The Mismatch Between Macroeconomic Stability and Declining Stock Performance of Digital Banks in Indonesia

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ABSTRACT

This study examines the mismatch between macroeconomic stability and the stock performance of digital banks in Indonesia over the period 2022-2023. The results of the analysis show that the USD/IDR exchange rate and Bank Indonesia interest rate have a significant negative effect on stock prices, while inflation shows no significant effect. These findings suggest that despite stable macroeconomic conditions, the share prices of digital banks experienced a significant decline, indicating market inefficiencies. This study makes a theoretical contribution by revealing the role of exchange rate and interest rate fluctuations in influencing the stock performance of digital banks in emerging markets. In conclusion, factors such as investor sentiment, market behavior, and the influence of digital financial technology need to be taken into account in developing strategies to support the stability and growth of the digital banking sector in Indonesia. The results of this study are important for policymakers, regulators, and market participants in dealing with the challenges faced by the digital banking sector in Indonesia.

Keywords : Digital banking, macroeconomic stability, stock performance, market inefficiency.

INTRODUCTION

In recent years, the digital banking sector in Indonesia has experienced significant growth, driven by the rapid adoption of technology and changing consumer preferences towards digital-based financial services. Digital banks, known for their ability to provide financial services quickly and efficiently through digital platforms, are seen as one of the key drivers of Indonesia's digital economic transformation. However, while expectations for the sector's performance are high, there are phenomena that trigger concerns about its long-term prospects.

Macroeconomics has a significant influence on the performance of digital banks. Various macroeconomic factors such as GDP growth rate, inflation, real interest rates, monetary policy, exchange rates, and economic growth variability can affect the performance of banks, including digital banks (Fakhrunnas et al., 2018). Larger banks are especially vulnerable to macroeconomic factors and financial crises (Fakhrunnas et al., 2018). Research shows that variables such as inflation rate and GDP can significantly affect banking diversification and profitability (Gafrej & Boujelbéne, 2022). The financial performance of banks is closely linked to macroeconomic factors, where GDP growth rate, inflation, and real interest rates are common factors that affect bank performance(Areeba Khan & Junaina Muhammad, 2016).

The relationship between macroeconomic factors and bank performance is

complex. Some studies show a strong impact of macroeconomic variables on bank performance (Idawati, 2023a), while others show mixed findings (Gautam & Gautam, 2021). Factors such as inflation expectations, macroeconomic uncertainty, and adverse macroeconomic conditions can affect the dynamics of bank performance (Abaidoo & Anyigba, 2020). Banks' exposure to macroeconomic factors can explain differences in deposit withdrawals, emphasizing the importance of macroeconomic stability for banking operations (LEVY-YEYATI et al., 2010).

During times of financial stress or crisis, the resilience and performance of banks, including digital banks, depend heavily on the macroeconomic environment. Changes in macroeconomic variables can trigger banking crises and bankruptcies if banks' solvency and liquidity ratios decline, requiring policymaker intervention in the banking system (Chukwu Agwu et al., 2020). The interconnectedness between banking and macroeconomic variables was evident during the global recession of 2008, which illustrates how changes in one factor can create a domino effect that affects financial and economic conditions (Syed & Aidyngul, 2020). In conclusion, macroeconomic factors have a substantial impact on the performance of digital banks. Understanding and effectively managing these macroeconomic variables is critical to ensuring the stability and success of digital banking operations. Policymakers, bank management, and regulators should consider macroeconomic conditions when formulating strategies, risk management practices, and regulatory policies to support the sustainable performance of digital banks.

However, despite Indonesia's generally favorable macroeconomic conditions from January 2022 to December 2023 with a stable inflation rate of below 5%, a gradual increase in the central bank interest rate from 3.5% to 6%, and an appreciation of the USD/IDR exchange rate from IDR 14,452 to IDR 16,503-the share prices of digital banks in Indonesia actually experienced a significant decline during this period. This decline in stock performance raises concerns about the resilience and growth prospects of the digital banking sector, especially in a supposedly stable economic environment. This phenomenon is a paradox that demands further attention, given that in theory, an efficient market should reflect stable macroeconomic conditions in stock valuations.

