected. The coefficient for the firm valuation variable is -0.003, with a significance of 0.617 ($p > 0.05$). Therefore, the firm valuation does not significantly affect stock *returns*, and hypothesis H2 is rejected.

The coefficient for stock liquidity is -2.727, with a significance of 0.046 ($p < 0.05$). therefore, it can be concluded that for every increase in stock liquidity, stock *returns* will decrease by -2.727 times, and the path value for stock liquidity on stock *returns* is significant, and hypothesis H3 is accepted. The coefficient for *foreign flow* is 3.399, with a significance of 0.002 ($p < 0.05$). Therefore, it can be concluded that for every increase in stock liquidity, stock *returns* will increase by 3.399 times, and the path value for *foreign flow* on stock *returns* is significant, and hypothesis H4 is accepted. The coefficient for firm profitability is -0.204, with a significance of 0.546 ($p > 0.05$). Therefore, profitability does not significantly affect *foreign flow*, and hypothesis H5 is rejected. The coefficient for firm valuation is 0.0003, with a significance of 0.602 ($p > 0.05$). Thus, valuation does not significantly affect *foreign flow*, and hypothesis H6 is rejected. The coefficient for stock liquidity is 1.0794, with a significance of 0.001 ($p < 0.05$). Therefore, it can be concluded that for every increase in stock liquidity, *foreign flow* will increase by 1.0794 times, and the path value for stock liquidity on *foreign flow* is significant, and hypothesis H7 is accepted.

Table 3. Indirect Effect Analysis

	Hypothesis	Path	Beta	t-Stat	P	Result
H8	Firm Profitability	\Rightarrow <i>Foreign flow</i> \Rightarrow Stock <i>Return</i>	10.116	1.22	0.223	Rejected
H9	Firm Valuation	\Rightarrow <i>Foreign flow</i> \Rightarrow Stock <i>Return</i>	0.117	3.20	0.001	Accepted
H10	Stock Liquidity	\Rightarrow <i>Foreign flow</i> \Rightarrow Stock <i>Return</i>	-7.572	-1.59	0.111	Rejected

Source: Data processing by Author (2025)

The mediation results in Table 3 provide a more nuanced understanding of the indirect effect of firm profitability, firm valuation, stock liquidity on stock *return* meditated by *foreign flow*. The hypothesis test for direct influence is accepted if the p-value is less than 0.05. Based on the data processing results in Table 3, the coefficient value for the mediating variable *foreign flow* is -0.4121006. This value represents the path coefficient. The significance value for the mediating variable *foreign flow* is 0.265, which is greater than 0.05 ($p > 0.05$). Therefore, it can be concluded that the path value for the mediating variable *foreign flow* does not have a significant effect. Consequently, hypothesis H8 in this study, which states that *foreign flow* mediates the effect of firm profitability on stock *returns*, is rejected.

The coefficient value for the mediating variable *foreign flow* is -0.0050432. This value represents the path coefficient. The significance value for the mediating variable *foreign flow* is 0.001, which is less than 0.05 ($p < 0.05$). Therefore, it can be concluded that the path value for the mediating variable *foreign flow* has a significant effect. Consequently, hypothesis H9 in this study, which states that *foreign flow* mediates the effect of firm valuation on stock *returns*, is accepted. The coefficient value for the mediating variable *foreign flow* is 0.2269915. This value represents the path coefficient. The significance value for the mediating variable *foreign flow* is 0.306, which is greater than 0.05 ($p > 0.05$). Therefore, it can be concluded that the path value for the mediating variable *foreign flow* does not have a significant effect. Consequently, hypothesis H10 in this

study, which states that *foreign flow* mediates the effect of stock liquidity on stock *returns*, is rejected.

