

BEYOND BORDERS: EXPLORING THE ROLE OF FOREIGN OWNERSHIP IN CORPORATE CASH HOLDINGS?



<https://journal.unpas.ac.id/index.php/jrak/index>

Amrie Firmansyah ¹, Nafis Dwi Kartiko², Amardianto Arham³

¹Faculty of Economic and Business, Universitas Pembangunan Nasional Veteran Jakarta, Indonesia

²Directorate General of Tax, Ministry of Finance, Indonesia

³Boston University School of Law, United States

Corresponding Author: amriefirmansyah@upnvj.ac.id ¹

Jl. Rs. Fatmawati, Pondok Labu, Jakarta Selatan, DKI Jakarta, Indonesia

Article Info

History of Article

Received: 15/12/2024

Revised: 14/2/2025

Accepted: 9/3/2025

Available Online: 16/4/2025


Jurnal Riset Akuntansi Kontemporer

Volume 17, No. 1, April 2025,

Page 139-158

ISSN 2088-5091 (Print)

ISSN 2597-6826 (Online)

 <https://doi.org/10.23969/jrak.v17i2.20710>

Keywords: foreign ownership; cash holdings; firm size; firm age; banking sector; investment efficiency

Abstract

High cash holdings in Indonesian banking firms raise concerns regarding efficiency and optimal resource allocation. This study investigates the impact of foreign ownership on cash holdings in Indonesian banks. This study is based on 637 firm-year observations from 46 Indonesian banks covering the 2004–2022 period. Due to incomplete yearly data, the analysis applies Ordinary Least Squares (OLS) regression using a cross-sectional approach. The results show that foreign ownership negatively affects all cash-holding proxies, particularly in mature banks with large asset bases. In contrast, it increases cash holdings in young banks with large assets and mature banks with small assets. These findings suggest that foreign investors may influence more efficient cash allocation, encouraging banks to direct resources toward productive investments. The study offers practical implications for policymakers and banking practitioners in enhancing cash management and governance structures in the presence of foreign stakeholders.

INTRODUCTION

Capital structure is a critical factor affecting a company's management and performance in the global business context (Bhatia & Kumari, 2024; Romano et al., 2001). The ownership structure of capital, particularly foreign ownership, significantly impacts various aspects of a firm's operations (Kampouris et al., 2022; Nakano & Nguyen, 2013; Yudaeva et al., 2003). It includes its influence on the cost of capital, which directly relates to the firm's investment and resource allocation decisions.

Foreign ownership plays a crucial role in determining the level of technology transfer, which can catalyze innovation and operational efficiency (Ghebrihiwet & Motchenkova, 2017; Jordaan, 2013). Additionally, foreign ownership affects not only the internal mechanisms of the firm but also the distribution of profits earned from investments (Ghebrihiwet & Motchenkova, 2017; Jordaan, 2013). This aspect is significant in assessing the contribution of foreign shareholders to the firm's added value. However, it is essential to note that foreign investors' control over their subsidiaries is crucial in managing risks and protecting corporate assets. Studies have shown that selecting the appropriate ownership structure, particularly for overseas affiliates, is a strategic decision that can enhance company performance (Chadha & Sharma, 2015; Kao et al., 2019; Lin & Fu, 2017; T. Nguyen et al., 2015; Yu, 2013). It demonstrates that foreign ownership not only provides funding but also influences the strategic and operational direction of the company.

Foreign ownership in a firm's capital structure has gained increasing attention in modern financial literature. Recent research suggests that foreign institutional ownership provides a source of funds and substantially benefits the firm (V. Z. Chen et al., 2014; Dachs & Peters, 2014; Divisekera & Nguyen, 2018). Contrary to previous negative views, these foreign institutions have been shown to impact long-term value creation positively (Bena et al., 2017). Efficient capital allocation is achieved through continuous investment and innovation. Foreign ownership can also improve governance and monitoring within the firm, as recognized in various studies (Aggarwal et al., 2011; W. Huang & Zhu, 2015). It can lead to a decrease in the cost of equity capital and increased transparency of corporate policies, reducing the commonality of stock liquidity (Deng et al., 2018; Hillier & Loncan, 2019). Moreover, a positive correlation has been established between foreign ownership, corporate R&D expenditure, and current and future corporate performance (Adamu & Haruna, 2020; Greenaway et al., 2020; R. D. Huang & Shiu, 2009; D. S. Nguyen et al., 2021). It has been demonstrated that foreign ownership has a greater impact on driving firm performance than foreign institutional investors (Nofal, 2020). Additional research supports the notion that foreign ownership can positively impact a company's profitability and operational performance (Y. Wang, 2016).

Foreign ownership can influence cash holding management through effective performance control. Cash holding refers to liquid assets owned by the company that can be used to finance investments or distributed as dividends to shareholders, as Gill & Shah (2012) described. Foreign ownership often leads to more disciplined financial management practices, including company cash management. Efficient management of cash holdings is crucial for companies as cash is the primary liquid asset that enables them to meet various financing needs. Diana (2020) and Wirdayanti et al. (2022) suggest that cash holdings can enhance company performance by reducing external funding costs and adding value to investment opportunities. Wirdayanti et al. (2022) also highlight the significance of cash availability in financing a company's operational activities. Foreign ownership directly impacts financial managers, as their responsibilities include managing cash levels efficiently and selecting suitable investments to maximize shareholder wealth. Companies require cash for various operational needs, such as salary payments, taxes, and dividend distribution (Bangun & Natsir, 2022; Herlambang et al., 2019; Q. Wang, 2019). Foreign ownership can contribute to more effective and strategic cash management.

This study examines the effect of foreign ownership on cash holdings in Indonesian banking firms. Previous research has produced conflicting results, with some studies indicating a positive effect (Chandra & Rahman, 2023; Phaiboonvessawat & Thanatawee, 2020; Vo, 2018) and others demonstrating a negative relationship (Loncan, 2020). A study by Ilyas et al. (2023) found that foreign institutional investors significantly influence the value of excess cash holdings. Furthermore, Karim & Ilyas (2021) conducted a study that found that foreign institutional investors in companies with a high probability of managerial agency costs and cash takeovers can reduce agency costs and positively impact cash contribution to firm value. The study employs a comprehensive analytical approach to provide a deeper understanding of the dynamics of foreign ownership and its effect on cash holdings.

This study presents a new perspective on the effect of foreign ownership on cash holding in the Indonesian banking sector, using data from 46 banks listed on the Indonesia Stock Exchange between 2004 and 2022. This study is relevant in the Indonesian context due to the high level of foreign

investment in the banking sector and the country's unique regulatory characteristics and economic environment. Foreign ownership in Indonesia's financial institutions continues to grow, making it crucial to understand how foreign investors influence corporate financial decisions, including cash-holding policies. Additionally, Indonesia's banking industry operates under a distinct governance structure and regulatory framework, which may shape the relationship between foreign ownership and corporate behavior differently than other markets. According to Swasana et al. (2019), foreign ownership policies in Indonesia's banking sector are more lenient than other countries, allowing foreign investors to have significant influence over bank share ownership. The banking liberalization implemented after the economic crisis aimed to attract foreign capital to strengthen bank capitalization; however, it also raised concerns about foreign dominance, which could impact cash management strategies and domestic bank investment. Farandy (2023) highlighted that foreign investment in the banking sector continues to expand, with foreign investors playing an increasingly dominant role in bank ownership and management, leading to changes in financial management patterns and banking expansion strategies. This study explores how foreign ownership interacts with internal firm characteristics, such as age and size, in shaping cash-holding policies.

Previous studies on foreign ownership and cash holdings have yielded mixed findings, with some suggesting a negative relationship due to foreign investors' efficiency-driven cash management. In contrast, others indicate a positive impact due to risk-averse strategies. However, these studies often overlook the moderating effects of firm characteristics, such as age and size, on this relationship. This study fills this gap by demonstrating how foreign ownership influences cash holdings differently across firm classifications, particularly highlighting its contrasting effects on mature firms with substantial assets and younger firms with large asset bases. By addressing these variations, this research provides a more nuanced understanding of corporate cash management in emerging markets, particularly in the Indonesian banking sector.

This study contributes significantly to both theoretical and practical aspects. The study enriches the literature by exploring and deepening the relationship between foreign ownership and cash holding, considering firm age and size factors. This study contributes significantly to both theoretical and practical perspectives. Theoretically, it advances the understanding of foreign ownership's role in corporate cash management by incorporating firm-specific characteristics—age and size—as moderating factors, which have been largely overlooked in prior studies. This perspective refines existing corporate finance theories by demonstrating how foreign investors influence cash policies differently across various firm classifications. Practically, the findings offer direct implications for corporate financial decision-making. Companies with foreign ownership can tailor their cash-holding strategies to firm characteristics, ensuring more efficient liquidity management. Policymakers can leverage these insights to develop regulatory frameworks that promote sound financial governance in firms with significant foreign investment. Moreover, this study provides a foundation for future research to explore how foreign ownership interacts with other corporate governance mechanisms, thus broadening the discourse on international investment and financial sustainability.

