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Analysis of Determinants Affecting the Distribution of MSME Funds in Indonesia: A Study of the VECM Approach

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Abstract

This study analyzes the dynamic relationship between Islamic monetary instruments (SBIS, PUAS, and the PLS mechanism) and the distribution of MSME financing in Indonesia, using a Vector Error Correction Model (VECM) for the period January 2014 to December 2023. The estimation results indicate significant policy transmission challenges: SBIS has a negative and significant effect on MSME financing. This crucial finding indicates that SBIS functions as a "liquidity trap," encouraging Islamic banks to place funds in low-risk liquid instruments rather than in risky real-sector financing, such as MSMEs. Meanwhile, PUAS and the underlying PLS mechanism are statistically insignificant, indicating risk aversion and operational barriers to profit-sharing contracts. IRF and FEVD analyses reinforce the conclusion that policy transmission remains weak, with MSME financing variations dominated by internal bank shocks. Theoretically, this study reveals a critical gap in the Mudarabah-based monetary framework, where liquidity instruments sacrifice the goal of promoting the real economy. The practical implications require regulators to redesign liquidity instruments (such as SBIS) to better encourage real-sector incentives, thereby strengthening the alignment between sharia principles and national economic development.

Keywords: *Islamic Monetary Policy, MSMEs, SBIS, PUAS, PLS, VECM*

Introduction

Current global economic conditions in both developing and developed countries demonstrate that Micro, Small, and Medium Enterprises (MSMEs) play a vital role in supporting sustainable economic development and growth. MSMEs are often viewed as a key pillar of the national economy due to their ability to create jobs, improve public welfare, and expand the domestic economic base by providing a diverse range of goods and services.[1] As a highly strategic sector, MSMEs are considered capable of making a substantial contribution to Gross Domestic Product (GDP) while strengthening the economy from the bottom up.

According to data released by the Ministry of Cooperatives and SMEs in December 2024, the number of MSMEs in Indonesia has reached more than 65 million, spread across various sectors, including culinary, fashion, handicrafts, and digital technology. Their contribution to GDP reaches approximately 61%.[2] This reflects the

[1] Rina Destiana, "Analisis Faktor-Faktor Internal Yang Mempengaruhi Pembiayaan Usaha Mikro Kecil dan Menengah (UMKM) Pada Bank Syariah di Indonesia," *Jurnal Riset Keuangan dan Akuntansi* 2, no. 1 (2016).

[2] Muhammad Syafii Antonio, "Islamic Microfinance Initiatives to Enhance Small and Medium Enterprises in Indonesia: From Historical Overview to Contemporary Situation," *Journal of Indonesian Islam* 5, no. 2 (2011): 313–34.

significant role this sector plays in national economic development. Furthermore, MSMEs account for approximately 97% of the workforce and contribute 60.4% of total domestic investment, making them the primary driver of the people's economy.

However, the large number of MSMEs does not guarantee that this sector is free from various structural problems. Challenges such as limited access to financing, low financial literacy, weak competitiveness, and minimal technology adoption pose serious obstacles to its development.[3] The COVID-19 pandemic has further exacerbated this situation, with MSMEs being the most economically impacted sector. According to a report from the Ministry of Cooperatives and SMEs, 37,000 MSMEs suffered severe losses during the pandemic,[4] demonstrating the fragility of this sector's resilience to external shocks.

Another crucial issue is the low share of bank financing for MSMEs. Data from Bank Indonesia shows that only 7.2% of GDP is allocated to MSME financing, a figure significantly lower than in other ASEAN countries such as Malaysia and Thailand. In fact, only 19.7% of total bank loans are disbursed to this sector, far behind South Korea (40.2%) and Thailand (34.5%). This demonstrates a gap between the importance of MSMEs to the economy and the attention they receive in terms of capital.

In an effort to address this gap, the government has introduced various financing schemes since the 1970s, including the Permanent Working Capital Credit (KMKP) and the Small Investment Credit (KIK). In addition, Bank Indonesia Regulation (PBI) No. 3/2/PBI/2011 requires banks to channel at least 20% of their total credit to small businesses to strengthen financial inclusion and encourage growth in the MSME sector.

As part of a mixed economic system, Indonesia implements a dual monetary policy that integrates sharia principles into the national financial system. In Islamic banking, Bank Indonesia has issued monetary instruments, such as Bank Indonesia Sharia Certificates (SBIS), which are used in open market operations (OMO) to maintain financial stability. This instrument not only serves as a monetary policy tool but also acts as a transmission channel that can influence the allocation of financing to the real sector, including MSMEs.

The role of Islamic banks as intermediary institutions is increasingly crucial in this context. Their primary function is to channel funds from those with surplus funds to the productive sector, including MSMEs. For the distribution of funds to run optimally, a deep understanding of the factors that influence financing is needed, both internally (e.g., bank profitability) and externally (e.g., monetary policy dynamics).[5]

Despite efforts to strengthen financing for MSMEs through Islamic monetary instruments, anomalies remain in their effectiveness. Several studies indicate that

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[3] Antonio, "Islamic Microfinance Initiatives to Enhance Small and Medium Enterprises in Indonesia: From Historical Overview to Contemporary Situation."

[4] Selamet Hartanto and Tri Suparyanto, "Islamic Finance Practices in Micro, Small, and Medium Enterprises in Indonesia: A Systematic Literature Review," *Millah: Journal of Religious Studies*, (2023), 435–64.

[5] Ari Pratiwi, "Islamic Banking Contribution in Sustainable Socioeconomic Development in Indonesia: An Epistemological Approach," *Humanomics* 32, no. 2 (2016): 98–120.

the impact of these instruments on the distribution of funds to the MSME sector can be positive, negative, or even insignificant.[6] Therefore, it is important to conduct an in-depth analysis of the influence of sharia monetary instruments on MSME financing in order to provide relevant input for policymakers and sharia banking industry players.

This study aims to assess the extent to which Islamic monetary instruments contribute to the distribution of financing to Indonesia's MSME sector, using a VAR/VECM econometric model. The findings of this study are expected to serve as a basis for formulating a more inclusive and responsive Islamic financial policy strategy to meet the needs of the MSME sector, a pillar of national economic development.

Literature Review

Islamic Monetary Policy

Monetary policy is an effort to control or direct the macroeconomy toward a desired condition by regulating the money supply. Through monetary policy, the government can adjust the money supply to support economic growth while controlling inflation.[7] In addition, monetary policy includes rules and regulations that influence the money supply and interest rates.[8] This policy aims to ensure sufficient economic growth or avoid excessive growth, which requires strict monitoring of the three main sources of monetary expansion: financing the budget deficit, deposit expansion through credit creation in commercial and external banks, and the use of the balance of payments surplus.[9]

From the perspective of Islamic economics, Umar Chapra emphasizes that monetary control instruments must align with Sharia principles and moral values. The first instrument he proposes is the growth target for M and M_0, in which the central bank sets an annual target for money supply growth that is consistent with national economic objectives, sustainable economic expansion, and currency stability. The second is the concept of public shares to performance deposits, where a proportion of demand deposits up to a certain limit, typically around 25 percent, can be redirected by the government to finance public projects that generate social welfare, particularly in areas where profit-sharing mechanisms are inapplicable.

