

THE EFFECT OF MONETARY POLICY ON CAPITAL MARKETS IN DEVELOPING COUNTRIES

Loso Judijanto *¹

IPOSS Jakarta, Indonesia
losojudijantobumn@gmail.com

Fauziah Nur Hutauruk

Universitas Imelda Medan
fauziahnur336@gmail.com

Amândio de Araújo Sarmiento

Universidade Nacional Timor Lorosa'e
amandioaraujo70@gmail.com

Al-Amin

Universitas Airlangga, Surabaya, Indonesia
al.amin-2024@feb.unair.ac.id

Abstract

Monetary policy is recognised as having a significant influence on the economy, particularly through its impact on the capital market. The study conducted in this research uses the literature research method. The results found that the effects of interest rate changes and significant increases in liquidity often have a short-term positive impact on stock market indices. However, the findings also emphasise the need for policymakers to consider complicating factors such as global political or economic instability and high inflation expectations, which may reduce the effectiveness of monetary policy. Finally, the findings underline that the room for manoeuvre of monetary policy can be limited in a low interest rate environment, which calls for a more innovative and sensitive policy approach to external conditions.

Keywords: Monetary Policy, Capital Markets, Emerging Markets.

Introduction

Monetary policy is one of the main tools used by central banks to control inflation, stabilise the currency, and create economic conditions conducive to growth. This policy includes controlling interest rates, open market operations, and setting minimum bank reserves (Akalpler & Hove, 2020). In the context of developing countries, the effectiveness of monetary policy is crucial as these countries often experience higher economic fluctuations, as well as have less stable capital markets that tend to be more volatile than developed countries (Badibanga, 2022).

¹ Correspondence author.

Capital markets in developing countries play a strategic role in corporate and government funding and in general economic development. A vibrant capital market can promote efficient resource allocation and facilitate long-term investment, which in turn supports economic growth. However, capital markets in developing countries also face challenges in the form of instability caused by global economic uncertainty, changes in cross-border capital flows, and sensitivity to changes in monetary policy (Beckmann et al., 2021).

Monetary policy, through tools such as interest rates and open market operations, can have direct and indirect effects on capital markets. For example, an increase in interest rates typically reduces market liquidity and raises borrowing costs, which in turn can depress stock prices and lower the value of capital markets. Conversely, expansionary policies can increase market liquidity and support rising stock prices (Bellavitis et al., 2023).

The link between monetary policy and capital markets is an important aspect of economic studies, especially in observing how policies implemented by central banks affect financial and investment conditions in a country. Monetary policy, which includes setting interest rates, controlling money supply, and open market operations, directly or indirectly, has a major impact on corporate balance sheets, investor behaviour, and the value of stocks and bonds in the capital market (Choi et al., 2020). A rise in interest rates will usually cause borrowing costs to increase, which may reduce corporate profits and make investors reassess their potential investment returns. Conversely, expansionary monetary policy that lowers interest rates tends to stimulate economic activity by making loans more affordable, which in turn can improve capital market performance through rising stock and bond prices (Demekas & Nerlich, 2020).

In developing countries, where capital markets are often not as robust as in developed countries, the influence of monetary policy is more significant. The higher volatility in emerging capital markets makes them more sensitive to changes in monetary policy. For example, announcements about interest rate changes by central banks can lead to significant inflows or outflows of foreign funds from capital markets, affecting liquidity and market valuations (Dobkowitz et al., 2022). Therefore, an in-depth understanding of the linkages between monetary policy and capital markets specifically in the context of emerging economies is needed, in order to formulate policy strategies that can support economic growth while maintaining capital market stability. Analysing these linkages is also important for investors and portfolio managers in planning investment strategies that are appropriate to changing micro and macroeconomic conditions (Ha et al., 2023).

Although the relationship between monetary policy and capital markets has been widely discussed in the economic literature, more in-depth studies especially in the context of developing countries are still needed (Harrison & Reed, 2023). Economic, political, and institutional conditions peculiar to emerging economies may influence the

way monetary policy affects capital markets (Kampl, 2021). Therefore, understanding these dynamics is important to formulate policies that not only support financial stability, but also sustainable economic growth.