Hypothesis Development Several financial theories can be used to analyze the relationship between foreign ownership and cash holdings. Trade-off theory emphasizes the search for firms' optimal level of cash holdings, considering the associated costs and benefits (Aftab et al., 2018; Ghazouani, 2013). The benefits of holding cash are related to the firm's ability to overcome financial crises through appropriate financial instruments. Companies with more cash can reduce operating and borrowing costs using internal funds or asset liquidation. Cash can also be used for short-term investments or as a preventive measure against future losses. This model is also known as the transaction model, as it explains the transactional motive of holding cash (Opler et al., 1999).

Additionally, according to the Pecking Order Theory, cash is a cushion between retained earnings and investment needs, and there is no optimal level of cash (Barasa et al., 2018; Ferreira & Vilela, 2004; Nafees et al., 2017). Funding decisions are challenged by information asymmetry. Companies typically prefer to use retained earnings rather than external financing, which is considered expensive and complicated. Debate exists within this theory, with some researchers arguing for an optimal level of cash holdings in the trade-off model. In contrast, others suggest a higher level of balance between the

two theories. Information asymmetry also presents a challenge, particularly when the firm becomes bankrupt, as the bank, as the debt issuer, has priority in the return of funds. However, there needs to be more information between the two parties.

According to Jensen's (1986) cash flow theory, companies with substantial cash holdings can more easily raise funds and increase liquid investments. Cash flow can be divided into two types: operating cash flow, which finances short-term liabilities or investment projects, and free cash flow, which is the cash available after meeting all needs. According to Ozkan & Ozkan's (2004) who studied using a sample of 1029 firms in the UK, and a concentrated ownership structure significantly impacts cash holdings. However, they needed to find a clear functional relationship between the two. Ferreira & Vilela (2004) demonstrated that debt liquidity and cash holdings have an inverse relationship. Additionally, they found that operating cash flow and firm growth opportunities are positively and significantly related to leverage and liquidity but negatively related to bank relationships.

Foreign ownership in companies can have significant implications for corporate performance and governance. According to Choi et al. (2012), the ownership structure is crucial in influencing firms' technological innovation performance. It implies that foreign ownership, with its unique characteristics and resources, can positively contribute to innovation and technological advancement in the firm. Beuselinck et al. (2017) highlight the importance of foreign shareholders for objective financial reporting. It indicates that foreign ownership can enhance the quality of financial reporting, increase transparency, and reinforce accountability within the company. Balagobei & Velnampy (2017) suggest that foreign ownership positively affects firm performance because foreign investors influence internal corporate governance systems. Foreign ownership encourages improvements in governance practices, improving firm performance. Fitri et al. (2019) believe foreign ownership positively affects firm value. Foreign investors tend to favor companies with a conducive ownership structure, which promotes good governance practices and high transparency. The study confirms that foreign investors often seek such ownership structures. Stulz (2005) states that in developed countries, foreign institutional investors can improve corporate discipline mechanisms through superior monitoring. Aggarwal et al. (2011) and Bena et al. (2017) suggested that foreign institutional investors can export good governance to various countries, resulting in positive changes in corporate governance structures. Specifically, foreign institutional investors from countries with strong investor protection facilitate improvements in governance. Kim et al. (2019) argue that foreign institutional investors require high-quality audits to decrease information asymmetry and improve external monitoring.

In the literature review on the impact of foreign ownership on cash holdings, studies have shown mixed results with significant implications. Cui et al. (2022) found that risk in the home country of foreign investors affects their investment abroad and cash holdings in the host country. The study found that the variance in risk between the investor's home country and the host country adversely affects the firm's cash holdings. It is due to changes in managerial decision-making. Foreign investors perceive lower corporate risk and better investment opportunities in the host country. Bena et al. (2017) suggested that foreign institutions can decrease agency costs by enhancing monitoring and corporate governance, which affects corporate cash management. In a study involving 1,929 non-financial companies listed on the Tokyo Stock Exchange from 2002 to 2016, Karim & Ilyas (2021) found that the involvement of foreign institutional investors reduces agency costs and positively impacts the contribution of cash to firm value. Vo (2018) analyzed companies listed on the Ho Chi Minh City Stock Exchange from 2007 to 2015 and found a positive correlation between foreign ownership and cash holdings. It indicates that foreign investors may promote sound financial management practices by maintaining higher levels of cash reserves. In their study of 165 non-financial companies listed on the IDX, Rizandi & Haryanto (2023) found that foreign institutional ownership significantly negatively impacts corporate cash holding. Thi et al. (2021) discovered that foreign ownership positively correlates with cash holdings during the global financial crisis, and the impact of foreign ownership weakens during this period. The study analyzed a sample of 5,493 observations from 621 companies listed between 2007 and 2017. According to Phaiboovessawat & Thanatawee's (2020) research, firms with greater foreign institutional ownership tend to hold more cash in Thailand. This implies foreign institutional investors may prompt managers to maintain larger cash reserves.

Loncan (2020) analyzed firms from 23 emerging economies and found that foreign institutional ownership reduces cash holdings and increases cash contribution to firm valuation. This effect may be due to mitigating agency conflicts and resolving financing constraints. The reasons for this negative impact may vary, but one of the main explanations, as noted by Han & Qiu (2007), is the volatility of cash flows, which affects the firm's cash holding behavior. Foreign investors often demand more efficient use of money, focusing on value-adding investments rather than simply keeping it as an unproductive form of liquidity (Eden, 2016; Korna et al., 2013; Pananond, 2015). Foreign investors typically encourage firms to use their cash for value-enhancing activities, such as investing in innovation or expanding their market, rather than just holding it as liquidity reserves (Loncan, 2020). Therefore, firms with high levels of foreign ownership may have lower cash holdings but be more efficient in using funds. This observation leads to the hypothesis that there is a negative correlation between foreign ownership and cash holdings in a firm. This relationship suggests that foreign ownership decreases the firm's cash holdings due to the implementation of more disciplined and value-creation-oriented financial management practices. Based on previous research findings, the following hypothesis is formulated.

H₁: Foreign ownership has a significant negative impact on corporate cash holdings.

METHOD

The research examines 46 banking institutions listed on the Indonesia Stock Exchange (IDX), comprising 637 firm-year observations spanning 2004 to 2022. A purposive sampling method was employed to include only banks with relatively consistent financial statement availability. Due to gaps in annual data for some banks, the number of observations varies across the years. To manage this inconsistency, the analysis includes only those periods with adequate data completeness. Furthermore, data validation was performed using various sources, such as audited annual reports and official websites, to ensure reliability. This sampling strategy enables the study to provide a representative overview of the Indonesian banking sector.

The operationalization of variables in this study is carefully designed to ensure robust measurement and analysis. The dependent variable, cash holdings, is measured using four proxies derived from Hu et al. (2019), offering a comprehensive view of the firm's liquidity position. The first proxy, CASHTA, measures the proportion of cash and cash equivalents to total assets, representing a straightforward assessment of cash relative to the firm's total resources. The second proxy, LNCASHTA, takes the natural logarithm of this ratio to address potential skewness and provide a normalized perspective. The third proxy, CASHNA, calculates the proportion of cash and cash equivalents to total net assets, which excludes liabilities and gives a more refined view of liquidity. Lastly, the fourth proxy, LNCASHNA, is the natural logarithm of the ratio of cash and cash equivalents to total net assets, further normalizing the data. The independent variable, foreign ownership (FOREIGN), is the percentage of shares owned by foreign investors, following the approach of Bose et al. (2018). This variable reflects the extent of foreign investors' influence on the firm's financial policies, particularly its cash management strategies.

To enhance the robustness of the analysis, control variables are included at both the firm and macroeconomic levels. Firm-level controls are derived from well-established measures in prior literature. Firm Size (FSIZE) is represented by the natural logarithm of total assets, reflecting the scale of the firm's operations (Bose et al., 2018). Firm Age (FAGE) is measured as the natural logarithm of the years since the company's establishment, offering insights into its lifecycle stage (Bose et al., 2018). Return On Assets (ROA), calculated as pre-tax income divided by total assets, indicates operational efficiency (Muthitacharoen, 2020). Return On Equity (ROE), defined as pre-tax income divided by total equity, measures profitability from shareholders' perspectives (Yoon et al., 2021). Leverage (LEV) is computed as the ratio of total debt (including both current and long-term liabilities) to total assets, reflecting the firm's financial risk and capital structure (Hu et al., 2019).

Macroeconomic variables are incorporated to account for broader economic conditions influencing cash holdings. The inflation rate (INF) is measured as the annual percentage growth of GDP

per capita, while the annual percentage change in the GDP deflator represents GDP growth (GDPGR). Both metrics are derived from Petria et al. (2015), which provide an overarching economic context that could affect liquidity preferences and firm behavior.

