

## The Role of Fintech in Enhancing the Stability of the Islamic Financial System: Integrating Digital Banking for Global Financial Inclusion

<sup>1</sup>Hairun Nisa✉, <sup>2</sup>Retno Indri Yustika, <sup>3</sup>Ratna, <sup>4</sup>Hidayani, <sup>5</sup>Zarina  
FEBI, Universitas Al-Qur'an Ittifaqiah, Indralaya, Indonesia

### ABSTRACT

This study analyzes the role of fintech in enhancing the global stability of the Islamic financial system and explores the integration of fintech-based digital banking within it. The research also investigates the challenges developing countries face in adopting Sharia-compliant fintech solutions, as well as the impact on economic growth and the stability of the Islamic financial sector. A literature review methodology is employed, analyzing secondary data from books, articles, and academic papers to examine the intersection of fintech, financial stability, and Islamic banking. The study focuses on fintech's potential to overcome geographical and operational barriers within the Islamic financial sector. The integration of fintech in Islamic banking improves operational efficiency, reduces costs, and expands access to financial services, especially in remote or underserved communities. By enhancing transparency and efficiency, fintech strengthens the stability of the Islamic financial system. The findings suggest that fintech's ability to offer cost-effective solutions is well-aligned with the principles of Islamic finance, supporting a more inclusive and sustainable banking model. Despite the benefits, challenges remain, including regulatory issues, Sharia compliance, and technological adoption in developing countries. Future research could involve field data or case studies to address the practical challenges of fintech integration. This study contributes to understanding how fintech can enhance the stability of the global Islamic financial system, improve financial inclusion, and reduce operational costs. It offers valuable insights for policymakers and financial institutions seeking to promote the adoption of Sharia-compliant fintech solutions.

 OPEN ACCESS

### ARTICLE HISTORY

Received: 04-02-2026

Accepted: 10-04-2026

### KEYWORDS

Fintech, Global Financial Stability, Digital Islamic Banking.

---

CONTACT: ✉ [hairunnisa@uqi.ac.id](mailto:hairunnisa@uqi.ac.id)

© 2026 Hairun Nisa, Retno Indri Yustika, Ratna, Hidayani, Zarina. Published by Institut Agama Islam Diniyyah Pekanbaru, ID  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non Commercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

## Introduction

The development of Islamic banking in countries with a majority Muslim population, such as Indonesia and Malaysia, has shown significant progress. However, this sector still faces several major challenges that need to be addressed in order to enhance financial inclusion, particularly in rural areas and underserved communities. One of the main challenges is the low level of financial literacy and understanding of Islamic financial products, such as *murabahah* and *ijarah* (Fathihani, Wafi, and Rosdiana 2025). In addition, the high operational costs associated with Islamic banking, related to the necessity of Sharia compliance, present another obstacle to expanding services. Therefore, optimizing digital Sharia banking services through fintech innovation becomes highly relevant in extending financial access, particularly in areas that are difficult to reach conventionally (Fitri et al., 2025).

Various studies have shown that financial technology (fintech) can play a crucial role in overcoming the challenges faced by Islamic banking. Fintech has the potential to improve operational efficiency and broaden financial access for underserved communities. According to Bulatova et al (2019), the integration of fintech within Islamic banking systems not only enhances efficiency but also ensures that financial products remain compliant with Sharia principles. However, despite the promising potential of fintech, its implementation in Islamic banking in many developing countries is still hindered by regulatory issues, oversight, and inadequate technology adoption.

This study aims to analyze the role of fintech in enhancing the stability of the Islamic financial system globally, and to explore the model of digital banking integration based on fintech within the Islamic financial system. Additionally, this research seeks to identify the challenges faced by developing countries in adopting Sharia-compliant fintech innovations and their impact on economic growth and financial stability. The primary goal of this study is to contribute to the development of more inclusive, efficient, and sustainable digital Islamic banking services through the integration of fintech.

