

# The Role of Fintech Technology in Improving Financial Inclusion and Financial System Stability

Sri Imaningati<sup>1</sup>, Eko Cahyo Maynardarto<sup>2</sup>, Miftakhul Huda<sup>3</sup>, Asri Ady Bakri<sup>4</sup>

STIE Bank BPD Jateng<sup>1</sup>

Universitas Tama Jagakarsa<sup>2</sup>

Institut Agama Islam Faqih Asy'ari Kediri<sup>3</sup>

Universitas Muslim, Indonesia<sup>4</sup>

Email: [sailiunaaha@gmail.com](mailto:sailiunaaha@gmail.com)

Entered : November 02, 2024

Accepted: December 17, 2024

Revised : December 05, 2024

Published : December 30, 2024

## ABSTRACT

*The development of financial technology (fintech) has had a significant impact on improving financial inclusion and the stability of the global financial system. This study aims to explore the role of fintech technology in promoting people's access to financial services and its contribution to financial system stability. Fintech enables the creation of digital platforms that facilitate services such as electronic payments, peer-to-peer lending, and micro-investments, reaching segments previously neglected by the traditional banking sector. On the other hand, fintech innovations also strengthen supervision and transparency in financial transactions, potentially reducing the risk of financial instability. However, these developments also present challenges, including the need for appropriate regulation to address potential risks such as fraud and personal data management. This research uses a qualitative approach with literature analysis and case studies in several countries that have widely implemented fintech. The results show that fintech has great potential in increasing financial inclusion, but its sustainability and contribution to financial system stability depend on effective regulation and collaboration between the public and private sectors. This research lies in the lack of a thorough study of the regulatory challenges faced by developing countries in implementing fintech to increase financial inclusion without posing a risk of instability. A growing phenomenon is the rapid adoption of fintech in developing countries, yet its impact on financial system stability and associated risks are still not fully understood and adequately addressed.*

**Keywords:** Fintech, Financial Inclusion, Financial System Stability, Regulation, Financial Technology

## INTRODUCTION

The development of financial technology (fintech) has drastically changed the landscape of the global financial sector in recent years, introducing various innovations that lead to improved accessibility, efficiency, and affordability of financial services (Sanyaolu et al., 2024). Fintech, which refers to the application of technology to simplify and accelerate financial services, has changed the way individuals and businesses interact with the financial system (Kadir., 2023). Innovations such as digital payment applications, peer-to-peer (P2P) lending, micro-investment, as well as blockchain technology have opened up new opportunities that were previously unimaginable in the traditional banking sector. The advent of digital payment technologies, for example, allows individuals to conduct transactions without having to visit a physical bank branch, reducing reliance on conventional banking infrastructure (Sitanggang et al., 2024). As such, financial services are becoming more accessible to the public, including in areas that previously lacked banking infrastructure.

The development of financial technology (fintech) has drastically changed the landscape of the global financial sector in recent years, introducing various innovations that lead to improved accessibility, efficiency, and affordability of financial services (Sanyaolu et al.,



2024). Fintech, which refers to the application of technology to simplify and accelerate financial services, has changed the way individuals and businesses interact with the financial system (Kadir, 2023). Innovations such as digital payment applications, peer-to-peer (P2P) lending, micro-investments, as well as blockchain technology have opened up new opportunities that were previously unimaginable in the traditional banking sector. The emergence of digital payment technologies, for example, allows individuals to conduct transactions without having to physically visit a bank branch, thereby reducing reliance on conventional banking infrastructure (Sitanggang et al., 2024). As such, financial services are becoming more accessible to the public, including in areas that previously lacked banking infrastructure.

The development of fintech has also brought great impact in improving financial inclusion, especially for groups of people who were previously unreached by traditional financial services, such as those in remote areas or have limited access to banking services (Alfiana et al., 2023). With the widespread adoption of mobile technology, fintech facilitates the penetration of financial services into the daily lives of previously marginalized communities. Moreover, fintech plays a role in empowering micro, small, and medium enterprises (MSMEs), which often face difficulties in accessing conventional banking services, by providing easier and more affordable access to financing (Hidayat et al., 2024).

However, while fintech offers many benefits, these advancements also bring challenges, including data security issues, fraud risks, and the need for clearer and more efficient regulation (Gusti., 2024). Without proper oversight, the integration of technology in the financial system can create its vulnerability to cyberattacks and misuse of personal data. Therefore, it is important for regulators and fintech service providers to collaborate in creating a safe and secure environment for users, and develop policies that promote innovation while maintaining financial system stability. Over time, the adoption and application of fintech is expected to continue to evolve while taking into account the risks and maximizing the potential of fintech to promote financial inclusion and sustainability of the global financial system (Ngamal., 2022).



Source: Bank Indonesia 2019

Based on the results of the National Survey on Financial Literacy and Inclusion released by the Financial Services Authority (OJK) in 2019, the financial literacy index of urban communities was recorded at 41.41%, while the financial inclusion index in urban areas reached 83.60%. In contrast, rural communities have a financial literacy index of 34.53% and a financial inclusion index of 68.49%. Nationally, the survey noted that the financial literacy index reached 38.03%, while the financial inclusion index stood at 76.19%. When compared to several ASEAN countries, such as Singapore with an index of 98%, Malaysia 85%, and Thailand 82% (Setiawan, 2020), Indonesia is still lagging behind. This condition shows the need for accelerated improvement in the index of Islamic financial literacy and financial inclusion (Djawahir, 2018).

Digital payment apps, such as Alipay, WeChat Pay, and GoPay, have revolutionized the way people transact by offering faster, safer, and more affordable solutions compared to conventional payment methods. Through these apps, users can make payments using only their smartphones, without the need to carry physical cash or credit cards, and avoid long lines at the cashier. Another advantage is the reduction in transaction fees, which are often lower compared to fees charged by traditional payment systems, such as bank transfer fees or credit card fees. These platforms also democratize access to payment systems, allowing individuals, even those living in remote areas or in countries with low levels of financial inclusion, to conduct financial transactions easily and efficiently (Sikka., 2024). By integrating digital payments into everyday life, communities that were previously marginalized from the formal financial system can now participate in the digital economy, opening up opportunities for business development and improving quality of life.

Peer-to-peer (P2P) lending services play a major role in expanding access to finance, especially for individuals and small businesses that find it difficult to obtain financing from traditional banks (Hapsari., 2020). P2P platforms, such as those found in Indonesia and several other developing countries, directly connect borrowers with lenders through online platforms, without going through bank intermediaries. This allows for a faster lending process and more flexible terms. Borrowers who may not qualify for a loan from a bank due to limited credit history or lack of collateral can now gain access to the funds they need to finance their business or personal needs. In return, lenders can enjoy higher returns compared to traditional investments. This model not only provides access to finance for those who were previously marginalized, but also provides broader investment opportunities for individuals or institutions looking to diversify their portfolios.