Figure 1.
Performance of Digital Banks on the Indonesia Stock Exchange 2022-2023

The data from the digital banks above shows that the performance of these banks experienced a significant decline after the COVID-19 pandemic. PT Bank Jago

Tbk (ARTO) recorded the largest decline of -83.03%, followed by PT Bank Raya Indonesia Tbk (AGRO) with a decline of -81.46%, and PT Allo Bank Indonesia Tbk (BBHI) with a decline of -70.58%.

This mismatch between stable macroeconomic indicators and the declining stock performance of digital banks hints at a fundamental problem in the digital banking sector in Indonesia. Conventional explanations that link stock performance to macroeconomic conditions seem insufficient to understand this phenomenon. Therefore, further investigation is needed to identify factors that may play a role in this mismatch, both from the internal structural side of digital banks and from the perception of a possibly inefficient market.

This study aims to fill this gap by conducting an in-depth analysis of how Indonesia's macroeconomic conditions may affect the performance of digital banks. Using a quantitative approach and the Efficient Market Hypothesis (EMH), this research is expected to provide a new understanding of the dynamics affecting the stock valuation of digital banks in Indonesia, as well as make a significant theoretical contribution to the financial economics literature, particularly in the context of emerging markets.

This research is important as it will not only provide insights into the factors that may have contributed to the declining performance of digital banks in Indonesia, but will also assist stakeholders in formulating more effective strategies to improve the stability and growth of the sector in the future.

LITERATURE REVIEW

Efficient Market Hypothesis - EMH

The Efficient Market Hypothesis (EMH), developed by Eugene Fama in the 1970s, suggests that security prices quickly adjust to new information, making it impossible for investors to consistently outperform the market (Naseer & Bin Tariq, 2015). This theory has become an important cornerstone in the analysis of stock prices in capital markets, assuming that changes in stock prices are unpredictable and driven entirely by new information that cannot be predicted in advance.

The EMH has been extensively examined in various studies with mixed results across various markets. Some studies support the validity of the EMH, while others find anomalies that suggest market inefficiency (Naseer & Bin Tariq, 2015). For example, tests in the Romanian capital market using various statistical methods show that the market is inefficient in the weak form (Armeanu & Cioacă, n.d.). In contrast, research in the Indian capital market shows that it is efficient in semi-strong form, where investors consider both historical information and publicly available information (Hooda, n.d.).

Over time, the EMH theory has evolved and continues to be used as a basic framework in analyzing stock price dynamics in capital markets. Although some recent studies challenge the universal applicability of the EMH, especially in emerging markets (Kofarbai & Zubairu, 2016), it remains an important concept in financial theory, which has contributed to the deepening of stock markets around the world.

In this context, EMH divides markets into three forms of efficiency: strong form efficiency, semi-strong form efficiency, and weak form efficiency, based on the

level of information reflected in stock prices (Yongxin, 2009). In an efficient market according to EMH, stock prices fully reflect all available information, so investors cannot earn abnormal profits consistently (Seddighi & Yoon, 2018). EMH has also been applied in various contexts, such as analyzing the impact of news events on stock prices and predicting stock movements in various markets, including in emerging economies such as MINT countries (Usman & Okoronkwo, 2024)

However, the relevance of EMH has been challenged by various recent findings, especially with the existence of anomalies and behavioral finance theories that highlight irrational investor behavior and market inefficiencies(Shiller, 2003). These findings suggest that markets are not always efficient, especially in less developed markets or where information is unevenly distributed. Nonetheless, EMH remains a critical framework for understanding market dynamics, as it drives ongoing research on market efficiency and the implications of investor behavior on stock price movements (Lo, 2017)

In conclusion, the development of EMH theory has contributed significantly to the understanding of stock market efficiency and stock price behavior in the capital market. The relevance of EMH lies in its ability to provide a framework for analyzing how information is integrated into stock prices, which in turn guides investment strategies and shapes market regulation. However, its application requires careful consideration of market anomalies and the influence of investor behavior that may lead to deviations from the basic assumptions of the theory.

