



Implementation of Sharia Accounting in Fintech: A Review of Sharia Compliance and Regulatory Framework

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Abstract

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This study explores the integration of Islamic accounting in fintech and its impact on *Sharia* compliance within Islamic financial institutions. As fintech rapidly evolves, a significant gap has emerged between innovation and existing regulatory frameworks, posing a major challenge in ensuring full adherence to *Sharia* principles. The research applies the *Tawhīd* String Relationship (TSR) theory, which links economic activities to the Islamic concept of monotheism (*tawhīd*), along with *maqāṣid al-sharī'ah* to gain a broader understanding of the objectives of Islamic law. The findings reveal that while fintech brings notable advancements—such as digital payments, peer-to-peer (P2P) lending, and *Sharia*-compliant investment platforms—these innovations must be carefully aligned with Islamic principles to avoid elements such as *ribā* (usury), *gharar* (uncertainty), and *maysir* (gambling). The study also highlights the urgent need for a comprehensive regulatory framework, supported by active oversight from authorities like Indonesia's Financial Services Authority (OJK) and *Sharia* Supervisory Boards (DPS). Overall, this research offers insights into how *Sharia*-compliant fintech can enhance financial inclusion, consumer protection, and economic justice, while also identifying the risks that may arise from unregulated innovation. The novelty of this study lies in its integration of TSR and *maqāṣid al-sharī'ah*, proposing a holistic approach to fintech regulation.

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INTRODUCTION

The implementation of Islamic accounting in fintech has become increasingly urgent in light of the rapid global growth of the fintech industry (Alshater *et al.*, 2022). As the digital revolution continues to reshape financial services worldwide, the Islamic finance sector is also facing new challenges in ensuring that its operations remain grounded in *Sharia* principles, which emphasize justice, transparency, and the avoidance of *ribā* (interest), *gharar* (uncertainty), and *maysir* (gambling) (Nugroho *et al.*, 2022). Fintech, by leveraging technology to streamline transactions and offer low-cost financial services, holds significant potential to transform Islamic finance operations (Oladapo *et*

al., 2022). However, integrating fintech solutions into Islamic financial institutions comes with its own set of challenges. One of the most pressing issues is ensuring that fintech services comply with *Sharia* principles as outlined in the *Qur'an* and *Hadith* (Muryanto, 2023). The diversity of fintech products—ranging from digital payments and peer-to-peer (P2P) lending to blockchain technology—adds complexity to maintaining compliance with Islamic legal and ethical standards. Therefore, this research is crucial for exploring how fintech solutions can be harmonized with core *Sharia* principles to achieve full compliance, and how regulatory frameworks can be established to strengthen the integrity of *Sharia*-compliant fintech operations.

The gap that currently exists lies in the fact that, although many Muslim-majority countries have adopted fintech, they still face significant challenges in establishing legal frameworks that can ensure comprehensive *Sharia* compliance. This is mainly due to the lack of a robust regulatory system and limited understanding of how fintech can operate in line with *Sharia* principles.

Based on this background, the research aims to address the following questions:

- How does the integration of fintech solutions impact *Sharia* compliance in Islamic financial institutions, and what challenges do these institutions face in ensuring full compliance in the digital finance era?
- What kind of regulatory framework is needed to strengthen the operational integrity of *Sharia*-compliant fintech services, and how can such a framework be designed to align with both financial regulations and *Sharia* principles?
- What are the potential risks and benefits of adopting fintech solutions in Islamic financial institutions, particularly in relation to *Sharia* governance, consumer protection, and financial inclusion?

The primary objective of this study is to identify and analyze the impact of integrating fintech solutions on *Sharia* compliance within Islamic financial institutions, as well as to examine the challenges these institutions face in maintaining *Sharia* compliance amid the rapidly evolving digital finance landscape (Rabbani, 2022). The research also aims to explore the need for an effective regulatory framework that can enhance the operational integrity of *Sharia*-compliant fintech services, and to offer recommendations on how such regulations can be designed to ensure alignment with both *Sharia* principles and existing financial laws. By applying the concepts of the *Tawhīd* String Relationship (TSR) and *Maqāṣid al-sharī'ah*, this study will delve into the potential risks and benefits of adopting fintech solutions in Islamic financial institutions, particularly in areas such as *Sharia* governance, consumer protection, and financial inclusion (Suryaman & Simanullang, 2025). It is expected to make a meaningful contribution to the development of theories related to the integration of fintech within the framework of Islamic accounting (Hassan & Raza Rabbani, 2023). One of the key contributions of this research is the introduction of a more holistic approach to understanding the relationship between fintech and *Sharia* compliance. This is done by emphasizing the importance of the TSR theory, which unifies all aspects of economic activity under the Islamic principle of *tawhīd* (oneness of God). Additionally, the study seeks to deepen the understanding of *Maqāṣid al-sharī'ah*—focusing on the achievement of *Sharia's* objectives for the well-being of society—by linking these principles to the implementation of technology in Islamic financial institutions (Syahriani *et al.*, 2023). Ultimately, this research aims to fill the existing gap in literature regarding the application of *Sharia* principles in fintech, while offering new insights into how these principles can be adapted to support the ethical and lawful growth of fintech in accordance with Islamic law.

