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Challenges in the Implementation of Mudharabah Financing in the Islamic Banking Industry

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Abstract

In recent decades, the proliferation of Islamic banking has rendered it a significant entity in the global financial arena, captivating numerous entrepreneurs and businesses with its ethically distinctive financing alternatives. Several Islamic financial institutions adhere robustly to the profit-sharing principle, notably via mudharabah, in product financing. This research paper explains why mudharabah contracts are used in Islamic banking products, focusing on financing schemes, literacy, and the lack of equal access to information. Moreover, within the context of Islamic FinTech, this research highlights high business risk as a pronounced impediment to the efficacious implementation of mudharabah. In addition, this study offers a rigorous analysis of the issues and challenges endemic to mudharabah financing, venturing into perspectives from regulators and Islamic bank customers. This paper utilized a literature review methodology, and data extracted from relevant literature is systematically analyzed to evaluate mudharabah products as a viable business financing model. Conclusively, the insights derived from this research are positioned to formulate strategic recommendations, fostering advancements in implementing mudharabah contracts within Islamic product financing.

Keywords: *Islamic Finance, Mudharabah, Islamic Banking*

1. Introduction

Islamic finance began in the late 1970s as a small financial industry in several Arab countries, and the growth has increased in every aspect of the organization and the sectors of finance it has explored (El-Gamal, 2006). The presence of Islamic finance aims to rebuild a complete Islamic economic order. It is an alternative to the depravity of conventional economic concepts while at the same time distinguishing itself from conventional finance by following the principles of Islamic law or sharia. The principles of Islamic finance aid in steering the economy clear of internal crises like the Global Financial Crisis and offer a robust safeguard against external fluctuations such as the COVID-19 crisis. Due to the external nature of the COVID-19 crisis, Islamic banks are anticipated to face a comparable impact to conventional banks as their operational frameworks align closely (ISDB, 2020). The COVID-19 crisis and the need to build a more sustainable and just world are idealized by Muslim advocates and international organizations. They refer to the risk-sharing mechanisms (mudharabah and musharakah) used in Islamic commercial finance and the rich history and enormous potential of Islamic social finance for mission alleviation, financial inclusion, and entrepreneurship promotion (Nienhaus, 2020).
Islamic financial institutions have a significant impact on gathering resources and ensuring fluidity within Islamic capital markets. Islamic banks maintain reasonable prudence in balancing the company's security and financial stability in supporting and stimulating economic activity (Chattha, 2020). The stability in Islamic banking may differ if analyzed based on its divine objectives; adequate banking stability consideration cannot be solely evaluated using financial indicators. However, the benefits and harms to the general public are equally important (Ismail & Pa, 2015). Islamic Financial Institutions must operate with Maqasid Syariah, which includes the prohibition of "Riba, Gharar, Maysir, and Hilah," as well as business ethics such as fairness and transparency (Abd Razak, 2015). With its focus on profit-and-loss sharing and prohibition of interest-based financial transactions, Islamic finance has entered a new, bright development stage. It remarkably contributes to a more healthy and stable international financial system (Ökte, 2016). Islamic finance offers an alternative to conventional finance that is convenient to operate in conjunction with conventional finance, and this is an expansion of the options available to users (Visser, 2019).
Due to its quick growth, Islamic finance now offers a wider range of Islamic financial products to both Muslims and non-Muslims, giving it a pluralistic appearance. Islamic finance has mobilized many funds, estimated at US$1 trillion in more than 75 countries, and is poised for further growth. However, the pace of innovation in the Islamic finance industry must be higher. The industry must continue innovating, especially in risk and liquidity management (Zulkhibri & Ghazal, 2015). For decades, many empirical studies

have examined the lending behavior of conventional banks. Compared to a lack of bank-level data, studies on Islamic bank financing behavior still need to be available (Zulkhibri & Sukmana, 2016).