The Effect Of Macroeconomic Factors On Digital Bank Performance

Macroeconomic factors play a crucial role in influencing the performance of digital banks in Indonesia. Various studies have highlighted the importance of these variables in determining the financial health of banks. Idawati (2023) emphasized that factors such as interest rates, inflation, exchange rates, and economic growth have a significant impact on the financial performance of commercial banks in Indonesia. Therefore, careful monitoring and management of these factors is necessary to maintain and improve the financial performance of banks (Idawati, 2023a)

The study by Fakhrunnas et al. also showed a strong influence of macroeconomic variables such as inflation, Bank Indonesia interest rates, and GDP growth on bank efficiency. These findings suggest that effective management of these macroeconomic variables is critical to improving the operational efficiency of digital banks in Indonesia (Fakhrunnas et al., 2018)

In addition, Aviliani et al. examined the impact of various macroeconomic indicators, including production index, inflation, Bank Indonesia interest rate, stock index, exchange rate, and crude oil price on the performance of state-owned banks in Indonesia. The results show a close relationship between macroeconomic conditions and banking performance in Indonesia, which is also true for digital banks. This underscores how fluctuations in macroeconomic conditions can affect bank stability and profitability (Aviliani et al., 2015).

Research by Mai (2024) further explores the relationship between macroeconomic factors such as GDP, inflation rate, unemployment rate, and interest rate with non-performing loans in Islamic banks in Indonesia. Although focused on

Islamic banking, these findings are relevant in the context of digital banks, especially in understanding how changes in economic conditions can affect asset quality and overall financial performance.

Overall, the performance of digital banks in Indonesia is heavily influenced by macroeconomic factors such as interest rates, inflation, GDP growth, and exchange rates. Effective management of these variables is key for digital banks to overcome challenges and optimize their performance in the Indonesian banking market. Interest rates, particularly the Bank Indonesia rate, have been identified as a key determinant of bank profitability (Aviliani et al., 2015; Idawati, 2023b). In addition, inflation, exchange rates, and economic growth are also variables that have a significant effect on banking performance (Idawati, 2023b; Jallow, 2023).

The COVID-19 pandemic has also impacted the performance of Islamic banking in Indonesia, which shows how global economic conditions can affect the stability of the banking sector (Jallow, 2023). Banking-specific factors such as foreign ownership, capital adequacy, and the ratio of operating expenses to operating income (BOPO) also affect the financial performance of digital banks (Ima Kristina Yulita, 2023). In state-owned banks, BOPO shows the largest response to macroeconomic shocks, indicating potential inefficiencies (Aviliani et al., 2015).

Understanding these macroeconomic factors and bank-specific characteristics is crucial for banks, regulators and policymakers to make informed decisions and adopt effective strategies to maintain and improve financial performance in the Indonesian banking sector. For example, economic growth and inflation can improve profitability as well as operational efficiency of banks (Maria, 2023), while high interest rates can negatively impact profitability by increasing borrowing costs, which in turn can hamper lending activities (Idawati, 2023b).

Foreign ownership is also a significant factor in determining financial performance, with indications that international investment can strengthen the operational capabilities of digital banks (Yulita, 2023). In addition, the presence of fintech companies plays an important role in strengthening the overall financial system, which indirectly benefits digital banks (Amal, 2024). Overall, macroeconomic factors create a complex environment that digital banks must navigate to optimize performance and attract investment. Understanding these dynamics is critical for strategic decision-making within the banking sector (Sinay, 2023).

Mismatch Between Macroeconomic Stability And Stock Performance

The relationship between macroeconomic stability and stock performance of digital banks is a complex issue that is influenced by various factors. Research shows that there is a mismatch between macroeconomic indicators and stock performance, which is not limited to specific countries but can be observed globally (Asnawi et al., 2022; Huang et al., 2024). Market inefficiencies and investor behavior are significant factors contributing to this mismatch (Syamala et al., 2014).

In the context of digital banks, the emergence of digital interactive media has introduced new dynamics in market behavior that can potentially affect stock performance (Wang et al., 2022). The complexity of financial markets, shaped by economic, political, psychological, and digital elements, may limit predictive capabilities in projecting stock price movements (Huang et al., 2024). Sentiment from

digital interactive media also plays an important role in understanding investor behavior and predicting stock prices (Mulyaningsih & Heikal, 2022)

In addition, the efficiency of digital banking companies may vary, with some being undervalued or efficient, while others are overvalued or inefficient. Factors such as income diversification and risk tolerance also affect the financial performance of banks, including digital banks (Nugroho et al., 2020). The financial health of banks, assessed through indicators such as CAMELS ratios, can also affect their profitability and attractiveness to investors.