In light of the challenges present in the Islamic banking system, the use of fintech can serve as a relevant and effective solution to accelerate financial inclusion in developing countries. Given that fintech can provide cost-effective technological solutions, this study argues that the integration of fintech within Islamic banking will support the stability of the global Islamic financial system. If applied properly, this technological innovation will create a more inclusive, transparent, and efficient financial system, ultimately improving the competitive edge of Islamic banking in the increasingly competitive global market.

## Methods

A literature review methodology is employed, analyzing secondary data from books, articles, and academic papers to examine the intersection of fintech, financial stability, and Islamic banking. The study focuses on fintech's potential to overcome geographical and operational barriers within the Islamic financial sector.

## Result

The literature on fintech reveals that it is a rapidly growing phenomenon, focusing on the use of technology within the financial sector to improve the efficiency and accessibility of financial services. Fintech includes various services such as digital payments, peer-to-peer lending, and crowdfunding (Giglio 2021). Research shows that fintech is considered a game-changer in the financial sector, offering quicker and cheaper alternatives compared to traditional banking services (Artha and Jufri 2020). The data from various studies also indicates that fintech can address the lack of financial access, particularly in underserved

areas where conventional banks have limited reach (Takeda & Ito, 2021).

Fintech, according to the literature, focuses on empowering individuals and businesses to access financial services more easily through technology. One of the primary features of fintech is its ability to bring down transaction costs and reduce the time required for financial transactions, including money transfers, investments, and lending. For example, digital payment services simplify transactions that were previously complex and time-consuming, while peer-to-peer lending platforms open up access to credit for individuals who were not previously served by financial institutions (Giglio 2021). Research also suggests that fintech provides a more inclusive financial solution, especially for individuals who lack access to formal financial services (Artha and Jufri 2020).

The relationship between the descriptive and explanatory data here highlights how fintech, as a concept that is transforming the financial sector, is highly relevant to the research problem discussed. One of the major challenges in Islamic banking is the limited reach to a wider audience, particularly in rural areas. With the adoption of technologies offered by fintech, such as digital payment apps and online lending platforms, the Islamic banking system can overcome geographical and operational barriers, while offering financial products that are more easily accessible to communities that were previously underserved.

The literature on financial stability emphasizes that it is a critical factor in preventing economic crises and ensuring the smooth functioning of the economy (Sassi and Kinski 2020). In many studies, financial stability is measured by indicators such as capital adequacy ratios, asset quality, and market liquidity (Abidi, Nsaibi, and Regaieg 2020). A stable financial system is capable of absorbing shocks and supporting long-term economic growth, which is crucial for maintaining market confidence. Studies show that Islamic financial systems may offer greater stability than conventional systems due to their avoidance of interest-based debt, which is more vulnerable to financial crises (Belouafi, Bourakba, and Saci 2015).

Financial stability is not solely dependent on the performance of individual banks but also on the overall stability of money markets, effective regulation, and the interactions between various economic actors Abidi et al. (2020). In the context of fintech, the literature shows that digital transformation in Islamic banking can enhance transparency and efficiency in financial operations, which in turn contributes to the overall stability of the financial system. This stability can also be influenced by the implementation of proper regulatory frameworks that ensure technological innovations remain safe and sustainable (Sassi and Kinski 2020).

The relationship between the descriptive and explanatory data here illustrates how financial stability is directly tied to the application of fintech in Islamic banking. By improving transparency, lowering costs, and enhancing efficiency, fintech can strengthen the stability of the Islamic financial system. The integration of technology in Islamic banking allows for better risk management, which ultimately contributes to long-term stability within the system.

The literature on digital Islamic banking reveals that the digital transformation in Islamic finance focuses on applying technology that aligns with Sharia principles. Digital Islamic banking offers a variety of financial products and services that comply with Islamic law, such as murabahah, ijarah, and istisna, which can be accessed through digital platforms (Hasan et al., 2020). Studies indicate that digital Islamic banking can enhance financial access for communities that have been previously excluded from traditional banking services.

