



DIGITAL ISLAMIC FINANCE IN INDONESIA: CHALLENGES AND OPPORTUNITIES FROM A PUBLIC POLICY PERSPECTIVE

Houria Ben Gharbi
Faculty of Economics and Business
Brawijaya University Indonesia,
Jl. Veteran No.10-11, Ketawanggede, Kec. Lowokwaru
Kota Malang, Jawa Timur 65145, Indonesia.
houriabn297@gmail.com

ABSTRACT

Digital Islamic finance has emerged as a strategic instrument for advancing inclusive and ethical financial systems in Indonesia. This study examines the institutional and public policy dynamics shaping the sector during the period 2016-2025, using qualitative content analysis of laws, policy frameworks, and institutional reports. The findings highlight key developments, including Law No. 4/2023, the Digital Sharia Banking Roadmap (RP3SI), and initiatives by OJK and KNEKS that support financial inclusion, green Sukuk, and sustainability-oriented finance. However, persistent challenges remain, notably regulatory fragmentation, unequal digital infrastructure, and limited ESG-Shariah integration, which constrain broader impact, particularly in rural areas. The study concludes that while top-down reforms have established a strong policy foundation, achieving sustainable and inclusive outcomes requires coordinated regulation, local-level implementation, and strengthened public trust in digital Islamic finance.

Keywords: Islamic FinTech; Indonesia; Digital Finance; Public Policy

Submitted: 14/10/2025

Accepted: 15/12/2025

Published: 26/12/2025

INTRODUCTION

In recent years, the global financial landscape has witnessed a rapid transformation driven by digital innovation. Digital financial services have emerged as a powerful tool for enhancing financial inclusion and democratizing access to finance, especially in underserved communities. Among these innovations, Islamic digital finance stands out as a distinctive approach that blends cutting-edge technology with the ethical principles of Shariah, offering an alternative model rooted in risk-sharing, fairness, and social responsibility (Shehadeh, 2021).

Building on this global momentum, Islamic digital finance is gaining increasing attention as a means of advancing sustainable and inclusive financial systems. It not only promises efficiency and convenience but also aligns with broader goals such as promoting economic justice, financial ethics, and responsible financing. Moreover, as digital Islamic finance continues to evolve, it is increasingly recognized as a potential enabler of the United Nations Sustainable Development Goals (SDGs) (Awang et al., 2025) particularly in Muslim-majority countries where conventional financial systems may not fully meet the needs of the population.





One such country is Indonesia, the world's largest Muslim-majority nation, which has made significant strides in promoting digital Islamic finance through regulatory frameworks and institutional reforms. Government bodies such as Bank Indonesia and the Financial Services Authority (OJK) have introduced policies aimed at fostering a comprehensive Shariah digital ecosystem. Institutions like Bank Syariah Indonesia (BSI) are also investing in digital transformation (Febrika et al., 2025). Nevertheless, despite these advancements, Indonesia continues to face substantial challenges, particularly in terms of regulatory clarity, standardization, and Shariah compliance (Syed Musa et al., 2025).

Despite growing institutional interest, existing literature on Islamic FinTech tends to focus primarily on technological innovation or financial performance (Syarif, 2023; Unal & Aysan, 2022), leaving a gap in critically evaluating public policies shaping the sector. Accordingly, this study seeks to fill this gap by examining the current landscape of public policies related to Islamic digital finance in Indonesia, identifying key challenges and opportunities, and offering recommendations for sustainable development of this vital sector.

LITERATURE REVIEW

Theoretical Framework

Institutional Theory

Institutional theory is a theoretical framework in the social sciences that focuses on how institutions emerge and evolve, and how formal and informal rules shape organizational behavior and policy-making within society. According to this framework, institutions are not understood merely as legal structures, but also include social practices, cultural norms, and regulatory rules that define acceptable behaviors and confer legitimacy to economic and political entities, thereby deeply influencing the implementation of public policies and the achievement of their objectives (Mahmud, 2017). Moreover, institutional theory emphasizes that organizations are influenced not only by individual goals or economic efficiency, but also by institutional pressures (such as regulatory pressure and societal norms) that drive organizations to adopt certain practices. This phenomenon, known as Institutional Isomorphism, occurs when organizations emulate successful models in their environment to reduce risk and increase legitimacy (Pirrolas et al., 2025). Therefore, the institutional perspective is directly relevant to public policy practices, as understanding how social and regulatory rules affect organizational behavior helps policymakers design effective and sustainable policies.

In the context of digital Islamic finance in Indonesia, institutional theory can be used as an analytical tool to understand the institutional factors that influence the adoption and expansion of digital Islamic financial services. For example, a study that applied institutional theory to Islamic financial inclusion in Indonesia, examining the roles of various institutions (governmental, financial, and small and medium enterprise sectors), found that shared institutional pressures among these entities are a critical factor in enhancing the adoption of financial services, and that integrating regulatory and social pressures increases the likelihood of financial inclusion (Saifurrahman & Kassim, 2023). Linking this perspective to the challenges and opportunities in digital Islamic finance indicates that the institutional environment including regulatory frameworks, Shariah compliance standards, and social culture represents both obstacles and opportunities for digital finance and financial inclusion policies (Rofik & Huda, 2025). Therefore, from a public policy perspective, analyzing digital





Islamic finance through institutional theory helps identify institutional gaps and propose regulatory interventions that support alignment between technology, Sharia compliance, and economic development goals.

Previous Studies

Islamic finance has evolved significantly in recent decades, not only as a faith-based alternative but also as a system aligned with ethical, risk-sharing, and value-based principles. Fitria, (2025) argues that Islamic finance can serve as a mechanism for promoting socio-economic justice by avoiding interest (*riba*), excessive uncertainty (*gharar*), and speculative practices. As interest in the sector grows, many scholars have explored its potential role in enhancing financial inclusion, especially in Muslim-majority countries (Nuswantoro, 2024).

With the rise of financial technology (FinTech), digital platforms have become instrumental in expanding the reach of Islamic financial services and play a key role in connecting Shariah-compliant finance with modern digital consumer behavior. According to Syarif (2023), it is particularly effective in reaching youth and unbanked communities who are often excluded from traditional financial services. By integrating ethical finance with technology, it offers inclusive and accessible solutions. Furthermore, Unal & Aysan, (2022) argue that Islamic FinTech fosters transparency and trust by utilizing blockchain and smart contract technologies, which align well with the ethical foundations of Islamic finance and enhance operational credibility among stakeholders.