It has been noted that nations with dual banking systems must distinguish between their respective macroprudential policies in order to manage the risks connected with the two systems (Zulkhibri & Naiya, 2016). Islamic Economics and Finance growth is increasing with the countries in which it operates, including Indonesia, Turkey, and other major Muslim countries, through the establishment of infrastructure through Islamic Banking institutions and the development of various business contract models, including Mudharabah, Musharakah, Murabaha, Salam, Istisna', and its derivative products. In order to fund infrastructure needs and the country's economic growth, we must develop an integrated Sharia legal framework, Sharia accounting, pricing mechanisms, tax regulations, and policies that can play an essential role in developing the role and market share of Sharia products, including them. Including the more competitive "mudharabah" profit-and-loss sharing product and global sukuk as complementary products and sources (Biancone & Shakhatreh, 2015).

The characteristics of sharia contracts that are applied by Islamic banking and finance are primarily profit-sharing mechanisms that contain the spirit of cooperatives in contracts such as mudharabah (profit sharing) and musharakah (partnerships) (Ismail & Tohirin, 2010). Mudharabah and musharakah are the two most important topics currently relating to Islamic banking's debt-financing side. Musharakah entails complete profit-and-loss sharing, whereas mudharabah is based on profit-sharing; in Mudharabah, the bank provides all capital and is financially responsible for the project's success. Mudharabah is a term that is very commonly known in Islamic economic literature and familiar to those studying business cooperation contract theory. However, these contracts are managed with relatively high business risk compared to others. According to the World Bank Group (2020), approximately 100 million adults remain unbanked outside the financial system; an essential role in bridging this is given to Islamic finance. With the addition of business, stakeholders are critical to the importance of capital availability and the role of digital solutions trading in maintaining worldwide supply (ISDB, 2020).

Thus, the recent COVID-19 crisis has shown how financial documents are becoming less physical and more digital, enabling safe, smooth, and extremely effective trade finance transactions as well as diversification. In the event of a COVID-19 outbreak, this can also help safeguard the businesses' good name and open up new avenues for performance and expansion for both the national economy and the businesses (Alabdullah et al., 2020). Islamic FinTech has become critical to contemporary Islamic business and economic activities. However, FinTech is a relatively new area of interest in financial activities that offer services without boundaries to a global clientele. However, the Sharia

FinTech sector remains no less attractive than the development of previous financial transactions. Islamic finance can benefit the future by leveraging Sharia solutions delivered through digital channels. Apart from several other obstacles, with the support and guidance of technologically advanced Muslim countries, Islamic FinTech can have massive potential in the future (Ahmad & Mamun, 2020).

Islamic banking has great potential to widen the market by optimizing the mudharabah function as a profit-sharing financing instrument if they cooperate with Islamic FinTech startups with a dominant market share in a country. We consider Mudharabah transactions unattractive and inefficient in financing a project due to the significant business risk factors mudharib faces. Islamic banking must explore and adapt to modern financial technology that offers convenience, speed, and secure transactions. According to (Romānova Kudinska, 2016), FinTech collaboration and optimization positively affect and assist Islamic banks in developing new opportunities and market share.

Islamic banking and academic circles are still severely developing products based on mudharabah contracts. In the Islamic banking industry, the mudharabah model has only been optimized for its function as an investment activity. According to Ahmed and Grais (2014), in deposit-taking, when the depositor is the owner, and the bank is the manager of the resources, the mudharabah contract is often utilized. The bank may also optimize it as a financing arrangement for an entrepreneur or economic agency. The form of fairness values in the practice of mudharabah financing prohibiting illegal and speculative elements is seen where the Islamic banks only implemented mudharabah financing on genuine business (real) and not contrary to the shariah, i.e., on the agricultural sector, property, or infrastructure, and trades. In various fiqh literature and primary sources, mudharabah is the best-known contract. However, in practice, the Islamic finance industry only uses mudharabah as an instrument of deposit investment contracts, while in practice, Islamic banking financing in various countries chooses to use Murabaha and musharakah contracts because it is considered that mudharabah contracts have more risk than other contracts. This is why we look further into the obstacles that cause very few banks to use mudharabah contracts in project financing.