Digital Islamic banking enables customers to access Sharia-compliant financial services in a more convenient and efficient manner. Technologies such as digital banking applications and QR code-based payment systems allow users to conduct financial transactions without needing to visit a physical bank branch. Furthermore, this digital transformation introduces

more transparent and cost-effective business models, increasing the competitiveness of Islamic banking in the global market (Hasan et al., 2020).

The relationship between the descriptive and explanatory data here demonstrates how digital Islamic banking holds the potential to address challenges faced by the Islamic financial system. By leveraging digital technology, Islamic banking can overcome geographical constraints and high operational costs while improving financial inclusion. This digital transformation also presents an opportunity to create a more efficient, transparent, and Sharia-compliant financial system.

Fintech, short for financial technology, refers to the use of technology to provide efficient and innovative financial services. Fintech encompasses a variety of technological applications within the financial sector, such as digital payments, peer-to-peer lending, and investment platforms (Madir 2021). According to Zavolokina, Dolata, and Schwabe (2017), fintech can be understood as the intersection between the financial sector and information technology, which creates innovations that change the traditional ways financial services are provided. This technology simplifies access to financial services, reduces operational costs, and increases efficiency. As technology continues to evolve, fintech remains a dominant force globally, greatly impacting traditional financial systems (Serbulova 2021).

Fintech can be categorized into several sectors, including payments, lending, insurance, and wealth management (Mulyk and Oliinyk 2021). One notable manifestation of fintech is the emergence of "neobanks" or banks without physical branches, which utilize digital platforms to provide banking services. According to Martinčević et al., (2020), neobanks offer more efficient services through mobile applications that are easily accessible. Another key sector is blockchain, which has the potential to improve transaction transparency and security (Pasterny 2021). With the rise of different fintech categories, it becomes clear that financial technology not only provides convenience but also presents challenges to traditional banking systems.

Financial stability is the condition in which the financial system operates efficiently, facilitating economic growth, and can absorb shocks or crises without causing significant harm to the economy (Abidi, Nsaibi, and Regaieg 2020). According to (Sassi and Kinski 2020), a stable financial system is capable of managing risks and supporting long-term economic development. This stability is especially important in the context of Islamic banking, which follows different principles than conventional banking systems. Studies show that Islamic financial systems may offer better stability than conventional systems due to their avoidance of interest-based debt, which is more vulnerable to financial crises (Belouafi, Bourakba, and Saci 2015).

In the context of financial stability, several indicators are commonly used, including market liquidity, bank capital adequacy ratios, and policies related to monetary and fiscal stability (Askari et al., 2012). Research by Abidi et al. (2020) shows that the stability of Islamic financial systems can be measured using indicators such as the financing-to-funding ratio and non-performing financing (NPF) ratios. Moreover, external factors such as commodity price fluctuations and global economic policies also affect stability. In Islamic finance, the use of risk-sharing instruments like *mudharabah* and *musharakah* further strengthens the system's resilience (Askari et al., 2012).

Digital Islamic banking refers to the use of technology to provide Islamic financial services through digital platforms, enabling access to financial services anytime and anywhere (Hariaha and Kulish 2019). According to Deshpande (2018), digital banking involves the use of internet-based applications for transactions, account management, and obtaining other banking products and services. This digitalization also includes systems like mobile banking, internet banking, and financial apps, aimed at improving efficiency and

convenience for customers. With the increasing adoption of technology, digital banking has become a crucial component of the global financial system (Drobotya and Brazhnyk 2021).

Digital Islamic banking can be categorized into several forms, including mobile banking, e-wallets, and banking services based on applications. According to Mbama et al. (2018), mobile banking facilitates account access through mobile devices, while e-wallets allow for online payments and transactions using digital wallets. The digital transformation in banking also includes the integration of payment systems like QR codes and blockchain (Semenog, 2021). In Islamic banking, this digitalization enables greater access to Sharia-compliant financial services that are more inclusive and transparent.