Thus, the mismatch between macroeconomic stability and the stock performance of digital banks is a complex issue that is influenced by market inefficiencies, investor behavior, digital media sentiment, as well as the financial performance of the banks themselves. Understanding these factors is critical for investors, policymakers and financial analysts to navigate the complexities of the stock market in the digital banking era.

Further research shows that traditional macroeconomic factors such as inflation rates and GDP growth have a significant influence on stock market performance, but the rise of digital financial technologies, particularly blockchain, introduces complexities that can obscure these relationships. For example, cryptocurrency price fluctuations have been shown to correlate with stock market dynamics, which suggests that investor behavior towards digital assets may override traditional economic indicators (Benarous et al., 2024). Additionally, studies show that macroeconomic variables such as exchange rates and foreign investment flows can have varying impacts on stock performance, with some indicators showing strong negative correlations (Shanu & Pandey, 2024).

Bank capitalization levels are also important for macroeconomic stability, as they can affect unemployment rates and income inequality, further complicating the relationship between economic health and stock performance (Pozovna et al., 2024). These findings suggest that market inefficiencies and investor sentiment towards digital banking innovations may lead to a mismatch between expected macroeconomic stability and actual stock performance, necessitating a deeper understanding of these dynamics (Mahesha, 2024).

Recent research highlights the complex relationship between macroeconomic factors and stock performance of digital banks. Although digital banks in Indonesia tend to outperform conventional banks in terms of risk-adjusted stock performance (Ahmad Fauzan, 2023), their financial performance is affected by factors such as foreign ownership, capital adequacy, and operating expenses (Yulita, 2023).Macroeconomic indicators can have a significant impact on stock market performance, as shown in Ghana, where borrowing rates negatively affect stock performance, while currency depreciation benefits investors (Kyereboah-Coleman & Agyire-Tettey, 2008). In South Africa, liquidity measures such as the bank liquidity mismatch index and aggregate liquidity mismatch index were shown to strongly influence bank stock returns, with the former showing a positive relationship and the latter a negative relationship (Marozva, 2020). These findings indicate that while digital banks may perform well, their stock performance is highly dependent on various macroeconomic and liquidity factors.

Market Efficiency In Developing Countries

In examining market efficiency in developing countries, particularly in the digital banking sector, it is important to consider the impact of lower efficiency levels compared to developed countries. Research shows that market inefficiencies can affect the stock performance of digital banks in countries such as Indonesia (Siagian, 2023; Zimper, 2015). The presence of foreign banks in developing countries may also affect market power dynamics (Yin, 2021), while factors such as bid-ask spread, market value, and return risk may affect stock holding periods in the banking sector ("Bid-Ask Spread, Market Value, and Return Risk on Stock Holding Period in the Banking Sector Listed on the Indonesian Stock Exchange (BEI) from 2018 to 2022", 2023).

In developing countries, the financial sector, including digital banks, plays an important role in supporting economic activity (Winful et al., 2020). However, inefficiencies in this market, such as limited market experience among market participants, may hinder optimal market functioning (Zimper, 2015). The efficiency of banking operations in Indonesia has been linked to market prices (Siagian, 2023), which emphasizes the importance of operational efficiency in influencing stock performance.

Efficiency benchmarks in the banking industry, as observed in the Indian context, can be a valuable reference for other economies (Sharma, 2018). The transition of traditional banking activities to digital formats can improve efficiency and business models(Galazova & Magomaeva, 2019). Moreover, the readiness of the financial sector to support economic activity, especially during crises such as the COVID-19 pandemic, highlights the importance of efficiency (Winful et al., 2020).

Overall, the literature suggests that market inefficiencies in emerging economies, including Indonesia, may impact the stock performance of digital banks. Understanding the factors that contribute to low levels of efficiency and addressing them through digital transformation and operational improvements is critical to improving the performance of digital banks in these markets.