2. Literature Review

Islamic financial assets have multiplied over the last decade to $2.2 trillion. S&P Global Ratings (2021) projects that the worldwide Islamic finance sector will expand by 10%–12% between 2021 and 2022, including Islamic bank and non-bank financial institutions, Islamic capital and money markets, and Islamic insurance (takaful). Islamic banking assets have grown faster than conventional ones in several Muslim-majority countries. Islamic finance is a form of equity-based, asset-backed finance that is environmentally and

socially responsible. It promotes profit-sharing, financial inclusion, and social welfare by connecting the financial sector to the real economy.

Islamic financial institutions have developed similarly to conventional investments over the last half-century. Many things could be improved in the current Islamic financing and investment period (UNDP, 2014). Islamic economic and financial principles are socially responsible for economic dishonesty and corruption; by definition, they promote moral development and financial stability (Tatiana et al., 2015). The financial system's core purpose is to jointly improve the community's welfare (Hakim & Irawan, 2019). According to Thaker et al. (2020), Islamic financial products may be superior alternatives or substitutes for conventional financial contracts. However, they are not complementary because Islamic financial contracts are governed by Islamic law or shariah. Banking is often presented fairly in Islamic banking (Baber, 2020). Because Islam provides various sharia and moral options to meet the needs of its adherents, including how business works (Roszkowska, 2021). According to (the Islamic Development Bank 2018) report, some regulatory biases favour risk-transfer-based debt instruments that persist and place long-term risk-sharing-based finance at a disadvantage.

The Mudharabah deposit contract adds three conditions to the simple mudharabah known in classical literature. The profit-and-loss sharing principle is based on the classical mudharabah contract, where the ratios of profit distribution are predetermined (Hassan et al., 2013). In contrast, the current mudharabah investment deposit is a sharia alternative to time deposits in conventional banks (Kahf, 2006). In the case of mudharabah investment, where the Islamic bank enters into a mudharabah contract as rabb al-mal with an external party, the Islamic bank is exposed to increased financing risk on the amount of the advance the mudharib, and risk of return arises from the uncertainty surrounding the return of assets obtained by Islamic banks. Generally, the default premium and overheads per capital ratio significantly contribute to an Islamic bank's higher financing rates (Beik & Arsyianti, 2008).

Mudharabah financing has no significant effect on the profitability of Islamic banks. Islamic banks failed to implement mudharabah financing (Afkar, 2017). Therefore, Islamic banks need to review the implementation of their main financing products to adapt to developments and modern business models (Alharbi, 2015). However, unlike musharakah financing, mudharabah financing reduces profitability, which means that the more mudharabah financing an Islamic bank distributes, the lower its profit rate (Arsyadona et al., 2019). Islamic financial institutions face the risk of equity investment in profit-sharing investments and losses on the asset side when mudharabah is used. Due to the liquidity, financing, and market risks associated with equity holdings, equity investments can lead to earnings volatility for financial

institutions. According to Herijanto (2016), In addition to the typical principal problem and to demonstrate good faith, the mudharib must fulfill several other obligations simultaneously. They additionally analyze the available information and conduct tabayyun (verification of truthfulness) to fulfill their obligations carefully and emphasize the process rather than the results. This shows that he has maintained his obligation to be faithful or be a trustee of the contract and rabb al mal.

Islamic banks must follow Islamic principles and perform the purification process to be fully Shariah-compliant. It is, however, the way to uphold Islam by demonstrating the uniqueness of Islamic finance as opposed to the conventional system (Yunus et al., 2018). A common characteristic of mudharabah projects is that they are necessary for economic or social development and community welfare. However, the expected returns from such projects are low, as they take too long to produce results, and local entrepreneurs are willing to initiate the project, even though they do not have the finances and do not even have the necessary collateral to obtain Islamic financing banks (Ahmed, 2018). On the other hand, when most businesses are losing money during a recession, it is difficult to identify a profit-making client who defrauds the bank by reporting losses. As a result, monitoring costs rise during recessions. These counter-cyclical changes in monitoring costs affect the profitability of Islamic banks that operate through partnership arrangements (mudharabah) (Ali, 2007).