This study seeks to fill the gap in the literature by investigating the effect of monetary policy on capital markets in emerging economies. Through a comprehensive literature review, this study hopes to provide new insights into the transmission mechanism of monetary policy to capital markets as well as the resulting implications for policymakers, investors, and emerging economies as a whole.

Research Methods

The study conducted in this research uses the literature research method. The literature research method is an important approach in various academic studies that aims to collect, review, and analyse previous publications related to a particular research topic. This approach is used to develop a theoretical framework, identify gaps in the existing literature, and inform research design (Kim et al., 2024); (Nguyen et al., 2024).

Results and Discussion

Monetary Policy

Monetary policy is the action taken by a country's central bank or monetary authority to control the money supply as well as interest rates, with the primary objective of achieving price stability and supporting sustainable economic growth (Levy-Orlik, 2023). The main mechanisms of monetary policy include open market operations, setting the policy interest rate, and bank reserve requirements. Through these activities, central banks seek to control inflation, influence currency exchange rates, as well as support job creation and overall financial stability (Mészáros & Kiss, 2020).

The main objective of monetary policy is to maintain price stability, which means keeping the inflation rate at a low and stable level. Price stability is seen as important as it can help individuals and businesses make more confident economic decisions (Michelena & Toledo, 2023). In addition, monetary policy also aims to support the country's economy in achieving optimal economic growth rates and stabilising financial markets. Through interest rate setting and money supply control, central banks can respond to domestic and international economic turmoil, manage market expectations, and help countries achieve lower unemployment rates, all while maintaining investor confidence in the economy (Morales & Reding, 2021a).

Monetary policy tools used by central banks to influence economic conditions include policy rate setting, open market operations, and minimum reserve requirements. Setting the policy rate, which is often the interest rate at which banks can borrow funds from the central bank, directly affects the cost of borrowing and the level

of spending in the economy (Morales & Reding, 2021b). Open market operations involve the purchase or sale of government debt securities by the central bank to regulate the money supply; purchases increase the monetary base while sales withdraw liquidity from the market. Minimum reserve requirements, which set the proportion of deposits that banks must maintain as reserves and not lend out, serve to control the amount of funds that banks can generate through the credit creation process. Wisdom in the application of these three tools is crucial in manoeuvring monetary policy to achieve price stability and support sustainable economic growth (Ospina, 2022).

Thus, monetary policy plays an important role in stabilising a country's economy by influencing inflation rates, unemployment, and economic growth through various tools such as interest rate setting, open market operations, and minimum reserve requirements. The effective use of these tools by the central bank helps control the money supply and interest rates, which in turn affect investment and consumption decisions. By maintaining price stability and supporting healthy economic growth, monetary policy not only provides certainty for market participants but also contributes directly to the economic well-being and financial stability of the country. Therefore, in-depth understanding and monitoring of this policy is crucial for the government and economic players to optimise the benefits gained and minimise the challenges in a dynamic global economy.

Capital Markets

The capital market is a segment of the financial market where buying and selling of long-term financial instruments, which can be stocks, bonds, or derivative instruments, takes place. The capital market aims to bring together the parties, namely investors who want to invest their excess funds to get returns in the long term, and companies or governments that need funds for expansion, infrastructure development, or other purposes (Otoman & Garcia-Vigonte, 2022). Through the capital market, funds available in society can be efficiently allocated to the various economic sectors that need them, contributing to overall economic growth. Capital markets also allow market participants to diversify their investments, reduce risk, and increase the liquidity of their assets (Papageorgiou et al., 2022).

The main functions of capital markets include funding function, liquidity function, and price formation function. The funding function is achieved when capital markets provide a mechanism to collect and channel economic funds from those with financial surpluses to those who need funds for business or project development. The liquidity function refers to the ability of the capital market to allow investors to quickly convert investments into cash without significant loss of value (Perego et al., 2024). Furthermore, the price formation function of the capital market is the process of determining the price of stocks or bonds based on supply and demand, which provides an indicator of the market value of a company and supports more efficient resource

allocation. As such, capital markets not only assist in corporate and government financing but also offer a mechanism for risk assessment and management, making them a critical component of the global financial ecosystem (Schlotmann, 2021).