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[6] Muhammad Thariq Audah and Rahmatina Awaliah Kasri, "Does Islamic Banking Matter in Transmitting Monetary Policy? Empirical Evidence from Indonesia and Malaysia.," *Pertanika Journal of Social Sciences & Humanities* 28, no. 1 (2020); Muhfiatun Muhfiatun, Lailatis Syarifah, and Annisa Nur Salam, "Efektifitas Instrumen Moneter Syariah Terhadap Penyaluran Dana Ke Sektor Usaha Mikro Kecil Menengah (UMKM) di Indonesia," *Al-Mashrof: Islamic Banking and Finance* 2, no. 1 (2021): 1–15.

[7] Dini Abdianti et al., "Konsep Kebijakan Moneter Dalam Perspektif Ekonomi Islam," *Trending: Jurnal Manajemen Dan Ekonomi* 1, no. 3 (2023): 213–26; Siti F Zahra, A Ascarya, and Nurul Huda, "Stability Measurement of Dual Banking System in Indonesia: Markov Switching Approach," *Al-Iqtishad Journal of Islamic Economics* 10, no. 1 (2018): 25–52, https://doi.org/10.15408/aiq.v10i1.5867.

[8] Rindani Dwihapsari, Mega Rachma Kurniaputri, and Nurul Huda, "Analisis Efektivitas Kebijakan Moneter Dalam Perspektif Konvensional dan Syariah Terhadap Inflasi di Indonesia Tahun 2013-2020," *Jurnal Ilmiah Ekonomi Islam* 7, no. 2 (2021): 980–93; Remi Reinaldo, "Kebijakan Moneter dalam Perspektif Islam," *Journal of Social and Economics Research* 6, no. 1 (2024): 2199–2207.

[9] Muhammad Hafiz Ikhsan et al., "Analisis Kebijakan Moneter Perbankan Syariah Terhadap UMKM di Indonesia," *Brilliant: Journal of Islamic Economics and Finance* 1, no. 2 (2023): 133–41; Milla Naeruz, "Analisis Perkembangan Perbankan Syariah terhadap Pertumbuhan UMKM Melalui Kebijakan Moneter di Indonesia," *Jurnal Tabarru': Islamic Banking and Finance* 3, no. 2 (2020): 163–72.

The third instrument is the official reserve requirement (Giro Wajib Minimum), which obligates commercial banks to keep a certain percentage of their deposits, generally between 10 and 20 percent, as reserves at the central bank. These reserves serve as a stabilizing tool, and the central bank bears the cost of mobilizing these funds to support commercial banks. The fourth is value-oriented credit allocation, which emphasizes that credit distribution should prioritize social benefits aligned with Islamic objectives over maximizing private profit. Finally, the credit limit policy helps the central bank expand the monetary base (high-powered money, M_0) as desired while maintaining control to prevent excessive credit expansion beyond prudent levels. In principle, the goal of Islamic monetary policy is to maintain currency stability (both internally and externally) so that equitable economic growth can be achieved. The stability of the value of money is inseparable from the goal of sincerity and openness in dealing with people (the real sector).[10] Therefore, if it is linked to the target of implementing monetary policy, automatically, the implementation of Islamic-based monetary policy will not allow the determination of interest rates as targets or operational targets.[11] To promote economic growth and stability, Islam does not use interest rates or monetary expansion through printing new money or budget deficits. Instead, it accelerates the circulation and development of real sector infrastructure.[12]

The objectives of Islamic monetary policy include broad economic viability based on full employment and optimal economic growth rates, socio-economic justice with equitable distribution of income and welfare, and stability in the value of money so that it allows the medium of exchange to be used as a means of calculation and a stable benchmark.[13]

SBIS (Bank Indonesia Sharia Securities Certificate)

SBIS is a Sharia-compliant monetary instrument. According to Bank Indonesia Regulation Number 10/11 dated March 31, 2008, on Bank Indonesia Sharia Certificates, SBIS is a short-term sharia-based security denominated in rupiah, issued by Bank Indonesia. Liquidity management regarding SBIS in Sharia Banking is based on DSN-MUI Fatwa No. 64 /DSN-MUI/XII/2007. This regulation came into effect on March 31, 2008, under DSN permission No. 63/DSN-MUIXII / 2007, using the *Ju'alah* contract. The *Ju'alah* contract is a rental contract (*Ijarah*) with a benefit whose success is unknown (in the sense of whether a job is successful or not).

[10] Khusni Aristina, Whinarko Juliprijanto, and Panji Kusuma Prasetyanto, "Analisis Kebijakan Moneter dan Kebijakan Fiskal Terhadap Pertumbuhan Ekonomi di Indonesia Tahun 2005-2018," *DINAMIC: Directory Journal of Economic* 2, no. 2 (2020): 403–14; Anisa Mawaddah Nasution and Maryam Batubara, "Penerapan Kebijakan Moneter Islam Pada Sistem Perekonomian Indonesia," *Jurnal Penelitian Ekonomi Akuntansi (JENSI)* 7, no. 1 (2023): 144–54.

[11] Nirmadar Ningsih Hiya, "Studi Literatur Kebijakan Moneter Islam Tanpa Bunga," *Jurnal Ilmiah Ekonomi Islam* 8, no. 1 (2022): 868–75; Liasulistia Ningsih et al., "Efektivitas Kebijakan Moneter Terhadap Pertumbuhan Ekonomi," *Jurnal Ilmiah Ekonomi, Manajemen dan Syariah* 3, no. 1 (2024): 36–40.

[12] Cinta Rahmi et al., "Analisis Transmisi Kebijakan Moneter Syariah Terhadap Kinerja UMKM melalui Sistem Murabahah," *Jurnal Akuntansi Keuangan dan Bisnis* 2, no. 1 (2024): 9–14; Erni Yusnita Siregar, "Kerangka Kerja Kebijakan Moneter dalam Islam," *Jurnal Al-Iqtishad* 17, no. 2 (2021): 163–75.

[13] Yuli Indah Sari and Widiyanto bin Mislan Cokrohadisumarto, "Modelling a Sustainability Model of Islamic Microfinance Institutions," *Journal of Islamic Monetary Economics and Finance* 5, no. 4 (2019): 713–40.

Based on the DSN-MUI Fatwa No.: 63/DSN-MUI/XII/2007, it was issued using the *mudharabah, musyarakah, wadi'ah, qardh*, and *wakalah* contracts. Bank Indonesia Sharia Certificates (SBIS) have specific characteristics as stipulated in Circular Letter No. 10/16/DPM, addressed to all Islamic Commercial Banks (BUS) and Islamic Business Units (UUS). Each SBIS is issued in a nominal amount of one million rupiahs (Rp 1,000,000.00), with a minimum maturity of one month and a maximum of twelve months. The period is calculated as the number of calendar days from one day after the transaction's completion date to the maturity date.

SBIS are issued in a scripless form, meaning that no physical certificate is printed. This digital issuance enhances efficiency, transparency, and safety in interbank transactions. Furthermore, SBIS instruments can be used as collateral with Bank Indonesia, reflecting their role as a liquid, low-risk asset within the Islamic banking liquidity framework. However, these instruments are not tradable in the secondary market, indicating their function is limited to liquidity management rather than speculative trading.

In general, the placement of funds in SBIS influences Islamic banks' intermediary role in channeling funds from surplus units to deficit units. This intermediation arises from information asymmetry between fund providers and fund users, creating a need for banks to facilitate the optimal flow of funds. Through this mechanism, SBIS serves as an alternative instrument for Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) in managing their short-term liquidity and investment portfolios while maintaining compliance with sharia principles.