Financial literacy also affects financial inclusion; in this case, Islamic financial literacy helps increase Islamic inclusion. Increasing Islamic financial literacy helps to include the Muslim community. Islamic banks will have to contribute to financial inclusion and digital transactions by increasing Islamic financial literacy across their lines of business. The potential of Islamic banking as a catalyst for financial inclusion has also attracted more attention in recent years (Djafri, 2018). Regarding workforce empowerment, the percentage is increasing in Islamic countries, but more is needed to meet economic growth targets. Using technology to provide better financial services is good advice.

Islamic FinTech has a bright future, especially in Muslim countries. Advances in digital technology cannot stop the growth of FinTech in the financial services industry (Aminah et al., 2020). FinTech will continue to be a game-changer for Islamic financial administration, with the proper roles of controllers and institutions (Miskam et al., 2019). Most exciting of all, FinTech introduces new financial trading models, both for controllers and exhibitors. The current guidelines for managing Sharia accounts can accommodate FinTech progress. The current guidelines for managing Sharia accounts can accommodate FinTech progress (Oseni et al., 2019). In this case, we analyze some of the literature relevant to this research and examine more deeply some of the barriers and problems to implementing mudharabah financing in

Islamic banking, including financing schemes, literacy, asymmetric information, and optimization of Islamic FinTech.

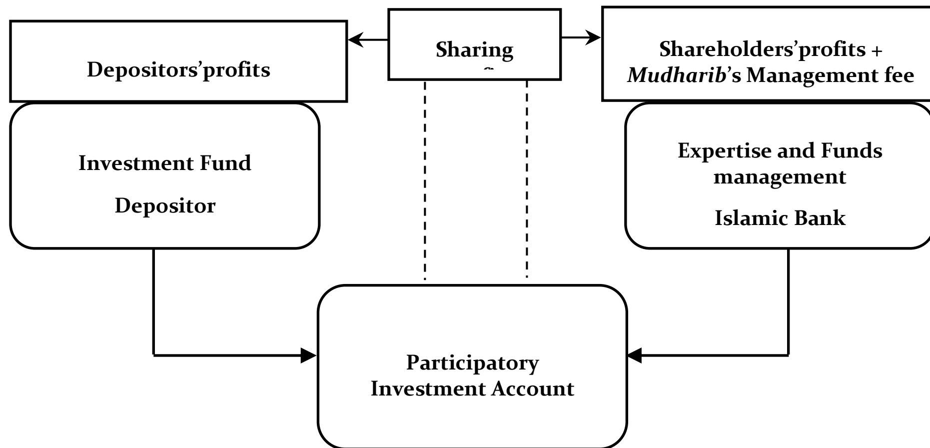
As an Islamic financial institution, implementing the mudharabah in Islamic banking is still not optimal (Fathoni, 2020). Not all Islamic banks adopt a profit and loss-sharing structure in their financing products, and some implement a revenue-sharing structure more extensively. Mudharabah's financing arrangement is based on the trust principle. Effective management and control must foster an honest and mutually trusting culture between Islamic banks and their customers. This concludes that many challenging factors exist for business or project financing with the mudharabah scheme in Islamic banking.

2.1. The Scheme of Mudharabah Financing

The practice of mudharabah contracts in Islamic banks has deviated from the classical fiqh theory (Ghozali, 2018). Every Muslim jurist or scholar has a different opinion on whether mudharabah is permissible or prohibited in the Shari'a. There are two types of mudharabah: those that occur without the demand for goods, as described in classical fiqh literature, and those that occur in response to requests or orders for goods, referred to as *al-mudharabah lil' amir bi al-Shira* or *al-mudharabah lil' wa'id bi al-shira*. Malikiyyah argued that mudharabah was equivalent to the sale of *al-'inah*, permissible under sharia, while al-Utsaimin argued for Hillah, "Borrowing money which includes usury" is haram.