The impact of Islamic FinTech in Indonesia has been significant in enhancing financial inclusion and promoting ethical finance. Firstly, it has enabled underserved populations, particularly in rural and low-income areas, to access financing through Shariah-compliant digital platforms, thereby reducing dependency on conventional, and sometimes exploitative, credit systems (Agustina & Faizah, 2023). Secondly, Islamic FinTech has fostered entrepreneurship by offering micro and peer-to-peer financing tailored to the needs of MSMEs (Micro, Small, and Medium Enterprises), which are the backbone of Indonesia's economy (Said, 2025). Thirdly, beyond financial inclusion, these platforms have contributed to raising awareness of Islamic financial literacy among youth and digital-savvy users, aligning ethical finance with daily digital behavior (Cahyati et al., 2025). Together, these effects demonstrate that Islamic FinTech is not only a technological trend but a socio-economic enabler in Indonesia's Islamic economic ecosystem.

Despite these positive outcomes, the literature reveals significant challenges and unresolved debates concerning public policy and regulatory governance. For example, general fintech regulations such as POJK 77/POJK.01/2016 in Indonesia are not tailored to Islamic FinTech specifics, leading to gaps in legal protection and enforcement (Sudi, 2025). Another concern is the limited digital literacy and awareness of Islamic financial principles among the general public, which restricts the broader adoption of these services, especially outside urban centers (Safira et al., 2025). These limitations suggest that without stronger governance and public education, the inclusive promise of Islamic FinTech may remain partially unfulfilled. These challenges have prompted growing academic attention to the role of public policy and regulatory governance in shaping the development of Islamic FinTech in Indonesia.

In response to these regulatory and governance challenges, a small but growing strand of research has begun to address Islamic FinTech from a public policy and regulatory perspective. For example, Amin & Arifin, (2025) examine consumer protection policies within Sharia fintech services in Indonesia, highlighting challenges in transparency, dispute resolution, and effective supervision, and calling for clearer regulatory mechanisms to enhance consumer trust and protection. Additionally, Fidhayanti et al., (2024) provide a comprehensive





analysis of the legal and regulatory framework governing Islamic fintech in Indonesia, identifying gaps in current policies and proposing improvements such as better coordination among regulatory bodies and tailored licensing frameworks. These studies demonstrate that while regulatory discussions exist, they often remain descriptive and lack critical assessment of policy coherence and institutional effectiveness, leaving important debates about policy implementation largely unresolved.

Institutional theory provides a lens to interpret the findings and contradictions in previous studies. It explains how institutional pressures, regulatory frameworks, and governance mechanisms shape the development, adoption, and challenges of Islamic FinTech in Indonesia. Despite the growing recognition of public policy as a critical driver of Islamic FinTech development, the literature reveals several contradictions and unresolved debates. On the one hand, regulatory frameworks and national strategies emphasize financial inclusion, innovation, and Shariah compliance as key policy objectives. On the other hand, empirical studies continue to document persistent challenges such as fragmented regulatory authority, complex licensing procedures, and non-binding Shariah governance mechanisms that constrain innovation and limit outreach beyond urban areas (Sudi, 2025; Amin & Arifin, 2025). This contradiction raises an unresolved policy debate over whether existing regulatory structures function primarily as enablers or as constraints on Islamic FinTech development. Moreover, while some studies highlight public policy opportunities such as coordinated regulation, consumer protection reforms, and public-private partnerships to enhance trust and inclusion (Fidhayanti et al., 2024) they stop short of systematically assessing how these policy instruments align with the ethical objectives of Islamic finance, including Maqasid al-Shariah and good governance. Consequently, significant gaps remain in understanding how public policy coherence and institutional coordination shape the sustainability and ethical impact of Islamic digital finance in Indonesia.

Conceptual Framework

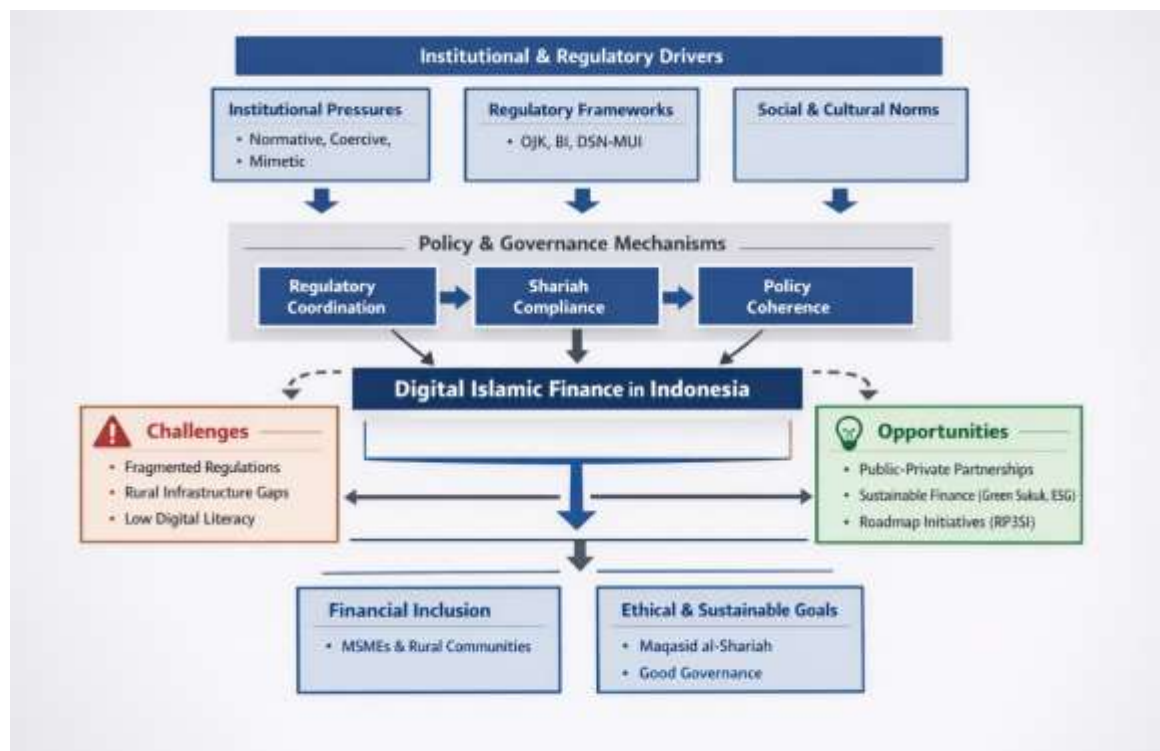


Figure 1: Conceptual framework diagram





Figure 1 presents a conceptual framework illustrating how institutional and regulatory drivers shape the development of Digital Islamic Finance in Indonesia. Institutional pressures, regulatory frameworks, and social-cultural norms influence governance mechanisms such as regulatory coordination, Shariah compliance, and policy coherence. These mechanisms, in turn, affect the adoption, financial inclusion, and ethical outcomes of digital Islamic finance. The framework also highlights key challenges, including fragmented regulations, rural infrastructure gaps, and low digital literacy, as well as opportunities through public-private partnerships, sustainable finance, and roadmap initiatives. This visualization helps link institutional theory to practical policy analysis and identifies areas for intervention to promote sustainable and inclusive Islamic digital finance.