PUAS (Islamic Interbank Money Market)

According to DSN MUI fatwa No. 37/DSN-MUI/2002, PUAS is defined as a short-term financial transaction activity between market players based on sharia principles. According to Article 1(4) of Bank Indonesia Regulation No. 7/26/PBI/2005, PUAS is defined as a short-term rupiah investment activity among market players based on the *mudharabah* principle. The *mudharabah* principle is one of the principles of Islamic banking products that emphasizes profit sharing. A *mudharabah* contract is a business cooperation agreement between two parties: the first party acts as the fund owner (*shahibul mal*) and provides 100% of the capital, while the other party acts as the business manager and provides labor. When the *mudharib* receives capital from the owner, the profits are shared according to the agreement. Likewise, if losses occur, the mudharib and owner of the capital share equally. In this case, the mudharabah scheme implements a cooperative system based on fairness.

Figure 1. PUAS Flow

The Islamic interbank money market (PUAS) is a process of lending and borrowing funds between banks with excess funds and those with shortages to address liquidity issues within the banking system. The PUAS mechanism utilizes a profit-sharing system determined at the beginning of the maturity period, with a predetermined return. PUAS was the primary instrument used before SBIS because its auction process is simpler and can be conducted daily. As money market instruments, PUAS and SBIS are related. If the SBIS yield is lower than the PUAS yield, Islamic banks will choose to transact in PUAS. Conversely, if the PUAS yield is lower than the SBIS yield, Islamic banks will choose to invest their funds in SBIS.[14]

Meanwhile, money market players, according to Sharia principles, can be run by Sharia banks as owners or recipients of funds, by conventional banks only as owners of funds.[15] PUAS is not affected by interest rates. The selling bank uses a profit-sharing method in PUAS, and if a loss occurs, the buying bank will not receive compensation. As long as the loss is not caused by fraud or negligence on the part of the issuing bank, the investing bank will bear the maximum loss, equal to the nominal value of the investment. IMA (Inter-Bank *Mudharabah*) Certificates, which are PUAS instruments, are issued by the head office of Islamic banks for banks whose entire activities are based on Islamic principles and UUS.[16]

***Profit and Loss Sharing* (PLS)**

Profit and Loss Sharing is the distribution of a portion of a company's profits to employees. This can take the form of an annual cash bonus based on profits earned in previous years, or of weekly or annual payments. There are two profit-sharing principles in financing contracts: revenue sharing and profit-and-loss sharing. In revenue sharing, the amount shared is the gross income before operating expenses are deducted. In profit and loss sharing, the amount shared is profit/loss after all operational expenses are accounted for. The profit-sharing rate has a positive and significant impact on the distribution of Islamic banking financing. This affects the amount of financing because a higher profit-sharing rate means a higher profit for the bank, which in turn increases the amount disbursed.[17]

Profit sharing is a crucial component of Islamic monetary policy and reflects the performance of the real sector. A profit-sharing system promotes a more equitable distribution of wealth and income, thereby fostering growth in the real sector. Profit sharing is a method used to finance products under Natural Uncertainty Contracts (AKAD) or business contracts that do not provide certainty about returns, either in terms of amount or timing, such as *musyarakah* and *mudharabah.*

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[14] Asmaul Husna et al., "Pengaruh Kebijakan Moneter Terhadap Kinerja Bisnis Perbankan Syariah," *Jurnal Riset Akuntansi dan Bisnis* 21, no. 2 (2021): 11.

[15] M Majid, M Ridwan, and Ade Khadijatul Z Hrp, "Monetary Policy from an Islamic Perspective.," *International Journal of Economics (IJEC)* 3, no. 1 (2024).

[16] Abdianti et al., "Konsep Kebijakan Moneter dalam Perspektif Ekonomi Islam."

[17] Husna et al., "Pengaruh Kebijakan Moneter Terhadap Kinerja Bisnis Perbankan Syariah"; Sitti Nikmah Marzuki, "Konsep Uang Dan Kebijakan Moneter dalam Ekonomi Islam," *Al-Iqtishad: Jurnal Ekonomi* 12, no. 2 (2020): 201–16.

Islamic Financing

According to Law No. 10 of 1998 concerning Banking, financing is the provision of money or equivalent bills under an agreement or contract between a bank and another party, requiring the financed party to repay the money or bills after a certain period, with compensation or profit sharing. According to Law No. 10 of 1998 on Banking, credit is the provision of money or equivalent bills, based on an agreement or loan agreement between a bank and another party, that requires the borrower to repay the debt after a certain period with interest.[18]

Increasing financing and fund distribution, which plays a crucial role in improving the quality and standard of banking, involves placing funds in SBIS and PUAS. Bank Indonesia issued a monetary policy instrument, the Bank Indonesia Sharia Certificates (SBIS), to enable Islamic banks to place short-term funds with Bank Indonesia and to serve as secondary reserves. In addition, Bank Indonesia issued a monetary policy instrument, the Sharia Interbank Money Market (PUAS). However, the more funds allocated to SBIS and PUAS, the less financing is provided.[19]

Micro, Small, and Medium Enterprises (MSMEs)

Micro Enterprises as referred to in the Constitution of the Republic of Indonesia Number 20 of 2008 concerning Micro, Small and Medium Enterprises, micro enterprises are productive enterprises owned by individuals or individual business entities that meet the criteria for micro enterprises as referred to in the law.[20] What is meant by a medium-sized business is a productive economic business that is independent and carried out by a person or individual or business entity that is not a subsidiary or branch of a company that is owned, controlled or is part of either directly or indirectly with a small business or large business that has a net worth or annual sales results as regulated by law.[21] The presence of Islamic financial institutions, such as Islamic banks and Islamic Microfinance Institutions (LKMS), plays a crucial role in supporting the development of the MSME sector. Islamic Microfinance Institutions (IMFIs) not only channel financing but also pursue social missions through the Baitul Maal and Baitul Tamwil mechanisms. Through relationship-based financing schemes, these institutions are able to address information asymmetry and provide sustainable financing to MSMEs with more manageable risks.[22]

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[18] A D Amri, L Tiara, and B I Hastuti, "Analisis Pembiayaan Bank Syariah Terhadap UMKM dan Pertumbuhan Ekonomi di Indonesia Rentang Waktu 10 Tahun Terakhir," *Rizquna: Jurnal Hukum dan* 1 (2023): 71–90; Abdumukhtor Rakhmanov, Abhishek Thommandru, and Shokhrukhbek Tillaboev, "Historical Trajectories and Modern Dynamics of Islamic Financial Law in Central Asia," *International Journal of Legal Information* 52, no. 1 (2024): 74–87.

[19] A F I Manik, "Customer Satisfaction and Loyalty in Islamic Banking: The Role of Quality, Economic, and Image," in *IOP Conference Series: Materials Science and Engineering*, vol. 662 (IOP Publishing, 2019), 32027; Hari Winarto, Adi Poernomo, and Agus Prabawa, "Analisis Dampak Kebijakan Moneter terhadap Pertumbuhan Ekonomi di Indonesia," *J-MAS (Jurnal Manajemen dan Sains)* 6, no. 1 (2021): 34–42.

[20] Iwan Setiawan et al., "Pembiayaan UMKM Bank Syariah dan Stabilitas Moneter di Indonesia Pasca Pandemic Covid-19," *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis* 10, no. 2 (2022): 743–54.

[21] Antonio, "Islamic Microfinance Initiatives to Enhance Small and Medium Enterprises in Indonesia: From Historical Overview to Contemporary Situation."