Practically, the findings of this study will serve as a valuable guide for Islamic financial institutions in integrating fintech solutions without compromising *Sharia* compliance (Rabbani, 2022). The insights gained can help decision-makers within these institutions develop more efficient policies and procedures for adopting financial technologies while remaining grounded in Islamic principles. This research also offers practical guidance on how Islamic financial institutions can mitigate the risks associated with adopting new technologies—such as threats to *Sharia* governance, violations of *Sharia* principles, and potential risks to consumer protection. As such, it provides a solid foundation for the development of practical policies that will help Islamic financial institutions remain competitive in the evolving fintech landscape while upholding the integrity of *Sharia* values (Mohd Haridan *et al.*, 2023). The policy implications of this study are highly relevant for regulators and policymakers, particularly those working in financial regulation and Islamic law (Harahap *et al.*, 2023). It will offer recommendations on the regulatory frameworks needed to support the sustainable growth of *Sharia*-compliant fintech. By analyzing the challenges Islamic financial institutions face in ensuring *Sharia* compliance, this research will provide critical input for policymakers in designing regulations that accommodate technological innovation while safeguarding adherence to Islamic legal standards. Moreover, the study's findings can guide regulators in strengthening oversight of *Sharia*-based fintech operations and in building a more transparent and equitable system for all stakeholders—both service providers and consumers (Muryanto, 2023).

This study offers a significant contribution in terms of novelty, particularly in advancing the concept of Islamic accounting through its integration with fintech solutions. It introduces the *Tawhīd* String Relationship (TSR) as a foundational theory that connects all forms of economic activity—including fintech—to the Islamic principle of *tawhīd* (oneness of God). This provides a new dimension in understanding how fintech should operate within a *Sharia* framework, not only in terms of its products but also in relation to the core values that guide all economic activities (Rahim *et al.*, 2023). Additionally, the research explores the application of *Maqāṣid al-sharī'ah* in the context of fintech, emphasizing the pursuit of *Sharia* objectives aimed at promoting the well-being of society. It introduces a fresh perspective on how *Sharia* principles can be applied in the digital era, aligning technology adoption with ethical and spiritual goals (Bashori *et al.*, 2024). Another key novelty lies in the analysis of how current regulatory frameworks can be strengthened or adapted to support the integration of fintech within Islamic financial institutions. The study proposes a new approach to regulatory design—one that goes beyond technical and operational aspects and also incorporates ethical and *Sharia* considerations, an area that is still rarely addressed in similar research. As a result, this study not only enriches the theoretical discourse on Islamic accounting and fintech, but also offers practical insights and policy recommendations to help shape a more inclusive, ethical, and technology-driven future for the Islamic finance industry.

LITERATURE REVIEW

The *Tawhīd* String Relationship (TSR) is a theoretical framework that connects all aspects of life to the principle of *tawhīd*—the oneness of God—in Islam. In this context, TSR asserts that every economic activity, including those in the fintech sector, must be rooted in the intention to seek the pleasure of Allah (Nugroho *et al.*, 2022). This theory goes beyond simply ensuring that products and transactions comply with *Sharia*; it offers a broader perspective on how economic actions should generate positive outcomes for

society and contribute to the common good (Abiola-adams *et al.*, 2023). TSR emphasizes the inseparable connection between religious values and economic practices, suggesting that all financial activities should aim toward a higher purpose—namely, the well-being of humanity. As such, this study applies TSR to examine how fintech solutions can align with *Sharia* principles while also delivering greater social benefits, rather than focusing solely on financial gain. By incorporating TSR, the study takes a more comprehensive view of fintech integration within the Islamic financial system—one that simultaneously considers spiritual, social, and economic dimensions. This approach allows for a deeper understanding of how technology can serve the goals of Islamic finance in a more ethical and holistic manner (Elamin, 2023).

Maqāṣid al-sharī'ah is a foundational concept that outlines the primary objectives of Islamic law in promoting the well-being of society. It focuses on five essential dimensions that any economic system—including fintech—must protect: religion (*din*), life (*nafs*), intellect (*'aql*), lineage (*nasl*), and wealth (*māl*) (Haque *et al.*, 2024). In the context of fintech, applying the principles of *Maqāṣid al-sharī'ah* ensures that services are not only compliant with *Sharia* regulations, but also contribute to broader societal benefits in line with social justice and communal welfare (F. Habib, 2023). *Maqāṣid al-sharī'ah* emphasizes that fintech should not operate solely for material profit but should instead serve the higher purpose of advancing public good (*maslahah*) (Kasri *et al.*, 2023). This includes promoting financial inclusion across all segments of society, safeguarding consumer rights, and creating opportunities for a fair and sustainable digital economy. By using the Maqasid framework, this research explores how regulation and governance in Islamic fintech can be structured to achieve long-term societal well-being. It provides a lens through which to evaluate whether fintech innovations are not only *Sharia*-compliant, but also ethically grounded and socially impactful.