The existence of P2P platforms also has a positive impact on the development of micro, small, and medium enterprises (MSMEs), which are the backbone of the economy in many countries (Rezky., 2023). MSMEs often face obstacles in obtaining financing from conventional financial institutions, which prefer to provide loans to large companies that have stronger collateral. With P2P lending (Ulirrahmi., 2023), MSMEs can get the funds needed to expand their businesses, increase production, or innovate at lower costs and more flexible terms. This helps drive local economic growth and create new jobs (Agil., 2024).

A major challenge that arises along with the development of fintech is the need for adequate regulation to maintain system integrity and security (Alviana., 2023). Data security and consumer protection should be a top priority in any fintech service. In addition, the role of regulators in ensuring that fintech platforms operate with transparency and responsibility is essential to maintain public trust (Kawengian., 2024). Therefore, there is a need for close cooperation between the public and private sectors to create a safe, fair, and accountable fintech ecosystem. Through the right approach, fintech can continue to grow and provide maximum benefits, not only for individuals, but also for the economy as a whole.

Blockchain technology has changed the way we look at the financial system by introducing a decentralized and secure transaction system (Ramadhani., 2024). By using this technology, every recorded transaction becomes permanent and immutable, which reduces the potential for fraud and data manipulation. Blockchain enables the creation of a more transparent transaction recording system, which increases user confidence in transaction security. In addition, this technology reduces the involvement of third parties, such as banks or other financial institutions, which often adds cost and time (Chairunnas., 2024).

The application of blockchain in payment systems and other financial services offers various advantages (Setisningsih., 2024). The technology also enables smart contracts, which are automated contracts that execute agreements based on agreed conditions. This makes the transaction process more efficient and reduces potential disputes between parties (Martinelli et al., 2024). Blockchain not only revolutionizes the way transactions are conducted, but also plays an important role in increasing financial inclusion, especially for those who are not

reached by the traditional banking system (Sudarmanto., 2024). By enabling access to digital financial services, blockchain opens up opportunities for individuals in remote areas or those without access to banks to engage in the global financial ecosystem. This technology creates a more open, secure, and inclusive financial system, which can have a positive impact on the economy as a whole (Pramaswara., 2023).

The development of financial technology (fintech) has had a significant impact by reaching segments of society that were previously neglected by the traditional financial system. People in rural or remote areas now have access to basic financial services, such as money transfers, payments, and savings, through mobile phone-based applications (Sadari., 2019). Thus, fintech overcomes the geographical barriers that have limited people's access to formal financial services. This easier access not only increases user convenience, but also reduces the costs typically associated with using conventional banking services, which are often out of reach for some communities (Riziek., 2024). Fintech contributes to reducing economic inequality by creating a more inclusive and fair financial system (Saputra., 2024). This technology not only provides wider and more affordable access to financial services, but also creates opportunities for reducing social and economic disparities (Sebyar., 2023). More equitable access to financial services helps accelerate economic growth, increases people's purchasing power, and opens up new opportunities for them to improve their quality of life, which was previously difficult to achieve through the traditional financial system.

Fintech has broken down the barriers that have limited access to financial services, especially for those outside the reach of the traditional financial system (Raharjo., 2021). These changes open up new horizons in financial inclusion, enabling individuals and communities to be more financially independent and actively participate in the global economy. These innovations demonstrate how technology can be used to create a more inclusive and efficient financial system, which in turn supports more equitable and sustainable economic growth (Fathori., 2023). Financial inclusion refers to all efforts to expand people's access to financial services by overcoming various barriers, both price and non-price related (Bhegawati et al., 2023). According to the Financial Services Authority (OJK), financial inclusion is defined as “the availability of access to various financial institutions, products, and services tailored to the needs and abilities of the community, in order to improve people's welfare.”

One of the biggest contributions of fintech is in improving financial inclusion. Financial inclusion, which refers to people's access to affordable and safe financial services, is an important issue in many developing countries. According to data from the World Bank, around 1.7 billion people worldwide still do not have access to formal financial services. In countries with limited financial infrastructure, fintech provides an alternative that allows people to access financial products such as bank accounts, loans, insurance, and investments, without having to rely on large financial institutions or far-flung bank branches. Fintech has overcome the problem of geographical limitations that often hinder financial access in rural or remote areas (Jange et al., 2024). With digital-based solutions, people can conduct financial transactions through smartphones or other devices, allowing them to access financial services anytime and anywhere. This convenience provides an opportunity for people who do not have access to banks or traditional financial institutions to participate in the digital economy, thus promoting financial inclusion more equitably (Maisaroh., 2024).

Innovations in fintech also have the potential to strengthen the stability of the global financial system. By offering alternatives to the traditional financial system, fintech can help diversify risks and reduce dependence on large financial institutions (Suganda., 2024). Technologies such as big data and artificial intelligence (AI) can help detect suspicious behavior and prevent potential fraud or system failures that could threaten financial stability (Munajat., 2024). One of the main issues is the need for adequate regulations to govern this growing industry. Without clear regulations, fintech risks potential abuses, such as online fraud, market manipulation, and violation of user data privacy (Yunita et al., 2022). Therefore,

it is important for the government and regulators to create a legal framework that can protect consumers and ensure the sustainability of innovation in fintech.

In addition to regulatory issues, another significant challenge faced by the fintech industry is the risk of market instability, which can threaten the stability of the financial system as a whole (Raaina., 2024). One obvious example is the unusually high volatility of the crypto market. Digital currencies such as Bitcoin and Ethereum, while offering huge profit potential, are often subject to sharp price fluctuations in a short period of time, which can cause huge losses for investors and create uncertainty in financial markets. In the absence of adequate oversight, a disorderly crypto market could pose a systemic risk, i.e. a major disruption affecting the entire financial sector, similar to the financial crisis that occurred in 2008. Extreme crypto price volatility can spill over into other assets, such as stocks and bonds, and add to tensions in the broader market.

In addition, the greater reliance on technology in the fintech sector also increases its vulnerability to other threats, such as cyberattacks and system failures. Fintech services that rely on digital platforms to provide real-time financial transactions make users' personal and financial data a potential target for hackers (Herdinata et al., 2019). Cyberattacks against fintech service providers, which can take the form of data theft, transaction manipulation, or even service termination, can cause huge financial losses to users and damage the reputation of the service provider. In addition, damage to technological infrastructure, whether caused by internal system failures or by natural disasters or technical accidents, can lead to wider disruptions, such as the interruption of payment services or verification processes, impacting everyday economic transactions. When these systems fail, not only individual users are affected, but also businesses and even the economy of a country.