Discussion

The interpretation of the path coefficients in Table 2 offers important insights into how the model explains the direct effect among the study variables directly effect, particularly in terms of both statistical significance and effect. The findings of this study indicate that the first hypothesis (H1), which posits that firm profitability significantly affects stock *returns*, is rejected. This suggests that the profitability variable, measured by ROA (*Return on Assets*), does not significantly enhance stock *returns*. In the financial sector, ROA fails to influence stock *returns*, as investors often focus on other financial metrics such as earnings per share (EPS), revenues, and cash flows. While ROA provides insight into a company's efficiency in generating profit relative to its assets, it is insufficient to explain stock *return* fluctuations, which are influenced by various external factors. These findings align with Mahirun (2023), which concluded that ROA does not significantly impact stock *returns*.

The findings indicate that the second hypothesis (H2), which suggests that firm valuation significantly impacts stock *returns*, is rejected. The firm valuation variable, measured by P/E (*Price Earnings Ratio*), does not significantly enhance stock *returns*. In the financial sector, factors such as macroeconomic conditions, interest rates, and market liquidity play a more dominant role in determining stock *returns*. While the P/E ratio is a common indicator of valuation, it does not fully reflect the complexities of the financial sector, where stock *returns* are more responsive to changes in regulations and systemic risks. These findings are consistent with Mahirun (2023), which indicated that P/E ratio has no significant effect on stock *returns*.

The findings indicate that the third hypothesis (H3), which states that stock liquidity significantly impacts stock *returns*, is accepted. This suggests that stock liquidity, measured by trading volume, does enhance stock *returns*. In the financial sector, high trading volumes reflect market interest and liquidity, facilitating transactions and enhancing stock price efficiency. When trading volume increases, it often indicates positive expectations about company performance, which can lead to higher stock *returns*. These results support the findings of Jun et al. (2003), which noted that stock liquidity significantly affects stock *returns*.

The fourth hypothesis (H4) is accepted, as *foreign flow*, measured by net foreign buy, significantly impacts stock *returns*. Foreign investments indicate global investor confidence in a company's prospects, which is particularly impactful in the financial sector, where external economic policies and market confidence play a crucial role. High levels of foreign buying typically signal positive market sentiment, contributing to higher stock prices and enhanced liquidity. These results are consistent with Yan & Wang (2018), which found that *foreign flow* significantly influences stock *returns*.

The findings suggest that the fifth hypothesis (H5), which posits that firm profitability significantly influences *foreign flow*, is rejected. The profitability variable, measured by ROA, does not enhance *foreign flow*. In the financial sector, foreign investors tend to focus on macroeconomic factors such as monetary policy and political stability rather than individual firm profitability. Therefore, while ROA is an internal performance indicator, it is not sufficient to attract foreign investment, which is driven by broader economic conditions. These findings align with Jehan et al. (2023), which stated that firm profitability (ROA) does not significantly influence *foreign flow*.

The sixth hypothesis (H6), which suggests that firm valuation significantly impacts *foreign flow*, is rejected. The valuation variable, measured by P/E, does not influence *foreign flow*. Foreign investors in the financial sector are more likely to focus on global economic stability, international interest rates, and systemic risks, rather than relying solely on firm valuations. P/E ratio, while providing some insight into a firm valuation, is not a sufficient predictor of foreign investment. These findings are consistent with Jehan et al. (2023), which indicated that firm valuation (P/E) does not significantly affect *foreign flow*.

The seventh hypothesis (H7), which states that stock liquidity significantly influences *foreign flow*, is accepted. High trading volume, reflecting stock liquidity, is a key factor in attracting foreign investment. In the financial sector, liquidity facilitates easy market access and assures foreign investors that they can enter or exit positions without significantly affecting stock prices. The presence of high liquidity is indicative of market interest, encouraging foreign investors to participate, which in turn increases *foreign flow*. These results align with the findings of Liljeblom & Löflund (2005), which showed that stock liquidity significantly influences *foreign flow*.