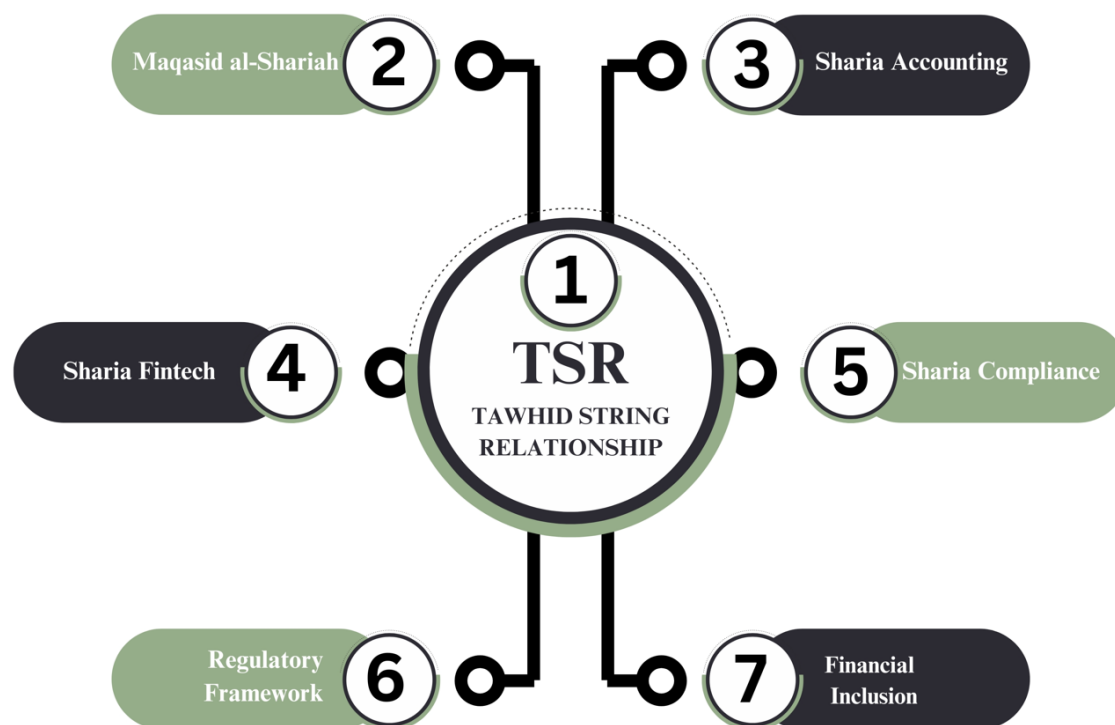
The variables analyzed in this study include Islamic accounting, which ensures that every fintech transaction adheres to *Sharia* principles—emphasizing transparency and the avoidance of *ribā* (interest), *gharar* (uncertainty), and *maysir* (gambling). *Sharia*-compliant fintech refers to financial technologies that operate in accordance with Islamic law, encompassing products such as peer-to-peer (P2P) financing and *Sharia*-compliant investment platforms (Kılıç, G., & Türkan, 2023). *Sharia* compliance serves as a measure of how closely fintech products align with the principles established in the *Qur'an*, *Hadith*, and fatwas issued by bodies such as Indonesia's National *Sharia* Council (DSN-MUI) (Muhammad Rais & Harya Pramata, 2024). A strong regulatory framework is also essential in supporting the operation of Islamic fintech, ensuring proper oversight by authorities like the Financial Services Authority (OJK) and the active role of *Sharia* Supervisory Boards (DPS). Lastly, financial inclusion is a key variable in ensuring access to financial services for segments of the population underserved by traditional financial systems (Nuri, 2025). This aligns with the goals of *Maqāṣid al-sharī'ah*, which promotes the public good and overall societal welfare. This study aims to explore how Islamic accounting, *Sharia*-compliant fintech, *Sharia* adherence, regulatory frameworks, and financial inclusion work together to build a more just and sustainable financial system.

Previous studies have widely explored the integration of technology into Islamic finance, but many of them have focused primarily on technical aspects—such as the use of blockchain and cryptocurrency in *Sharia*-compliant transactions. For instance, research by Asyiqin *et al.* (2024) highlights the regulatory challenges in integrating fintech with Islamic finance, emphasizing the importance of ensuring that fintech operations align with *Sharia* principles. Their study also stresses the need for stronger regulatory oversight to safeguard *Sharia* compliance. While acknowledging the benefits

fintech brings—particularly in advancing financial inclusion—the research points out that maintaining full *Sharia* compliance remains a major challenge in regulating and supervising fintech activities. Meanwhile, (Muryanto *et al.*, 2022). finds that although countries like Indonesia and other Muslim-majority nations have begun to adopt Islamic fintech, a significant gap still exists between current regulations and the rapidly evolving needs of the market (Alshater *et al.*, 2022). His study underscores the importance of developing more comprehensive regulatory frameworks to ensure *Sharia* compliance in fintech solutions.

The conceptual framework in this study is designed to explain the relationship between Islamic accounting, fintech, and *Sharia* compliance within the context of Total Societal Responsibility (TSR) and the *Maqāṣid al-sharī'ah* (Ridwan *et al.*, 2023). The proposed model aims to link the implementation of *Sharia* principles in fintech operations with the broader goal of promoting societal well-being, as reflected in the objectives of *Maqāṣid al-sharī'ah*. This research will examine how the application of Islamic accounting in *Sharia*-compliant fintech can enhance adherence to *Sharia* principles, while also ensuring that fintech contributes to financial inclusion and consumer protection. More specifically, the framework will analyze the impact of fintech integration on *Sharia* compliance within Islamic financial institutions, as well as the challenges they face in maintaining compliance with Islamic law in the digital era (Adesola Oluwatosin Adelaja *et al.*, 2024). Additionally, this study will explore the regulatory frameworks needed to support more effective and sustainable operations of *Sharia*-based fintech.

Figure 1. Conceptual Framework of the Study



Source: Author's Own

As illustrated in Figure 1 above, the conceptual framework provides a simplified visual representation of the key variables in this study: Islamic Accounting, *Sharia*

Fintech, *Sharia* Compliance, Regulatory Framework, Financial Inclusion, *Tawhīd* String Relationship (TSR), and *Maqāṣid al-sharī'ah*. This framework outlines how these elements are interconnected and collectively contribute to the study's overall objective.

METHODS

This study employs a descriptive qualitative research design aimed at addressing the research questions related to the implementation of Islamic accounting in *Sharia*-compliant fintech and its connection to *Sharia* compliance and existing regulatory frameworks (Kamaldeen, 2024). This approach is chosen because descriptive qualitative methods allow researchers to explore and describe existing phenomena through the analysis of secondary data from relevant previous studies (Barada, 2013). The study places a strong emphasis on theoretical exploration by linking the concepts of *Tawhīd* String Relationship (TSR) and *Maqāṣid al-sharī'ah* within the context of Islamic fintech (As-Salafiyah, 2024). The data used in this research consists of secondary sources, including scholarly journal articles, reports, and other documents that discuss Islamic accounting, *Sharia* fintech, *Sharia* compliance, regulatory frameworks, and the application of TSR and *Maqāṣid al-sharī'ah* in the fintech sector. By analyzing secondary data, the researcher is able to draw insights from a variety of perspectives in the existing literature. This forms a critical foundation for identifying research gaps and offering more meaningful contributions to the field.