METHODOLOGY

Research Approach

This study adopts a qualitative research approach to examine the challenges and opportunities of digital Islamic finance in Indonesia from a public policy perspective, this approach is appropriate given the exploratory nature of the research and its focus on understanding regulatory structures, institutional arrangements, and policy coherence rather than measuring causal relationships.

Research Design and Method

The study employs document-based qualitative content analysis as the primary methodological approach. This method enables a systematic and critical examination of policy texts, legal frameworks, and institutional documents to uncover underlying regulatory logic, governance mechanisms, and policy priorities shaping digital Islamic finance in Indonesia. Document analysis is particularly suitable for public policy research, as it allows the researcher to assess both formal regulatory intentions and their practical implications.

Data Sources and Document Selection Criteria

The analysis draws on a purposive selection of documents issued by key public and regulatory institutions involved in Islamic finance and financial technology governance in Indonesia. The documents analyzed include:

1. National laws and regulations (e.g., Law No. 4/2023 on Financial Sector Development and Strengthening).
2. Financial Services Authority (OJK) regulations and reports related to fintech and Islamic finance.
3. Bank Indonesia policy frameworks (e.g., BI Payment System Blueprint 2025).
4. National Sharia Council (DSN-MUI) fatwas related to digital financial services.
5. Policy roadmaps and strategic documents issued by KNEKS.
6. Government reports and official statistical publications.
7. Peer-reviewed academic studies addressing Islamic fintech regulation and governance.

Documents were selected based on the following criteria:

1. Direct relevance to Islamic finance, digital finance, or fintech regulation.
2. Explicit connection to public policy, governance, or regulatory oversight.





3. Official or authoritative status (laws, regulations, policy reports).
4. Analytical relevance to Shariah compliance, financial inclusion, or institutional coordination.

Time frame of Analysis

The study focuses on policy documents and regulatory texts issued between 2016 and 2025. This period captures the emergence of fintech-specific regulation in Indonesia (beginning with POJK No. 77/2016), as well as recent regulatory reforms and institutional developments, including Law No. 4/2023 and the Digital Shariah Banking Roadmap (RP3SI) 2023–2027. This time frame allows for the identification of both policy continuity and regulatory evolution.

Analytical Procedure and Interpretation of Policy Texts

Policy documents were interpreted using thematic content analysis. The analysis followed three main stages. First, relevant texts were carefully read to identify recurring regulatory themes, policy objectives, and institutional roles. Second, policy statements were interpreted in light of institutional theory, focusing on how regulatory pressures, governance structures, and legitimacy mechanisms influence organizational behavior within the Islamic fintech ecosystem. Third, the findings were compared across documents to identify inconsistencies, overlaps, and gaps between stated policy goals and regulatory implementation rather than treating policy texts as neutral instruments, this study interprets them as institutional tools that reflect power relations, governance priorities, and normative assumptions about innovation, inclusion, and Shariah compliance.

Coding Strategy and Thematic Framework

A deductive coding strategy was applied, guided by institutional theory and the research objectives. Four main analytical themes were developed prior to coding:

1. Regulatory coherence (alignment and consistency across laws, regulations, and institutional mandates).
2. Shariah governance mechanisms (role of DSN-MUI, enforce ability of fatwas, and Shariah oversight).
3. Institutional coordination (interaction among OJK, Bank Indonesia, KNEKS, and other public actors).
4. Digital financial inclusion (policy measures targeting MSMEs, rural populations, and underserved communities).

During analysis, additional sub-themes emerged inductively, including regulatory fragmentation, licensing complexity, digital infrastructure gaps, and public–private partnerships. These themes were then mapped onto the conceptual framework to explain how institutional and regulatory drivers shape outcomes in digital Islamic finance.





RESULTS AND DISCUSSION

Regulatory Coherence and Shariah Compliance

One of the central challenges facing digital Islamic finance in Indonesia is the fragmentation and lack of coherence within its regulatory and Shariah-compliance frameworks. Indonesia relies primarily on regulations issued by the Financial Services Authority (OJK) and Bank Indonesia, supplemented by fatwas from the National Shariah Council (DSN-MUI). However, these instruments often operate in isolation rather than in a unified manner, leading to inconsistent application across fintech platforms (Susilawati et al., 2021).

Unlike Malaysia's consolidated Islamic Financial Services Act (2013) and centralized Shariah Advisory Council, Indonesia's decentralized model allows providers to interpret DSN fatwas differently, resulting in varying standards of compliance and consumer uncertainty (Batool, 2025; Asyiqin et al., 2024). This divergence undermines regulatory clarity, affects investor confidence, and may inhibit cross-platform interoperability.

Content analysis of public policy documents reveals that while OJK issued fintech-specific rules, such as POJK No. 77/2016 on P2P lending (OJK, 2016) and DSN-MUI Fatwa No. 117/DSN-MUI/IX/2018 on IT-based financing (DSN-MUI, 2018) these remain non-binding unless integrated into legal mandates (Ishak et al., 2022). The absence of mandatory regulatory incorporation of DSN fatwas weakens their enforceability, allowing some fintech entities to self-identify as Shariah-compliant without external validation. Moreover, recent research on POJK 77/2016 highlights regulatory misalignments with practical FinTech behavior. The regulation still presents significant operational challenges due to overly high minimum capital requirements and complex licensing procedures, which limit the entry of small FinTech firms and hinder innovation in the sector (Isman, A. 2024).