Recent studies on digital banking in Indonesia reveal a complex relationship between technology adoption and efficiency. Although the adoption of digital banking technology shows a non-linear effect on bank efficiency, with a trade-off between performance and market reach (Rosnita Wirdiyanti, 2019), digital banks and neo-banks generally operate more efficiently compared to non-digital banks (Amanda & Sudrajad, 2023).The implementation of digital banking and digital transformation has led to a trend of increasing efficiency in the Indonesian banking industry (Sugihyanto & Jansen Arsjah, 2023). In addition, digital banks tend to outperform conventional banks in terms of risk-adjusted stock performance, with bank size, return on equity, and non-performing loans positively associated with performance (Fauzan, 2023). These findings highlight the significant impact of digital transformation on cost efficiency and performance in the Indonesian banking sector, providing valuable insights for stakeholders to improve strategies and enhance overall efficiency.

METHODS

This study aims to examine the mismatch between macroeconomic stability and the declining stock performance of digital banks in Indonesia in the period 2022-2024. In this study, the independent variables used are USD exchange rate, interest rate, and inflation, while the dependent variable analyzed is the stock price of digital banks. The research method used is quantitative method with multiple linear regression analysis to test the relationship between these variables.

The population in this study are all digital banks listed on the Indonesia Stock Exchange (IDX). For sample determination, this study used the saturated sample method, in which all members of the population were taken as research samples. This method was chosen to ensure that all digital banks listed on the IDX in this research period could be analyzed comprehensively.

The samples used in this study were 7 digital banks listed on the Indonesia Stock Exchange.

Table 1. Research Sample

No	Stock Code	Company Name
1	ARTO	PT. Bank Jago Tbk
2	BBYB	PT. Bank Neo Commerce Tbk
3	AGRO	PT. Bank Raya Indonesia Tbk
4	BBHI	PT. Allo Bank Indonesia Tbk
5	BACA	PT. Bank Capital Indonesia Tbk
6	BANK	PT. Bank Aladin Syariah Tbk
7	BABP	PT. Bank MNC Internasional Tbk

The data used in this study comes from secondary data obtained from the financial statements of digital banks listed on the Indonesia Stock Exchange (IDX) as well as macroeconomic data published by Bank Indonesia and the Central Statistics Agency (BPS). The data collected includes the USD exchange rate against IDR, Bank Indonesia interest rates, inflation rates, and digital bank stock prices during the period 2022 to 2023.

To analyze the relationship between the independent variables and the dependent variable, this study uses a panel data model. This regression model is used to estimate the effect of USD exchange rates, interest rates, and inflation on digital bank stock prices. The regression equation used in this study is :

$$\mathbf{Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + e,}$$

where

Y : digital bank stock price
β0 : constant
β1, β2, β3 : regression coefficient for each independent variable
X1 : USD exchange rate
X2 : Interest rate
X3 : Inflation, and
e : error term

The collected data will be processed using EViews software, to perform panel data regression analysis.

RESULT AND DISCUSSION

Analysis Of Regression Results

Dependent Variable: Y
Method: Panel Least Squares
Date: 08/21/24 Time: 12:32
Sample: 2022M01 2023M12
Periods included: 24
Cross-sections included: 7
Total panel (balanced) observations: 168

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	202.5721	73.14060	2.769626	0.0063
X1	-47.72463	17.62834	-2.707267	0.0075
X2	-1.417938	0.404089	-3.508975	0.0006
X3	0.082524	0.211126	0.390874	0.6964

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.818437	Mean dependent var	2.929920
Adjusted R-squared	0.808095	S.D. dependent var	0.545614
S.E. of regression	0.239017	Akaike info criterion	0.033117
Sum squared resid	9.026424	Schwarz criterion	0.219067
Log likelihood	7.218173	Hannan-Quinn criter.	0.108585
F-statistic	79.13567	Durbin-Watson stat	0.245819
Prob(F-statistic)	0.000000		

The panel data regression analysis conducted aims to evaluate the influence of three key macroeconomic variables-the USD/IDR exchange rate (X1), Bank Indonesia interest rate (X2), and inflation rate (X3)-on the stock prices of digital banks in Indonesia over the period 2022 to 2023. The results provide important insights into the complex dynamics between macroeconomic stability and stock performance in the emerging digital banking sector.

a. USD/IDR Exchange Rate (X1)