Data collection was conducted through an in-depth literature review, gathering previous research, journal articles, government reports, and fatwas from the MUI relevant to the research topic, such as Scopus, Emerald Insight, Google Scholar, DOAJ, and publication portals from OJK or DSN-MUI. The researcher identified and evaluated existing literature to gain a clearer understanding of the relationship between Islamic accounting, *Sharia*-compliant fintech, and *Sharia* compliance, as well as how current regulations influence the implementation of fintech in the Islamic finance sector (Kismawadi, 2024). All collected data were then analyzed and categorized based on key themes relevant to the research questions. This secondary data also served to provide insights into the challenges Islamic financial institutions face when adopting fintech solutions while maintaining *Sharia* compliance (Lutfiah, 2024). Once the data was gathered, the processing phase involved organizing the information into thematic categories such as *Sharia* regulations, the regulatory framework for fintech, and the principles of TSR and *Maqāṣid al-sharī'ah*. This process aimed to identify regulatory gaps, institutional challenges, and the potential benefits of adopting *Sharia*-compliant fintech. Through this descriptive analysis, the study seeks to present a clear and in-depth picture of how fintech solutions can be effectively integrated into the Islamic financial sector.

The analysis in this study focuses on exploring the relationship between Islamic accounting and *Sharia*-compliant fintech, as well as how *Sharia* compliance principles are implemented within fintech systems (Alsmadi, 2025). The research also examines the role of existing regulations, particularly the roles played by the Financial Services Authority (OJK) and the *Sharia* Supervisory Board (DPS), in ensuring adherence to *Sharia* principles. In addition, the study explores how a more robust regulatory framework can be developed to support the growth of inclusive and sustainable *Sharia*-based fintech.

RESULT AND DISCUSSION

Result

■ **Integration of Fintech Solutions and Its Impact on *Sharia* Compliance and the Challenges Faced in the Digital Financial Era**

The integration of financial technology (fintech) solutions within Islamic financial institutions (IFIs) reflects a significant transformation in the Islamic finance landscape (Rani *et al.*, 2024). Amid the rapid development of digital technology, IFIs are not only expected to keep up with innovation but also ensure that every application of technology aligns with *Sharia* principles. This phenomenon places a great deal of urgency on maintaining *Sharia* compliance as the fundamental basis for all Islamic economic activities. Compliance with *Sharia* is not merely a formality but reflects a commitment to *maqāṣid al-sharī'ah*—the primary objectives of Islamic law—which aim to protect religion, life, intellect, lineage, and wealth. The grand theory used in this study is *Tawhīd* String Relationship (TSR), a conceptual approach that links economic and business activities with the values of *tawhīd* in Islam (Nugroho *et al.*, 2022). According to TSR, all economic activities, including fintech innovation, must aim to achieve the public good and seek Allah's pleasure as the ultimate goal.

Previous studies have shown that the integration of fintech in the Islamic financial sector brings numerous benefits, such as improved operational efficiency, expanded financial inclusion, and increased service transparency (Ahmad, 2024). However, the main challenge lies in maintaining the integrity of *Sharia* compliance in a rapidly evolving digital ecosystem. Several studies emphasize that not all fintech products can be immediately considered *Sharia*-compliant. For example, the risks of *ribā*, *gharar*, and *maysir* often lie hidden within algorithmic practices or smart contracts that have not undergone *Sharia* audits. For instance, research by Usman *et al.* (2022) developed a TAM (Technology Acceptance Model) by adding variables such as *Sharia* compliance, *Sharia* knowledge, and trust in *Sharia*. The results show that these three variables have a significant impact on customer satisfaction in *Sharia* e-banking services. This indicates that the acceptance of technology in Islam heavily depends on consumers' perceptions and understanding of *Sharia*. Additionally, from a legal perspective, research by Muryanto *et al.* (2022) suggests that countries like Indonesia still face regulatory challenges in creating a legal framework for *Sharia* fintech. There is a need for national laws or regulations that explicitly address *Sharia* compliance in fintech operations, including supervisory standards from the *Sharia* Supervisory Board (DPS) and financial authorities such as OJK. Based on a bibliometric review by Qudah *et al.* (2023), four major research trends in *Sharia* fintech are financial inclusion and corporate governance, the transformation of Islamic financial services, integration of information technology, and the challenges and opportunities of digitalizing Islamic finance. This shows that digital transformation is inevitable but must not neglect the Islamic philosophical roots based on *maqāṣid* and *tawhīd*. Another phenomenon highlights the gap between digital literacy and *Sharia* literacy among industry players and consumers. In Indonesia, for example, despite having the largest Muslim population in the world and over 5,000 Islamic financial institutions (Muhammad & Nugraheni, 2022), *Sharia* fintech transactions still lag behind countries such as Saudi Arabia and Iran. This is largely due to the weak public understanding and lack of educational mechanisms and regulatory oversight.

This research uniquely combines TSR and *maqāṣid al-sharī'ah* as an integrative approach to examine the impact and challenges of implementing fintech in IFIs. It offers a holistic framework that not only considers the technological and efficiency aspects but

also the ethical, social, and spiritual dimensions. In the perspective of TSR, fintech innovation should be a means to build economic justice, reduce inequality, and foster a culture of sharing and mutual assistance (*itsar*) within the financial system.

▪ **Regulatory Framework to Strengthen the Operational Integrity of *Sharia* Fintech**

The operational integrity of *Sharia* fintech services in the digital era is not only determined by technological capability and innovation but also highly dependent on the strength of the regulatory framework that governs it. The phenomenon of global growth in *Sharia* fintech, particularly in Muslim-majority countries like Indonesia, shows a strong drive to introduce inclusive financial solutions that align with *Sharia* principles (Anwar, 2024). However, this growth has not been accompanied by a well-established legal and regulatory structure, leading to numerous challenges in maintaining *Sharia* compliance amid the complexity of digital services. This issue is particularly important because *Sharia*-compliant financial services must not only meet the regulatory requirements of bodies like the Financial Services Authority (OJK) but also adhere to the norms outlined in the *Qur'an*, *Hadith*, and other sources of Islamic law.