For this reason, it is important for regulators and fintech service providers to maintain the right balance between supporting innovation and managing risk. Thoughtful regulation is needed to avoid the negative impacts that market instability and cyberattacks can bring, while ensuring that the fintech ecosystem can develop in a healthy and sustainable manner. One way to achieve this is by implementing stricter regulations for crypto markets, which include transparency standards, transaction oversight, and investor protection. As with cybersecurity, fintech service providers should invest in robust infrastructure to anticipate and counter digital threats. Better protection systems, such as data encryption, two-factor verification, and regular system updates, are essential to maintain user trust and reduce their vulnerability to attacks. The government needs to work with fintech companies, cybersecurity experts, and financial institutions to create policies that encourage innovation while protecting users and the financial system as a whole (Norrahan., 2023). With a prudent and proactive approach, these challenges related to market instability and technological risks can be managed more effectively, providing opportunities for fintech to thrive without compromising global financial stability.

In this context, collaboration between the public and private sectors is crucial to creating a healthy and sustainable fintech ecosystem. Fintech technology, with all its potential to change the way financial services are delivered, requires a solid foundation in terms of clear and integrated regulation. Regulators, as those with responsibility for financial system oversight and stability, must work closely with technology developers, financial service providers, and other relevant parties (Sahrir et al., 2024). This collaboration will ensure that the resulting policies can not only accommodate the rapid development of technology, but also keep fintech innovations from causing negative impacts that can undermine the integrity of the financial system. The importance of private sector involvement in the regulatory process lies in their deeper understanding of the technical and operational aspects of fintech (Anaroga et al., 2024).

Fintech service providers often have better insights into the challenges and opportunities involved in developing new technologies. With open communication between the public and private sectors, regulators can design policies that are more adaptive and relevant to market

needs, while maintaining high standards of safety and consumer protection (Prihartama., 2024). This collaboration also provides room for the private sector to share their knowledge and experience, which can enrich policies and best practices in the fintech sector. Fintech service providers should ensure that their systems are equipped with cutting-edge security technologies, such as data encryption and multi-factor authentication, to prevent potential cyber threats.

Regulators need to establish rules that require fintech companies to meet certain standards related to data protection, as well as conduct periodic audits to ensure that these standards are consistently applied (Baskoro., 2024). In addition, there needs to be clear policies to protect consumers from potential fraud, such as transparent complaint mechanisms and fund recovery procedures for consumers who are victims of cybercrime. Fraud prevention in the fintech world also requires special attention, as the increasing number of financial transactions conducted digitally opens up opportunities for more sophisticated fraudulent activities (Azizah et al., 2024). Therefore, this collaboration not only focuses on technology development, but also includes joint efforts to create an effective supervisory system.

Regulations governing transaction transparency, mandatory reporting of suspicious activities, and real-time monitoring systems are necessary to ensure that fraud can be detected and stopped before it harms consumers and the financial system more broadly. Collaboration between the public and private sectors is not only about creating policies that support innovation, but also about ensuring that all parties involved are accountable for the risks that may arise. This balanced approach will help create a safe, transparent, and inclusive fintech ecosystem, where technology can flourish freely, yet remain within a corridor that ensures stability and protection of all users. The importance of fintech in improving financial inclusion is not only limited to developing countries, but also has a significant impact in developed countries. In developed countries, even though most of the population already has access to traditional financial services, fintech still plays a key role in improving the convenience, efficiency, and accessibility of everyday financial transactions. Fintech innovations, such as digital payments and mobile banking, have simplified the way people manage their finances by providing solutions that are faster, more convenient and secure than traditional payment methods. This not only reduces reliance on cash, but also facilitates better financial integration in everyday life, from shopping transactions to money transfers between individuals.

One prime example of the benefits of fintech in developed countries is the growing role of digital payments, such as mobile payment apps and digital wallets. Platforms such as Apple Pay, Google Pay, and PayPal have made it possible for consumers to make payments with just a few taps of their fingers, both in physical stores and for online transactions. The speed and convenience offered by these payment methods not only saves time, but also minimizes the risk of losing cash, as well as providing a more secure transaction experience thanks to the use of encryption technology and biometric authentication. In addition, mobile banking has given people the opportunity to access a wide range of banking services directly from their mobile devices, allowing them to manage accounts, monitor expenses, and even make investments without having to go to a bank office. Fintech innovations in developed countries have also helped improve personal risk management through more affordable and accessible financial products. For example, in terms of insurance, fintech services have enabled insurance providers to offer more flexible micro-products, which can be tailored to individual needs. These insurance products often have lower premiums and do not require complicated procedures, allowing more people to protect themselves from health risks, accidents or other financial losses. In addition, fintech has introduced more inclusive investment solutions, such as robo-advisor-based investment apps, which allow people with limited funds to start investing in a diversified portfolio without having to have in-depth knowledge of the stock market or pay high fees for investment managers.

The importance of fintech in improving financial inclusion can also be seen in personal finance management. Financial apps that integrate features such as budget tracking, financial planning, and debt management help individuals to more easily manage and plan their finances. With the ability to monitor spending in real-time, users can make wiser financial decisions and minimize the risk of over-indebtedness. In addition, fintech also opens up opportunities for small and medium enterprises (SMEs) to more easily access financing, which was previously difficult to obtain through the traditional banking system (Wati., 2024). Innovations such as peer-to-peer (P2P) lending and crowdfunding provide alternatives for SMEs to obtain business capital without having to rely on conventional bank loans that often require collateral and long processes (Fathori., 2024).

Overall, while developed countries generally already have relatively stable and inclusive financial systems, fintech still contributes greatly to improving the efficiency, convenience, and accessibility of financial services. Through innovations such as digital payments, mobile banking, and more affordable insurance and investment products, fintech not only supports financial inclusion for those underserved by traditional banking, but also provides convenience and benefits to society as a whole in managing and optimizing their personal finances. With its continued development, fintech has the potential to drive a more inclusive and efficient financial system, both in developing and developed countries.

Financial technology (fintech) has shown significant contributions in supporting financial inclusion, especially through the ease of access and adoption of technology by the public. However, studies on the overall impact of fintech on financial system stability are limited. Existing studies mostly focus on the aspect of increasing accessibility of financial services, while the integration between financial inclusion and potential risks posed by fintech development has not been comprehensively discussed. In addition, studies on the role of policy and regulation in balancing the benefits of fintech with potential negative impacts on economic stability are still rare. These gaps underscore the need for more in-depth research to understand the relationship between fintech, financial inclusion, and financial system stability, including the risk mitigation strategies that can be implemented.