This study positions cash holdings as a key indicator of financial performance, exploring how foreign ownership impacts corporate liquidity policies. Including firm-specific control variables, such as size, age, profitability, and leverage, allows for an in-depth analysis of internal factors shaping cash management. Simultaneously, integrating country-level controls, including inflation and GDP growth, situates the findings within the broader macroeconomic landscape. By combining these perspectives, the study seeks to provide a nuanced understanding of the dynamics between foreign ownership and cash holdings.

Table 1. Variable Measurement & Proxies Summary

Variable	Definition	Formula	Measurement Scale
CASHTA	Cash Holdings / Total Assets	Cash / Total Assets	Ratio
LNCASHTA	Log of CASHTA	Ln (Cash / Total Assets)	Ratio
CASHNA	Cash Holdings / Net Assets	Cash / (Total Assets - Total Liabilities)	Ratio
LNCASHNA	Log of CASHNA	ln(Cash / Net Assets)	Ratio
FOREIGN	Foreign Ownership Percentage	Foreign Shares / Total Shares	Ratio
FSIZE	Firm Size	ln(Total Assets)	Ratio
FAGE	Firm Age	ln(Years Since Establishment)	Ratio
ROE	Return on Equity	Net Income / Equity	Ratio
ROA	Return on Assets	Net Income / Total Assets	Ratio
LEV	Leverage	Total Debt / Total Assets	Ratio
INF	Inflation Rate	Annual Inflation %	Ratio
GDPGR	GDP Growth Rate	Annual GDP Growth %	Ratio

This study employs a quantitative research approach with a correlational design to examine the relationship between foreign ownership and corporate cash holdings. The analysis utilizes the Ordinary Least Squares (OLS) regression model, which estimates the effect of multiple independent variables on a single dependent variable while ensuring statistical reliability. OLS is chosen because the dataset does not contain fully structured panel or time-series data, as not all observations are available for each bank across all years (Gujarati & Porter, 2009). To enhance the robustness of the analysis, the study conducts diagnostic tests, including a Multicollinearity Test, by assessing Variance Inflation Factor (VIF) values. A VIF below 10 confirms the absence of multicollinearity, ensuring that high correlations among explanatory variables do not distort the estimated coefficients. Additionally, robustness checks are performed by employing alternative model specifications to validate the consistency of the results. The research model is as follows:

$$Cash_Holdings_{i,d} = \beta_0 + \beta_1 Foreign_Ownership_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$$

RESULTS

Table 2 presents the descriptive statistics for the data analysis of Indonesian banking companies. Four proxies were measured for cash holdings. The first proxy, CASHTA, has an average of 0.17, a median of 0.15, and a maximum value of 0.69. The second proxy, LNCASHTA, has an average of -1.87, a median of -1.87, and a maximum value of -0.37. Thirdly, the CASHNA (proportion of cash and cash equivalents to total net assets) has an average of 1.33, a median of 1.17, and a maximum value of 5.77. Finally, the LNCASHNA (natural logarithm of the ratio of cash and cash equivalents to total net assets) has an average of 0.09, a median of 0.16, and a maximum value of 1.75. The average foreign ownership in Indonesia is 30%, indicating a significant level of foreign participation in the banking

industry. The variation in foreign ownership levels suggests that corporate governance structures across firms differ significantly, leading to diverse cash management practices. Firms with higher foreign ownership are more likely to reduce excess cash reserves and reallocate funds toward investments or shareholder distributions, reflecting the efficiency-driven oversight of foreign investors.

Table 2. Descriptive Statistics

Variable	n	Mean	S.D.	Min	0.25	Mdn	0.75	Max
CASHTA	637	0.17	0.08	0.04	0.12	0.15	0.20	0.69
LNCASHTA	637	-1.87	0.43	-3.22	-2.14	-1.87	-1.60	-0.37
CASHNA	637	1.33	0.81	-2.03	0.76	1.17	1.74	5.77
LNCASHNA	637	0.09	0.68	-3.17	-0.26	0.16	0.55	1.75
FOREIGN	637	0.30	0.40	0.00	0.00	0.00	0.84	0.99
FAGE	637	3.74	0.53	1.95	3.30	3.81	4.08	4.84
FSIZE	637	30.99	1.83	25.22	29.70	30.84	32.42	35.23
ROE	637	9.99	24.62	-205.72	1.45	9.53	19.90	135.50
ROA	637	0.84	2.34	-13.57	0.20	0.92	1.69	11.22
LEV	637	3.65	5.37	0.00	0.00	1.79	5.14	48.68
INFL	637	6.27	4.68	-0.40	3.75	4.97	8.27	18.15
GDPGR	637	4.73	2.00	-2.07	4.88	5.07	5.56	6.35

The multicollinearity test results contained in Table 3 show the Variance Inflation Factor (VIF) value for each variable in four different regression models. The VIF values obtained indicate no multicollinearity symptoms in the regression model studied. It can be seen from the VIF values for all variables, such as ROE, ROA, FSIZE, FAGE, INFL, GDPGR, LEV, and FOREIGN, which all have VIF values below the threshold of 10, with the highest value being 1.72 for ROE and the lowest value being 1.2 for FOREIGN. The average VIF value for all variables is 1.45, well below the set threshold, indicating the absence of multicollinearity issues in the regression model. It suggests that the variables in the regression model have a low level of correlation with each other, thus ensuring that the regression analysis results are reliable and valid.

Table 3. Variance Inflation Factor

Variable	CASHTA	LNCASHTA	CASHNA	LNCASHNA
ROE	1.72	1.72	1.72	1.72
ROA	1.66	1.66	1.66	1.66
FSIZE	1.59	1.59	1.59	1.59
FAGE	1.44	1.44	1.44	1.44
INFL	1.39	1.39	1.39	1.39
GDPGR	1.38	1.38	1.38	1.38
LEV	1.25	1.25	1.25	1.25
FOREIGN	1.20	1.20	1.20	1.20
Mean VIF	1.45	1.45	1.45	1.45

This study conducted pairwise correlation analysis between variables; the results are presented in Table 4. The results show a negative relationship between the CASHTA, LNCASHTA, CASHNA, and LNCASHNA variables and the FOREIGN variable. The correlation between CASHTA (proportion of cash and cash equivalents to total assets) and FOREIGN is -0.180, with a significance of $p < 0.1$, indicating a significant negative relationship. It means that the higher the foreign ownership in the company, the lower the proportion of cash and cash equivalents to total assets. The correlation between LNCASHTA (natural logarithm of the ratio of cash and cash equivalents to total assets) and FOREIGN is also negative, with a value of -0.151 and a significance of $p < 0.1$.

Meanwhile, CASHNA (the proportion of cash and cash equivalents to total net assets) has a negative correlation of -0.143 with FOREIGN, which is also significant at $p < 0.1$. LNCASHNA (the

natural logarithm of the cash and cash equivalents ratio to total net assets) has a lower correlation with FOREIGN, -0.067, and significance at $p < 0.1$, indicating a negative relationship but weaker than other cash holdings variables. This correlation suggests that an increase in foreign ownership is associated with a reduction in cash holdings, both in absolute terms and relative to total and net assets.

Table 4. Correlation Matrix This table presents the Pairwise correlation coefficients between the variables used for hypothesis testing (p-values are in parentheses).

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) CASHTA	1.000											
(2) LNCASHTA	0.945*	1.000										
(3) CASHNA	0.558*	0.625*	1.000									
(4) LNCASHNA	0.540*	0.659*	0.882*	1.000								
(5) FOREIGN	-0.180*	-0.151*	-0.143*	-0.067	1.000							
(6) FAGE	-0.232*	-0.202*	-0.119*	-0.098*	0.312*	1.000						
(7) FSIZE	-0.263*	-0.171*	0.003	0.085*	0.109*	0.472*	1.000					
(8) ROE	0.035	0.058	0.072	0.071	-0.090*	0.207*	0.345*	1.000				
(9) ROA	-0.065	-0.036	-0.022	-0.067	-0.060	0.218*	0.326*	0.613*	1.000			
(10) LEV	-0.151*	-0.149*	-0.022	0.010	0.246*	0.253*	0.377*	0.091*	0.049	1.000		
(11) INFL	0.089*	0.070	0.254*	0.224*	0.086*	-0.033	-0.039	0.103*	0.048	0.090*	1.000	
(12) GDPGR	0.182*	0.220*	0.268*	0.294*	0.048	-0.050	-0.044	0.140*	0.100*	-0.022	0.509*	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The study's discussion of regression results focuses on the impact of foreign ownership on firm cash holdings. Table 5 displays the regression results that investigate the effect of foreign ownership on cash holdings throughout the sample. Models (1), (3), (5), and (7) use equations without control variables. In contrast, Models (2), (4), (6), and (8) include control variables such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation rate (INF), and GDP growth (GDPGR). The regression results indicate that foreign ownership has a negative impact on cash holdings in all models. In Model (1), foreign ownership has a negative effect on CASHTA with a coefficient of -0.0353 ($t = -5.86$, $p < 0.01$). In Model (2), with control variables such as Firm Age (FAGE), Firm Size (FSIZE), and Return On Equity (ROE), the effect of foreign ownership on CASHTA is -0.0239 ($t = -3.79$, $p < 0.01$). In Model (2), with control variables such as Firm Age (FAGE), Firm Size (FSIZE), and Return On Equity (ROE), the effect of foreign ownership on CASHTA is -0.0239 ($t = -3.79$, $p < 0.01$). Additionally, FAGE has a negative coefficient of -0.0134 ($t = -2.67$, $p < 0.01$) in Model (2), indicating that firm age negatively affects cash holdings. The variable FSIZE has a negative effect of -0.00902 ($t = -3.68$, $p < 0.01$) on cash holdings. The model's ability to explain variations in cash holdings significantly increases when control variables are included. For instance, the R2-Adjusted for Model (2) is 0.132, indicating that the model explains approximately 13.2% of the variation in cash holdings. The significant F-statistic value confirms the reliability of the regression model used.