In Indonesia, although there has been an increase in *Sharia* fintech transactions, the volume of these transactions is still relatively small compared to countries like Saudi Arabia, Iran, and Malaysia (Suswanto *et al.*, 2025). One of the main reasons for this disparity is the weakness in the legal framework that can ensure a harmonious integration of digital innovation with *Sharia* principles. Currently, there is no specific law regulating the operations of *Sharia* fintech, which means oversight remains sectoral and partial. As a result, many fintech operators run their businesses using conventional models and then label them as "*Sharia*-compliant" without a deep evaluation of their contractual structures, business processes, or social impact. This raises concerns that many *Sharia* fintech products are merely cosmetic or branded as such, rather than being genuinely compliant. To address this issue, this research adopts the grand theory of *Tawhīd* String Relationship (TSR), which emphasizes the integration of spiritual (*tawhīd*), social, and economic aspects in the operations of Islamic financial institutions. TSR requires that every economic activity, including technological innovations, be directed toward achieving social justice, ecosystem balance, and full compliance with divine values.

In this context, the regulatory framework for *Sharia* fintech cannot be designed using a conventional approach alone. It must adopt a dual approach, combining formal legal principles from financial regulators with the substantial values of Islamic law. According to a report DinarStandard (2021), global Islamic fintech in 2020 recorded transactions amounting to USD 49 billion, and is projected to increase to USD 128 billion by 2025. However, this increase brings serious risks if it is not matched by strong and comprehensive regulations. Regulation is needed to close gaps that can be exploited by non-compliant fintech companies that disregard *Sharia* principles such as the prohibition of *ribā*, speculative practices (*maysir*), and excessive uncertainty (*gharar*). A study by Muryanto *et al.* (2022) emphasizes that Indonesia's greatest challenge in developing *Sharia* fintech is the lack of integrated and systematic *Sharia* oversight. They propose the creation of an Islamic Fintech Act that has legal power to regulate all aspects of *Sharia* fintech operations, including licensing, *Sharia* compliance, internal audits, and consumer dispute resolution mechanisms.

From an institutional perspective, strengthening the role of the *Sharia* Supervisory Board (DPS) is necessary to ensure that it does not just serve an administrative role, but also proactively supervises with support from digital audit technologies. Furthermore, the

maqāṣid al-sharī'ah approach can be a key guide in designing this regulatory framework. *Maqāṣid al-sharī'ah* not only requires the legitimacy of the form (compliance), but also justice and benefit (substance) in its implementation (As-Salafiyah, 2024). Fintech services that merely replicate conventional service structures and then label them as “*Sharia-compliant*” are insufficient if they do not bring tangible benefits. Therefore, regulators must ensure that every fintech product truly avoids *ribā* and does not burden users with hidden financial costs through complex algorithmic mechanisms. This is particularly relevant when discussing services like *Sharia* peer-to-peer lending or blockchain-based microfinancing. Smart contracts used in these services must have verified *Sharia* compliance clauses, not just technical automation. Research by Usman *et al.* (2022) also highlights the importance of *Sharia* compliance education in increasing customer trust in *Sharia* e-banking services. They found that the public’s perception of *Sharia* is influenced not only by regulations but also by transparency, communication, and consistency in services. In other words, the regulatory framework must simultaneously educate the public and industry players through *Sharia*-based digital literacy.

At a macro level, research by Qudah *et al.* (2023), through bibliometric analysis, identifies that one of the major future trends in the development of Islamic fintech is the need for a balance between technological innovation and a responsive regulatory structure. In this context, regulators must play the role of both facilitators and integrity guards, not just law enforcers. This role requires regulators to stay updated on technologies such as AI, blockchain, and big data, which are increasingly adopted by *Sharia* fintech players.

▪ **Risks and Benefits of Adopting Fintech Solutions in *Sharia* Financial Institutions (LKS)**

The adoption of financial technology (fintech) solutions by *Sharia* financial institutions (LKS) has created a new dynamic in Islamic finance practices (Abdullah *et al.*, 2024). This phenomenon not only drives a massive digital transformation but also presents fundamental challenges to *Sharia* governance, consumer protection, and financial inclusion. Fintech, which was initially developed in the conventional ecosystem, is now being adopted by *Sharia*-based institutions to improve efficiency, expand financial access, and provide products and services that align with Islamic principles. However, during this process, a critical issue arises: how to ensure that the adoption of this technology truly aligns with *maqāṣid al-sharī'ah*—the protection of religion, life, intellect, lineage, and wealth—as the philosophical foundation of the Islamic economic system.

A striking phenomenon in the growth of *Sharia* fintech is the significant increase in services such as peer-to-peer lending, digital payment platforms, and blockchain-based investments. According to the report DinarStandard (2021), the global transaction volume of *Sharia* fintech in 2020 reached USD 49 billion, and it is projected to increase to USD 128 billion by 2025. However, amid this growth, there are significant risks that, if not addressed seriously, could undermine public trust in *Sharia* finance. For example, many products labeled as *Sharia-compliant* have not gone through rigorous *Sharia* audits and certification, which can allow the occurrence of practices containing *ribā* or *gharar*. This highlights the importance of strong *Sharia* governance, not merely as an administrative formality, but as a system of oversight embedded in every digital service process.