This research aims to explore the role of fintech in enhancing financial inclusion and its contribution to financial system stability. Through literature review and case studies, this research will analyze how fintech has been implemented in various countries, both developed and developing. This research is expected to provide deeper insights into the positive impacts and challenges faced in the implementation of fintech, as well as provide recommendations for policy development that can optimize the benefits of fintech for financial inclusion and global financial system stability.

## **METHODS**

This research uses the literature study method to explore the influence of financial inclusion on financial system stability through the integration of financial technology (fintech). The first step involves selecting relevant literature sources from academic journals, books and research reports that address the topics of financial inclusion, financial system stability and fintech. Secondary data from the literature will be collected and analyzed to identify key themes, such as the impact of financial inclusion on financial system stability and the role of fintech in expanding financial access. Furthermore, literature analysis is conducted to build a comprehensive understanding of the relationship, as well as synthesize existing findings to provide critical analysis. The research will conclude on the contribution of fintech in enhancing financial system stability and provide recommendations for policy or further research in this area

## RESULTS AND DISCUSSION

Financial inclusion plays a very important role in creating inclusive and sustainable economic growth (Maskhuri., 2024). By providing previously marginalized individuals and groups, including communities in remote areas, with access to financial services such as savings, financing, and investment, financial inclusion helps expand their economic opportunities. This allows them to participate more in economic activities and increase productivity, which in turn can drive efficiency in the economic system. A positive impact of financial inclusion is its ability to support poverty alleviation. With increased access to financial resources, individuals can obtain capital for education, entrepreneurship, or skill development that increases earning potential (Lasaksi et al., 2023). In addition, financial inclusion enables more efficient resource allocation, by providing financial products and services that are more affordable and suited to people's needs, thereby improving the economic conditions of the underprivileged.

Without adequate access to financial resources, certain individuals and groups will find it difficult to access economic opportunities that can improve their well-being, exacerbating income inequality within society (Nasoha et al., 2025). Promoting financial inclusion is therefore an important step towards creating a more equitable economic system where everyone, without exception, has an equal opportunity to thrive and contribute to economic progress.

Based on the results of the literature analysis and case studies conducted in this research, there are several key findings related to the role of fintech in improving financial inclusion and its contribution to financial system stability. These findings cover various aspects, ranging from the impact of fintech on financial access of previously underserved communities, to the challenges and opportunities that arise related to regulation and financial system stability.

Fintech has significantly contributed to the increase in financial inclusion. In developing countries such as India and Brazil, the adoption of fintech technologies, such as digital payment platforms and app-based microloans, has successfully provided financial access to populations that previously did not have access to traditional banking services (Alfarizi et al., 2023). For example, in India, platforms such as the Unified Payments Interface (UPI) and other fintech services have enabled people in rural areas to conduct financial transactions digitally, reducing dependence on conventional banking services. Likewise, in Brazil, fintech-based micro-lending services have opened up opportunities for small entrepreneurs and individuals to access financing that is difficult to obtain through traditional bank channels.

Fintech is also proven to improve efficiency and transparency in the financial system. Digital payment systems developed by fintech companies such as Alipay and WeChat Pay in China have introduced faster and more secure payment models, which in turn increases transaction transparency. In many countries, fintech has also reduced transaction costs, allowing users to transfer money at a lower cost compared to the traditional banking system. This is especially beneficial for people with low incomes who were previously hampered by high fees for financial transactions.

Fintech has played a crucial role in expanding access to financial services for groups previously unreachable by the traditional financial system (Dzikrullah et al., 2024). With increasing smartphone and internet penetration in developing countries, fintech platforms such as digital wallets and peer-to-peer lending have provided more affordable and accessible financial services. A study conducted by Hughes et al. (2020) shows that fintech contributes greatly to increasing financial inclusion globally, connecting millions of previously unbanked people with the international financial system. This finding confirms that technology can be an effective instrument to reduce the financial gap and support the creation of social and economic inclusion in different parts of the world.

However, the findings also reveal some challenges related to regulation and financial system stability that need to be addressed. One of the main challenges faced by the fintech



sector is the lack of a clear and uniform regulatory framework across countries. In some countries, such as Brazil, there is limited oversight of fintech service providers, which may increase risks to financial system stability. For example, in the absence of adequate regulation, some fintech platforms may operate without sufficient oversight, risking to create uncertainty and vulnerabilities in financial markets, especially with regard to the security of personal data and transactions.

In addition, the findings from the case studies also show that financial system stability can be jeopardized by over-reliance on technology. Along with the rapid development of fintech, more and more transactions are conducted through digital applications, creating its vulnerability to cyber threats. Data security and protection of user identity are important issues that need to be seriously addressed by regulators and fintech service providers (Utama et al., 2023). For example, in some cases, hacking of fintech platforms can cause huge losses to users and undermine public trust in the digital financial system.

The role of fintech in improving access to finance can be seen through several mechanisms that are not always explicitly written, but can be implied from various existing phenomena. One of them is the use of e-wallet, which has enabled people to conduct financial transactions digitally without having to visit a bank office or use cash. E-wallets provide convenience in making transactions, both for purchasing goods and paying for services, which can be done directly from a mobile device. The existence of e-wallets also makes it easier for people to access financial services, especially for those in remote areas who previously had difficulty accessing traditional banking services. By only using a smartphone connected to the internet, people can now carry out various financial transactions more practically and quickly, which previously required more complicated and time-consuming procedures.

E-commerce platforms that have integrated the use of e-wallets in the online shopping process, also expand access to finance for the community (Arifin., 2024). The ease of making digital payments through e-wallets not only speeds up transactions, but also opens up opportunities for people to be more actively involved in the digital economy. This is important in promoting financial inclusion, as more people can access digital financial services without being limited by physical location or access to conventional financial institutions.

The next big challenge for fintech is to improve digital financial literacy and education (Sutarsih., 2023). Without sufficient understanding of how to use these services, many people, especially those who are not familiar with technology, will find it difficult to optimally utilize fintech's potential. Therefore, it is important to provide comprehensive education so that people, especially in areas that are still less familiar with technology, can use digital financial services effectively and safely. Thus, fintech indirectly plays a major role in expanding and improving people's access to digital financial services, which in turn contributes to increasing financial inclusion in Indonesia, while reducing the gap that exists between the groups of people who are better served and those who are less served by the traditional financial system (Prawana., 2024).