Furthermore, governance gaps emerge in institutional coordination. The 2023 omnibus Law No. 4/2023 on Financial Sector Development and Strengthening expanded OJK's powers but did not establish a unified mechanism for Shariah oversight across sectors like P2P lending, e-wallets, or emerging digital assets even as the law alludes to digital rupiah and cryptocurrencies (Izmi, 2024; Transatlantic Law International, 2023). As a result, OJK, Bank Indonesia, DSN-MUI, and the Ministry of Communication often issue overlapping guidelines yet lack a centralized body to ensure uniform Shariah compliance. These inconsistencies have tangible implications. The lack of cohesive policy weakens consumer trust, limits product innovation like smart-contract-based Sukuk or block chain payments and restricts scalability of Islamic digital platforms. Without a coherent framework that integrates public regulation and Shariah-governance systems, the sector risks fragmentation rather than consolidation.

From an institutional theory perspective, the observed regulatory fragmentation reflects weak institutional coordination and competing regulatory logics among key public actors. The absence of a dominant and harmonized institutional framework generates conflicting coercive pressures (from regulators), normative expectations (from Shariah authorities), and cognitive interpretations (by fintech providers) (Vijayagopal et al., 2024). leading to inconsistent compliance practices across the Islamic fintech ecosystem. This institutional misalignment undermines regulatory legitimacy and reduces the effectiveness of public policy in steering the sector toward coherent and Shariah-aligned outcomes.

From a Maqasid al-Shariah perspective, regulatory fragmentation in Indonesia has implications that extend beyond technical governance concerns and directly affect the realization of the five essential objectives (*al-daruriyyat al-khams*). Inconsistent Shariah standards and weak regulatory enforcement undermine *hifz al-māl* (preservation of wealth) by exposing consumers to compliance uncertainty, financial misconduct, and potential losses.





Moreover, the absence of a unified Shariah governance framework weakens *hifz al-din*, as users face difficulties in distinguishing genuinely Shariah-compliant platforms from those that merely self-declare compliance without effective oversight. Regulatory fragmentation also indirectly constrains *hifz al-nafs* and *hifz al-nasl* by limiting access to ethical and affordable financial services for MSMEs and vulnerable communities, thereby reinforcing financial exclusion. Consequently, the failure to harmonize public regulation with Shariah governance mechanisms restricts the capacity of Islamic digital finance to fulfill its Maqasid al-Shariah objectives, transforming regulatory policy from an enabling framework into a structural constraint (Ben Gharbi et al., 2025), Saleh & Soualhi, 2025).

Digital Inclusion and Accessibility

Digital Islamic finance has been increasingly recognized as a tool for promoting financial inclusion in Indonesia, particularly for micro, small, and medium enterprises (MSMEs), rural populations, and unbanked communities. Platforms such as Ammana and Alami offer Shariah-compliant financing that does not require conventional collateral, positioning themselves as more inclusive alternatives to traditional banks (Desky & Savitri, 2024). These platforms aim to serve halal-certified MSMEs and provide easier, ethical access to capital.

However, empirical evidence paints a more complex picture. According to a regional field survey conducted in Pekalongan, Batang, and Pemalang districts, over 60% of MSMEs still do not have access to financing, despite the presence of digital financial platforms. While online Islamic FinTech services are appreciated for their simplified application procedures, fast disbursement times, and the absence of collateral requirements, their reach remains limited to digitally literate and infrastructure-ready areas (Serang et al., 2025). This reveals a critical accessibility gap: digital Islamic finance may be growing, but its actual penetration into underserved regions is still inadequate (Dewi & Adinugraha, 2023). Many MSMEs continue to face barriers due to lack of internet access, limited awareness, and insufficient integration of digital tools at the grassroots level. Hence, while these platforms have strong potential, they have not yet substantially closed the inclusion gap, and their impact remains geographically uneven and socially selective.

Despite these challenges, digital financial tools have shown significant positive impact in better-connected urban environments. For instance, Widiawati et al., (2022) conducted a quantitative study using SmartPLS on 100 MSMEs in Jakarta and found that Islamic digital payment systems had a statistically significant effect on financial literacy (t-statistic = 4.174) and financial inclusion (t-statistic = 4.345). Additionally, financial literacy served as a mediator in enhancing inclusion (t-statistic = 2.075), demonstrating the dual impact of Islamic FinTech in fostering both digital financial capabilities and access to Shariah-compliant services.

Moreover, the impact of these platforms is not uniformly distributed. While urban MSMEs benefit significantly, rural communities often lag behind due to limited internet infrastructure and lower levels of digital and financial literacy. Despite national inclusion efforts outlined in Presidential Regulation No. 82/2016 (World Bank, 2020), gaps remain in practical implementation. Islamic FinTech startups, while innovative, often lack the outreach capacity and capital to scale their services to the archipelago's more remote regions (Oi, 2023). Furthermore, not all platforms provide adequate educational resources on Shariah finance, which limits informed usage among new users. Public private partnerships, such as the integration of Shariah-compliant digital wallets like LinkAja Syariah and DANA Syariah, continue to show promising potential (Hardiyanti et al., 2024). According to the 2023 Indonesian Islamic Finance Report (OJK, 2023), the Islamic financial industry grew by 9.04% year-on-year, with Indonesia ranking third globally in both the Islamic Finance Development





Indicator and the Global Islamic FinTech Index. These advancements, however, remain closely tied to sustained government initiatives, and inter-agency collaboration aimed at expanding access across all regions.

This finding can be further explained through the lens of digital divide theory and financial inclusion theory. From a digital divide perspective, unequal access to digital infrastructure, internet connectivity, and digital skills creates structural barriers that prevent rural and low-income MSMEs from benefiting equally from Islamic fintech innovations (Syahid et al., 2025). Although digital Islamic finance platforms reduce traditional financial barriers such as collateral requirements, they simultaneously introduce new forms of exclusion based on digital literacy and technological readiness. This confirms that financial inclusion in the digital era is not solely determined by product availability, but by the broader socio-technical environment in which users operate.

From a financial inclusion theory standpoint, effective inclusion requires not only access to financial services, but also usability, affordability, and informed participation (Ozili, 2020). The empirical evidence presented in this study indicates that Islamic fintech in Indonesia has succeeded in improving access and literacy in urban contexts, while failing to adequately address structural constraints in rural areas. As a result, digital Islamic finance currently exhibits a pattern of selective inclusion rather than universal inclusion. This selective outcome highlights the need for stronger public policy intervention, particularly in digital infrastructure development, financial education, and public–private collaboration, to ensure that Islamic fintech contributes to inclusive and equitable economic development rather than reinforcing existing inequalities. In conclusion, digital Islamic finance has undeniably improved accessibility and inclusion in key segments of Indonesia’s economy. Yet, without addressing underlying infrastructural and educational disparities, the sector risks deepening the urban–rural divide rather than closing it.