The grand theory used in this research is *Tawhīd* String Relationship (TSR), which explains that all economic activities in Islam, including financial technology innovations,

must be integrated with the values of *tawhīd* (monotheism) as the central orientation. From the TSR perspective, the adoption of fintech must lead to the creation of value that balances both spiritual and material needs. Finance is not solely viewed as an instrument for economic growth, but also as a means to establish social justice and protect society from uncertainty and exploitative practices. Therefore, the use of digital technology must be directed towards achieving tangible benefits for the community, especially for groups previously excluded from formal financial services.

From a benefit perspective, *Sharia* fintech has great potential in expanding financial inclusion. Through digital approaches, financial services can now reach segments of society that were previously excluded from formal financial institutions, such as people in remote areas, informal workers, and small and medium-sized enterprises (SMEs). Technology enables the opening of accounts online, micro-financing based on *Shariah* principles without heavy collateral requirements, as well as easily accessible digital platforms for *zakat* and *waqf*. This opens up significant opportunities for *Sharia* finance to be more inclusive and responsive to societal needs. The digital features also enhance efficiency and transparency in every transaction, which ultimately reduces costs and increases consumer trust. However, these benefits do not come without risks. One of the crucial challenges is the weak consumer protection. In the fast-paced and data-driven fintech ecosystem, consumers are vulnerable to personal data misuse, online fraud, and an imbalance of information between service providers and users. This is exacerbated by low digital literacy and *Sharia* financial literacy among the public, leading many customers to fall into products that are not fully aligned with Islamic principles. Therefore, consumer protection in *Sharia* fintech must include robust education on *Sharia* contracts, consumer rights, and easily accessible and fair dispute resolution mechanisms.

Sharia governance is also a weak point that is often overlooked in the development of *Sharia* fintech services. Many platforms that claim to be "*halal*" lack oversight from independent and competent *Sharia* Supervisory Boards (DPS). In some cases, DPS is only present as a formal requirement to meet administrative obligations, rather than as an entity actively overseeing business processes. In this context, regulations should encourage DPS to be actively involved from the product design process, system development, implementation, and service evaluation. This is essential to ensure that digital innovations do not violate *Sharia* principles, either explicitly or implicitly.

The *maqāṣid al-sharī'ah* approach provides clear guidance in assessing the benefits and risks of *Sharia* fintech. In this framework, the utility of a product is measured by its ability to protect and advance the five main objectives of *Sharia*. An innovative product that harms consumers economically or violates justice cannot be categorized as *Sharia*-compliant. Conversely, simple technology that can expand access to financing for the poor with fair profit-sharing principles is more suitable for development. This approach places substance over form when assessing *Sharia* compliance.

From a legal framework perspective, Indonesia still faces challenges in providing a comprehensive legal basis for *Sharia* fintech. Currently, there is no specific law regulating *Sharia*-based fintech, so oversight of *Sharia* governance remains partial and unsystematic. In such a situation, the risk of violating *Sharia* principles is high. Therefore, regulations are needed that not only set technical limits but also comprehensively govern *Sharia* governance, the role of DPS, consumer rights and obligations, and penalties for violations of *Sharia* principles. This study also finds that the current regulatory framework is still not robust enough to fully support the *optimāl* development of *Sharia*-compliant fintech. For instance, Bank Indonesia Regulation (PBI) No. 19/12/PBI/2017 and regulations from the Financial Services Authority (OJK) provide a solid foundation,

but they are not yet sufficient to address the complexity and rapid dynamics brought about by technological advancements (Syarif & Aysan, 2024). Therefore, a more comprehensive and adaptive regulatory framework is needed—one that can keep pace with innovation while remaining firmly grounded in *Sharia* principles. The study highlights the importance of stronger oversight from the Financial Services Authority (OJK) and a more active role from the *Sharia* Supervisory Board (DPS) to ensure that fintech products and services offered by Islamic financial institutions are not only operationally efficient but also fully aligned with Islamic law. *Maqāṣid al-sharī'ah* emphasizes that any regulatory framework must prioritize the well-being of the community and the protection of consumers. These should be central considerations in all regulations applied to *Sharia*-compliant fintech. In this regard, regulations must both support innovation and safeguard the integrity of operations, ensuring that fintech products contribute to public welfare in accordance with *Sharia* values. Table 1 illustrates the relationship between the *Sharia* fintech regulatory framework and the *Tawhīd* String Relationship (TSR) and *maqāṣid al-sharī'ah* concepts. This table shows how existing regulations, such as PBI, POJK, and Fatwa MUI (Aulia *et al.*, 2020), directly relate to the implementation of *Sharia* principles in fintech. TSR demands transparency and justice in fintech transactions, while *maqāṣid al-sharī'ah* focuses on oversight aimed at achieving social welfare and consumer protection for the public good. This table also highlights that data protection, financial inclusion, and effective oversight are the key aspects that must be considered in building a trusted *Sharia* fintech ecosystem.

Table 1. The Relationship Between *Sharia* Fintech Regulatory Framework with TSR and *Maqāṣid al-sharī'ah*

No.	Regulatory Aspect	Regulations of PBI, POJK, and Fatwa MUI	Relation to TSR and <i>Maqāṣid al-sharī'ah</i>
1	<i>Sharia</i> Compliance	<ul style="list-style-type: none"> ▪ PBI No. 11/33/PBI/2009 on the Implementation of Good Corporate Governance (GCG) for <i>Sharia</i> Commercial Banks (BUS) and <i>Sharia</i> Business Units (UUS) ▪ POJK No. 77/POJK.01/2016 on Information Technology-Based Money Lending Services (Fintech Lending) ▪ Fatwa DSN-MUI No. 146/DSN-MUI/IX/2021: <i>Sharia</i> Guidelines for Online Shop Operations. 	<ul style="list-style-type: none"> ▪ TSR emphasizes that all transactions must adhere to the principle of <i>tawhīd</i>. ▪ <i>Maqāṣid al-sharī'ah</i> ensures that fintech transactions contribute to the welfare of the ummah.
2	Supervision & Control	<ul style="list-style-type: none"> ▪ PBI No. 7/35/PBI/2005 on the Supervision Guidelines for <i>Sharia</i> Banks 	<ul style="list-style-type: none"> ▪ TSR regulates transparency and fairness in fintech transactions.