Capital markets play a crucial role in the economy by facilitating the efficient allocation of funds, whereby funds from investors are transferred to companies and government entities that require fresh funds for expansion, research and development, or infrastructure projects (Signe et al., 2024). This process not only helps in stimulating economic growth and job creation through investments in various sectors, but also provides an opportunity for individuals and institutions to invest their savings in financial instruments that offer potential returns. As such, capital markets contribute not only to the development of the corporate and government sectors through providing access to long-term capital, but also optimise returns for investors, ultimately supporting the stability and sustainable growth of the economy as a whole (Sullivan, 2024).

Impact of Monetary Policy on the Capital Market

Monetary policy, implemented by a country's central bank, affects the capital market through various mechanisms. Changes in monetary policy, such as interest rate adjustments, open market operations, and changes in minimum reserve requirements, can have a significant impact on capital market conditions (Titumir, 2021a). For example, a reduction in interest rates tends to make bonds and bank deposits less attractive to investors, so funds may shift to stocks or other capital market instruments that offer potentially higher returns. This can increase liquidity in the stock market and push up stock prices (Titumir, 2021b).

Conversely, a rise in interest rates may make money market instruments such as deposits and bonds more attractive, causing funds to exit the stock market and leading to a decline in stock prices. This happens because investors seek safer assets and more certain returns offered by interest-based instruments in periods of higher interest rates (Titumir, 2021c). In this scenario, companies listed on the capital market may find it difficult to raise new capital through stock or bond issuance as investors are more likely to allocate their assets to investments that provide higher yields with lower risk (Titumir, 2021d).

In addition, monetary policy can affect currency exchange rates, which impact multinational corporations and international investors in the capital market. For example, if monetary policy is made to increase interest rates, the exchange rate may strengthen (Vyshnevskiy et al., 2024). This can benefit companies that import a lot or have foreign currency-denominated debt, but on the other hand, it can hurt exporting companies whose revenues will be reduced when converted back to the stronger local currency. These effects broadly impact investors' portfolios and the share prices of companies listed on the capital market (Wutscher, 2024).

Ultimately, the capital market response to monetary policy depends largely on the market's perception and expectation of the policy's effectiveness in promoting economic growth. In the short term, policy announcements may cause market volatility as a result of adjustments by market participants. However, in the long run, the effectiveness of monetary policy in creating economic conditions conducive to growth can help boost investor confidence, which in turn can stimulate capital market activity. As such, monetary policy has a powerful tool to influence overall capital market dynamics.

The Effect of Monetary Policy on the Capital Market

Monetary policy has an important influence on the capital market as it can impact the cost of capital and investors' expectations. When central banks lower interest rates, the cost of borrowing money for individuals and businesses falls, which can stimulate investment in various sectors of the economy (Yepez, 2021). This reduction in interest rates often increases stock prices as expectations of future profits become more attractive when borrowing costs fall and economic activity increases. As a consequence, capital markets tend to react positively with an increase in trading volume and a rise in stock prices in general (Akalpler & Hove, 2020).

On the opposite side, tightening monetary policy, such as interest rate hikes, may place downward pressure on the capital market. Higher borrowing costs can dampen spending and investment by companies, affecting their earnings and future growth expectations (Badibanga, 2022). As a result, stock values may fall as investors will seek higher returns to compensate for greater risk. This may lead to a decline in the stock market index and lower investors' wealth, which in turn may reduce consumption and further investment (Beckmann et al., 2021).

Furthermore, monetary policy can also affect liquidity in the financial system. Monetary expansion, such as with quantitative easing, where central banks purchase financial assets to increase the monetary base and improve liquidity, usually favours a rise in capital markets (Bellavitis et al., 2023). This additional liquidity makes funds more readily available for investors to invest in the stock market, often leading to a rise in stock prices. Conversely, the withdrawal of monetary stimulus and policy reversals from quantitative easing to quantitative tightening can dry up liquidity and put pressure on the stock market (Choi et al., 2020).