The eighth hypothesis (H8), which suggests that *foreign flow* mediates the impact of firm profitability on stock *returns*, is rejected. Although profitability, measured by ROA, may reflect a company's financial performance, *foreign flow* does not effectively mediate its impact on stock *returns* in the financial sector. Foreign investments are more influenced by external factors such as global market conditions, regulatory changes, and macroeconomic stability. These findings are consistent with Mahirun (2023), who concluded that ROA does not significantly affect *foreign flow*, and *foreign flow* does not mediate the relationship between profitability and stock *returns*.

The ninth hypothesis (H9), which posits that *foreign flow* mediates the effect of firm valuation on stock *returns*, is accepted. The P/E ratio provides a preliminary understanding of firm valuation, but the relationship between valuation and stock *returns* is strengthened when combined with *foreign flow*. Foreign investments signal global confidence in the company's future prospects, thereby reinforcing the positive impact of valuation on stock *returns*. These results align with Jehan et al. (2023) and Indrayono (2019), which confirmed that *foreign flow* has a significant impact on stock *returns*.

The tenth hypothesis (H10), which suggests that *foreign flow* mediates the impact of stock liquidity on stock *returns*, is rejected. While high trading volume increases market efficiency and liquidity, *foreign flow* does not significantly mediate this relationship in the financial sector. Liquidity itself is often sufficient to create an efficient market without the need for *foreign flow* to intervene. Other factors, such as macroeconomic conditions and market sentiment, play a more dominant role in influencing stock *returns*. These findings are in line with Jun et al. (2003), who concluded that stock liquidity (trading volume) does not significantly influence *foreign flow* or stock *returns*.

Limitation

This study reports a coefficient of determination below 50%, indicating that a substantial proportion of the variance in stock *returns* remains unexplained; therefore, other factors not included in this model may also influence stock *returns* and warrant further investigation.

Contribution

The aforementioned gaps in prior studies provide the basis for this study's novelty, which is operationalized by introducing *foreign flow* as a mediating variable. *Foreign flow* is selected as a mediator to address unresolved inconsistencies in earlier findings and to offer a more robust explanation of the relationships examined.

CONCLUSION AND SUGGESTION

Conclusion

The results of this study show that stock liquidity and *foreign flow* significantly affect stock *returns*, while firm profitability and firm valuation do not have a significant impact on stock *returns*. Stock liquidity also significantly influences *foreign flow*, while firm profitability and valuation do not. Additional tests indicate that *foreign flow* mediates the effect of firm valuation on stock *returns* but does not mediate the effect of firm profitability or stock liquidity on stock *returns*.

These findings support Signaling Theory and Efficient Market Hypothesis (EMH), which suggest that stock fundamentals, such as firm valuation and stock liquidity, attract foreign investors, ultimately driving up stock prices and *returns*. Based on these explanations, it can be concluded that firms in the financial sector listed on the Indonesia Stock Exchange during 2022-2024 have strong fundamentals that attract foreign investment, thereby increasing the *returns* from their stocks. This serves as added value for stock investors in Indonesia when considering their investment decisions.

Suggestion

For future research, scholars may consider expanding the scope and extending the observation period, incorporating additional variables such as market sentiment, and complementing quantitative analyses with qualitative approaches to provide richer insights.

AUTHOR CONTRIBUTION STATEMENT

All authors declare that this work is original and has never been published in any form or media, nor is it under consideration for publication in any other journal. All sources cited in this work adhere to the basic standards of scientific citation.

REFERENCE

- Amihud, Y., & Mendelson, H. (1986). Asset pricing and the bid-ask spread. *Journal of Financial Economics*, 17(2), 223–249. [https://doi.org/10.1016/0304-405X\(86\)90065-6](https://doi.org/10.1016/0304-405X(86)90065-6)
- Agung, I. G. N. (2013). *Panel Data Analysis Using E Views*. John Wiley & Sons, Ltd.
- Balvers, R. J., Gu, L., & Huang, D. (2017). Profitability, Value, and Stock *Returns* in Production-Based Asset Pricing without Frictions. *Journal of Money, Credit and Banking*, 49(7), 1621–1651. <https://doi.org/10.1111/jmcb.12426>
- Bekaert, G., & Harvey, C. R. (2000). Foreign Speculators and Emerging Equity Markets. *The Journal of Finance*, 55(2), 565–613. <https://doi.org/10.1111/0022-1082.00220>