Institutional Coordination and Public Sector Involvement

Institutional coordination has become a focal point in advancing digital Islamic finance in Indonesia. In response to longstanding regulatory fragmentation and the rapid evolution of decentralized FinTech models, the enactment of Law No. 4/2023 on Financial Sector Development and Strengthening, which expanded OJK’s authority over digital assets and Islamic FinTech (including cryptocurrencies and Digital Rupiah) previously under separate regulation (OJK, 2024). This legal shift empowered a comprehensive regulatory architecture under a single supervisory body. To operationalize this shift, OJK established the Sharia Finance Development Committee (KPKS) in mid-2025 as a cross-agency platform bringing together representatives from DSN-MUI, academics, and industry professionals to harmonize Shariah compliance standards across financial service sectors (Ilham, 2025). Moreover, OJK and KNEKS have ramped up public–private initiative collaboration through programs such as SICANTIKS and the School of Sharia, targeting community-level inclusion via religious educators and village-owned enterprises (BUMDes) (KNEKS, 2025b). These initiatives aim to embed Shariah-compliant financial awareness in rural areas and strengthen service delivery via local channels. These reforms have translated into measurable improvements:

1. The National Financial Literacy and Inclusion Survey (SNLIK) showed an increase in inclusion from 75.02% in 2024 to 80.51% in 2025, alongside a rise in financial literacy from 65.43% to 66.46% (OJK, 2025a).
2. The Islamic financial sector continued robust expansion: Islamic banking financing grew by 8.87%, Islamic insurance contributions by 8.04%, and financing receivables by 8.03% year-on-year as of early 2025 (OJK, 2025b).





While institutional initiatives at the central level have strengthened regulatory coordination, their impact remains constrained especially in less developed provinces with limited digital infrastructure or local capacity. For instance, A comparative study with urban and rural respondents (n = 654) found that although behavioral intentions and government support significantly boosted FinTech adoption in cities, similar mechanisms had much weaker effects in rural areas (Setiawan et al., 2025)-highlighting structural constraints in infrastructure and local capacity.

Nonetheless, Indonesia's institutional frameworks and policy reforms offer a promising foundation for digital Islamic finance, their real-world impact continues to be geographically uneven. Many rural and semi-urban regions still face substantial barriers that hinder both the supply and demand for Shariah-compliant financial services. These include inadequate physical infrastructure such as limited ATM networks and branch presence, lack of capital among providers, and insufficient outreach mechanisms. On the demand side, challenges persist in the form of low public awareness, complicated onboarding processes, and concerns related to collateral requirements (Mardhiyaturrositaningsih & Janah, 2025). These discrepancies underscore the need for decentralized policy instruments and infrastructure investment to bridge the gap between national frameworks and local realities especially in underbanked rural regions.

Opportunities for Sustainable Islamic Digital Finance

Indonesia's regulatory landscape has increasingly recognized Islamic digital finance as a strategic tool for advancing sustainable development. The launch of the Digital Sharia Banking Roadmap (RP3SI) 2023–2027 reflects a national effort to promote inclusive financing for MSMEs, support the halal industry, and foster ethical investment through Sharia-compliant products like SRIA (KNEKS, 2025a). This roadmap, jointly spearheaded by OJK and KNEKS, signals a top-down commitment to aligning Islamic finance with broader sustainability goals.

In parallel, the Green Sukuk Framework developed by the Ministry of Finance has enabled the issuance of sovereign Shariah-compliant green bonds to fund climate-related infrastructure and social development programs. In 2023 alone, over USD 1.5 billion was raised, positioning Indonesia as a global leader in sustainable Islamic finance (Indonesia's Ministry of Finance, 2023). These efforts are further supported by the National Financial Inclusion Strategy (2021–2024), which explicitly promotes digital Islamic finance for underserved communities (Sekretariat Kabinet Republik Indonesia, 2016).

Operationally, the intersection between Environmental, Social, and Governance (ESG) principles and Maqasid al-Shariah lies in their shared emphasis on ethical value creation, social welfare, and long-term sustainability. While ESG provides measurable criteria for evaluating environmental impact, social responsibility, and governance quality, Maqasid al-Shariah offers a normative Islamic framework aimed at preserving the five essential objectives (*al-daruriyyat al-khams*), particularly *hifz al-māl* (protection of wealth), *hifz al-nafs* (protection of life), and *hifz al-dīn* (protection of religious integrity) (Khairunnisa et al., 2025). In practice, Shariah-compliant ESG instruments such as Green Sukuk operationalize this convergence by channeling funds toward environmentally sustainable projects that also serve social development objectives, thereby aligning financial performance with ethical and religious accountability.

However, the effectiveness of this intersection depends on the existence of integrated governance mechanisms. Without standardized ESG–Shariah screening tools, unified reporting frameworks, and enforceable oversight, the alignment between ESG metrics and Maqasid objectives risks remaining symbolic rather than substantive (Mohd Zain et al., 2024). This





highlights the importance of regulatory coordination and institutional capacity-building to ensure that sustainability initiatives in Islamic digital finance translate into measurable socio-economic and ethical outcomes rather than compliance-driven labels.

Despite these promising initiatives, several structural challenges persist. Islamic FinTech platforms in Indonesia face operational barriers such as limited integration with ESG standards, weak verification tools, and insufficient outreach in rural areas (Surbakti & Fitri, 2024). While the BI Payment System Blueprint 2025 supports digital wallets and payment gateways (Bank Indonesia, 2025), Shariah-compliant adoption remains low outside urban centers, hindered by fragmented infrastructure and mistrust.

Public-private partnerships have begun to address these gaps. Through collaborations between UNDP Indonesia, AFSI, and ITB Commercial Impact Lab, pilot programs are underway to implement sustainability-linked finance aligned with Shariah principles, specifically targeting MSMEs in Java and Sumatra (UNDP Indonesia, 2024). Yet, scaling these initiatives requires broader education, trust-building, and standardized ESG-Shariah compliance mechanisms.

In summary, while national policies provide a strong foundation, the practical realization of a sustainable Islamic digital finance ecosystem remains uneven. The urban-rural divide, lack of verification tools, and reliance on international actors in pilot projects indicate a need for more locally rooted, integrated, and scalable solutions. A holistic approach that balances innovation with trust-building and regulatory coherence is crucial for achieving tangible and equitable outcomes.