[22] Muhammad Miqdad Robbani, Mahdiah Aulia, and Fatiya Rumi Humaira, "Progressive Financing In Indonesian Islamic Microfinance Institutions: Improved Monitoring or Distinctive Com-

Micro, Small, and Medium Enterprises (MSMEs) are the most strategic national economic sector, affecting the livelihoods of many people, thus serving as the backbone of the national economy. MSMEs are also the largest economic player group in the Indonesian economy and have proven to be key to safeguarding the national economy during times of economic crisis and driving post-crisis economic growth.[23] Presidential Regulation Number 6 of 2009 concerning the development of central and regional industries to support the 2009-2015 creative industry development policy, namely the development of economic activities based on creativity, skills and individual talents that have economic value and have an impact on the welfare of the Indonesian people.[24]

Islamic financing schemes such as mudharabah and musyarakah are forms of intermediation that directly channel capital into the real sector.[25] Therefore, financing from Islamic banking should significantly drive the growth of MSMEs, particularly due to its usury-free Sharia characteristics and greater flexibility to meet the needs of small businesses. The problems faced by MSMEs can be viewed from two perspectives: internal and external to the MSMEs themselves. Internally, the inhibiting factors are limited capital, limited human resources, weak business networks, and market penetration capabilities.[26]. Meanwhile, from the external side, the inhibiting factors are the business climate that is not fully conducive, limited facilities and infrastructure, the implications of regional autonomy, the short-lived nature of products, limited market access and the implications of free trade. Seeing this, the government provides full support to MSMEs by committing to developing MSMEs. One of the government's efforts is listed in PBI No. 14/22/PBI/2012 where the regulator requires banks to channel credit to MSMEs, at least 20% of the total financing or credit.

A significant long-term relationship between Islamic bank financing and business trends in Indonesia, as demonstrated by the Johansen cointegration test.[27] This confirms that Islamic financing oriented towards the real sector has a sustainable impact on increasing national business activity, including MSMEs. Islamic financial inclusion, Islamic financial planning, and financial literacy contribute positively to the productivity and welfare of the community. In the context of MSME empowerment,

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mercialisation?," *Journal of Islamic Monetary Economics and Finance* 6, no. 3 (2020): 641–66.

[23] Abdul Wahab and Ilma Mahdiya, "Peran Lembaga Keuangan Syariah Terhadap Pertumbuhan UMKM dalam Revitalisasi Ekonomi Pembangunan Di Indonesia," *Islamadina: Jurnal Pemikiran Islam* 24, no. 1 (2023): 109–24; Nursini Nursini, "Micro, Small, and Medium Enterprises (MSMEs) and Poverty Reduction: Empirical Evidence from Indonesia," *Development Studies Research* 7, no. 1 (2020): 153–66.

[24] Pratiwi, "Islamic Banking Contribution in Sustainable Socioeconomic Development in Indonesia: An Epistemological Approach."

[25] Aryadimas Suprayitno, Arva Athallah Susanto, and Weni Hawariyuni, "Sustainability of Islamic Bank Financing across Macroeconomic and Internal Factors," *Journal of Sustainable Economics* 2, no. 2 (2024): 83–93.

[26] P Eko Prasetyo, "The Role of Government Expenditure and Investment for MSME Growth: Empirical Study in Indonesia," *The Journal of Asian Finance, Economics and Business* 7, no. 10 (2020): 471–80.

[27] Sri Herianingrum et al., "The Impact of Islamic Bank Financing on Business," *Entrepreneurship and Sustainability Issues* 7, no. 1 (2019): 133–45.

these aspects can be important prerequisites in optimizing the impact of Islamic-based MSME financing.[28]

Previous Research

Empirical studies employing the Vector Error Correction Model (VECM) demonstrate that MSME financing distribution is shaped by macroeconomic conditions, banking fundamentals, institutional quality, and financial.[29] Fintech initially substitutes conventional services but evolves into a complementary mechanism for financial inclusion, improving credit evaluation despite digital literacy and regulatory constraints (Hidayat & Lestari, 2024; Karim et al., 2024). Sharia fintech also enhances MSME inclusion, although infrastructural and regulatory limitations persist (Aisyah & Atho'illah, 2025).

In the sphere of social and Islamic finance, Sharia-based financing, social innovation, and inclusion significantly promote MSME growth.[30] Access to Islamic bank financing is influenced by socio-relational and religious dimensions, as well as economic factors.[31] Profit-and-loss sharing (PLS) schemes contribute more substantially to economic growth than non-PLS models in both short and long terms,[32] while *musyarakah* contracts provide alternative financing for collateral-constrained MSMEs despite risk management challenges.[33] Financial literacy and human capital capacity are critical determinants of formal financing access and training and mentoring programs strengthen MSME financial capability.[34] Policy effectiveness, particularly interest subsidies under the KUR program and capacity-building initiatives, remains pivotal in expanding MSME financing, especially during post-pandemic recovery.[35]

Research Hypothesis

A number of empirical studies show that Islamic monetary instruments such as Bank Indonesia Sharia Certificates (SBIS) tend to absorb banking liquidity, thereby

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[28] Meri Indri Hapsari et al., "Antecedents of Islamic Welfare: Productivity, Education, and the Financial Aspect," *International Journal of Islamic and Middle Eastern Finance and Management* 17, no. 1 (2024): 63–85.

[29] Early R Kismawadi, "Contribution of Islamic Banks and Macroeconomic Variables to Economic Growth in Developing Countries: Vector Error Correction Model Approach (VECM)," *Journal of Islamic Accounting and Business Research*, 2023, https://doi.org/10.1108/jiabr-03-2022-0090.

[30] Suhada Suhada, Irwansyah Irwansyah, and Lilis Marlina, "Pengaruh Pembiayaan Syariah, Inovasi Sosial, dan Inklusi Sosial, Terhadap Pertumbuhan UMKM," *Balance: Jurnal Akuntansi dan Manajemen* 4, no. 1 (2025): 277–89.

[31] Imam Abdul Aziz and Andri Brawijaya, "Faktor-Faktor Yang Mempengaruhi Aksesibilitas Umkm Terhadap Pembiayaan Di Bank Syariah (Studi Pada UMKM Kampung Lembur Sawah Mulyaharja)," *Journal of Islamic Economic Scholar* 5, no. 2 (2024): 121–30.

[32] Masrizal Masrizal and Budi Trianto, "The Role of PLS Financing on Economic Growth: Indonesian Case," *Journal of Islamic Monetary Economics and Finance* 8, no. 1 (2022): 49–64.

[33] M M Jaffar, S M Zain, and A A Jemain, "Diminishing Musyarakah Investment Model Based on Equity," in *AIP Conference Proceedings*, ed. H Ibrahim et al., vol. 1905 (American Institute of Physics Inc., 2017), https://doi.org/10.1063/1.5012143.

[34] Yusmaniarti Yusmaniarti et al., "Peningkatan Kapasitas SDM Melalui Pelatihan Akses Dan Literasi Keuangan Bagi Pelaku UMKM Bengkulu Utara," *Jurnal Pengabdian Kolaborasi Dan Inovasi IPTEKS* 2, no. 6 (2024): 1676–84.

[35] S A Wicaksono, P Wulandari, and N D Hendranastiti, "The Effect of Industry Sector and Profit-Loss Sharing Financing on Credit Risk of Islamic Banks in Indonesia Considering Covid-19 Pandemic," *Journal of Islamic Accounting and Business Research*, 2024, https://doi.org/10.1108/JIABR-04-2023-0135.

reducing financing to the real sector, including MSMEs.[36] Other research reveals negative relationship between SBIS ownership and the distribution of *Murabahah* financing.[37] In the short term, sharia monetary instruments have a negative impact on financing, although the effect can be positive in the long term.[38] Similar findings showed that SBIS has a significant influence on Islamic banking financing.[39] This evidence reinforces the hypothesis that SBIS can restrain the flow of Islamic bank funds to the MSME sector due to banks' preference for safer instruments compared to risky real sector financing.