However, Islamic scholars have created products that can replace conventional banking products by replacing costs and contingent payment structures for interest rate payments and discounts. In addition, the competitiveness of several Sharia products and profit-and-loss sharing principles attract Muslim investors and non-Muslim customers. Islamic banks often provide mudharabah deposits with varying profit-sharing rates and maturities. While general mudharabah deposits are used by banks at their discretion to finance all of their operations, limited mudharabah is invested in customer-designated, unique initiatives and is often made available to larger depositors through the private banking division.

Figure 1. The Mudharabah Financing Scheme in Islamic Banking Industry



Source: (Khaldi & Amina, 2018)

The proposed mudharabah financing scheme will work best if the project is secured by assets worth the investment. Mudharabah is a contract between two parties: an investor (an individual or a bank) that provides financial resources to a second party, an entrepreneur, to finance a particular company. According to an agreed-upon ratio, the profit is divided between the two parties (*rabb al-mal* and *mudharib*), but if there is a loss, the investor bears all financial losses. In contrast, entrepreneurs bear all operational losses, particularly the opportunity cost of their efforts (Gait &Worthington, 2007).

Profit-sharing is one of the main principles of Islamic finance, which is expected to create prosperity and unlock the potential for economic growth where it is applied. However, from the consumer's point of view, external factors (Experience and capital) are the main reasons for the low level of financing adoption (Yustiardhi et al., 2020). According to Imady and Seibel (2006), mudharabah contracts are implemented in Islamic banking in two different categories of Islamic financial products: working capital financing products and deposits.

Table 1. The Types of *Mudharabah* Financing in Islamic Banking Industry

***Mudharabah* as Products based on profit-sharing**	A profit-sharing arrangement in which one party provides capital, the other provides entrepreneurial expertise, or a bank provides capital, and the customer manages the project. A pre-agreed ratio distributes profits.
***Mudharabah* as Deposito products**	A profit-sharing plan is where the customer oversees the project and one party provides finance and the other offers entrepreneurial experience, or when funding is provided by a bank. The profit-sharing ratio is pre-arranged.

There is a difference between *musharakah* and *mudharabah* in implementing business contracts in Islamic banking. According to Jaurino and Wulandari (2017) and Ernayani and Robiyanto (2019), mudharabah significantly affects bank profitability, while musharakah financing has no effect. Each bank currently collects funds from middle to upper-class customers, which will later be managed and transferred to customers needing working capital. The profits received by the bank have an impact on increasing capital, which will then be directed to additional financing. The rate of return on capital can be calculated by comparing the bank's profits and capital or the difference between expenditures and investment income.

Table 2. The Differentiation Characteristic between *Musharakah* and *Mudharabah*

Characteristic	***Musharakah***	***Mudharabah***
Capital/Investment	It originates with all partners	It originates in *Rabb al-mal*, not *mudharib*
Participation right	All partners	*Rabb al-mal* is not entitled to take part
Sharing of losses	Each partner, in proportion to their capital contribution	Wholly absorbed by *Rabb al-mal*
Accountability	Normally, limitless	*Rabb al-mal's* liability is limited to his investment
Profit distribution	Can be distributed at any interval determined by the asset's valuation (annual, quarterly, monthly).	Final distribution occurs only after the *mudharabah* business is liquidated.
Asset ownership	All assets are acquired jointly by all partners in proportion to their investment.	*Rabb al-mal's* entire estate

Source: Authors' Own

Mudharabah is a financing arrangement between two or more parties in which one of the partners provides project financing and manages the business. At the same time, *musharakah* is a form of loan arrangement based on profit-and-loss sharing; in other words, *musharakah* is a type of equity-sharing agreement shared by all capital and business management partners. In a *murabaha* transaction, the bank purchases an asset or vote from a third party and then resells it to another party at a profit margin. Mudharib cannot take a share of the profits upfront (Cham, 2018).