## Discussion

One of the most striking findings of this research is that fintech does not only have the potential to expand access to Sharia banking services but can also fundamentally transform the stability of the Islamic financial system. The research discovered that the application of fintech in Islamic banking can significantly reduce operational costs and overcome geographical limitations that hinder financial services in remote areas. Moreover, the integration of fintech can create a more transparent and efficient financial ecosystem, which was previously considered challenging to achieve within the framework of Sharia banking. This finding reveals that fintech can act as a catalyst that dramatically changes the landscape of global Islamic finance.

This study aligns with previous research conducted by Saba et al. (2019), which shows that fintech can improve financial inclusion in developing countries, particularly through cost-effective and efficient solutions. Additionally, research by Rabbani et al. (2020) emphasizes fintech's potential to improve Sharia banking services but also highlights significant challenges regarding Sharia compliance that need to be addressed. The strength of this study lies in its emphasis on the integration of fintech to enhance the stability of the Islamic financial system through digitalization, while other studies have focused more on regulatory challenges and compliance issues. This provides a significant contribution to understanding how financial technology can serve as a practical solution rather than just a challenge.

The results of this study demonstrate that the objective of enhancing the stability of the Islamic financial system can be achieved through the integration of fintech. The use of digital technology, such as banking applications and digital payments, offers immense potential to expand financial access, especially in underserved regions. This reflects the substantial benefits of this research, which are not only relevant for the Islamic banking sector but also applicable to global financial inclusion policies. The increasing number of users of Sharia-compliant fintech services indicates a strong demand for financial products based on Islamic principles, which could have a positive impact on the global economy.

The implications of this research are highly significant for Islamic banking policies and fintech development. As the stability of the global financial system becomes increasingly important, the integration of fintech into Sharia banking systems will help improve efficiency and inclusion, thereby reducing the instability typically seen in conventional financial systems. Governments and regulators must consider developing policies that support the adoption of Sharia-compliant fintech solutions, which will strengthen the competitiveness of the Islamic financial industry in the global market while ensuring that the products remain compliant with Sharia principles. The research findings reflect the reality that fintech plays a crucial role as an agent of change in the financial system, particularly in improving financial inclusion among underserved populations. This is because fintech offers more accessible, cost-effective, and user-friendly financial products, especially for those in remote areas. The

integration of technology into Islamic banking also provides a solution to the issues of high operational costs and administrative complexity that traditional Sharia banking systems face. Therefore, these findings indicate that fintech integration is the right step to enhance the stability of the Islamic financial system.

Based on the findings of this research, it is essential for stakeholders in the Islamic banking sector to accelerate the adoption of digital technologies that are compatible with Sharia principles. The first step should be strengthening partnerships between Islamic banks and fintech companies to expand the availability and reach of Sharia-compliant digital banking products. Furthermore, regulators should create clear regulatory frameworks to ensure that fintech solutions are implemented in accordance with Sharia law while maintaining financial system stability. These actions will help speed up financial inclusion and contribute to the long-term sustainability of the Islamic financial system.

## Conclusion

One of the most surprising findings of this research is that fintech not only has the potential to expand access to Islamic banking services but also significantly transforms the stability of the Islamic financial system. The study found that the implementation of fintech in Islamic banking can significantly reduce operational costs and overcome geographic barriers that have previously limited the reach of financial services in remote areas. Additionally, the integration of fintech can create a more transparent and efficient financial ecosystem, something that was once considered difficult to achieve within the framework of Islamic banking. This finding demonstrates that fintech can act as a catalyst that changes the global Islamic financial landscape.

This research makes a significant theoretical contribution by enhancing the understanding of how fintech can optimize the role of the Islamic financial system in promoting global financial inclusion. Practically, the findings provide direction for Islamic financial institutions to explore collaborations with fintech companies to develop more inclusive and affordable Sharia-compliant financial products. Furthermore, this research introduces new insights into how technology integration can improve the stability of the financial system within an ethical framework, paving the way for further research in Islamic economics and financial technology.