A significant negative coefficient of -47.72463 (Prob = 0.0075) for the exchange rate indicates a substantial inverse relationship between the depreciation of the Rupiah (IDR) against the US Dollar (USD) and the stock prices of digital banks. This finding is particularly striking as it emphasizes the sensitivity of the digital banking sector to currency fluctuations. IDR depreciation may increase the cost of foreign currency-denominated liabilities for banks, reduce profitability, and ultimately lead to lower share prices. This finding is in line with the broader literature in emerging markets, where exchange rate volatility is often cited as a key risk factor affecting bank performance (Fakhrunnas et al., 2018; Idawati, 2023a). Moreover, it suggests that digital banks, given their relatively new and technology-driven business models, may be more vulnerable to exchange rate risk compared to traditional banks that may have more established risk management practices.

b. Bank Indonesia Interest Rate (X2)

The interest rate variable also shows a negative and significant coefficient of -1.417938 (Prob = 0.0006), indicating that an increase in the Bank Indonesia interest rate leads to a decrease in the share price of digital banks. This relationship can be explained by the direct impact of interest rates on borrowing costs. Higher interest rates can reduce credit demand, tighten profit margins, and ultimately affect banks' earnings prospects. For digital banks, which often operate on narrower margins and rely heavily on volume-based growth strategies, the impact of rising interest rates could be more pronounced. The literature supports this view, highlighting the inverse relationship between interest rates and bank profitability (Aviliani et al., 2015; Idawati, 2023b). In the context of digital banks, which are still in their infancy, an increased cost of capital may also deter investment in technology and innovation, further depressing their stock performance.

c. Inflation Rate (X3)

Interestingly, the inflation rate shows a positive but statistically insignificant coefficient of 0.082524 (Prob = 0.6964). This finding suggests that inflation did not play a significant role in influencing the stock prices of digital banks during the study period. The relative stability of inflation in Indonesia, which is maintained below 5%, may have muted its impact on bank performance, which traditionally may be more affected by cost pressures caused by inflation or changes in consumer demand. However, the insignificant impact could also indicate that digital banks have mechanisms or business models that make them less sensitive to moderate levels of inflation, or that other macroeconomic factors overrode the effect of inflation during this period. It also points to the possibility that inflation expectations are already reflected in the stock market, reflecting investor anticipation and thus reducing the observable impact on stock prices.

d. Implications of R-Squared Value and Model Fit

The R-squared value of 0.818437 indicates that about 82% of the variability in the share prices of digital banks can be explained by the model, indicating a strong fit. This high explanatory power suggests that the selected macroeconomic variables (exchange rate, interest rate, and inflation) are indeed critical in understanding stock price movements in this sector. The significant F-statistic (Prob(F-statistic) = 0.000000) further confirms the strength of the model, confirming that the macroeconomic factors collectively have a substantial impact on the share prices of digital banks.

However, it is important to recognize the 18% of the variance that is not explained by the model. This unexplained variance may be due to other factors not included in the analysis, such as digital transformation strategies, changes in consumer behavior, competitive dynamics in the fintech space, or global economic uncertainty. Future research could explore these additional variables to further refine the model and increase its explanatory power.

Market Efficiency and Anomalies: A Critical Examination

The significant findings on exchange rates and interest rates, which contrast with the insignificance of inflation, provide a more in-depth perspective on market efficiency in the context of the digital banking sector in Indonesia. According to the Efficient Market Hypothesis (EMPH), stock prices should integrate and reflect all available information, including macroeconomic indicators. However, the results show that while some macroeconomic factors (such as exchange rates and interest rates) are reflected in stock prices, others (such as inflation) are not, indicating potential market inefficiencies.

This raises important questions about the nature and extent of these inefficiencies. The significant decline in digital bank share prices, despite stable macroeconomic conditions, could point to some underlying issues:

a. Information Asymmetry: The digital banking sector, which is relatively new, may suffer from information asymmetry where investors do not fully understand or trust the business model of digital banks, leading to mispricing of shares.
b. Behavioral Factors: Behavioral finance theory suggests that investor sentiment, herd behavior, and overreaction may cause stock prices to deviate from their fundamental value. The observed decline may reflect irrational market behavior rather than a rational response to macroeconomic changes.
c. Structural Weaknesses: The early stages of development in the digital banking sector may contribute to market inefficiencies. Issues such as lack of scale, operational challenges, or regulatory uncertainty may cause share prices to fall, regardless of macroeconomic stability.