Monetary policy also affects currency exchange rates, which can have a significant impact on capital markets, especially in economies with large participation from foreign investors. Looser monetary policy tends to weaken the domestic currency, attracting foreign investors who seek assets with higher potential returns (Demekas & Nerlich, 2020). This could favour a rise in stock prices. On the other hand, tighter monetary policy tends to strengthen the domestic currency, which could reduce its attractiveness to foreign markets. As a result, foreign investors may withdraw capital,

which may increase selling pressure in the domestic stock market and lead to a decline in stock prices (Dobkowitz et al., 2022).

Overall, monetary policy plays a crucial role in shaping broader economic conditions and can have a very gradual or sudden impact on capital markets, depending on how policy changes are perceived and anticipated by market participants.

Supporting and Hindering Factors of Monetary Policy on Capital Market

Supporting factors for monetary policy in influencing the capital market include the confidence of market participants in the policies taken by the central bank. If investors believe that monetary policy will be effective in supporting economic growth, the market response tends to be positive (Ha et al., 2023). This can be seen when central banks announce interest rate cuts or other stimulus programmes, such as quantitative easing, which usually support an increase in stock prices due to expectations that high liquidity and lower borrowing costs will encourage investment and consumption (Harrison & Reed, 2023).

Another factor that supports the success of monetary policy is the smooth transmission mechanism of monetary policy to the real sector. Effective transmission ensures that changes in monetary policy can induce changes in the behaviour of borrowers and lenders, which then affect investment and consumption decisions. The stability of the banking system and financial markets also plays an important role, as it ensures that changes in interest rates can be efficiently linked to the rest of the economy, including capital markets (Kampl, 2021).

On the other hand, constraining factors include the presence of global political or economic uncertainties that may reduce the effectiveness of monetary policy. For example, when investors feel uncertain about the future prospects of the global economy, they may respond less to incentives provided by monetary policy as they may prioritise investment safety over seeking higher returns. Other constraints include the limitations of monetary policy in a low or negative interest rate environment, where the central bank's room for manoeuvre to further lower interest rates is very limited (Levy-Orlik, 2023).

The existence of high inflation expectations can also be an impediment to the effectiveness of monetary policy on capital markets. If investors anticipate that too much monetary stimulus will lead to high inflation in the future, this can depress stock values as the general rise in prices of goods and services can undermine purchasing power and profits (Mészáros & Kiss, 2020). As a result, central banks must strike a balance between stimulating economic growth and maintaining price stability, which necessitates clear policy communication to keep inflation expectations within reasonable limits (Michelena & Toledo, 2023).

Overall, the enabling and constraining factors are highly influential in determining how effectively monetary policy can influence the capital market, which in

turn affects overall economic growth. The balance between stimulus incentives and inflation control, market confidence, and current global economic conditions will determine the outcome of monetary policy on the capital market.

Conclusion

The findings of this study show that monetary policy has a significant influence on the capital market, mainly through the effects of interest rates and liquidity provided by the central bank. When interest rates are lowered, the capital market often experiences an upturn thanks to lower borrowing costs that encourage firms and individuals to increase investment and consumption. On the other hand, programmes such as quantitative easing that increase liquidity have also been shown to support rising stock prices, as easier access to funds allows more investment into the stock market.

However, this study also found some inhibiting factors that may reduce the effectiveness of monetary policy in influencing the capital market. Global political and economic instability, as well as high inflation expectations, can reduce investor confidence and lower the effectiveness of monetary policy incentives. Similarly, in an environment with already very low interest rates, a policy of further rate cuts has limited room for manoeuvre to make a meaningful difference in the economy, thereby limiting positive movements in the capital market. In summary, monetary policy is a powerful tool to influence the capital market but its effectiveness is highly dependent on the prevailing economic and political conditions.

From a theoretical perspective, this finding reinforces the understanding that monetary policy plays a crucial role in its influence on the capital market, particularly through the mechanism of interest rate and liquidity effects. This lends support to existing theories on the transmission mechanism of monetary policy and how changes in this policy can affect investment and market value. Practically, the findings suggest that policymakers need to consider global economic conditions as well as internal factors when designing monetary policy to ensure that interest rate changes and liquidity enhancements are able to achieve the desired economic development objectives, by avoiding the formation of asset bubbles and anticipating undesirable inflationary effects. These implications are important to help achieve the right balance between growth stimulation and financial stability.