Table. 5 Regression Results

The table displays the regression outcomes that investigate the effect of foreign ownership on corporate cash holdings across all samples. Models (1), (3), (5) and (7) use the equation: $Cash_Holdings_{i,d} = \beta_0 + \beta_1 Foreign_Ownership_{i,d} + \epsilon$. Meanwhile, Models (2), (4), (6), and (8) is a model that includes control variables, as shown in the following equation: $CASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $LNCASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $CASHNA = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, and $LNCASHNA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$. The variable $\varphi_{i,d}$ is a control variable that comprises factors such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation

rate (INF), and GDP growth (GDPGR). The table includes regression coefficients and t-statistics $\left(\frac{b}{t_{stat}}\right)$. Robust regressions have been presented to account for heteroscedasticity and autocorrelation. The significance levels are denoted by ***, **, and *, corresponding to 1%, 5%, and 10% respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	CASHTA	CASHTA	LNCASHTA	LNCASHTA	CASHNA	CASHNA	LNCASHNA	LNCASHNA
FOREIGN	- 0.0353*** (-5.86)	-0.0239*** (-3.79)	-0.165*** (-4.55)	-0.0977** (-2.48)	-0.293*** (-3.99)	-0.301*** (-3.70)	-0.116** (-1.97)	-0.118** (-1.99)
FAGE		-0.0134*** (-2.67)		-0.0927*** (-2.80)		-0.137** (-1.97)		-0.168*** (-3.00)
FSIZE		-0.00902*** (-3.68)		-0.0228* (-1.72)		0.0402* (1.92)		0.0777*** (3.33)
ROE		0.000478*** (2.88)		0.00244** (2.54)		0.00230 (1.10)		0.00273* (1.68)
ROA		-0.00299 (-1.18)		-0.0161 (-1.14)		-0.0380 (-1.52)		-0.0583** (-2.40)
LEV		-0.000334 (-0.59)		-0.00493 (-1.27)		-0.00149 (-0.28)		-0.00280 (-0.68)
INFL		-0.0000606 (-0.08)		-0.00476 (-1.04)		0.0296*** (3.51)		0.0157** (2.43)
GDPGR		0.00632*** (3.95)		0.0496*** (4.88)		0.0762*** (5.25)		0.0857*** (5.47)
_cons	0.179*** (43.69)	0.475*** (6.10)	-1.823*** (-80.08)	-0.987** (-2.36)	1.414*** (32.41)	0.149 (0.24)	0.126*** (3.42)	-2.127*** (-3.10)
N	637	637	637	637	637	637	637	637
R ² -Adj	0.0309	0.132	0.0211	0.109	0.0189	0.122	0.00295	0.143
F_Stat	34.28	10.81	20.68	9.781	15.95	14.18	3.900	12.27
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0487	0.0000

The study's results suggest that foreign ownership (FOREIGN) negatively affects all cash holdings proxies, supporting Hypothesis 1. This implies that foreign investors tend to use cash more efficiently and focus on value-adding investments rather than using it for unproductive liquidity. This finding aligns with Loncan's results, which analyzed companies in 23 developing countries. The study found that foreign institutional ownership decreases cash holdings but increases the contribution of cash to firm valuation. This effect may be due to the mitigation of agency conflicts and the resolution of financing constraints. The negative impact of cash flow volatility on firms' cash holding behavior has been noted by Han & Qiu (2007), as well as by Eden (2016), Korna et al. (2013), and Pananond (2015). Foreign investors often demand more efficient use of cash, focusing on value-adding investments rather than simply holding it as an unproductive form of liquidity. This reinforces the argument that firms with greater foreign ownership are subject to stronger governance mechanisms, which encourage disciplined liquidity management and discourage excessive cash reserves. Therefore, companies with high levels of foreign ownership may have lower cash holdings but a more efficient use of funds.

To enhance the analysis in this study, we categorized the sample companies into four quadrants based on their age and size (shown in Figure 1). This categorization investigates the impact of age and size on the results. The company's average age and size determine the scale's dividing lines. The first quadrant comprises 17 companies that have been operating for a long time and are significant. These companies may have more established management structures and financial strategies. With stronger governance and operational efficiency, these firms are expected to optimize cash holdings, ensuring liquidity while minimizing idle funds. It will be interesting to see how these characteristics interact with other variables in the regression model. The second quadrant includes two young companies that are already large. They may be in a rapid growth phase, and exploring how innovation and expansion affect

their financial policies would be interesting. Given their expansionary nature, these firms may require higher cash reserves to finance aggressive investment strategies while maintaining financial stability. In the third quadrant, there are 19 small and young companies. These companies may have greater flexibility in financial decision-making than larger, older ones. However, they may also face liquidity constraints, necessitating more conservative cash management strategies. The fourth quadrant includes eight companies operating for an extended period but are relatively small. These companies may have a more conservative approach or have found a specific niche market.

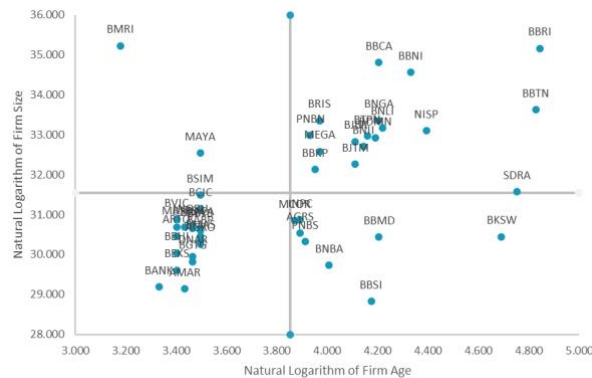


Figure 1. Quadrants for Firm Age and Firm Size

The regression model that has been created will be used to investigate each quadrant. It will enable us to identify and compare patterns and trends between different company groups. This quadrant-based regression analysis allows for a comparative examination of how firm characteristics influence the relationship between foreign ownership and cash holdings. The approach strengthens the empirical findings by illustrating whether foreign ownership's impact varies across different firm profiles or remains consistent across the board. The approach strengthens the empirical findings by identifying whether the observed trends hold consistently across different firm profiles or if specific categories exhibit unique financial behaviors. Foreign ownership may exert different effects depending on firm maturity and size, leading to variations in cash management practices. By incorporating firm characteristics into the analysis, this study provides a more nuanced understanding of how foreign investors influence corporate liquidity policies in diverse business environments. The results reinforce that foreign investors play a crucial role in shaping corporate liquidity policies, pushing firms toward a more strategic allocation of cash resources while minimizing unproductive liquidity reserves.

This discussion will focus on the first quadrant, which comprises mature firms with significant assets. Table 6 displays the regression results that examine the impact of foreign ownership (FOREIGN) on cash holdings in these firms. The results show that FOREIGN has a negative effect on cash holdings, which is consistent with the main findings across the sample. Furthermore, the regression results suggest that Firm Size (FSIZE) negatively affects the cash holdings proxy. Mature and large firms typically possess more stable and efficient financial structures. The presence of foreign investors in such firms may encourage more effective use of cash and a focus on value-enhancing investments. With increased resources and greater access to financing options, these companies may not need to maintain high cash holdings as a liquidity reserve. Instead, they will likely invest the funds in higher-yielding opportunities or other uses that support growth and expansion. The negative effect of FSIZE on cash holdings can be explained by the fact that larger companies are more efficient in managing their liquid assets. This is because larger companies often have better risk management systems and can access cheaper financing sources, reducing the need to hold large amounts of cash. Additionally, larger companies may have a more established dividend payout policy, reducing the need to hold excess cash.