The results show that overall, fintech can contribute positively to financial system stability if implemented with the right regulatory policies. Countries that have adopted comprehensive regulations and effective supervisory systems, such as China with policies that support an integrated digital payment system, show that fintech can run sustainably without threatening market stability. On the other hand, countries without clear and firm policies are likely to face more challenges in maintaining financial system stability amidst the rapid adoption of fintech. In addition, this study also found that the long-term sustainability of fintech is highly dependent on the application of innovative and inclusive technology (Sintadewi et al., 2024). To maintain sustainability, fintech service providers need to focus on developing products and services that are accessible to all levels of society, including those in remote or underserved areas. Therefore, it is important for fintech providers to develop business models

that do not only prioritize profits, but also focus on improving people's economic welfare through better access to financial services (Muslihun., 2024).

Research conducted by Fauziah et al. (2020) and Andrian et al. (2019) on the effect of financial inclusion on financial system stability, using a multiple linear regression analysis approach, shows that financial inclusion has a negative effect on financial system stability. In contrast, research by Anindyntha & Sulistyono (2022) which examines the impact of financial inclusion through fintech integration on financial system stability, using multiple regression analysis, indicates that financial inclusion integrated with fintech has a significant effect on increasing financial system stability. This finding suggests that the higher the financial inclusion driven by fintech integration, the greater the contribution in improving financial system stability.

Financial system stability is a condition in which the financial system operates smoothly and efficiently, and is able to face various pressures without causing significant damage to the economy (Alamsyah., 2018). A stable financial system allows transactions and the flow of funds between economic sectors to run well, supports investment, and facilitates appropriate risk distribution. The existence of a stable system is critical to promoting sustainable economic growth, as it provides a solid foundation for healthy economic activity.

Factors that affect financial system stability include financial institution integrity, market liquidity, information transparency, and the quality of regulation and supervision (Maluluw et al., 2024). The integrity of financial institutions is crucial in maintaining stability, where institutions such as banks and insurance companies must be able to manage risks prudently and maintain financial soundness (Long et al., 2023). In addition, market liquidity is also instrumental in ensuring that the financial system can provide sufficient funds for economic activities without causing excessive volatility. Information transparency plays a key role in maintaining financial system stability (Suhartono., 2019). Open access to accurate information about the financial condition of the institutions involved allows stakeholders to make better decisions (Umum et al., 2023). Without transparency, uncertainty may arise, potentially undermining stability. Regulations that encourage information disclosure are therefore crucial for markets to remain viable and trustworthy for all parties involved.

Supervision by financial authorities, such as the central bank and capital market regulatory agencies, is also very important to maintain financial system stability (Yustianti., 2017). Regulators play a role in ensuring that financial institutions do not take steps that could jeopardize the system as a whole. They also have an obligation to respond to market changes or financial crises with policies that can help stabilize the financial system. Close supervision of financial practices is a means to prevent large losses caused by speculative or uncontrolled activities (Maita et al., 2024).

The financial system continues to face various challenges from within and outside the country. Rapid market changes, economic crises, or external factors such as pandemics can affect the performance of the financial system (Maknun., 2024). Therefore, it is important to continuously monitor market developments and adjust existing policies to deal with these changes. Technology, especially fintech, also has a major impact on financial system stability. While fintech has the potential to expand financial inclusion, challenges related to data security and proper supervision need to be addressed to keep the financial system stable.

Finally, the results also show a close relationship between government policies and healthy fintech development. Countries with pro-technology policies that support fintech innovation tend to have more advanced fintech ecosystems and are better able to maintain financial system stability. For example, Singapore and Estonia have developed regulatory frameworks that support fintech development by providing incentives for innovators and involving the public sector in the supervision and regulation of the industry.

Overall, this study shows that fintech has great potential to increase financial inclusion and strengthen the global financial system. However, to achieve the maximum benefits of

fintech, clear regulations, strict supervision, and concerted efforts from the government, fintech service providers, and users are needed to address existing challenges, such as data security risks and inequality of access

## CONCLUSIONS

This research reveals that financial technology (fintech) has a very significant role in increasing financial inclusion and potentially strengthening the stability of the global financial system. By adopting fintech, especially in the form of digital payments, microloans, and technology-based financial management platforms, people who were previously underserved by the traditional banking system now have wider and easier access to financial services. Fintech opens up new opportunities for individuals and small businesses in developing countries to access financing and conduct transactions that were previously limited, which in turn can drive more inclusive economic growth. However, the results also show that challenges related to regulation and supervision remain a major obstacle to sustainable fintech adoption. Without a clear and uniform regulatory framework, the risk of financial system instability may increase, especially with regard to its vulnerability to cyberattacks, as well as potential neglect of data protection and transaction security. Therefore, it is important for countries to develop policies that support fintech innovation while maintaining sufficient oversight to avoid negative impacts on the financial system as a whole. To conclude, fintech can serve as a powerful tool to increase financial inclusion and drive efficiency in the global payment system, but its sustainability and stability depend heavily on the policies and regulations implemented. Countries that are able to create a policy framework that supports fintech while maintaining proper oversight stand a chance of capitalizing on the great potential of this technology. Therefore, collaboration between governments, fintech service providers, and regulators is necessary to create a safe, inclusive, and stable ecosystem, which can ultimately contribute to more equitable and sustainable economic growth.

## REFERENCES

- Agil Dzikrullah, Ach., & Chasanah, U. (2024). OPTIMALISASI PERAN KOPERASI DALAM MENDUKUNG UMKM: MENINGKATKAN AKSES MODAL, PENGUASAAN TEKNOLOGI, DAN EKSPANSI PASAR. *INVESTI : Jurnal Investasi Islam*, 5(1), 648–668. <https://doi.org/10.32806/ivi.v5i1.205>
- Alamsyah, H. (2003). RESTRUKTURISASI PERBANKAN DAN DAMPAKNYA TERHADAP PEMULIHAN KEGIATAN EKONOMI DAN PENGENDALIAN MONETER. *Buletin Ekonomi Moneter Dan Perbankan*, 1(3), 121–145. <https://doi.org/10.21098/bemp.v1i3.180>
- Alfiana, A., Fanggidae, F. O., Norrahman, R. A., & Farida, F. (2023). Analisis Kualitatif Kebijakan Pengembangan Produk FinTech dalam Meningkatkan Akses Keuangan dan Perilaku Konsumen di Indonesia. *Sanskara Akuntansi Dan Keuangan*, 2(01), 28–37. <https://doi.org/10.58812/sak.v2i01.253>
- Anaroga, P. G., Damelia, W., Astrini, A. P., & Harahap, R. N. (2024). Peran Perusahaan Dalam Pemberdayaan UMKM: Analisis Close Loop Model Pada Bank Sampah Pematang Pudu Bersih. *Jurnal Aplikasi dan Inovasi Iptek*, 6(1), 20–37. <https://doi.org/10.52232/jasintek.v6i1.153>
- Alfarizi, M., Kamila Hanum, R., Andriana Firmansyah, A., & Wusqo, U. (2023). Digital Banking dalam Akselerasi Pemberdayaan Ekonomi Womenpreneur Indonesia : Eksplorasi Sosial-Ekonomi dan Peran LPS Berbasis PLS-SEM. *Jurnal Magister Ekonomi Syariah*, 2(2 Desember), 1–32. <https://doi.org/10.14421/jmes.2023.022-01>