H1: SBIS has a negative impact on MSME financing.

Studies show that the Islamic Interbank Money Market (PUAS) plays an important role in maintaining liquidity and supporting the transmission of monetary policy to the real sector, including MSMEs. PUAS can strengthen Islamic monetary operations,[40] while another study showed that PUAS has a positive impact through increased bank liquidity, although its contribution to MSME financing is relatively small.[41]

H2: PUAS has a positive influence on MSME financing.

Evidence from Malaysia indicates that PLS-based financing mechanisms generate relatively more stable returns and lower loss exposure for SMEs, thereby positioning PLS as a viable and beneficial alternative financing model.[42] In the Indonesian context, PLS financing has also demonstrated a significant positive effect on the Industrial Production Index (IPI), suggesting its role in stimulating real sector activity and supporting broader economic growth dynamics.[43] Nevertheless, despite these advantages, PLS financing entails comparatively higher financing risk, especially among larger Islamic banks and institutions operating outside more economically developed regions such as Java.[44]

H3: PLS has a positive impact on MSME financing.

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[36] Muhfiatun, Syarifah, and Salam, "Efektifitas Instrumen Moneter Syariah Terhadap Penyaluran Dana Ke Sektor Usaha Mikro Kecil Menengah (Umkm) di Indonesia."

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Methodology

This study employs a quantitative descriptive approach using secondary monthly time-series data from January 2014 to December 2023. The methodology emphasizes objectivity, measurability, and systematic empirical analysis to generate valid and reliable findings. Data were obtained from authoritative institutional sources, namely the Sharia Banking Statistics (SPS) published by the Financial Services Authority (OJK) and the Indonesian Economic and Financial Statistics (SEKI) issued by Bank Indonesia (BI). For consistency, several annual variables were converted into a monthly frequency through interpolation. Data were collected through the documentation and systematic review of official institutional reports and databases to ensure credibility and accuracy.

The analysis applies Vector Autoregression (VAR) and Vector Error Correction Model (VECM) to examine both short-term and long-term effects of Islamic monetary policy instruments on MSME financing. The procedure includes stationarity testing using the Augmented Dickey-Fuller (ADF) method, optimal lag selection based on the Akaike Information Criterion (AIC), model stability testing through the inverse root of the AR polynomial, and Johansen cointegration testing to determine long-run equilibrium relationships. When cointegration is detected, the VECM model is used; otherwise, the VAR model is used. Further analysis incorporates Granger causality tests, Impulse Response Functions (IRF), and Forecast Error Variance Decomposition (FEVD) to assess dynamic interactions and variable contributions. The research model is grounded in theoretical and empirical frameworks that highlight the role of Islamic monetary instruments such as SBIS, PUAS, and profit-and-loss sharing schemes in influencing the allocation of Islamic financing to MSMEs through liquidity and monetary transmission mechanisms.

Results and Discussion

The results of an empirical analysis of the influence of Islamic monetary policy instruments on the distribution of financing for MSMEs in Indonesia. The model used is the Vector Error Correction Model (VECM),[45] taking into account that most of the data is non-stationary at the level but stationary in the first difference and has a long-term relationship (co-integration).

Stationary Test

The stationarity test was conducted using the Phillips-Perron (PP) test at a 5% significance level. The null hypothesis (H_0) tested is that each variable has a unit root, meaning it is non-stationary. If the test statistic value is less than the critical value at the 5% level, and the probability value is less than 0.05, then H_0 is rejected, which means the variable is stationary at the level.

The Bank Indonesia Sharia Certificate (SBIS) variable has a PP statistical value of -9.923874 with a p-value of 0.0000, which is also smaller than the critical value at the 5% significance level. The Islamic Interbank Money Market (PUAS) variable

45 Syanisma Khansa Indirwan et al., "The Role of Zakat and Macroeconomic Variables in Reducing Unemployment in Indonesia: Peran Zakat dan Variabel Makroekonomi dalam Mengurangi Pengangguran di Indonesia," *Jurnal Transformatif (Islamic Studies)* 9, no. 2 (2025): 125–38.

shows a PP statistical value of -9.874388 with a p-value of 0.0000, which is much smaller than the 5% critical value of -2.885863. Thus, the null hypothesis is rejected and it can be concluded that the PUAS variable is stationary at the level. The Profit and Loss Sharing (PLS) variable has a PP statistic value of -0.280414 with a p-value of 0.9233. This value is greater than the critical value at the 5% significance level of -2.885863. Therefore, the null hypothesis cannot be rejected. This means the PLS variable is non-stationary at the level and requires further testing in first differences.

The Sharia MSME Financing (PUMKM) variable also showed similar results, with a PP statistic value of -11.44857 and a p-value of 0.0000, which is less than the critical limit. This indicates that the PUMKM variable is stationary at the level. Based on the test results above, it can be concluded that three of the four variables, namely PUAS, PUMKM, and SBIS, are stationary at the level, while one variable, namely PLS, is not stationary and requires further stationarity testing at the first difference level. These results serve as the basis for determining the appropriate estimation method, whether VAR or VECM. If after the first difference test, PLS becomes stationary and there is a co-integration relationship between the variables, then the VECM approach will be used in the next stage of the analysis.

Stationarity Test at the Level

After conducting a stationarity test at the level and finding that the PLS variables are not stationary, a further test is conducted on all variables at the first difference level to ensure that all variables have the same order of integration, namely I(1).

D(SBIS) has a statistical value of 43.26210 and a p-value of 0.0001, which is significantly smaller than the 5% critical value. D(PUAS) also shows a statistical value of -25.79111 with a p-value of 0.0000, indicating that PUAS also becomes stationary after the first differentiation. D(PLS) shows a statistical value of 7.966768 with a p-value of 0.0000, which is far below the critical value at the 5% significance level (-2.886074). This indicates that the PLS data becomes stationary after the first differentiation. Thus, the PLS variable is included in category I(1). D(PUMKM) has a very high statistical value, namely 120.2273, with a p-value of 0.0001, indicating that this variable is also stationary in first differences.

Optimal Lag Test

The next important step in time series analysis is determining the optimal number of lags in the VAR/VECM model. The choice of lag is crucial because it directly impacts the model's validity and stability. Too few lags can result in underfitting the model specification, failing to adequately capture the dynamics of the relationships between variables. Conversely, choosing too many lags can lead to overfitting and reduce the model's degrees of freedom.

Table 9. Optimal Lag Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	370.7119	NA	1.59e-08	-6.607421	-6.509780	-6.567811
1	435.7267	124.1725	6.56e-09	-7.490571	-7.002368	-7.292522
2	481.9173	84.89073	3.81e-09	-8.034545	-7.155779*	-7.678055*
3	505.6994	41.99375	3.32e-09*	-8.174764	-6.905435	-7.659835
4	518.5804	21.81638	3.54e-09	-8.118565	-6.458673	-7.445196
5	538.4467	32.21563	3.33e-09	-8.188228*	-6.137773	-7.356419
6	551.8769	20.81074	3.53e-09	-8.141925	-5.700907	-7.151676
7	569.8140	26.50169*	3.47e-09	-8.176828	-5.345247	-7.028140
8	581.1070	15.87127	3.87e-09	-8.092018	-4.869874	-6.784889

Based on the results above, the AIC criterion reaches its minimum at lag 5 (8.188222), while SC and HQ reach their minimums at lag 2 (-7.155779 and -7.678055, respectively). When the three criteria differ, AIC is often used as the primary reference, especially in studies that focus on estimating long-term relationships and dynamic responses between variables. This is because AIC tends to be more sensitive to model complexity than SC and HQ, and is more tolerant of overfitting when the number of observations is large enough. With this in mind, this study uses lag 5 as the optimal lag for VECM model estimation.