References

- Akalpler, E., & Hove, S. (2020). Monetary Policy and Capital Flow Implications on Economic Growth in BRICS Countries. *SSRN Electronic Journal*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.2139/ssrn.3720809>
- Badibanga, T. M. (2022). Capital Markets' Development: Are African Countries Lagging? *Monetary and Financial Systems in Africa*, Query date: 2024-06-26 11:25:29, 283–314. https://doi.org/10.1007/978-3-030-96225-8_13
- Beckmann, J., Czudaj, R., & Osowski, T. (2021). Monetary Policy and Foreign Denominated Debt by Non-Bank Borrowers. *Credit and Capital Markets – Kredit Und Kapital: Volume 54, Issue 3, 54(3)*, 423–446. <https://doi.org/10.3790/ccm.54.3.423>
- Bellavitis, C., Fisch, C., & Vismara, S. (2023). Monetary Policy and Venture Capital Markets. *Review of Corporate Finance*, 3(4), 627–662. <https://doi.org/10.1561/114.00000053>
- Choi, S., Smith, B. D., & Boyd, J. H. (2020). Inflation, Financial Markets, and Capital Formation. *Handbook of Monetary Policy*, Query date: 2024-06-26 11:25:29, 449–475. <https://doi.org/10.4324/9780429270949-37>
- Demekas, D. G., & Nerlich, A. (2020). *Creating Domestic Capital Markets in Developing Countries: Perspectives from Market Participants*. International Finance Corporation, Washington, DC. <https://doi.org/10.1596/33617>
- Dobkowitz, S., Gnewuch, M., & Weiß, M. (2022). 52nd Konstanz Seminar on Monetary Theory and Monetary Policy. *Credit and Capital Markets – Kredit Und Kapital: Volume 55, Issue 1, 55(1)*, 137–144. <https://doi.org/10.3790/ccm.55.1.137>
- Ha, J., Liu, H., & Rogers, J. (2023). Capital Controls in Emerging and Developing Economies and the Transmission of U.S. Monetary Policy. *Policy Research Working Papers*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.1596/1813-9450-10582>
- Harrison, A., & Reed, R. R. (2023). Capital flows to developing countries: Implications for monetary policy across the globe. *Review of International Economics*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.1111/roie.12703>
- Kampl, L.-M. (2021). Measuring the Short-Term Effects of the ECB's Unconventional Monetary Policy on Financial Markets: A Review. *Credit and Capital Markets – Kredit Und Kapital: Volume 54, Issue 1, 54(1)*, 37–77. <https://doi.org/10.3790/ccm.54.1.37>
- Kim, K., Lee, K., & Kwon, O. (2024). A systematic literature review of the empirical studies on STEAM education in Korea: 2011–2019. *Disciplinary and Interdisciplinary Education in ...*, Query date: 2024-05-10 07:14:07. https://doi.org/10.1007/978-3-031-52924-5_6
- Levy-Orlik, N. (2023). Limitations of monetary policies in open developing economies: External capital inflows and sterilisation policies. *Monetary Policy Challenges in Latin America*, Query date: 2024-06-26 11:25:29, 59–77. <https://doi.org/10.4337/9781802200706.00015>
- Mészáros, M., & Kiss, G. D. (2020). Spillover effects of unconventional monetary policy on capital markets in the shadow of the Eurozone: A sample of non-Eurozone