- Arifin, M. R. W., & Cahya, S. B. (2024). PENGARUH PENGGUNAAN PLATFORM DIGITAL MONEY DAN PLATFORM E-COMMERCE TERHADAP PERILAKU KONSUMTIF MAHASISWA. *Jurnal Pendidikan Tata Niaga (JPTN)*, 12(2), 263-272. <https://doi.org/10.26740/jptn.v10n2.p1689-1700>
- Azizah, S., Ula, Z. N., Mutiara, D., & Prameswari, M. P. (2024). Keamanan siber sebagai fondasi pengembangan aplikasi keuangan mobile: Studi literatur mengenai cybercrime dan mitigasinya. *Akuntansi Dan Teknologi Informasi*, 17(2), 221-237. <https://doi.org/10.24123/jati.v17i2.6409>
- Bhegawati, D. A., & Novarini, N. N. A. (2023). Percepatan Inklusi Keuangan untuk Meningkatkan Pertumbuhan Ekonomi, Lebih Terinklusif, dan Merata Di Era Presidensi G20. *Jurnal Akuntansi, Manajemen, Bisnis Dan Teknologi (AMBITEK)*, 3(1), 14–31. <https://doi.org/10.56870/ambitek.v3i1.60>
- Chairunnas, A., Sugianto, E., Pratiwi, R., Sitorus, M., & Cahyono, B. (2024). Teknologi Blockchain dalam Transformasi Keuangan dan Perbankan: Potensi dan Tantangan. *Journal of Economic Education and Entrepreneurship Studies*, 5(2), 357-368. <https://doi.org/10.62794/je3s.v5i2.3568>
- Dzikrullah, Ach., & Chasanah, U. (2024). OPTIMALISASI PERAN KOPERASI DALAM Mendukung UMKM: Meningkatkan Akses Modal, Penguasaan Teknologi, dan Ekspansi Pasar. *INVESTI : Jurnal Investasi Islam*, 5(1), 648–668. <https://doi.org/10.32806/ivi.v5i1.205>
- Fathori, F. (2023). PERAN PASAR MODAL DALAM PEMBANGUNAN EKONOMI: STUDI KASUS TENTANG KONTRIBUSI PASAR SAHAM TERHADAP PERTUMBUHAN EKONOMI DI NEGARA BERKEMBANG. *CURRENCY: Jurnal Ekonomi Dan Perbankan Syariah*, 2(1), 233–242. <https://doi.org/10.32806/ccy.v2i1.240>
- Handoko, R. M., Trisna, B. A. A., Pratama, R. D., & Parhusip, J. (2024). Implementasi Blockchain untuk Keamanan Sistem Pembayaran Digital dan Optimasi Transaksi Keuangan (Studi Kasus Industri Fintech di Indonesia). *Teknik: Jurnal Ilmu Teknik Dan Informatika*, 4(2), 64-74. <https://doi.org/10.22236/jutikom.v1i1.8742>
- Hidayat, I., Qurotulaini, D. L., Safitri, N. A., & Novitasari, R. (2024). Transformasi Digital Pada UMKM di Indonesia Dalam Menghadapi Tantangan dan Peluang Pada Akses Pembiayaan. *Jurnal Intelek Insan Cendikia*, 1(10), 7414-7413. <https://doi.org/10.31219/osf.io/jm6u2>
- Herdinata, C., & Kohardinata, C. (2019). PENGARUH REGULASI DAN KOLABORASI TERHADAP LITERASI KEUANGAN DALAM UPAYA PENERAPAN FINANCIAL TECHNOLOGY PADA USAHA KECIL DAN MENENGAH. *Business and Finance Journal*, 4(2), 135–140. <https://doi.org/10.33086/bfj.v4i2.1358>
- Hilda, & Gusti, G. P. (2024). TRANSFORMASI INDUSTRI KEUANGAN DAN PERDAGANGAN MELALUI FINTECH DAN E-COMMERCE: STUDI ANALISIS DAMPAK DAN TANTANGAN. *Jurnal Ekonomi STIEP*, 9(1), 64–74. <https://doi.org/10.54526/jes.v9i1.195>
- Ismamudi, I., Hartati, N., & Sakum, S. (2023). Peran Bank dan Lembaga Keuangan dalam Pengembangan Ekonomi: Tinjauan Literatur. *Jurnal Akuntansi Neraca*, 1(2), 35–44. <https://doi.org/10.59837/jan.v1i2.10>
- Jange, B., Pendi, I., & Susilowati, E. M. (2024). Peran Teknologi Finansial (Fintech) dalam Transformasi Layanan Keuangan di Indonesia. *Indonesian Research Journal on Education*, 4(3), 1199–1205. <https://doi.org/10.31004/irje.v4i3.1007>
- Johan, J. (2024). INOVASI DALAM TEKNOLOGI KEUANGAN: MENGUBAH PRAKTIK PERBANKAN DAN INVESTASI TRADISIONAL. *CURRENCY: Jurnal Ekonomi Dan Perbankan Syariah*, 2(2), 296–314. <https://doi.org/10.32806/ccy.v2i2.244>