No.	Regulatory Aspect	Regulations of PBI, POJK, and Fatwa MUI	Relation to TSR and <i>Maqāṣid al-sharī'ah</i>
3	Consumer Protection	<ul style="list-style-type: none"> POJK No. 2 of 2024 on the Implementation of <i>Sharia</i> Governance for <i>Sharia</i> Commercial Banks and <i>Sharia</i> Business Units Fatwa DSN-MUI No. 135/DSN-MUI/V/2020: On shares, which regulates <i>Sharia</i> principles in stock investments PBI No. 16/1/PBI/2014 on Consumer Protection in Payment System Services POJK No. 6/POJK.07/2022 on Consumer Protection Fatwa MUI No. 57/DSN-MUI/VII/2024 on: The Application of <i>Sharia</i> Principles in Protecting Investors' Assets in Capital Markets 	<ul style="list-style-type: none"> <i>Maqāṣid al-sharī'ah</i> focuses on supervision to achieve social welfare. TSR ensures that consumer rights are protected according to Islamic teachings. <i>Maqāṣid al-sharī'ah</i> ensures consumer protection for the public good.
4	Data Security & Privacy	<ul style="list-style-type: none"> PBI No. 19/12/PBI/2017 on Financial Technology Services (Fintech) POJK No. 6/POJK.07/2022 on Consumer and Public Protection in the Financial Services Sector Fatwa DSN-MUI No. 117/DSN-MUI/II/2018 on Information Technology-Based Financing Services 	<ul style="list-style-type: none"> TSR regulates data protection to maintain public trust. <i>Maqāṣid al-sharī'ah</i> directs data protection to prevent social harm.sosial.
5	Financial Inclusion	<ul style="list-style-type: none"> PBI No. 10/16/PBI/2008 on Financial Inclusion in the <i>Sharia</i> System POJK No. 76/POJK.07/2016 on Increasing Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Public Fatwa MUI No. 21/DSN-MUI/X/2001 on Financial 	<ul style="list-style-type: none"> TSR ensures that fintech provides benefits for the ummah as a whole. <i>Maqāṣid al-sharī'ah</i> focuses on improving financial inclusion for the welfare of the ummah.

No.	Regulatory Aspect	Regulations of PBI, POJK, and Fatwa MUI	Relation to TSR and <i>Maqāṣid al-sharī'ah</i>
		Inclusion in the <i>Sharia</i> System	

Source: Author's Own

Discussion

The rapid growth of financial technology (fintech) adopted by Islamic Financial Institutions (IFIs) reflects a response to consumer demands for speed, convenience, and efficiency in financial services. However, many platforms claiming to be *Sharia*-compliant have yet to undergo proper certification or audits in accordance with Islamic principles (Aman, 2020). This highlights a gap between digital innovation and the substantive values of *Sharia*—particularly regarding contract structures, avoidance of *ribā* (interest), and the hidden potential for *gharar* (ambiguity) within algorithmic processes. According to Hasan *et al.* (2020), it is essential to ensure that technology is not only *halal* in label but also *tayyib* in both process and outcome. As emphasized by Nugroho *et al.* (2020), the principle of *Tawhīd* String Relation (TSR) becomes increasingly relevant, demanding the integration of spiritual, social, and economic values in every technological innovation. On the regulatory side, the absence of a specific legal framework for *Sharia*-based fintech presents a pressing challenge. Muryanto *et al.* (2022) note that the lack of dedicated regulation weakens oversight of digital products that should conform to Islamic principles. This is echoed by Diniyya *et al.* (2021), who found that existing legal structures remain too general to address the specific needs of Islamic fintech. Thus, a comprehensive regulatory framework is needed—one that bridges positive law and the objectives of *maqashid Shariah*. Aligned with TSR, such regulation should not only prevent violations but also foster a balanced environment of justice, transparency, and efficiency within the digital ecosystem.

The benefits of Islamic fintech adoption can be seen in the expansion of financial access for previously unbanked populations. Qudah *et al.* (2023) found that fintech has significant potential to support financial inclusion through digital means, including micro-*Sharia* financing and digital platforms for *zakat* and *waqf* services. However, these benefits are overshadowed by various risks stemming from low levels of *Sharia* financial literacy among the public. Usman *et al.* (2022) emphasize that customer perceptions of *Sharia* compliance rely heavily on the clarity of contracts and the transparency of information. Without robust oversight, consumers may fall into practices of *gharar* or even hidden *ribā*, especially in products lacking clear explanations.

Another challenge arises from the limited involvement of the *Sharia* Supervisory Board (SSB) during the product design and development stages. In many cases, fintech companies only engage SSBs at the final stages for administrative formality, rather than as strategic partners in shaping the business structure. This undermines substantive *Sharia* compliance. As noted by Ridwan *et al.* (2023), *maqashid Shariah* goes beyond formal legality it emphasizes the public benefit (*maslahah*) achieved through the Islamic financial system. Therefore, audits based on *maqashid* principles and tech-based SSB oversight are urgent and indispensable. From a regulatory standpoint, the proposed approach is to enact a specific law governing Islamic fintech comprehensively. This would include mandatory *Sharia* certification standards, full integration of the SSB across all operational stages, and enforcement measures for violations of *Sharia* principles in

digital platforms. [Diniyya et al. \(2021\)](#) recommend that financial authorities like Indonesia's OJK collaborate with *fiqh muamālah* scholars and technology experts to build a credible and resilient *Sharia* fintech ecosystem. In doing so, regulation would serve not only as a control mechanism but also as a facilitative tool for sustainable and inclusive Islamic economic growth.