Table 6. Regression Results

The table presents the regression results examining the effect of foreign ownership on corporate cash holdings in mature companies with significant assets. Models (1), (2), (3) and (4) respectively use the following equations: $CASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $LNCASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $CASHNA = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, and $LNCASHNA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$. The variable $\varphi_{i,d}$ is a control variable that comprises factors such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation rate (INF), and GDP growth (GDPGR). The table includes regression coefficients and t-statistics $\left(\frac{b}{t_{stat}}\right)$. Robust regressions have been presented to account for heteroscedasticity and autocorrelation. The significance levels are denoted by ***, **, and *, corresponding to 1%, 5%, and 10% respectively.

	(1) CASHTA	(2) LNCASHTA	(3) CASHNA	(4) LNCASHNA
FOREIGN	-0.0354*** (-5.16)	-0.188*** (-4.02)	-0.684*** (-8.25)	-0.465*** (-8.65)
FAGE	-0.0146 (-1.44)	-0.0899 (-1.25)	-0.0293 (-0.19)	0.0552 (0.52)
FSIZE	-0.00940*** (-3.10)	-0.0425** (-2.32)	-0.158*** (-4.11)	-0.114*** (-3.96)
ROE	0.000340 (1.38)	0.00261 (1.62)	0.0102*** (2.75)	0.00863*** (2.80)
ROA	0.00505 (1.33)	0.0170 (0.74)	-0.136*** (-4.27)	-0.134*** (-5.17)
LEV	-0.00158** (-2.53)	-0.0127*** (-2.70)	-0.0133* (-1.85)	-0.0142** (-2.44)
INFL	0.000188 (0.25)	-0.00196 (-0.42)	0.0248** (2.57)	0.0140** (2.26)
GDPGR	0.00512*** (2.87)	0.0444*** (3.26)	0.0568*** (2.87)	0.0681*** (3.44)
_cons	0.499*** (4.58)	-0.331 (-0.50)	6.522*** (5.07)	3.518*** (3.75)
<i>N</i>	291	291	291	291
<i>R</i> ² -Adj	0.265	0.247	0.379	0.399
<i>F</i> _Stat	11.26	10.70	22.30	25.52
<i>Prob</i> > <i>F</i>	0.0000	0.0000	0.0000	0.0000

In this section, we will discuss quadrant 2, which is a segment of firms that are young but have significant assets. Table 7 presents the regression results evaluating the effect of foreign ownership (FOREIGN) on cash holdings in young firms with significant assets. In contrast to the main findings across the sample, the results in quadrant two show that FOREIGN positively affects cash holdings. In addition, the regression results also show that Firm Size (FSIZE) has a positive effect, while Firm Age (FAGE) has a negative effect on the cash holdings proxy. Young, large-sized companies are in the growth and expansion stage. The presence of foreign investors in these companies often brings additional capital that can be used to support innovation and growth. Foreign ownership may also bring new management perspectives that favor the strategic use of cash to accelerate expansion and innovation. This contributes to increased cash holdings as a resource for future investments.

The positive effect of FSIZE suggests that these firms use their scale to maximize operational efficiency, thereby increasing cash holdings. They may have better access to various sources of financing, which allows them to keep more cash for emerging investment opportunities. On the other hand, the negative effect of FAGE suggests that as they age, these young firms may optimize their financial structure and become more efficient in cash management. In the early stages of growth, they may require higher levels of cash holdings to deal with uncertainty and strategic investments.

Table 7. Regression Results

This table presents regression results testing the effect of foreign ownership on corporate cash holdings in young firms with significant assets. Models (1), (2), (3) and (4) respectively use the following equations: $CASHTA_{i,d} = \beta_0 + \beta_1FOREIGN_{i,d} + \beta_2\varphi_{i,d} + \epsilon$, $LNCASHTA_{i,d} = \beta_0 + \beta_1FOREIGN_{i,d} + \beta_2\varphi_{i,d} + \epsilon$, $CASHNA = \beta_0 + \beta_1FOREIGN_{i,d} + \beta_2\varphi_{i,d} + \epsilon$, and $LNCASHNA_{i,d} = \beta_0 + \beta_1FOREIGN_{i,d} + \beta_2\varphi_{i,d} + \epsilon$. The variable $\varphi_{i,d}$ is a control variable that comprises factors such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation rate (INF), and GDP growth (GDPGR). The table includes regression coefficients and t-statistics $\left(\frac{b}{t_{stat}}\right)$. Robust regressions have been presented to account for heteroscedasticity and autocorrelation. The significance levels are denoted by ***, **, and *, corresponding to 1%, 5%, and 10% respectively.

	(1) CASHTA	(2) LNCASHTA	(3) CASHNA	(4) LNCASHNA
FOREIGN	0.170 (1.64)	1.417* (2.00)	4.164*** (3.67)	4.146*** (3.93)
FAGE	-0.0711 (-1.54)	-0.574* (-1.92)	-2.022*** (-4.37)	-2.075*** (-4.74)
FSIZE	0.00717 (0.58)	0.0833 (0.99)	0.226* (1.84)	0.223* (2.00)
ROE	0.000987** (2.58)	0.00597** (2.13)	0.0102* (1.80)	0.00302 (0.64)
ROA	0.0222* (1.83)	0.177* (2.01)	0.322* (2.06)	0.352** (2.50)
LEV	0.000866* (1.95)	0.00369 (1.24)	0.0156** (2.70)	0.00658 (1.51)
INFL	0.00152 (0.54)	0.0101 (0.55)	-0.00717 (-0.31)	-0.0217 (-0.89)
GDPGR	-0.00209 (-0.58)	-0.0182 (-0.67)	-0.0303 (-0.81)	-0.0189 (-0.50)
_cons	0.0297 (0.09)	-3.675 (-1.50)	-1.744 (-0.47)	-2.429 (-0.71)
N	33	33	33	33
R ² -Adj	0.348	0.312	0.624	0.588
F_Stat	23.71	15.09	19.09	14.50
Prob > F	0.0000	0.0000	0.0000	0.0000

This section deals with the third quadrant, which includes young firms with small assets. Table 8 presents the regression results that examine the effect of foreign ownership (FOREIGN) on cash holdings in young firms with small assets. Interestingly, the results show that FOREIGN does not significantly affect cash holdings, which differs from the main findings across the sample. In this

quadrant, the regression results indicate that Firm Size (FSIZE) positively influences cash holdings proxies. At the same time, Firm Age (FAGE) significantly negatively influences CASHNA and LNCASHNA proxies. However, on CASHTA and LNCASHTA proxies, neither FAGE nor FSIZE shows a significant effect.

The absence of a significant FOREIGN effect on young firms with small assets can be explained. Such companies may still need to attract foreign investors due to their limited operational scale and higher risk profile. In addition, these young firms may be more focused on growth and expansion, so their cash holdings management is influenced more by operational and investment needs than by external factors such as foreign ownership. The positive effect of FSIZE suggests that as size increases, these young firms tend to hold more cash in preparation for growth and investment opportunities. On the other hand, the negative effect of FAGE may indicate that as they age, these firms become more efficient in their use of cash, perhaps due to increased management experience and internal learning processes.

Table 8. Regression Results

The table presents the regression results examining the effect of foreign ownership on corporate cash holdings in young small-asset firms. Models (1), (2), (3) and (4) respectively use the following equations: $CASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $LNCASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $CASHNA = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, and $LNCASHNA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$. The variable $\varphi_{i,d}$ is a control variable that comprises factors such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation rate (INF), and GDP growth (GDPGR). The table includes regression coefficients and t-statistics ($\frac{b}{t_{stat}}$). Robust regressions have been presented to account for heteroscedasticity and autocorrelation. The significance levels are denoted by ***, **, and *, corresponding to 1%, 5%, and 10% respectively.

	(1) CASHTA	(2) LNCASHTA	(3) CASHNA	(4) LNCASHNA
FOREIGN	-0.0113 (-0.52)	-0.0448 (-0.37)	0.183 (0.72)	0.177 (1.32)
FAGE	0.0769 (1.46)	0.146 (0.53)	-2.439*** (-4.56)	-2.542*** (-7.79)
FSIZE	-0.0148 (-1.40)	0.0137 (0.28)	0.383*** (8.41)	0.428*** (7.06)
ROE	0.000416** (1.98)	0.00183 (1.52)	0.000112 (0.05)	-0.000247 (-0.16)
ROA	-0.00265 (-0.84)	-0.0103 (-0.60)	-0.00905 (-0.34)	-0.0338 (-1.51)
LEV	0.000604 (0.23)	-0.00556 (-0.39)	-0.0219 (-0.74)	-0.0276* (-1.90)
INFL	0.0000832 (0.03)	-0.0109 (-0.86)	-0.0210 (-1.25)	-0.0319** (-2.09)
GDPGR	0.00839** (2.35)	0.0590*** (2.87)	0.0677*** (2.69)	0.0689*** (2.85)
_cons	0.344 (1.28)	-2.828** (-2.09)	-2.208 (-1.32)	-4.398** (-2.44)
N	220	220	220	220
R ² -Adj	0.0222	0.0153	0.211	0.332
F_Stat	2.136	1.813	15.35	14.19
Prob > F	0.0000	0.0000	0.0000	0.0000

The fourth quadrant, which includes mature firms with small assets, will be discussed. Table 9 presents the study's regression results that examine the impact of foreign ownership (FOREIGN) on cash holdings in such firms. The results are intriguing as they indicate a positive effect of FOREIGN on cash holdings, which differs from the main findings observed across the sample. The positive effect of foreign investors on mature firms with small assets could be due to several factors. Firstly, the presence of foreign investors may provide better access to international resources and networks, which are particularly valuable for firms with limited assets. It may provide new opportunities for firms to develop their operations and expand their markets. Secondly, foreign investors may introduce better governance practices and strategic approaches that can enhance the efficiency and productivity of the firm. This increased efficiency may lead to more effective utilization of existing funds, thereby increasing their cash holdings, especially for mature companies with small assets.