- Kadir, S. (2023). Keuangan Terdesentralisasi (DeFi) Dan Teknologi Keuangan (FinTech) Syariah Dalam Sistem Keuangan Abad 21. *Journal of Accounting and Finance (JACFIN)*, 5(2), 1-14. <https://doi.org/10.30736/jes.v2i1.33>
- Kawengian, V. M. (2024). Tinjauan Hukum Peran Bank Sentral Terhadap Penggunaan Teknologi Blockchain Dalam Transaksi Keuangan Di Indonesia. *Lex Privatum*, 14(2). <https://doi.org/10.35194/jhmj.v9i2.3856>
- Lasaksi, P., Andriani, E., & Sunijati, E. (2023). Pengaruh Kewirausahaan Mikro dan Pendidikan Perempuan terhadap Pengentasan Kemiskinan di Indonesia. *Sanskara Ekonomi Dan Kewirausahaan*, 2(01), 9–17. <https://doi.org/10.58812/sek.v2i01.273>
- Long, T. K., & Boediningsih, W. (2023). Evaluasi Pengawasan Otoritas Jasa Keuangan Terhadap Lembaga Keuangan Non-Bank: Studi Kasus SNP Finance. *Aladalah: Jurnal Politik, Sosial, Hukum Dan Humaniora*, 1(4), 237-254. <https://doi.org/10.59246/aladalah.v1i4.604>
- Maisaroh, S., & Wahyuni, S. (2024). Dampak Transisi Uang Tunai Ke Uang Digital Terhadap Inklusi Keuangan Di Indonesia Perspektif Ekonomi Syariah. *Jurnal Ilmiah Manajemen, Ekonomi dan Akuntansi*, 4(3), 13-26. <https://doi.org/10.24036/ecosains.12073257.00>
- Maita, R., Zacharias, V. J., Hutasoit, T., Mahipal, M., Haider, E. C., & Vahzrianur, V. (2024). Perjudian Dalam Kerangka Hukum Ekonomi Syariah: Tinjauan Terhadap Maysir dan Konsekuensinya. *Media Hukum Indonesia (MHI)*, 2(2), 139-150. <https://doi.org/10.24252/iqtishaduna.vi.44212>
- Maknun, L. (2024). Dinamika Kebijakan Moneter di Indonesia: Sejarah, Transformasi, dan Respons terhadap Krisis Ekonomi. *Dinamika Kebijakan Moneter di Indonesia: Sejarah, Transformasi, dan Respons terhadap Krisis Ekonomi*. <https://doi.org/10.25077/jas.v14i2.124>
- Malinda, S., Raneo, A. P., & Malinda, F. (2024). Keterampilan Investasi Keuangan dan Penguatan Struktur Modal UMKM Muara Penimbung. *CARADDE: Jurnal Pengabdian Kepada Masyarakat*, 7(1), 23-32. <https://doi.org/10.30984/nyur.v4i1.806>
- Maluw, S. J., Tamporangoy, G. H., & Korah, R. S. (2024). PENERAPAN PRINSIP KEHATI-HATIAN BANK BERBASIS DIGITAL DALAM MEMBERIKAN KREDIT KEPADA DEBITUR. *LEX ADMINISTRATUM*, 12(2). <https://doi.org/10.34007/jehss.v5i4.1772>
- Martinelli, I., Tsabita, N. M., Putri, A. F. E., & Novela, D. (2024). Legalitas dan Efektivitas Penggunaan Teknologi Blockchain Terhadap Smart Contract Pada Perjanjian Bisnis di Masa Depan. *UNES Law Review*, 6(4), 10761-10776. <https://doi.org/10.25126/jtiik.1078016>
- Maskhuri, M. (2024). Peran Ekonomi Syariah dalam Pembangunan Ekonomi Berkelanjutan di Indonesia. *Indonesian Research Journal on Education*, 4(4), 2056-2060. <https://doi.org/10.56145/jurnalekonomidanbisnis.v1i2.91>
- Mukhtar, D. F., & Rahayu, Y. (2019). Analisis Pendanaan Modal Umkm Melalui Financial Technology Peer To Peer Lending (P2P). *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 8(5). <https://doi.org/10.55606/mri.v2i3.3059>
- Munajat, A. A., & Yusuf, H. (2024). Peran Teknologi Informasi Dalam Pencegahan Dan Pengungkapan Tindak Pidana Ekonomi Khusus: Studi Tentang Kejahatan Keuangan Berbasis Digital. *Jurnal Intelek Insan Cendikia*, 1(9), 4853-4865. <https://doi.org/10.61994/equivalent.v2i2s.722>
- Muslihun, M. (2024). Transformasi Pemasaran Syariah Melalui Teknologi Financial (Fintech) dalam Ekonomi Digital. *Revenue Journal: Management and Entrepreneurship*, 2(1), 13–18. <https://doi.org/10.61650/rjme.v2i1.630>
- Norrahman, R. A. (2023). Peran Fintech Dalam Transformasi Sektor Keuangan Syariah. *JIBEMA: Jurnal Ilmu Bisnis, Ekonomi, Manajemen, Dan Akuntansi*, 1(2), 101–126. <https://doi.org/10.62421/jibema.v1i2.11>