- The Role of Foreign flow in Mediating the Influence of Firm Profitability, Firm Valuation, and Stock Liquidity on Stock Return; Pages 1837-1852 [Ahmad Zulham Hamdan, Nur Khusniyah Indrawati, Mychelia Champaca]
- Chandra, T., Junaedi, A. T., Wijaya, E., Suharti, S., Mimelientesa, I., & Ng, M. (2019). The effect of capital structure on profitability and stock *returns*. *Journal of Chinese Economic and Foreign Trade Studies*, 12(2), 74–89. <https://doi.org/10.1108/jcefts-11-2018-0042>
- Creswell, J. W., & Creswell, J. D. (2023). *RESEARCH DESIGN: Qualitative, Quantitative, and Mixed Methods Approaches* (Sixth Edit). SAGE Publications, Inc.
- Datar, V. T., Y. Naik, N., & Radcliffe, R. (1998). Liquidity and stock *returns*: An alternative test. *Journal of Financial Markets*, 1(2), 203–219. [https://doi.org/10.1016/S1386-4181\(97\)00004-9](https://doi.org/10.1016/S1386-4181(97)00004-9)
- Dladla, P., & Malikane, C. (2019). Stock *return* predictability: Evidence from a structural model. *International Review of Economics and Finance*, 59(October 2018), 412–424. <https://doi.org/10.1016/j.iref.2018.10.006>
- Fama, E. F. (1970). Stock market price behavior. *The Journal of Finance*, 25(2), 383–417. <https://doi.org/http://www.jstor.org/stable/2325486>
- Fama, E. F., & French, K. R. (1992). The Cross-Section of Expected Stock *Returns*. *The Journal of Finance*, 47(2), 427. <https://doi.org/10.2307/2329112>
- Froot, K. A. (2008). Foreign direct investment. University of Chicago Press.
- FTSE. (2025). *FTSE Indonesia Index (USD)*. <https://research.ftserussell.com/Analytics/Factsheets/Home/DownloadSingleIssue?issueName=WIIDN&IsManual=false>
- Guasoni, P., & Weber, M. (2017). Dynamic Trading Volume. *Mathematical Finance*, 27(2), 313–349. <https://doi.org/10.1111/mafi.12099>
- Hertina, D., & Saudi, M. H. M. (2019). Stock *return*: Impact of *return* on asset, *return* on equity, debt to equity ratio and earning per share. *International Journal of Innovation, Creativity and Change*, 6(12), 93–104.
- IDX. (2025). 19 Juta Investor Pasar Modal dan 8 Juta Investor Saham Tercapai di Penutupan Bulan Inklusi Keuangan 2025. Bursa Efek Indonesia. <https://www.idx.co.id/id/berita/siaran-pers/2488>
- Indrayono, Y. (2019). Predicting *returns* with financial ratios: Evidence from Indonesian Stock Exchange. *Management Science Letters*, 9(11), 1901–1908. <https://doi.org/10.5267/j.msl.2019.6.003>
- Jehan, N., Nawaz, F., & Zeb, A. (2023). Nexus between Pakistani Firm's Profitability and Foreign Direct Investment. *Global Social Sciences Review*, VIII(II), 143–164. [https://doi.org/10.31703/gssr.2023\(viii-ii\).15](https://doi.org/10.31703/gssr.2023(viii-ii).15)
- Jun, S. G., Marathe, A., & Shawky, H. A. (2003). Liquidity and stock *returns* in emerging equity markets. *Emerging Markets Review*, 4(1), 1–24. [https://doi.org/10.1016/S1566-0141\(02\)00060-2](https://doi.org/10.1016/S1566-0141(02)00060-2)
- Kang, J.-K., & Stulz, R. M. (1996). How Different Is Japanese Corporate Finance? An Investigation of the Information Content of New Security Issues. *Review of Financial Studies*, 9(1), 109–139. <https://doi.org/10.1093/rfs/9.1.109>
- Kayakus, M., Tutcu, B., Terzioglu, M., Talaş, H., & Ünal Uyar, G. F. (2023). ROA and ROE Forecasting in Iron and Steel Industry Using Machine Learning Techniques for Sustainable Profitability. *Sustainability (Switzerland)*, 15(9), 1–14. <https://doi.org/10.3390/su15097389>
- KSEI. (2025). Statistik Pasar Modal Indonesia-Agustus 2025. https://web.ksei.co.id/files/Statistik_Publik_Agustus_2025.pdf