Strategic Implications for Digital Banks and Policymakers

The findings have significant implications for digital banks, regulators and investors in Indonesia. The negative impact of exchange rate and interest rate fluctuations on stock prices highlights the vulnerability of digital banks to macroeconomic volatility. As digital banks expand their operations and seek to attract more investment, it is important that they develop robust risk management strategies that address these vulnerabilities. This may include hedging against currency risk, diversifying their revenue sources, or adopting more flexible lending practices that can withstand interest rate fluctuations.

For policymakers and regulators, these results emphasize the importance of considering the unique challenges faced by digital banks when designing monetary and regulatory policies. Given the sector's sensitivity to interest rates and exchange rates, monetary policy decisions should take into account their potential impact on the digital banking sector. In addition, there may be a need to enhance regulatory oversight to ensure that digital banks have the necessary safeguards in place to mitigate risks associated with macroeconomic instability.

Future Research Directions: Broadening the Scope

This study opens up several avenues for future research. The unexplained variance in the model suggests that there are additional factors affecting the stock prices of digital banks. Future research can explore:

a. Impact of Technology Innovation: Given that digital banks are highly dependent on technology, future studies could examine the role of fintech innovation, cybersecurity threats, and digital infrastructure on stock performance.
b. Investor Sentiment Analysis: Analyzing market sentiment, perhaps through big data approaches such as social media sentiment analysis or news articles, can provide insight into how public perception drives stock prices.
c. Comparative Study: Comparing the findings with other developing countries can provide a broader understanding of how digital banks operate under different macroeconomic conditions.

In addition, a deeper exploration of behavioral finance aspects, such as how investor psychology and market narratives affect stock performance, may offer a richer explanation for the observed anomalies.

Revisiting the Efficient Market Hypothesis in Emerging Markets

This study contributes to the ongoing debate on the relevance of the Efficient Market Hypothesis, especially in emerging markets such as Indonesia. The significant findings on exchange rates and interest rates, which contrast with the insignificance of inflation, suggest that the market may not be fully efficient, as proposed by the EMH. These results imply that other, non-macroeconomic factors, including investor behavior, market maturity, and the early nature of digital banking, play a significant role in stock pricing. Future studies can further challenge the EMH by incorporating a wider range of variables and exploring alternative theoretical frameworks that better capture the complexity of emerging markets.

Overall, this regression analysis provides important insights into the intersection of macroeconomic stability and stock performance of digital banks in Indonesia. While macroeconomic factors such as exchange rates and interest rates are shown to be influential, the apparent market inefficiencies suggest that there is still much to be understood about how these banks face unique challenges in the emerging digitally-driven financial landscape. The findings not only contribute to the academic discourse but also offer practical guidance for policymakers, regulators, and market participants in this rapidly evolving digital banking sector.

CONCLUSION

The conclusion of this study states that there is a mismatch between macroeconomic stability and the stock performance of digital banks in Indonesia during the period 2022 to 2023. The panel data regression results show that the USD/IDR exchange rate and Bank Indonesia interest rate variables have a significant negative effect on digital bank stock prices, while the inflation variable shows no significant effect. This finding indicates that despite Indonesia's overall stable macroeconomic conditions, the stock prices of digital banks continue to experience significant declines, which may indicate the presence of market inefficiencies.

This study answers the research question of how Indonesia's macroeconomic conditions affect the stock performance of digital banks, and finds that exchange

rate fluctuations and interest rate changes are key factors that impact stock prices. However, inflation stability did not have a significant impact on the stock performance of digital banks during the period studied. This confirms the importance of a deeper understanding of the dynamics affecting stock performance in the digital banking sector, especially in an emerging market context such as Indonesia.

This study also makes a theoretical contribution by highlighting the mismatch between efficient market expectations and the reality of digital bank stock performance, and underscores the need for further research to understand the role of investor sentiment, market behavior, and the influence of digital financial technology in influencing stock performance. In conclusion, it is important for policymakers, regulators, and market participants to consider these factors in developing strategies that support the growth and stability of the digital banking sector in Indonesia.

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