Consumer protection in the context of Islamic fintech must be pursued through two key approaches. First, *Sharia*-based digital literacy and education should be expanded to help consumers understand the contracts, benefits, and risks of the products they use. Second, dispute reporting and resolution mechanisms should be digitized, easily accessible, and supported by guidance from *Sharia* authorities. [Muryanto \(2023\)](#) highlights that weak consumer protection opens the door to exploitation and information asymmetry—particularly in app-based lending and investment services. [Table 2](#) below illustrates the direct connection between fintech integration & *Sharia* compliance, *Sharia* fintech regulatory frameworks, as well as the risks and benefits of adopting *Sharia* fintech.

Table 2. *Sharia* Fintech from the Perspective of Compliance, Regulation, and Risk-Benefit

Aspects	Integration of Fintech & <i>Sharia</i> Compliance (Hasan et al., 2020 ; Nugroho et al., 2020 ; Ridwan et al., 2023)	<i>Sharia</i> Fintech Regulatory Framework (Muryanto et al., 2022 ; Suaidi, 2025)	Risks & Benefits of Adopting <i>Sharia</i> Fintech (Usman et al., 2022 ; Qudah et al., 2023 ; Muryanto, 2023)
Phenomenon	The use of fintech by IFIs has increased, but most have not yet been accompanied by consistent <i>Sharia</i> certification mechanisms.	The absence of specific legal frameworks leads to partial supervision of <i>Sharia</i> digital systems and products.	The adoption of fintech expands financial services, but creates new gaps that require readiness in governance and education.
Main Focus	Identifying how far <i>maqāṣid al-sharī'ah</i> principles are present in fintech-based digital features and contracts.	Designing a supervision system and standardization of financial technologies subject to <i>Sharia</i> values and national regulations.	Weighing the financial benefits and the risks of <i>Sharia</i> compliance of fintech products for consumers and the wider society.
Grand Theory	<i>Tawḥīd</i> String Relation is used to integrate the spiritual and technological dimensions into Islamic fintech structures.	TSR demands a regulatory framework that combines the orientation of public welfare and authoritative transparency.	TSR and <i>maqashid</i> are used as tools to measure the balance between technological efficiency and <i>Sharia</i> justice.

Aspects	Integration of Fintech & <i>Sharia</i> Compliance (Hasan <i>et al.</i> , 2020 ; Nugroho <i>et al.</i> , 2020; Ridwan <i>et al.</i> , 2023)	<i>Sharia</i> Fintech Regulatory Framework (Muryanto <i>et al.</i> , 2022; Suaidi, 2025)	Risks & Benefits of Adopting <i>Sharia</i> Fintech (Usman <i>et al.</i> , 2022; Qudah <i>et al.</i> , 2023; Muryanto, 2023)
Benefits	Provides an alternative to digital <i>Sharia</i> financial transactions that are faster and more practical compared to conventional methods.	Builds public trust in modern Islamic financial systems that are supervised by both legal and religious standards.	Provides financial access to underserved segments, including SMEs and rural communities, through <i>Sharia</i> financing approaches.
Risks / Challenges	Many platforms only use the " <i>Sharia</i> " label without in-depth analysis of contracts and their <i>Sharia</i> risks.	The lack of a unified operational standard causes different interpretations of what is <i>halal</i> and <i>haram</i> in digital financial products.	Low financial literacy causes users to be vulnerable to practices such as <i>gharar</i> , implicit <i>ribā</i> , and misuse of personal data.
Recommendations	Require <i>Sharia</i> audits and verification from the design stage, not just after implementation.	Specific <i>Sharia</i> fintech regulations are needed, with legal binding and active involvement of <i>Sharia</i> Supervisory Boards at all levels.	Socialize <i>Sharia</i> principles and strengthen digital literacy at the grassroots level as a foundation for consumer protection.

Source: Author's Own

CONCLUSION

This study demonstrates that the integration of fintech solutions in Islamic financial institutions (IFIs) has a significant impact on *Sharia* compliance. *Sharia* fintech offers various innovative services that enhance accessibility, speed, and efficiency in financial transactions. However, the biggest challenge faced is ensuring that every product and service remains in compliance with fundamental *Sharia* principles. *Tawhīd* String Relationship (TSR), as the grand theory used in this research, guides that every transaction in *Sharia* fintech must be conducted with the intention of seeking Allah's pleasure, thus requiring the integration of technology with deep Islamic principles. This study also emphasizes that an adequate regulatory framework is essential to maintain the operational integrity of *Sharia* fintech services and ensure compliance with principles found in the *Qur'an*, *Hadith*, and MUI Fatwa (Saifullah *et al.*, 2024). However, the existing regulatory framework is still insufficient to accommodate the rapid growth of financial technology. PBI, POJK, and MUI Fatwas provide a good basic guideline, but

the major challenge faced by IFIs is the lack of a comprehensive regulation that accommodates fintech innovations while ensuring full compliance with *Sharia* principles. A more comprehensive and adaptive regulatory framework is urgently needed, particularly one that considers Maqasid *Sharia* and the public welfare in every fintech product implemented.

This study recommends that the *Sharia* fintech regulatory framework be strengthened with tighter supervision from the Financial Services Authority (OJK) and the *Sharia* Supervisory Board (DPS) to ensure that every product and service offered complies with *Sharia* principles while upholding the welfare of the community. Technological innovation should be encouraged, but it should not compromise the foundational *Sharia* principles in the operations of Islamic financial institutions. Additionally, IFIs need to adopt more principles of transparency, justice, and consumer protection, in line with the goals of Maqasid *Sharia*. Improved and adaptive regulation of fintech development is expected to benefit the public welfare and enhance financial inclusion, which in turn can help create a sustainable and *Sharia*-compliant financial system.

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