- Nasoha, A. M. M., Atqiya, A. N., Huda, M., Abhista, Z. N., & Selfia, S. (2025). Dampak Kewarganegaraan terhadap Akses Ekonomi: Analisis atas Kesenjangan Sosial-Ekonomi di Indonesia: The Impact of Citizenship on Economic Access: An Analysis of Socio-Economic Disparities in Indonesia. *LITERA: Jurnal Ilmiah Multidisiplin*, 2(1), 1-12. <https://doi.org/10.20886/jpsek.2008.5.2.69-81>
- Pramaswara, M. A., & Athoillah, M. (2023). Pengaruh Inklusi Keuangan Di Era Ekonomi Digital Dalam Meningkatkan Pertumbuhan Ekonomi. *Journal of Development Economic and Social Studies*, 2(1), 205-221. <https://doi.org/10.21776/jdess.2023.02.1.19>
- Prawana, I. (2024). Peran Literasi Keuangan Dan Fintech Syariah Dalam Mendorong Inklusi Keuangan Pada Pelaku UMKM. *Jurnal Ekonomi dan Keuangan Syariah*, 3(3), 16-34. <https://doi.org/10.47065/ekuitas.v4i3.2985>
- Prihartama, T., & Mukhsin, M. (2024). Peran Financial Teknologi (Fintech) Syariah Dalam Mewujudkan Keuangan Inklusif Di Indonesia Dengan Pendekatan Keuangan Syariah. *Jurnal Ekonomi Manajemen Dan Bisnis (JEMB)*, 1(6), 62-70. <https://doi.org/10.30651/jms.v3i1.1618>
- Putri, D. C. P., & Lutfianti, A. (2024). Peran Teknologi Finansial FinTech dalam Mengubah Layanan Perbankan Tradisional. *Media Hukum Indonesia (MHI)*, 2(4). <https://doi.org/10.31004/irje.v4i3.1007>
- Raharjo, B. (2021). Fintech Teknologi Finansial Perbankan Digital. *Penerbit Yayasan Prima Agus Teknik*, 1-299. <https://doi.org/10.55606/jupsim.v1i1.239>
- Raainaa, N. A. (2024). ANALISIS DISRUPSI EKONOMI DALAM ERA DIGITAL DAN IMPLIKASINYA TERHADAP PERUBAHAN PROSES BISNIS, TRANSFORMASI KEUANGAN, SERTA TANTANGAN REGULASI. *Jurnal Ekonomi Revolusioner*, 7(6). <https://doi.org/10.36423/jumper.v3i2.906>
- Ramadhani, A., Ananda, D. A., & Azmi, Z. (2024). Teknologi Blockchain dan Sistem Akuntansi: Potensi dan Tantangan. *Indonesian Journal of Economics, Management and Accounting*, 1(1), 37-48. <https://doi.org/10.53769/ijms.v2i4.682>
- Rezky, M. I. (2023). Strategi Pengembangan Usaha Mikro, Kecil Dan Menengah (Ukm) Berbasis Financial Technology. *Journal of Principles Management and Business*, 2(02), 64-77. <https://doi.org/10.55657/jpmb.v2i01.124>
- Rizieq, M., & Suwarsit, S. (2024). Transformasi Layanan Perbankan dari Antrian Panjang Menuju Banking in Your Pocket. *Jurnal Multidisiplin Ilmu Akademik*, 1(6), 291-299. <https://doi.org/10.61722/jmia.v1i3>
- Sadari, S., & Hakim, A. (2019). Revitalisasi Keuangan Inklusif Dalam Sistem Perbankan Syariah di Era Financial Technology. *Zhafir | Journal of Islamic Economics, Finance, and Banking*, 1(1), 1-24. <https://doi.org/10.51275/zhafir.v1i1.126>
- Sahrir, I. F., Paridah, N., Yunitasari, K., & Putri, R. A. A. (2024). Perlindungan Hukum Terhadap Nasabah Bank Dalam Penggunaan Aplikasi Dana Di Indonesia. *Jurnal Dunia Ilmu Hukum (JURDIKUM)*, 2(2), 43-48. <https://doi.org/10.59435/jurdikum.v2i2.379>
- Salsabila, F. A., & Ilimih, A. A. (2024). Penyalahgunaan Data Pribadi Sebagai Bentuk Kejahatan Sempurna Dalam Perspektif Hukum Siber. *ALADALAH: Jurnal Politik, Sosial, Hukum dan Humaniora*, 2(4), 176-181. <https://doi.org/10.59246/aladalah.v2i4.968>
- Sanyaolu, T. O., Adeleke, A. G., Azubuko, C. F., & Osundare, O. S. (2024). Exploring fintech innovations and their potential to transform the future of financial services and banking. *International Journal of Scholarly Research in Science and Technology*, 5(01), 054-073. <https://doi.org/10.56781/ijrst.2024.5.1.0033>
- Saputra, R. F., & Fasa, M. I. (2024). literasi dan inklusi keuangan syari'ah dalam memajukan ekonomi hijau. *Jurnal Intelek Dan Cendikiawan Nusantara*, 1(5), 7617-7623. <https://doi.org/10.56998/jr.v7i01.128>

- Sebyar, M. H., & Wulandari, M. A. (2023). KESENJANGAN SOSIAL EKONOMI DI MASYARAKAT SEKITAR PERKEBUNAN KELAPA SAWIT DI KABUPATEN TANJUNG JABUNG BARAT PROVINSI JAMBI. *JURNAL AGRIMANSION*, 24(3), 744–785. <https://doi.org/10.29303/agrimansion.v24i3.1584>
- Setianingsih, R., & Nasution, M. I. P. (2024). Analisis Teknologi Blockchain Berperan dalam Meningkatkan Keamanan dan Data Privasi di Sektor Keuangan Terhadap Implementasi. *JURNAL ILMIAH NUSANTARA*, 1(4), 588-596. <https://doi.org/10.59581/jusiik-widyakarya.v2i4.4158>
- Sintadewi, S. H., Auliani, N., Rahmadaniah, N. L., Rahma, A., & Jannah, M. (2024). INOVASI AKUNTANSI MUDHARABAH UNTUK PEMBIAYAAN BERBASIS TEKNOLOGI DALAM EKOSISTEM FINTECH SYARIAH. *Musyteri: Jurnal Manajemen, Akuntansi, dan Ekonomi*, 10(8), 21-30. <https://doi.org/10.61132/nuansa.v2i4.1371>
- Sitanggang, A. S., Salsabilah, W. T., Zahra, S. F., Prisilia, V. I., & Muslim, F. (2024). TRANSFORMASI TEKNOLOGI MESIN ATM MENJADI APLIKASI MOBILE BANKING DI ERA DIGITAL. *Jurnal Ilmiah Kajian Multidisipliner*, 8(8). <https://doi.org/10.11113/jt.v34.626>
- Sudarmanto, E., Yusuf, S. R., Yuliana, I., Wahyuni, N., & Zaki, A. (2024). Transformasi digital dalam keuangan Islam: Peluang dan tantangan. *Jurnal Ilmiah Ekonomi Islam*, 10(1), 645-655. <https://doi.org/10.29040/jiei.v10i1.11628>
- Suganda, D. A. (2024). Pengaruh Kebijakan Moneter Non-Tradisional Terhadap Stabilitas Ekonomi di Negara Berkembang: Sebuah Pendekatan Meta-Analisis. *Equivalent: Journal of Economic, Accounting and Management*, 2(2s), 27-47. <https://doi.org/10.61994/equivalent.v2i2s.722>
- Sutarsih, E. (2023). Literasi dan Inklusi: Keuangan Syariah sebagai Fundamental Kesejahteraan UMKM: Edukasi Bisnis Akses Keuangan Syariah untuk UMKM Santri di Yogyakarta. *As-Syar'i: Jurnal Bimbingan & Konseling Keluarga*, 5(3). <https://doi.org/10.47467/as.v5i3.5628>
- Ulirrahmi, F. (2023). Peer to Peer Lending Syari'ah: Wadah Investasi Bisnis Sektor Riil untuk Pengembangan UMKM. *Al-Hiwalah: Journal Syariah Economic Law*, 2(1), 18-36. <https://doi.org/10.47766/alhiwalah.v2i1.1471>
- Utama, A. N., Hidayat, R. M., Kesuma, P. T., & Hosnah, A. U. (2023). Analisis Hukum Pencegahan Hoax terhadap Fatwa MUI Terkait Boikot Produk dan Pendidikan Kesadaran Publik dalam Era Digital. *Jurnal Pendidikan Tambusai*, 7(3), 30323-30334. <https://doi.org/10.30739/darussalam.v11i2.622>
- Yunita, P., Ali, A., Fahminuddin, M., & Hidayatullah, S. (2022). FINANSIAL TEKNOLOGI SYARIAH & BANK DIGITAL: KENDALA DAN TANTANGAN PENGEMBANGAN FINTECH SYARIAH DI INDONESIA. *Zhafir: Journal of Islamic Economics, Finance, and Banking*, 4(2), 113-142. <https://doi.org/10.51275/zhafir.v1i1.128>