While this research provides valuable insights into the role of fintech in strengthening the Islamic financial system, there are several limitations to consider. This study relies solely on a literature review, and empirical data or interviews with stakeholders from the Islamic banking and fintech sectors were not included. Therefore, future research could develop a more comprehensive approach by collecting field data through surveys or case studies to gain broader perspectives on the challenges and opportunities associated with fintech integration in Islamic banking. Further studies could also explore the social and economic impacts of Sharia-compliant fintech adoption in developing countries and identify policies that could accelerate the implementation of this technology in the Islamic financial sector..

## References

- Abidi, Ilyes, Mariem Nsaibi, and Boutheina Regaieg. 2020. "Financial Stability of Islamic Finance." 10(1).
- Artha, Bhenu, and Ali Jufri. 2020. "Fintech : A Literature Review." 7(2): 59–65.

- Belouafi, Ahmed, Chaouki Bourakba, and Karima Saci. 2015. "Islamic Finance and Financial Stability : A Review of the Literature Islamic Finance and Financial Stability :” 28(2).
- Bulatova, Elvira Ildarovna, Ekaterina Alekseevna Potapova, Regina Andreevna Fathutdinova, and Ruslan Chirgishanovich Yandiev. 2019. "THE FINTECH AND ISLAMIC FINANCE SYNTHESIS IN THE MODERN WORLD.” (October).
- Drobotya, Yana, and Liudmyla Brazhnyk. 2021. "DIGITALIZATION OF BANKING ACTIVITIES AND PAYMENT SYSTEMS.” *Market Infrastructure*.
- Fathihani, Inngamul Wafi, and Riska Rosdiana. 2025. "The Impact Of Islamic Banking On Financial Inclusion In Developing Countries : A Systematic Literature Review.” 7(1): 1–26.
- Giglio, Ferdinando. 2021. "Fintech : A Literature Review.” *European Research Studies Journal XXIV(2)*: 600–627.
- Hariaha, Lesia O., and Rostyslav R Kulish. 2019. "Financial Security of Banking in a Digitalized Economy.” *The Problems of Economy* 4(42): 163–171.
- Madir, Jenela. 2021. *FinTech: Law and Regulation*. UK: Edward Elgar Publishing.
- Martinčević, Ivana, Sandra Črnjević, and Igor Klopotan. 2020. "Fintech Revolution in the Financial Industry.” In *ENTRENOVA - ENTERprise REsearch InNOVation Journal*, , 563–71.
- Mbama, Cajetan Ikechukwu, Patrick Ezepue;, Lyuba Alboul;, and Martin Beer. 2018. "Digital Banking, Customer Experience and Financial Performance: UK Bank Managers' Perceptions.” *Journal of Research in Interactive Marketing* 12(4): 432–451.
- Mulyk, T.O., and O.O. Oliinyk. 2021. "The Economic Meaning and Types of FinTech Innovations.” *Business Inform* (12).
- Pasterny, Zofia. 2021. "FinTech – A Step Ahead or a Force of Creative Destruction in Finance.” *Wydawnictwo Uniwersytetu Łódzkiego* 2(30).
- Sassi, Taher Mohamed, and Marius Kinski. 2020. "Philipps-Universität Marburg Fachschaft Wirtschaftswissenschaften How Islamic Finance Can Affect the Financial Stability?” (May): 0–3.
- Serbulova, Natalia. 2021. "Fintech as a Transformation Driver of Global Financial Markets.” In *XIV International Scientific and Practical Conference "State and Prospects for the Development of Agribusiness - INTERAGROMASH 2021," E3S Web Conferences*, 9.
- Zavolokina, L., M. Dolata, and G. Schwabe. 2017. "FinTech Transformation: How IT-Enabled Innovations Shape the Financial Sector.” In *Lecture Notes in Business Information Processing*,.