Table 1: Appendix

Policy / Legal Framework	Stated Objective	Actual Impact
POJK No. 77/2016	Regulate P2P lending sector	High capital and complex licensing hinder small Shariah-compliant FinTech entry and slow innovation. (Isman, A. 2024)
DSN-MUI Fatwa No. 117/2018	Guide Shariah-compliant digital financial practices	Lack of binding DSN fatwas leads to inconsistent Shariah compliance and weak enforcement. (Ishak et al., 2022)
Law No. 4/2023	Expand OJK's authority over digital assets and Islamic FinTech	Enhanced regulatory unification, but still lacks a centralized Shariah supervisory authority across sectors. (Izmi, 2024; Transatlantic Law International, 2023)
Presidential Regulation No. 82/2016.	Achieve national financial inclusion	Contributed to setting national financial inclusion goals; however, implementation in remote areas remains weak. (Oi, 2023)
Sharia Finance Development Committee (KPKS), 2025	Harmonize Shariah standards across sectors	Shows institutional promise; but its long-term impact is still developing. (OJK, 2025)





Policy / Legal Framework	Stated Objective	Actual Impact
SICANTIKS & School of Sharia Programs	Build Shariah financial literacy at the community level	Effective in early-stage rollout in Java/Sumatra; limited scalability nationwide (KNEKS, 2025)
Digital Sharia Banking Roadmap (RP3SI) 2023–2027	Promote inclusive Islamic finance, support MSMEs, and boost ethical investment.	Improved innovation and financial literacy; effectiveness still limited in remote regions (Surbakti & Fitri, 2024)
BI Payment System Blueprint 2025	Supports digital payment infrastructure, including e-wallets and payment gateways.	Adoption of Shariah-compliant solutions remains low outside urban areas due to weak infrastructure and lack of trust.
Green Sukuk Framework	Finance climate projects via Sharia-compliant sovereign bonds.	Successfully raised over USD 1.5 billion (2023); enhanced global Islamic finance leadership (MoF, 2023)
Public-private pilot projects (UNDP, AFSI, ITB)	Implementation of sustainability-linked finance aligned with Shariah principles	Active pilots in Java and Sumatra; however, their limited scale and reliance on international partners raise concerns about long-term sustainability

CONCLUSION

Based on the findings of this study, several policy implications emerge for key stakeholders involved in Indonesia’s digital Islamic finance ecosystem, including fintech providers, Shariah authorities, regulatory agencies, and the government. These implications can be differentiated into short-term and long-term policy actions.

For fintech providers, short-term policy implications include the need to strengthen internal Shariah governance mechanisms, enhance transparency in product structures, and improve consumer education regarding Shariah compliance and digital financial literacy. Platforms should invest in user-friendly disclosure tools and standardized reporting to build trust, particularly among first-time users and MSMEs. In the long term, fintech firms are encouraged to integrate ESG metrics with Maqasid al-Shariah objectives in product design, moving beyond compliance-driven models toward value-based innovation that supports sustainable and inclusive growth.

For Shariah authorities, particularly DSN-MUI, the findings highlight the importance of stronger institutional integration with regulatory bodies. In the short term, clearer operational guidelines and standardized interpretations of Shariah rulings for digital financial products are needed to reduce compliance ambiguity across platforms. In the long term, establishing a centralized and legally empowered Shariah governance framework—similar to models adopted in other jurisdictions—would enhance enforceability, consistency, and public confidence in Islamic fintech.

For regulatory agencies such as OJK and Bank Indonesia, short-term priorities include improving inter-agency coordination, simplifying licensing procedures for Islamic fintech, and aligning fintech regulations with actual market practices. Addressing regulatory overlaps and reducing administrative complexity would lower entry barriers for innovative yet compliant firms. In the long term, regulators should develop integrated policy frameworks that harmonize





financial regulation, digital infrastructure policy, and Shariah governance, ensuring that innovation does not outpace institutional capacity.

For government agencies and policymakers, the findings suggest that digital Islamic finance should be treated as a strategic public policy instrument rather than a niche financial sector. In the short term, targeted public investment in digital infrastructure, especially in rural and underserved regions, is critical to addressing unequal access. In the long term, embedding digital Islamic finance within national development strategies through education reform, MSME support programs, and sustainability agendas can ensure that fintech contributes meaningfully to financial inclusion, social welfare, and long-term economic resilience.

Overall, these policy implications emphasize that the success of digital Islamic finance in Indonesia depends not only on technological innovation but also on coordinated governance, institutional alignment, and a clear ethical orientation grounded in both ESG principles and Maqasid al-Shariah.

REFERENCES

- Agustina, R., & Faizah, F. (2023). Sharia Fintech: Opportunities and Challenges in Indonesia. *Journal of Islamic Economics (JoIE)*, 3. <https://doi.org/10.21154/joie.v3i1.6289>
- Amin, N. M. F., & Arifin, T. (2025). Analysis of Consumer Protection Policy on the Use of Sharia Fintech Services in Indonesia. *International Journal of Islamic Studies Issues*, 1(1), 39–47. <https://doi.org/10.59966/ep1kwv07>
- Asyiqin, I., Mareto, I., & Genovés, M. (2024). The Role of Regulation in the Development of Sharia Fintech: A Review of Contemporary Islamic Economic Law. *Sharia Oikonomia Law Journal*, 2, 255–270. <https://doi.org/10.70177/solj.v2i4.1241>
- Awang, M. Z., Mat Nong, N. F., & Wan Chik, W. M. Y. (2025). Integrating Islamic Social Finance with the United Nations Sustainable Development Goals through Maqasid Al-Shariah Principles. *International Journal of Academic Research in Business and Social Sciences*, 15(7), Pages 35-51. <https://doi.org/10.6007/IJARBSS/v15-i7/25668>
- Bank Indonesia. (2025). *Indonesia Payment Systems Blueprint 2025*. <https://www.bi.go.id/en/fungsi-utama/sistem-pembayaran/blueprint-2025/default.aspx?>
- Batool, R. (2025). *Regulatory Challenges in Sharī'ah Governance in Indonesia* (SSRN Scholarly Paper 5258074). Social Science Research Network. <https://doi.org/10.2139/ssrn.5258074>
- Ben Gharbi, H., Burhan, U., Manzilati, A., & Wulandari, F. (2025). Natural Resources Management in Light of Islamic Jurisprudence and the Maqasid Sharia. *International Journal of Smart Business Systems*, 1(1), 1–14.
- Cahyati, C., Niswatin, N., & Hiola, Y. (2025). The Influence of Islamic Financial Literacy on Sharia Digital Finance for Consumers at Pegadaian Syariah Gorontalo. *Assets : Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak*, 9, 107–119. <https://doi.org/10.30741/assets.v9i2.1559>
- Desky, H., & Savitri, A. (2024). Sharia Peer-to-Peer Lending Financing: A Funding Alternative for MSMEs in Indonesia. *Al-Hiwalah : Journal Syariah Economic Law*, 3, 146–162. <https://doi.org/10.47766/al-hiwalah.v3i2.4670>
- Dewi, I. S., & Adinugraha, H. H. (2023). The Role of Sharia Fintech in Improving Halal Financial Inclusion in Msmes in Indonesia. *Likuid Jurnal Ekonomi Industri Halal*, 3(1), Article 1. <https://doi.org/10.15575/likuid.v3i1.18693>
- DSN-MUI. (2018). *Fatwa Archives—Laman 5 dari 16*. <https://dsnemui.or.id/kategori/fatwa/>