- Le, B. (2020). New evidence for the determinants of foreign investment in an Asian market. *Afro-Asian Journal of Finance and Accounting*, 10(2), 151–167. <https://doi.org/10.1504/AAJFA.2020.106251>
- Liljeblom, E., & Löflund, A. (2005). Determinants of international portfolio investment flows to a small market: Empirical evidence. *Journal of Multinational Financial Management*, 15(3), 211–233. <https://doi.org/10.1016/j.mulfin.2004.09.003>
- Lohr, S. L. (2021). *Sampling: Design and Analysis*. Chapman and Hall/CRC
- Mahirun, M. (2023). Determinants of LQ45 Stock *Return* in Indonesia. Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration, 31(2). <https://doi.org/10.46585/sp31021693>
- Martin, I. W. R., & Wagner, C. (2019). What Is the Expected *Return* on a Stock? *Journal of Finance*, 74(4), 1887–1929. <https://doi.org/10.1111/jofi.12778>
- MSCI. (2025). *MSCI Indonesia Index (USD)*. <https://www.msci.com/documents/10199/255599/msci-indonesia-index-price-usd.pdf>
- Neldi, M., Hady, H., Elfiswandi, & Lusiana. (2023). the Determinants of Price Earning Ratio: Evidence From Indonesia. *Journal of Law and Sustainable Development*, 11(4), 1–21. <https://doi.org/10.55908/SDGS.V11I4.1003>
- Novy-Marx, R. (2013). The other side of value: The gross profitability premium. *Journal of Financial Economics*, 108(1), 1–28. <https://doi.org/10.1016/j.jfineco.2013.01.003>
- Penman, S., & Reggiani, F. (2013). *Returns* to buying earnings and book value: Accounting for growth and risk. *Review of Accounting Studies*, 18(4), 1021–1049. <https://doi.org/10.1007/s11142-013-9226-y>
- S&P. (2025). *FTSE Indonesia Index (USD)*. https://www.spglobal.com/spdji/en/idsenhancedfactsheet/file.pdf?calcFrequency=M&force_download=true&hostIdentifier=48190c8c-42c4-46af-8d1a-0cd5db894797&languageId=1&indexId=344788
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business A Skill-Building Approach*. John Wiley & Sons Ltd.
- SPENCE, M. (1978). JOB MARKET SIGNALING **The essay is based on the author's doctoral dissertation ("Market Signalling: The Informational Structure of Job Markets and Related Phenomena," Ph.D. thesis, Harvard University, 1972), forthcoming as a book entitled *Market Signalin*. In *Uncertainty in Economics* (Vol. 87). ACADEMIC PRESS, INC. <https://doi.org/10.1016/b978-0-12-214850-7.50025-5>
- Vo, X. V. (2017). Trading of foreign investors and stock *returns* in an emerging market - Evidence from Vietnam. *International Review of Financial Analysis*, 52, 88–93. <https://doi.org/10.1016/j.irfa.2017.05.007>
- Yan, C., & Wang, X. (2018). The non-persistent relationship between foreign equity flows and emerging stock market *returns* across quantiles. *Journal of International Financial Markets, Institutions and Money*, 56, 38–54. <https://doi.org/10.1016/j.intfin.2018.03.002>