Additionally, mature firms with small assets may be more flexible and better equipped to adapt to market changes quickly than larger firms. Foreign ownership can enhance a company's ability to survive and thrive in a competitive environment by providing new perspectives and innovative ideas. Additionally, foreign investors may view these companies as promising investment opportunities with high growth potential, providing additional capital to increase the company's cash holdings and better capitalize on emerging opportunities.

Table 9. Regression Results

This table presents regression results testing the effect of foreign ownership on corporate cash holdings in mature companies with small assets. Models (1), (2), (3) and (4) respectively use the following equations: $CASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $LNCASHTA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, $CASHNA = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$, and $LNCASHNA_{i,d} = \beta_0 + \beta_1 FOREIGN_{i,d} + \beta_2 \varphi_{i,d} + \epsilon$. The variable $\varphi_{i,d}$ is a control variable that comprises factors such as Firm Size (FSIZE), Firm Age (FAGE), Return On Assets (ROA), Return On Equity (ROE), and Leverage (LEV), inflation rate (INF), and GDP growth (GDPGR). The table includes regression coefficients and t-statistics $\left(\frac{b}{t_{stat}}\right)$. Robust regressions have been presented to account for heteroscedasticity and autocorrelation. The significance levels are denoted by ***, **, and *, corresponding to 1%, 5%, and 10% respectively.

	(1) CASHTA	(2) LNCASHTA	(3) CASHNA	(4) LNCASHNA
FOREIGN	0.0279 (1.56)	0.217* (1.98)	0.398* (1.79)	0.645*** (3.45)
FAGE	-0.0163 (-0.88)	-0.119 (-1.05)	-0.540* (-1.89)	-0.708*** (-2.97)
FSIZE	-0.0271*** (-2.95)	-0.131*** (-3.06)	0.0896 (1.16)	0.151** (2.20)
ROE	0.00184*** (2.95)	0.0136*** (3.00)	-0.00921 (-0.53)	0.0137 (1.05)
ROA	-0.0199*** (-2.78)	-0.154*** (-2.94)	-0.0330 (-0.26)	-0.219* (-1.92)
LEV	0.00294*** (4.47)	0.0170*** (4.01)	-0.00540 (-0.54)	-0.00118 (-0.12)
INFL	-0.00192 (-1.22)	-0.0170* (-1.67)	0.0497* (1.71)	0.0192 (0.93)
GDPGR	0.00737*** (3.90)	0.0592*** (3.88)	0.0538** (2.01)	0.0863*** (3.28)
_cons	0.994*** (3.52)	2.199* (1.70)	-0.102 (-0.04)	-2.579 (-1.33)
N	93	93	93	93
R ² -Adj	0.342	0.361	0.240	0.401
F_Stat	17.71	10.72	5.698	9.550
Prob > F	0.0000	0.0000	0.0000	0.0000

DISCUSSION

Foreign ownership significantly negatively impacts cash holdings in Indonesian banking firms, aligning with findings from prior research. Firms with a high level of foreign ownership tend to hold less cash, reflecting greater efficiency in cash utilization. Several studies demonstrate that firms with substantial investments tend to reduce cash holdings, as cash is allocated to value-enhancing investments (Caprio et al., 2013; D. Chen et al., 2014; Y. Huang et al., 2013; Kalcheva & Lins, 2007; Loncan, 2020). It is particularly relevant in the banking industry, which has broad access to external funding, reducing the need for substantial cash reserves.

This negative relationship indicates that foreign investors often encourage firms to use the cash more productively by directing it toward investments that add value rather than accumulating idle liquidity. This finding is further supported by the descriptive statistics, which show that firms with higher foreign ownership exhibit lower average cash holdings across all proxies. The regression results also confirm this relationship, with a significant negative coefficient for foreign ownership across CASHTA, LNCASHTA, CASHNA, and LNCASHNA, providing empirical support for Hypothesis 1. This tendency is evident in mature firms with large assets, where foreign ownership significantly influences cash management. Such firms typically have stable financial structures, diminishing the necessity for high liquidity. Instead, foreign investors in these firms tend to prioritize efficient fund usage for strategic investments that can enhance firm value.

The context-specific impact of foreign ownership on cash holdings is also noteworthy. Beuselinck et al. (2017) highlight the role of foreign shareholders in promoting financial reporting transparency. With improved transparency, firms can better manage cash and reduce the likelihood of retaining unproductive liquidity. Furthermore, Fitri et al. (2019) found that foreign ownership positively affects firm value, indicating that foreign investors prefer ownership structures that foster good governance practices and high transparency levels. These findings are consistent with Stulz (2005), who argues that foreign institutional investors from developed countries can strengthen corporate discipline mechanisms through superior monitoring. This perspective aligns with the trade-off theory, which suggests that firms balance liquidity needs with investment opportunities. Firms with higher foreign ownership appear to prioritize optimal liquidity levels rather than excessive cash retention, consistent with this theoretical framework.

Foreign ownership can also drive more strategic and efficient financial management in banking firms. In broader research, Choi et al. (2012) emphasize that ownership structure influences technological innovation within firms. With its unique characteristics and resources, foreign ownership can contribute positively to technological advancements and innovation. It is evident in young firms with large sizes and mature firms with small assets, where foreign ownership positively impacts cash holdings. This relationship can be attributed to the need to support innovative strategies and financial flexibility. This relationship aligns with the pecking order theory, as younger firms, despite their larger size, may still experience financing constraints, leading them to maintain higher cash reserves to ensure financial flexibility and support innovation-driven strategies.

Phaiboonvessawat & Thanatawee (2020), Thi et al. (2021), and Vo (2018) highlight the benefits foreign ownership brings to firms, including the introduction of new ideas and innovative business strategies. Foreign investors often push firms to allocate their resources efficiently, whether supporting business expansion or developing new services, including banking. Over the long term, this push reduces the need for substantial cash holdings while enhancing profitability and firm value.

The banking industry's context in Indonesia is critical in understanding the impact of foreign ownership on cash holdings. High liquidity is often associated with conservative risk management strategies. However, foreign ownership typically encourages a more aggressive, profitability-oriented approach. By reducing unproductive cash accumulation, banking firms can strategically allocate resources to value-adding investments, such as digitalizing financial services or strengthening credit portfolios. It supports findings that foreign ownership significantly enhances the efficiency and effectiveness of corporate cash management.

These findings support cash flow theory, as firms with stronger cash flows and better access to external capital markets are less dependent on internal cash reserves, reinforcing the argument that foreign ownership enhances corporate liquidity management efficiency. Thus, the empirical findings support the theoretical arguments of the trade-off, pecking order, and cash flow theories. The results indicate that foreign ownership influences corporate liquidity policies in a manner that balances the need for financial flexibility with efficiency-driven investment strategies. The variation in cash holdings across different firm profiles suggests that foreign ownership does not uniformly affect firms but interacts with company characteristics such as size, age, and access to financing.

CONCLUSION

This study examines the influence of foreign ownership on corporate cash holdings, showing that foreign investors generally reduce cash retention, particularly in mature firms with substantial assets. However, their influence varies across firms of different sizes and ages, highlighting the need for tailored liquidity management strategies. These findings contribute to corporate finance literature by reinforcing trade-off, pecking order, and cash flow theories in the context of foreign ownership, demonstrating how firms optimize liquidity policies to balance financial constraints and investment efficiency.

Practically, this study provides insights for regulators and corporate managers in designing financial policies that align with firm characteristics. Regulators should promote governance mechanisms that enhance the efficient use of liquidity, ensuring that foreign ownership fosters value creation rather than excessive liquidity accumulation. On the other hand, firms should develop adaptive strategies that leverage foreign investment to enhance financial stability and long-term profitability.