- Febrika, F. Sari, Sarmigi, E., & Saini, M. Z. H. (2025). Public Perception of Security and Reliability: How to Build a Trust in Islamic Banking? *BANCO: Jurnal Manajemen dan Perbankan Syariah*, 7(1), Article 1. <https://doi.org/10.35905/banco.v7i1.11016>
- Fidhayanti, D., Mohd Noh, M. S., Ramadhita, R., & Bachri, S. (2024). Exploring The Legal Landscape of Islamic Fintech in Indonesia: A Comprehensive Analysis of Policies and Regulations. *F1000Research*, 13, 21. <https://doi.org/10.12688/f1000research.143476.2>
- Fitria, T. N. (2025). Islamic Banking Digitalization: Challenges and Opportunities in the Era of Industrial Revolution 4.0. *Jurnal Ilmiah Ekonomi Islam*, 11(01), Article 01. <https://doi.org/10.29040/jiei.v11i1.16855>
- Hardiyanti, I., Hidayat, A., Novita, S., & Sajiyo, S. (2024). Analysis of The Dsn Mui Fatwa on Sharia Electronic Money from the Perspective of Qiyas (A Study On Linkaja Syariah Application). *Istinbath*, 23, 66–78. <https://doi.org/10.20414/ijhi.v23i1.644>
- Ilham, M. L. (2025). *Indonesia's Financial Authority Launches National Sharia Finance Committee to Bolster Governance and Regulatory Synergy—Jakarta Daily*. Indonesia's Financial Authority Launches National Sharia Finance Committee to Bolster Governance and Regulatory Synergy - Jakarta Daily. <https://www.jakartadaily.id/market-finance/16215514907/indonesias-financial-authority-launches-national-sharia-finance-committee-to-bolster-governance-and-regulatory-synergy>
- Indonesia's Ministry of Finance. (2023). *Green Sukuk Allocation and Impact Report 2023 Final*. <https://www.scribd.com/document/698800732/Green-Sukuk-Allocation-and-Impact-Report-2023-Final>
- Ishak, I., Ilham, I., & Sabani, A. (2022). Shari'a Compliance Principles in Financial Technology. *Jch (Jurnal Cendekia Hukum)*, 8(1), Article 1. <https://doi.org/10.33760/jch.v8i1.542>
- Khairunnisa, D., Asngari, I., & Suhel. (2025). Integrating ESG and Maqashid Syariah for Sustainable Islamic Finance in Indonesia. *Jurnal Ilmiah Manajemen*, 13(06). <https://jurnal.ibik.ac.id/index.php/jimkes/article/view/4025>
- KNEKS. (2025a). *KNEKS Perkuat Kolaborasi untuk Akselerasi Implementasi RP3SI 2023–2027*. Komite Nasional Ekonomi dan Keuangan Syariah. <https://kneks.go.id/berita/679/kneks-perkuat-kolaborasi-untuk-akselerasi-implementasi-rp3si-20232027?category=1>
- KNEKS. (2025b). *School of Syariah: Kolaborasi Literasi dan Inklusi Keuangan Syariah KNEKS-OJK*. Komite Nasional Ekonomi Dan Keuangan Syariah. <https://kneks.go.id/berita/683/school-of-syariah-kolaborasi-literasi-dan-inklusi-keuangan-syariah-kneks-ojk?category=1>
- Mahmud, R. (2017). Understanding Institutional Theory in Public Policy. *Dynamics of Public Administration*, 34, 135. <https://doi.org/10.5958/0976-0733.2017.00011.6>
- Mardhiyaturrositaningsih, M., & Janah, R. (2025). Islamic Financial Inclusion in Islamic Bank: A Study of Supply and Demand in Central Java. *Al-Bank: Journal of Islamic Banking and Finance*, 5, 1. <https://doi.org/10.31958/ab.v5i1.14580>
- Mohd Zain, F. A., Muhamad, S. F., Abdullah, H., Sheikh Ahmad Tajuddin, S. A. F., & Wan Abdullah, W. A. (2024). Integrating environmental, social and governance (ESG) principles with Maqasid al-Shariah: A blueprint for sustainable takaful operations. *International Journal of Islamic and Middle Eastern Finance and Management*, 17(3), 461–484. <https://doi.org/10.1108/IMEFM-11-2023-0422>
- Nuswanto, P. (2024). Encouraging Economic Growth Through Islamic Financial Principles in Indonesia. *West Science Islamic Studies*, 2(02), Article 02. <https://doi.org/10.58812/wsiss.v2i02.806>