VECM Model Stability Test

The stability test is a crucial step in VECM model analysis to ensure the model produces valid, non-explosive estimates. This test is performed by examining the roots of the model's characteristic polynomial and its modulus. A model is considered stable if all the modulus values of its characteristic roots lie within the unit circle, that is, if the modulus is less than one.

Table 10. Model Stability Test

Root	Moduls
0.819456	0.819456
-0.440658 - 0.688807i	0.817701
-0.440658 + 0.688807i	0.817701
-0.270623 - 0.770259i	0.816416
-0.270623 + 0.770259i	0.816416
0.163020 - 0.792454i	0.809048
0.163020 + 0.792454i	0.809048
-0.577563 - 0.564539i	0.807641
-0.577563 + 0.564539i	0.807641
-0.807020	0.807020
-0.755632 - 0.260871i	0.799396
-0.755632 + 0.260871i	0.799396
0.033532 - 0.777441i	0.778164
0.033532 + 0.777441i	0.778164
0.447429 - 0.629428i	0.772251
0.447429 + 0.629428i	0.772251
-0.762030	0.762030
0.417593 - 0.463066i	0.623549
0.417593 + 0.463066i	0.623549
0.563976	0.563976

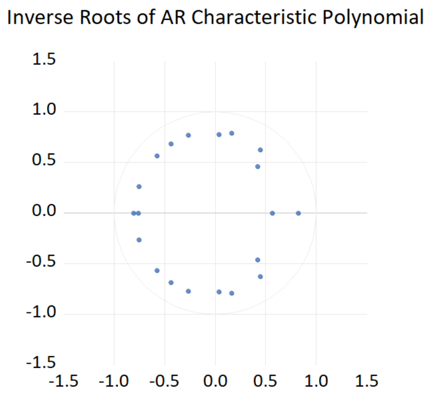
Based on the stability test results shown in Table/Figure 10, all roots have modulus values ranging from 0.563976 to 0.819456. None of the roots has a modulus equal to or greater than one, meaning all roots are within the unit circle. Therefore, the VECM model used in this study is stable.

This stability indicates that the model meets the requirements for further estimation, such as Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) analyses, to measure the dynamics of short-term relationships and the contribution of exogenous variables to Islamic MSME financing.

Model Stability Testing Based on Inverse Roots

One important requirement for implementing the Vector Error Correction Model (VECM) is ensuring model stability. To verify this, a test was conducted by mapping the inverse roots of the autoregressive (AR) characteristic polynomial. The graphical visualization results show that all inverse roots of the model lie within the unit circle. None of the roots lies on or outside the unit circle, either on the real or complex axis.

Figure 3. Inverse Roots



These findings strongly indicate that the VECM model used in this study meets multivariate stability criteria. This means the dynamic system in the model can move toward long-term equilibrium without producing divergent solutions. Therefore, the model is feasible and valid for use in advanced analyses, such as the Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD).

Granger Causality Test

To determine the short-term causal relationships among the variables in this study, a Pairwise Granger Causality test was conducted with an optimal lag of 5 periods. This test aims to determine whether a variable can predict another variable based on its past values.

Table 11. Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob
PUAS does not Granger Cause PUMKM	115	0.13238	0.9846
PUMKM does not Granger Cause PUAS		0.31596	0.9024
PLS does not Granger Cause PUMKM	115	1.26869	0.2831
PUMKM does not Granger Cause PLS		1.63251	0.1579
SBIS does not Granger Cause PUMKM	115	0.75967	0.5809
PUMKM does not Granger Cause SBIS		1.23165	0.2996
PLS does not Granger Cause PUAS	115	9.56812	2.E-07
PUAS does not Granger Cause PLS		0.05159	0.9983
SBIS does not Granger Cause PUAS	115	0.37883	0.8623
PUAS does not Granger Cause SBIS		0.33044	0.8936
SBIS does not Granger Cause PLS	115	1.24063	0.2955
PLS does not Granger Cause SBIS		0.55206	0.7364

The test results show only one statistically significant causal relationship: from the Profit and Loss Sharing (PLS) variable to the Islamic Interbank Money Market (PUAS), with a p-value of 0.0000002 ($p < 0.05$). This means that, statistically, the historical value of PLS helps explain the movement of PUAS, indicating that the profit-sharing-based financing mechanism plays an important role in influencing the dynamics of short-term Islamic interbank transactions.

Co-integration Test

To test for the existence of long-term relationships among variables in the model, the Johansen co-integration test using the trace statistic was employed. This test is crucial for determining whether there is a long-term structural relationship between the variables in the system, namely SBIS, PUAS, PLS, and Islamic MSME financing (PUMKM), which is a primary requirement for using the Vector Error Correction Model (VECM).

Table 12. Cointegration Test

Hypothesized No. of CE(S)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob. ** Critical Value
None *	0.254705	63.50128	47.85613	0.0009
At most 1 *	0.154734	29.98818	29.79707	0.0475
At most 2	0.079117	10.82432	15.49471	0.2225
At most 3	0.012450	1.428185	3.841465	0.2321

Based on the co-integration test results, the trace statistic for the "None" null hypothesis (63.50128) exceeds the 5% critical value (47.85613) at the 0.0009 significance level. This indicates that the null hypothesis stating no co-integration is rejected. Similarly, for the hypothesis "At most 1", the trace statistic value of 29.98818 exceeds the critical value of 29.79707 at the 0.0475 significance level, which is below the 5% significance threshold. However, in the hypotheses "At most 2" and "At most 3", the trace statistic values do not exceed the critical value, and the p-value is above 0.05, so the null hypothesis is not rejected under both conditions. Long-Term Relationship Estimation Results (Co-integrating Equation):

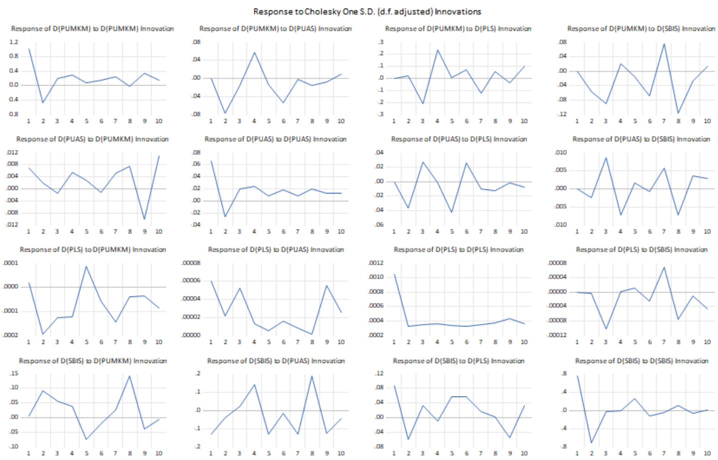
Table 13. Co-integrating Equation

Co-integrating Eq:	CointEq1
D(PUMKM(-1))	1.000000
D(PUAS(-1))	-8.047843 (7.80138) [-1.03159]
D(PLS(-1))	191.0116 (150.063) [1.27288]
D(SBIS(-1))	-7.017811 (0.83138) [-8.44115]
C	0.263351

The analysis of the long-term relationship among the variables in this study was conducted by estimating the co-integrating equation in the Vector Error Correction Model (VECM). The estimation results show that the SBIS (Bank Indonesia Sharia Certificate) variable has a statistically significant negative effect on the financing of Islamic MSMEs (PUMKM) in the long term, with a coefficient of -7.017811 and a t-statistic of -8.44115. This value far exceeds the critical limit at the 5% significance level, indicating that the increase in Islamic banks' use of SBIS contributes to the decrease in financing channeled to the MSME sector. This can be explained by the fact that, in conditions of loose liquidity, Islamic banks tend to prefer investing funds in safe but unproductive SBIS instruments rather than channeling them into the higher-risk MSME sector.