This study has limitations, particularly in its focus on Indonesian banking firms, limiting generalizability to other industries. Additionally, the COVID-19 period introduces potential biases, though macroeconomic controls were included to mitigate its effects. Future research could extend this analysis by incorporating a broader corporate life cycle perspective, applying dynamic panel models, or exploring cross-country comparisons to assess whether foreign ownership affects liquidity policies differently across regulatory environments.

The finding offers valuable insights for policymakers and corporate decision-makers. Regulators should consider policies encouraging transparency in corporate cash management, particularly for firms with significant foreign ownership, to prevent excessive liquidity retention or inefficient cash allocation. Since foreign investors influence cash policies differently across firm categories, policymakers could design targeted regulations that balance financial flexibility and investment efficiency. For instance, mature firms with large assets may benefit from foreign oversight in capital allocation, while younger firms may require supportive policies to ensure financial stability amidst ownership changes. From a corporate perspective, firms must continuously assess how foreign ownership impacts financial resilience and long-term growth, adjusting cash management strategies accordingly.

REFERENCES

- Adamu, A., & Haruna, J. 2020. Ownership structures and firm performance in Nigeria: A canonical correlation analysis. *Journal of Research in Emerging Markets*, 2(4), 21–32. <https://doi.org/10.30585/jrems.v2i4.537>
- Aftab, U., Javid, A. Y., & Akhter, W. 2018. The determinants of cash holdings around different regions of the world. *Business and Economic Review*, 10(2), 151–181. <https://doi.org/10.22547/BER/10.2.7>
- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. 2011. Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1), 154–181. <https://doi.org/10.1016/j.jfineco.2010.10.018>
- Balagobei, S., & Velnampy, T. 2017. A study on ownership structure and financial performance of listed beverage food and tobacco companies in Sri Lanka. *International Journal of Accounting*

- and Financial Reporting*, 7(2), 36–47. <https://doi.org/10.5296/ijafr.v7i2.11518>
- Bangun, N., & Natsir, K. 2022. The effect of operating cash flow, net working capital, and earning quality on cash holding of consumer goods companies. *The Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 653, 405–411. <https://doi.org/10.2991/aebmr.k.220501.061>
- Barasa, C., Achoki, G., & Njuguna, A. 2018. Managers views on the determinants of cash holdings: Evidence from Kenya. *International Journal of Economics and Finance*, 10(8), 172–180. <https://doi.org/10.5539/ijef.v10n8p172>
- Bena, J., Ferreira, M. A., Matos, P., & Pires, P. 2017. Are foreign investors locusts? The long-term effects of foreign institutional ownership. *Journal of Financial Economics*, 126(1), 122–146. <https://doi.org/10.1016/j.jfineco.2017.07.005>
- Beuselinck, C., Blanco, B., & García Lara, J. M. 2017. The role of foreign shareholders in disciplining financial reporting. *Journal of Business Finance & Accounting*, 44(5–6), 558–592. <https://doi.org/10.1111/jbfa.12239>
- Bhatia, A., & Kumari, P. 2024. The moderating effect of corporate governance factors on capital structure and performance: evidence from Indian companies. *Corporate Governance*, 24(5), 1083–1102. <https://doi.org/10.1108/cg-06-2023-0239>
- Bose, S., Khan, H. Z., Rashid, A., & Islam, S. 2018. What drives green banking disclosure? An institutional and corporate governance perspective. *Asia Pacific Journal of Management*, 35(2), 501–527. <https://doi.org/10.1007/s10490-017-9528-x>
- Caprio, L., Faccio, M., & McConnell, J. J. 2013. Sheltering corporate assets from political extraction. *The Journal of Law, Economics, & Organization*, 29(2), 332–354. <https://doi.org/10.1093/jleo/ewr018>
- Chadha, S., & Sharma, A. K. 2015. Capital structure and firm performance: Empirical evidence from India. *Vision*, 19(4), 295–302. <https://doi.org/10.1177/097226291561085>
- Chandra, R., & Rahman, A. 2023. Foreign institutional ownership and cash holdings in Indonesia capital market. *Jurnal Akuntansi Kontemporer*, 15(1), 52–61. <https://doi.org/10.33508/jako.v15i1.3100>
- Chen, D., Li, S., Xiao, J. Z., & Zou, H. 2014. The effect of government quality on corporate cash holdings. *Journal of Corporate Finance*, 27, 384–400. <https://doi.org/10.1016/j.jcorpfin.2014.05.008>
- Chen, V. Z., Li, J., Shapiro, D. M., & Zhang, X. 2014. Ownership structure and innovation: An emerging market perspective. *Asia Pacific Journal of Management*, 31, 1–24. <https://doi.org/10.1007/s10490-013-9357-5>
- Choi, S. B., Park, B. Il, & Hong, P. 2012. Does ownership structure matter for firm technological innovation performance? The case of Korean firms. *Corporate Governance: An International Review*, 20(3), 267–288. <https://doi.org/10.1111/j.1467-8683.2012.00911.x>
- Cui, D., Ding, M., Han, Y., & Suardi, S. 2022. Foreign shareholders, relative foreign policy uncertainty and corporate cash holdings. *International Review of Financial Analysis*, 84, 102399. <https://doi.org/10.1016/j.irfa.2022.102399>
- Dachs, B., & Peters, B. 2014. Innovation, employment growth, and foreign ownership of firms: A European perspective. *Research Policy*, 43(1), 214–232. <https://doi.org/10.1016/j.respol.2013.08.001>
- Deng, B., Li, Z., & Li, Y. 2018. Foreign institutional ownership and liquidity commonality around the world. *Journal of Corporate Finance*, 51, 20–49. <https://doi.org/10.1016/j.jcorpfin.2018.04.005>
- Diana, E. 2020. Examining the factors affecting firm values: The case of listed manufacturing companies in Indonesia. *Journal of Accounting Research, Organization and Economics*, 3(1), 62–72. <https://doi.org/10.24815/jaroe.v3i1.15532>
- Divisekera, S., & Nguyen, V. K. 2018. Determinants of innovation in tourism evidence from Australia. *Tourism Management*, 67, 157–167. <https://doi.org/10.1016/j.tourman.2018.01.010>
- Eden, L. 2016. Multinationals and foreign investment policies in a digital world. *E15Initiative, International Centre for Trade and Sustainable Development and World Economic Forum*,

- Geneva. *Www. E15initiative. Org.* <https://mnccenter.org/publications/multinationals-and-foreign-investment-policies-digital-world>
- Farandy, R. 2023. *Regulasi investor asing di perbankan Indonesia.* <https://artikel.pajakku.com/regulasi-investor-asing-di-perbankan-indonesia/>
- Ferreira, M. A., & Vilela, A. S. 2004. Why do firms hold cash? Evidence from EMU countries. *European Financial Management*, 10(2), 295–319. <https://doi.org/10.1111/j.1354-7798.2004.00251.x>
- Fitri, E. R., Savitri, E., & Al Azhar, L. 2019. Influence of foreign ownership, ownership concentrated, and environmental disclosure to firm value. *Indonesian Journal of Economics, Social, and Humanities*, 1(2), 91–96. <https://doi.org/10.31258/ijesh.1.2.91-96>
- Ghazouani, T. 2013. The capital structure through the trade-off theory: Evidence from Tunisian firm. *International Journal of Economics and Financial Issues*, 3(3), 625–636. <https://www.econjournals.com/index.php/ijefi/article/view/448>
- Ghebrihiwet, N., & Motchenkova, E. 2017. Relationship between FDI, foreign ownership restrictions, and technology transfer in the resources sector: A derivation approach. *Resources Policy*, 52, 320–326. <https://doi.org/10.1016/j.resourpol.2017.03.011>
- Gill, A., & Shah, C. 2012. Determinants of corporate cash holdings: Evidence from Canada. *International Journal of Economics and Finance*, 4(1), 70–79. <https://doi.org/10.5539/ijef.v4n1p70>
- Greenaway, D., Guariglia, A., & Yu, Z. 2020. The more the better? Foreign ownership and corporate performance in China. In *The Chinese Capital Markets* (pp. 29–50). Routledge. <https://doi.org/10.1080/1351847X.2012.671785>
- Gujarati, D. N., & Porter, D. C. 2009. Basic econometric. In *Introductory econometrics: a practical approach* (5th ed.). McGraw-Hill/Irwin Companies, Inc.
- Han, S., & Qiu, J. 2007. Corporate precautionary cash holdings. *Journal of Corporate Finance*, 13(1), 43–57.
- Herlambang, A., Murhadi, W. R., & Cendrati, D. 2019. Factors affecting company's cash holding. *16th International Symposium on Management (INSYMA 2019)*, 24–27. <https://doi.org/10.2991/insyma-19.2019.7>
- Hillier, D., & Loncan, T. 2019. Stock market integration, cost of equity capital, and corporate investment: Evidence from Brazil. *European Financial Management*, 25(1), 181–206. <https://doi.org/10.1111/eufm.12147>
- Hu, J., Li, A., & Luo, Y. 2019. CEO early life experiences and cash holding: Evidence from China's great famine. *Pacific-Basin Finance Journal*, 57, 101184. <https://doi.org/10.1016/j.pacfin.2019.101184>
- Huang, R. D., & Shiu, C. 2009. Local effects of foreign ownership in an emerging financial market: Evidence from qualified foreign institutional investors in Taiwan. *Financial Management*, 38(3), 567–602. <https://doi.org/10.1111/j.1755-053X.2009.01048.x>
- Huang, W., & Zhu, T. 2015. Foreign institutional investors and corporate governance in emerging markets: Evidence of a split-share structure reform in China. *Journal of Corporate Finance*, 32, 312–326. <https://doi.org/10.1016/j.jcorpfin.2014.10.013>
- Huang, Y., Elkinawy, S., & Jain, P. K. 2013. Investor protection and cash holdings: Evidence from US cross-listing. *Journal of Banking & Finance*, 37(3), 937–951. <https://doi.org/10.1016/j.jbankfin.2012.10.021>
- Ilyas, M., Mian, R. U., & Mian, A. 2023. Foreign institutional investors and the value of excess cash holdings: international evidence. *International Journal of Accounting & Information Management*, 31(5), 705–725. <https://doi.org/10.1108/IJAIM-04-2023-0078>
- Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329. <https://www.jstor.org/stable/1818789>
- Jordaan, J. A. 2013. Firm heterogeneity and technology transfers to local suppliers: Disentangling the effects of foreign ownership, technology gap and absorptive capacity. *The Journal of International Trade & Economic Development*, 22(1), 75–102.