- OJK. (2016). *POJK-Nomor- 77 -POJK. 01—2016*. <https://ojk.go.id/id/regulasi/otoritas-jasa-keuangan/peraturan-ojk/Pages/POJK-Nomor-77-POJK.01-2016.aspx>
- OJK. (2024). *OJK International Information Hub | Otoritas Jasa Keuangan*. <https://iru.ojk.go.id/iru/policy/detailpolicy/13208/ojk-issues-regulation-concerning-the-implementation-of-digital-financial-asset-trading-including-cryptocurrency>
- OJK. (2025a). *OJK and BPS Announce the Results of the 2025 National Survey on Financial Literacy and Inclusion (SNLIK)*. <https://iru.ojk.go.id/iru/news/detailnews/13688/ojk-and-bps-announce-the-results-of-the-2025-national-survey-on-financial-literacy-and-inclusion-snlik>
- OJK. (2025b). *The Financial Services Sector Stable and Resilient, Supporting the Acceleration of National Economic Growth (Monthly Board of Commissioners Meeting—May 2025)*. https://iru.ojk.go.id/iru/policy/detailpolicy/13725/the-financial-services-sector-stable-and-resilient-supporting-the-acceleration-of-national-economic-growth-monthly-board-of-commissioners-meeting-may-2025?utm_source=chatgpt.com
- Ozili, P. K. (2020). Theories of Financial Inclusion. In E. Özen & S. Grima (Eds.), *Uncertainty and Challenges in Contemporary Economic Behaviour* (p. 0). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80043-095-220201008>
- Pirrolas, O. A. C., Correia, P. M. A. R., Pirrolas, O. A. C., & Correia, P. M. A. R. (2025). From Isomorphism to Institutional Work: The Advancement of Institutional Theory in Public Administration. *Encyclopedia*, 5(4). <https://doi.org/10.3390/encyclopedia5040184>
- Rofik, M., & Huda, N. (2025). Integration of Islamic Financial Technology and Digital Financial Inclusion in Indonesia. *Journal of Economics and Social Sciences (JESS)*, 4(2), 1183–1190. <https://doi.org/10.59525/jess.v4i2.1047>
- Safira, N., Inayatillah, Meutia, R., Kamri, N., ‘Azzah, & Yusof, K. A. (2025). Fintech Lending Adoption among Muslim Millinials in Southeast Asia. *BANCO: Jurnal Manajemen dan Perbankan Syariah*, 7(1), Article 1. <https://doi.org/10.35905/banco.v7i1.11358>
- Said, M. (2025). Optimizing Sharia Fintech for Financial Inclusion in Indonesia in the Digital Era: An Islamic Economic Perspective. *Balanca : Jurnal Ekonomi Dan Bisnis Islam*, 7(1), Article 1. <https://doi.org/10.35905/balanca.v7i1.13214>
- Saifurrahman, A., & Kassim, S. (2023). Enhancing the MSME Islamic Financial Inclusion in Indonesia: An Institutional Theory Perspective. *Journal of Accounting and Finance*, 23, 6–25. <https://doi.org/10.33423/jaf.v23i2.6042>
- Saleh, A. O. H., & Soualhi, Y. (2025). *Maqasid al-Shariah, Islamic finance, and climate action*. In *Islamic Finance and Climate Action* (1st ed.). Routledge.
- Sekretariat Kabinet Republik Indonesia. (2016, September 16). Perpres No. 82/2016: Presiden Pimpin Langsung Dewan Nasional Keuangan Inklusif. *Sekretariat Kabinet Republik Indonesia*. <https://setkab.go.id/perpres-no-822016-presiden-pimpin-langsung-dewan-nasional-keuangan-inklusif/>
- Serang, A. E. D., Kalsum, U., Pasagi, Y., & Putri, E. L. H. (2025). The Role of Financial Technology (Fintech) in Financial Inclusion and MSME Growth in Indonesia. *Oikonomia : Journal of Management Economics and Accounting*, 2(3), Article 3. <https://doi.org/10.61942/oikonomia.v2i3.339>
- Setiawan, B., Triana, D., Al Azizah, U. S., Wahyuni, A. S., Victor, V., Nathan, R. J., & Fekete-Farkas, M. (2025). Financial technology (Fintech) innovation and financial inclusion: Comparative study of urban and rural consumers post-Covid-19 pandemic. *Journal of Innovation and Entrepreneurship*, 14(1), 86. <https://doi.org/10.1186/s13731-024-00452-x>
- Shehadeh, M. (2021). *Applications and risks of digital Islamic finance*. 233–258.





- Sudi, D. M. (2025). Enhancing the sustainability and competitiveness of Islamic Banking: A comparative study of fiscal policy and regulatory Frameworks in Indonesia and Malaysia. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 11(2), Article 2. <https://doi.org/10.29210/020255614>
- Surbakti, M., & Fitri, A. (2024). *Implementation of ESG Principles in Islamic Fintech: A Case of P2P Alami Sharia. 1.*
- Susilawati, C., Sulaiman, A. A., Abduh, M., Prasetyo, Y., & Athoillah, M. A. (2021). Comparative Study on the Regulation of Sharia Financial Technology in Indonesia and Malaysia. *Jurisdictie: Jurnal Hukum Dan Syariah*, 12(1), Article 1. <https://doi.org/10.18860/j.v12i1.12213>
- Syahid, M. A. A., Zan, Z. M., Pon, Y., Zukri, T. S. T. M., Ibrahim, M. A., & Said, M. Z. (2025). The Transformative Role of Digital Technology in Enhancing Economic Inclusivity within Developing Countries: A Scoping Review. *PaperASIA*, 41(3b), 406–416. <https://doi.org/10.59953/paperasia.v41i3b.356>
- Syed Musa, S., Kholiq, A., & Haerany, A. (2025). *Comparative Analysis of Artificial Intelligence (AI) Transformation In Islamic Financial Sector Products and its Implications on Economic Growth in Indonesia and Malaysia.*
- Unal, I. M., & Aysan, A. F. (2022). Fintech, Digitalization, and Blockchain in Islamic Finance: Retrospective Investigation. *FinTech*, 1(4), Article 4. <https://doi.org/10.3390/fintech1040029>
- UNDP Indonesia. (2024). *ESG Leveraging Islamic Fintech: The Launch of Study on Sustainability-Linked Financing.* UNDP. <https://www.undp.org/indonesia/press-releases/esg-leveraging-islamic-fintech-launch-study-sustainability-linked-financing>
- Vijayagopal, P., Jain, B., Viswanathan, S. A., Vijayagopal, P., Jain, B., & Viswanathan, S. A. (2024). Regulations and Fintech: A Comparative Study of the Developed and Developing Countries. *Journal of Risk and Financial Management*, 17(8). <https://doi.org/10.3390/jrfm17080324>
- Widiawati, W., Nuraini, A. N. A., & Haryana, A. H. A. (2022). Analysis of The Effect Of Sharia Financial Technology (Fintech) on Increasing Literacy and Inclusion of Sharia Financial Inclusion of Msmes in Dki Jakarta. *Journal of Entrepreneur and Business*, 1(1), Article 1. <https://doi.org/10.52643/joeb.v1i1.22>
- World Bank. (2020). Letter of Development Policy. <https://documents1.worldbank.org/curated/en/957051585323664605/pdf/Official-Documents-Letter-of-Development-Policy-for-Loan-9055-ID-Closing-Package.pdf>