Meanwhile, two other variables, namely PUAS (Sharia Interbank Money Market) and PLS (Profit and Loss Sharing), showed coefficients of -8.047843 and 191.0116, respectively, but their t-statistics were not significant at the 95% confidence level, namely -1.03159 and 1.27288. This indicates that, although PUAS is designed to strengthen interbank liquidity and PLS is an ideal financing scheme in the Islamic financial system, these two instruments have not played a significant role in supporting the long-term growth of Islamic MSME financing. Impulse Response Function (IRF) Analysis Results:

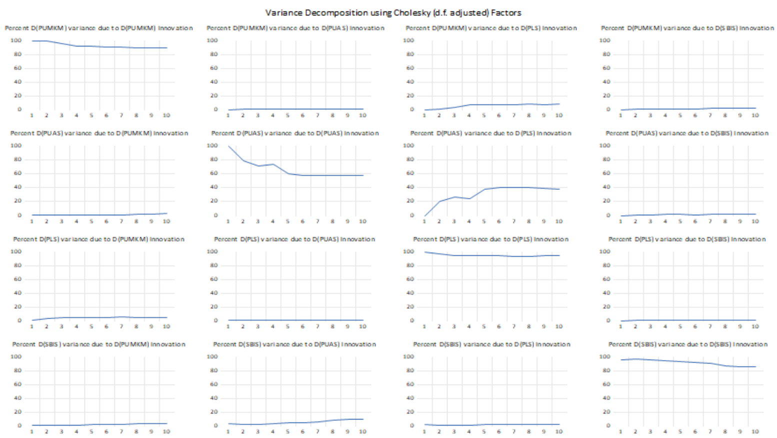
Figure 4. Impulse Response Function (IRF)



Impulse Response Function (IRF) analysis was conducted to examine how variables in the system respond to a one-standard-deviation shock from another variable. The IRF results for 10 periods indicate that the Islamic MSME financing (PUMKM) variable responded negatively to shocks to the Bank Indonesia Sharia Certificate (SBIS) in the initial period, followed by small fluctuations. This finding aligns with previous long-term estimates, which indicated that increasing fund allocation to SBIS was counterproductive to the distribution of funds to the MSME sector.

Meanwhile, MSMEs' responses to shocks in PUAS and PLS tend to fluctuate but are not economically significant, indicating that the influence of these two instruments on MSMEs is not direct and may require longer transmission times or depend on other external conditions. On the other hand, the PUAS and PLS variables show a relatively small response to shocks from other variables, reflecting structural resilience but also weak short-term interconnections between these instruments and the real sector. Meanwhile, SBIS shows a relatively stronger negative response to PLS shocks, which can be interpreted as indicating that increased PLS-based financing encourages Islamic banks to reduce exposure to SBIS instruments and shift their orientation toward the real sector. Forecast Error Variance Decomposition (FEVD) Results:

Figure 5. Forecast Error Variance Decomposition (FEVD)



The FEVD analysis was conducted to determine the extent to which variation or uncertainty in each variable is explained by shocks from other variables in the system. The estimation results show that Islamic MSME financing (PUMKM) is almost entirely explained by shocks from itself, with the proportion remaining high (over 90%) until the 10th period. This indicates that Islamic monetary policy instruments, such as PUAS, PLS, and SBIS, have not made a significant contribution in explaining the dynamics of MSME financing in the short to medium term.

In contrast to PUMKM, the PUAS variable shows a fairly strong dependence on PLS shocks, with its contribution steadily increasing over time to approximately

30%. This finding is consistent with previous Granger test results, which suggest that PLS is a Granger cause of PUAS. Meanwhile, SBIS does not exhibit a significant effect on PUAS, PLS, or PUMKM, as its fluctuations are almost entirely explained by shocks from its own source.

Hypothesis Testing

Hypothesis 1: SBIS affects sharia-compliant MSME financing. SBIS shows a coefficient of -7.02 with a t-statistic of -8.44, which is significant at the 1% confidence level. Therefore, the null hypothesis stating that SBIS has no effect on MSME financing is rejected. The negative relationship indicates that increasing Islamic bank funds placed in SBIS instruments tends to reduce financing to MSMEs. This can be explained economically: SBIS, as a safe and liquid Islamic monetary instrument, diverts funds from the productive sector to the more conservative monetary sector. This finding aligns with previous research, who showed that the effectiveness of Islamic microfinance institutions in reaching the MSME sector is strongly influenced by institutional design that separates social and commercial functions.[46] Through the *Baitul Maal and Baitul Tamwil* schemes, Islamic institutions can allocate financing more sustainably and efficiently to micro and small businesses.

Hypothesis 2: PUAS influences Islamic MSME financing. PUAS shows a coefficient of -8.05 with a t-statistic of -1.03, which is not statistically significant at the conventional significance level. This indicates that Islamic interbank money market activity has no significant influence on the distribution of financing to MSMEs. The negative relationship indicates that PUAS, as an interbank liquidity management mechanism, has not functioned optimally as a monetary policy transmission channel to the real sector. This is inconsistent with the results showing an insignificant relationship between Islamic money market variables (PUAS) and MSME financing.[47] Non-bank Islamic instruments, such as IMFIs, are more responsive to the needs of micro-enterprises than Islamic financial market instruments that provide inter-institutional liquidity.

Hypothesis 3: PLS affects Islamic MSME financing. Profit-Loss Sharing shows a coefficient of +191.01 with a t-statistic of +1.27, which, although not statistically significant at the 5% level, is close to the 10% significance threshold. The positive direction of the relationship indicates that profit-sharing-based financing has great potential to encourage MSME financing. Islamic bank financing contributes to long-term business trends through the real-sector intermediation mechanism, in which funds are channeled to the productive sector via a profit-loss sharing scheme.[48]

Analysis and Discussion

The selection of VECM is based on co-integration findings among variables, which statistically demonstrate the existence of a long-term equilibrium relationship. The existence of co-integration implies that, although these variables may experience

46 Robbani, Aulia, and Humaira, "Progressive Financing In Indonesian Islamic Microfinance Institutions: Improved Monitoring Or Distinctive Commercialisation?"

47 Robbani, Aulia, and Humaira.

48 Herianingrum et al., "The Impact of Islamic Bank Financing on Business."

short-term deviations, they are bound to a common path over the long term. The adjustment mechanism to return to long-term equilibrium is represented by the Error Correction Term (ECT) coefficient. A significant and negative ECT coefficient indicates how quickly and strongly the adjustment occurs. The VECM estimation results confirm the existence of an error-correction mechanism, whereby deviations from long-term equilibrium in the previous period are corrected in the following period until the system returns to stability. The speed of this correction (e.g., X% per month) provides important insights into Islamic banks' flexibility and responsiveness to market signals and monetary policy.