- <https://doi.org/10.1080/09638199.2013.745282>
- Kalcheva, I., & Lins, K. V. 2007. International evidence on cash holdings and expected managerial agency problems. *The Review of Financial Studies*, 20(4), 1087–1112. <https://www.jstor.org/stable/4494797>
- Kampouris, I., Mertzanis, C., & Samitas, A. 2022. Foreign ownership and the financing constraints of firms operating in a multinational environment. *International Review of Financial Analysis*, 83, 102328. <https://doi.org/10.1016/j.irfa.2022.102328>
- Kao, M.-F., Hodgkinson, L., & Jaafar, A. 2019. Ownership structure, board of directors and firm performance: evidence from Taiwan. *Corporate Governance: The International Journal of Business in Society*, 19(1), 189–216. <https://doi.org/10.1108/CG-04-2018-0144>
- Karim, S., & Ilyas, M. 2021. Foreign institutional investors and the contribution of cash and dividend to firm's value. *Managerial Finance*, 47(3), 310–325. <https://doi.org/10.1108/MF-11-2019-0568>
- Kim, J.-B., Pevzner, M., & Xin, X. 2019. Foreign institutional ownership and auditor choice: Evidence from worldwide institutional ownership. *Journal of International Business Studies*, 50, 83–110. <https://doi.org/10.1057/s41267-018-0160-x>
- Korna, J. M., Ajekwe, T., & Idyu, I. A. 2013. The impact of foreign direct investment on the Nigerian banking sector. *Journal of Business and Management*, 7(4), 77–92. <https://www.iosrjournals.org/iosr-jbm/papers/Vol7-issue4/J0747792.pdf>
- Lin, Y. R., & Fu, X. M. 2017. Does institutional ownership influence firm performance? Evidence from China. *International Review of Economics & Finance*, 49, 17–57. <https://doi.org/10.1016/j.iref.2017.01.021>
- Loncan, T. 2020. Foreign institutional ownership and corporate cash holdings: Evidence from emerging markets. *International Review of Financial Analysis*, 71, 101295. <https://doi.org/10.1016/j.irfa.2018.12.003>
- Muthitacharoen, A. 2020. *Assessing tax burden differential between foreign multinationals and local firms: Implications for FDI tax incentives*. <https://www.pier.or.th/en/dp/127/>
- Nafees, B., Ahmad, N., & Rasheed, A. 2017. The determinants of cash holdings: Evidence from SMEs in Pakistan. *Paradigms*, 11(1), 111. <https://paradigms.ucp.edu.pk/wp-content/uploads/2017/09/paradigms110117.pdf>
- Nakano, M., & Nguyen, P. 2013. Foreign ownership and firm performance: evidence from Japan's electronics industry. *Applied Financial Economics*, 23(1), 41–50.
- Nguyen, D. S., Nguyen, V. D., Tran, D. T., & Dempsey, M. 2021. The firm's performance in relation to capital structure and foreign ownership: evidence from Vietnam. *Journal of Advanced Engineering and Computation*, 5(1), 35–49. <https://doi.org/10.25073/jaec.202151.315>
- Nguyen, T., Locke, S., & Reddy, K. 2015. Ownership concentration and corporate performance from a dynamic perspective: Does national governance quality matter? *International Review of Financial Analysis*, 41, 148–161. <https://doi.org/10.1016/j.irfa.2015.06.005>
- Nofal, M. 2020. The effect of foreign ownership on firm performance: evidences from Indonesia. *3rd Asia Pacific International Conference of Management and Business Science (AICMBS 2019)*, 237–242. <https://doi.org/10.2991/aebmr.k.200410.037>
- Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. 1999. The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52(1), 3–46. [https://doi.org/10.1016/S0304-405X\(99\)00003-3](https://doi.org/10.1016/S0304-405X(99)00003-3)
- Ozkan, A., & Ozkan, N. 2004. Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance*, 28(9), 2103–2134. <https://doi.org/10.1016/j.jbankfin.2003.08.003>
- Pananond, P. 2015. Motives for foreign direct investment: a view from emerging market multinationals. *The Multinational Business Review*, 23(1), 77–86. <https://doi.org/10.1108/MBR-02-2015-0008>
- Phaiboonvessawat, W., & Thanatawee, Y. 2020. Foreign institutional ownership and cash holdings in Thai capital market. *Development Economic Review*, 14(1), 37–56. <https://so06.tci-thaijo.org/index.php/NER/article/view/240428>
- Rizandi, D., & Haryanto, R. 2023. Cash holding, type of ownership and firm performance: an empirical

- study Indonesia. *Asian Journal of Accounting and Finance*, 5(1), 6–14. <https://myjms.mohe.gov.my/index.php/ajafin/article/view/21557>
- Romano, C. A., Tanewski, G. A., & Smyrniotis, K. X. 2001. Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16(3), 285–310. [https://doi.org/10.1016/S0883-9026\(99\)00053-1](https://doi.org/10.1016/S0883-9026(99)00053-1)
- Stulz, R. M. 2005. The limits of financial globalization. *The Journal of Finance*, 60(4), 1595–1638.
- Swasana, R. D. A., Munandar, A. I., & Subiyantoro, H. 2019. Analisis kebijakan kepemilikan asing pada sektor perbankan di Indonesia terhadap ketahanan ekonomi negara. *Jurnal Kajian Strategik Ketahanan Nasional*, 2(1), 57–70. <https://doi.org/10.7454/jkskn.v2i1.10019>
- Thi, Q. N. N., Tran, Q. T., & Doan, H. P. 2023. Foreign ownership, state ownership and cash holdings under the global financial crisis: evidence from the emerging market of Vietnam. *International Journal of Emerging Markets*, 18(9), 3354–3369. <https://doi.org/10.1108/IJOEM-03-2020-0303>
- Vo, X. V. 2018. Foreign ownership and corporate cash holdings in emerging markets. *International Review of Finance*, 18(2), 297–303. <https://doi.org/10.1111/irfi.12130>
- Wang, Q. 2019. Economic cycle, uncertainty of economic policy and cash holding of listed companies. *Modern Economy*, 10(1), 281–297. <https://doi.org/10.4236/me.2019.101019>
- Wang, Y. 2016. Research on foreign ownership applied in R&D investment of Chinese GEM companies. *Asian Journal of Social Science Studies*, 2(1), 161–165. <https://doi.org/10.20849/ajsss.v2i1.139>
- Wirdayanti, W., Reniati, R., & Saputra, D. 2022. The effect of leverage, company size, inflation rate, and cash holding on company value (In hotel, restaurant, and tourism sub-sector companies listed on the IDX for the 2017-2020 period). *International Journal of Business, Technology and Organizational Behavior (IJBTOB)*, 2(4), 367–380. <https://doi.org/10.52218/ijbtob.v2i4.212>
- Yoon, B., Lee, J.-H., & Cho, J.-H. 2021. The effect of ESG performance on tax avoidance—evidence from Korea. *Sustainability*, 13(12), 1–16. <https://doi.org/10.3390/su13126729>
- Yu, M. (2013). State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research*, 6(2), 75–87. <https://doi.org/10.1016/j.cjar.2013.03.003>
- Yudaeva, K., Kozlov, K., Melentjeva, N., & Ponomareva, N. 2003. Does foreign ownership matter? The Russian experience. *Economics of Transition*, 11(3), 383–409. <https://doi.org/10.1111/1468-0351.00157>