- countries. *Review of Economic Perspectives*, 20(2), 171–195. <https://doi.org/10.2478/revecp-2020-0008>
- Michelena, G., & Toledo, F. (2023). Global financial cycle and monetary policy rules: A Neo-Kaleckian model for emerging markets and developing economies. *Monetary Policy Challenges in Latin America*, Query date: 2024-06-26 11:25:29, 78–95. <https://doi.org/10.4337/9781802200706.00016>
- Morales, J. A., & Reding, P. (2021a). Modelling Monetary Policy. *Monetary Policy in Low Financial Development Countries*, Query date: 2024-06-26 11:25:29, 293–316. <https://doi.org/10.1093/oso/9780198854715.003.0007>
- Morales, J. A., & Reding, P. (2021b). Monetary Policy Instruments. *Monetary Policy in Low Financial Development Countries*, Query date: 2024-06-26 11:25:29, 89–144. <https://doi.org/10.1093/oso/9780198854715.003.0003>
- Nguyen, D., Boeren, E., Maitra, S., & ... (2024). A review of the empirical research literature on PLCs for teachers in the Global South: Evidence, implications, and directions. ... *Development in Education*, Query date: 2024-05-10 07:14:07. <https://doi.org/10.1080/19415257.2023.2238728>
- Ospina, M. A. G. (2022). Optimal Monetary Policy in Developing Countries: The Role of Informality. *SSRN Electronic Journal*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.2139/ssrn.4302041>
- Otoman, V., & Garcia-Vigonte, F. (2022). Monetary Policy of the Developing Countries: The Case of the Philippines. *SSRN Electronic Journal*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.2139/ssrn.4121627>
- Papageorgiou, C., Melina, G., Cantelmo, A., & Fatouros, N. (2022). Monetary Policy in Disaster-Prone Developing Countries. *IMF Working Papers*, 2022(55), 1–1. <https://doi.org/10.5089/9798400204371.001>
- Perego, E. R., Bodart, V., & Courtoy, F. (2024). *Us Monetary Policy Spillovers to Developing Countries: The Commodity-Financial Channel*. Query date: 2024-06-26 11:25:29. <https://doi.org/10.2139/ssrn.4724150>
- Schlotmann, O. (2021). Is Now the Time for Modern Monetary Theory or Permanent Monetary Finance? *Credit and Capital Markets – Kredit Und Kapital: Volume 54, Issue 1*, 54(1), 17–36. <https://doi.org/10.3790/ccm.54.1.17>
- Signe, F. X., Poutineau, J. C., & Gankou, J. M. (2024). *Monetary Policy with Heterogeneous Agents in Developing Countries: The Case of CEMAC zone*. Query date: 2024-06-26 11:25:29. <https://doi.org/10.21203/rs.3.rs-3964163/v1>
- Sullivan, M. (2024). Understanding and predicting monetary policy framework choice in developing countries. *Economic Modelling*, 139(Query date: 2024-06-26 11:25:29), 106783–106783. <https://doi.org/10.1016/j.econmod.2024.106783>
- Titumir, R. A. M. (2021a). Fiscal policy and productive capacity. *Fiscal and Monetary Policies in Developing Countries*, Query date: 2024-06-26 11:25:29, 131–161. <https://doi.org/10.4324/9781003201847-4>
- Titumir, R. A. M. (2021b). Framing fiscal and monetary policies for developing countries. *Fiscal and Monetary Policies in Developing Countries*, Query date: 2024-06-26 11:25:29, 37–89. <https://doi.org/10.4324/9781003201847-2>

- Titumir, R. A. M. (2021c). Monetary policy, growth and employment. *Fiscal and Monetary Policies in Developing Countries*, Query date: 2024-06-26 11:25:29, 205–240. <https://doi.org/10.4324/9781003201847-6>
- Titumir, R. A. M. (2021d). Price, Inflation and Monetary Policy. *Fiscal and Monetary Policies in Developing Countries*, Query date: 2024-06-26 11:25:29, 241–268. <https://doi.org/10.4324/9781003201847-7>
- Vyshnevskiy, I., Jombo, W., & Sohn, W. (2024). The clarity of monetary policy communication and financial market volatility in developing economies. *Emerging Markets Review*, 59(Query date: 2024-06-26 11:25:29), 101121–101121. <https://doi.org/10.1016/j.ememar.2024.101121>
- Wutscher, C. (2024). The ECB's New Green Monetary Policy. *Sustainable Finance in Europe*, Query date: 2024-06-26 11:25:29, 409–462. https://doi.org/10.1007/978-3-031-53696-0_11
- Yepez, J. (2021). Unintended Consequences of U. S. Monetary Policy Shocks: Dutch Disease and Capital Flow Measures in Emerging Markets and Developing Economies. *SSRN Electronic Journal*, Query date: 2024-06-26 11:25:29. <https://doi.org/10.2139/ssrn.4026408>