Nonie Afrianti's study on public intention to use Islamic banking products[49] shows that attitudes, subjective norms, and perceived behavioral control have a significant influence on the use of Islamic financial products. Although there is public demand for Islamic banking products, the supply side of Islamic banks may be constrained by liquidity preferences (SBIS). This indicates a mismatch between potential demand and fund allocation policies.

The research results demonstrate that SBIS has negative effects on MSME financing in both the short and long term. The research findings need thorough examination because they present essential results. SBIS's money market instrument serves as Bank Indonesia's tool to manage excess liquidity, using mechanisms similar to conventional Bank Indonesia Certificates (SBI). The instrument draws funding from Islamic banks into risk-free liquid assets instead of supporting MSME financing which carries higher risk levels. The observed pattern demonstrates how institutions must choose between controlling liquidity and fulfilling their sharia-based goals. Islamic banks select to invest their funds in SBIS because these instruments provide quick liquidity and low risk despite losing their ability to support MSME development as the economic backbone of the nation. The shift in Islamic banks orientation from partnership-based financing toward short-term liquidity instruments, as criticized by Dawaba and Migdad[50], indicates a misalignment between the normative ideals and the actual practices of Islamic banking. The findings of this study, which show that SBIS has a negative and significant effect on MSME financing, reinforce this argument: a preference for safe liquidity instruments has the potential to reduce the intermediation function toward the real sector. A similar study conducted by Ihsanul Ikhwan and Ririn Riani[51] shows that the efficiency of Islamic banks experienced pressure during the crisis period. Efficiency and liquidity stability became the banks' main priorities, which may explain their tendency to prefer safe instruments such as SBIS over MSME financing, which carries higher risk.

The research findings show that PUAS has no statistically significant effect on the distribution of MSME financing. The interbank liquidity management system of PUAS operates as a short-term tool for daily liquidity management between

[49] Nonie Afrianti, "Analysis of Community Intentions on Islamic Bank Products Using The Theory of Planned Behavior Approach", *Islamic Economic Journal,* Vol. 08, No. 01, 2022: 14-24

[50] Ashraf Mohamed Dawaba and Abdalrahman Migdad, "Islamic Banks between the Jurisprudence of Leading Theorists and Application", *Islamic Economic Journal,* Vol. 8, No.01, 2022 : 34-56

[51] Ihsanul Ikhwan and Ririn Riani, "The Effeciency of Indonesian and Malaysian Sharia Bank in the Shadow of Covid-19 Pandemic: DEA Window Analysis", *Islamic Economic Journal*, Vol. 08, No. 02, 2022: 123-143

Islamic banks. The results show that short-term interbank money market liquidity movements do not effectively transfer to long-term credit distribution decisions for MSME financing. Banks maintain their MSME financing decisions independent from short-term liquidity changes. Furthermore, as found by Huda et al.[52] PUAS does not have a significant effect on the profitability of Islamic banks, suggesting that this instrument functions more as a liquidity stabilization mechanism rather than as a channel for financing transmission to the productive sector. This condition strengthens the conclusion that the transmission of Islamic monetary policy to MSMEs remains suboptimal.

The fundamental PLS model of Islamic banking shows a positive relationship with MSME financing, but it does not reach statistical significance. The positive direction indicates that Islamic banks recognize the essential role of PLS-based financing for MSMEs, consistent with their philosophical approach. The results show no statistical significance because banks face operational challenges and face risks during PLS financing implementation. The implementation of PLS financing through *Mudharabah* and *Musyarakah* requires advanced risk evaluation and extensive monitoring and results in higher operating expenses than debt-based *murabahah* financing. Banks maintain their support for PLS financing in theory, but operational challenges and risk factors prevent it from affecting total MSME lending. The study by Muhammad Alfan Rumasukun and Alivia Maharani (2024) shows that Islamic financial inclusion and literacy have a significant effect on MSME productivity. These findings highlight the importance of Islamic financing for MSMEs. Therefore, when SBIS instead reduces the allocation of financing, there is a potential loss of momentum in enhancing MSME productivity.[53]

The results of the Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) analyses further reinforce these findings. The IRF analysis shows that the response of MSME financing to shocks in Islamic monetary instruments is relatively small and dampens quickly. Meanwhile, FEVD indicates that the dominance of internal shocks in influencing MSME financing variation remains very high. The contribution of monetary instruments (SBIS, PUAS, PLS) to the variance in MSME financing is relatively low.

The main implication is that the transmission mechanism of Islamic monetary policy in Indonesia to the real sector, particularly MSMEs, is still ineffective. Islamic banks respond more to shocks and internal bank factors (such as core capital, NPF, or internal targets) than to policy signals from Bank Indonesia (BI). SBIS, which should be a balancing instrument, actually acts as a "pull" for funds from the real sector because it is considered the most attractive risk-free investment instrument. This creates a gap between the philosophical objectives of Islamic banking (supporting real economic activity and justice) and operational practices driven by liquidity and risk considerations.

[52] Miftahul Huda et all, "The Effect of Macroeconomics Variables on the Profitability of Islamic Comercial Banks in Indonesia", *Islamic Economic Journal,* Vol. 10, No.02, 2024: 135-149

[53] Muhammad Alfan Rumasukun and Alivia Maharani, "The Effect of Islamic Financial Inclusion and Literacy on the Productivity of MSMEs: Case Study in Probolinggo", *Islamic Economic Journal,* Vol. 10, No.1, 2024: 88-102

Conclusion

This study aims to analyze the dynamic short-term and long-term relationships between Islamic monetary policy instruments, namely the SBIS, PUAS, and PLS mechanisms, and the distribution of financing for Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, using the Vector Error Correction Model (VECM) with monthly data from January 2014 to December 2023. The findings indicate co-integration among these variables, suggesting an adjustment mechanism that maintains long-run equilibrium, as evidenced by a significant Error Correction Term (ECT) coefficient.

Specifically, the most significant finding lies in the role of SBIS. The VECM estimation results show that SBIS has a negative and significant effect on MSME financing in both the short and long term. This implies that the liquidity-absorption instrument, intended to serve as a stabilizer, instead encourages Islamic banks to divert funds from riskier intermediation activities (such as MSME financing) toward highly liquid, low-risk monetary instruments. This creates a dilemma, as Bank Indonesia's liquidity incentives have not yet contributed significantly to the Islamic real sector. In contrast, PUAS, which represents short-term interbank liquidity, and the PLS mechanism (the core philosophy of Islamic finance) had no statistically significant effect on aggregate MSME financing. Although the direction of PLS is philosophically positive in promoting real-sector financing, its insignificance reflects operational constraints, high-risk costs, and banks' preference for debt-based financing, which is easier to manage.

Further analysis using the Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) strengthens the conclusion that the transmission of Islamic monetary policy to MSME financing remains weak. Variations in MSME financing are predominantly driven by internal banking shocks, while the contribution of Islamic monetary instruments remains relatively small. The main contribution of this study is to provide critical empirical evidence that the current design of Islamic monetary policy cannot yet be considered effective in performing its optimal intermediation function for the MSME sector. A re-evaluation of SBIS is necessary to prevent it from becoming a "liquidity trap," along with the development of regulatory frameworks and incentives explicitly aimed at reducing operational risks and promoting the implementation of PLS-based financing in alignment with the macroeconomic objectives of Islamic economics.

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