In *mudharabah* and *musharakah*, capital can be in cash, goods, equipment, or other assets but cannot be in the form of debt. Capital providers suffer losses only if the *mudharib* does not invest in real projects (Jais et al., 2020). So, when the *mudharabah* business suffers a loss, the profit is initially used to cover the loss. If the loss exceeds the profit earned on liquidation, such a thing can be deducted from the capital. In addition to the uncertainty of *"gharar"* in

the process, this is also not allowed because it leads to a zero-sum game that benefits one party at the expense of the other.

This emphasizes that *mudharabah* is the most well-known contract among others based on previous studies and classical literature. However, Islamic finance industry players should pay more attention to its function, especially Islamic banking. Several studies have revealed that the *mudharabah* contract needs to be re-optimized with various development and adaptation, including eliminating cost barriers and the risk of business losses when using a *mudharabah* contract.

2.2. Literation and Asymmetric Information

Financial inclusion is significantly impacted by financial literacy. Islamic inclusion is enhanced by Islamic financial knowledge (Basrowi et al., 2020). With digital technology, the growth of financial inclusion will proliferate. Literacy is a viable educational strategy and can be used for a wider audience. If Islamic banks compete in the working capital financing industry, they must contribute to financial inclusion and digital transactions.

In this case, the mudharabah contract is authentic and realistic, as the mudharib is entitled to a share of profits in exchange for his actual managerial contributions but not to a share of losses. Mudharib's worst-case scenario is that he receives nothing and his efforts are futile. In mudharabah, most mudharib will likely have sufficient and additional information about the project, while Islamic banks will be excluded from its profitability. Islamic banks need to pay attention and analyze comprehensively. This is done to avoid losses when running the project. To prevent misleading information, information must be transparent from the beginning to the finish of the process. Asymmetry in information may arise when the mudharib, due to unsuitable and deceitful actions, refrains from reporting the outcomes of the undertaken project. To illustrate, collaborators have indicated cases wherein they deliberately evaded the timely and stipulated disbursement of benefits (Naim et al., 2016).

Choosing financing mechanisms presents a noteworthy hurdle for Islamic financial institutions in their endeavor to extend financial support. Identifying suitable collaborators to engage in business operations, particularly to sustain a competitive edge and ensure profitability, is crucial for these banks (Yustiardhi et al., 2020). In addition, monitoring the performance of mudharib will increase the costs for Islamic banks. This illustrates that bolstering Islamic financial literacy will promote the adoption of Islamic financial technology and enhance the integration of the Muslim community.

Everyone interested in this realizes its full potential and must work together to deliver Islamic values to businesses and consumers (Za'aba et al., 2020). Financial literacy on mudharabah financing is essential to well known and

needs to be understood together between Islamic banking (sahib al-Maal) and customer (mudharib); this will shorten the distance between theory and practice when implementer the mudharabah financing, while asymmetrical information is a common obstacle that occurs when people do not care about financing products in Islamic banking.

2.3. Risk in *Mudharabah* Financing

The concept of mudharabah can be based on profit-sharing, where each calculation is based on net and gross profit. Implementing profit-sharing is undoubtedly more beneficial for mudharib, while profit-sharing is more beneficial for rabb al-mal (Mohd Dali et al., 2004). In general, Islamic banks tend to choose products with a low-risk profile; the lower the risk profile, the better for the health of bank liquidity. Mudharabah is classified as one of the most high-risk financing products by banks. Islamic banks will face various risks as rabb al-mal (capital providers). There are at least three risks to be faced: financial risk, business risk, and risk of return.

Islamic risk-sharing principles and profit-sharing imply that one party entrusts his money to another party who functions as a financial manager and provides the necessary expertise and management assistance. In an agreed manner, the mudharib will use the money, return the principal, and retain a pre-agreed profit share (Ismail & Nor, 2011). Due to the nature of the mudharabah, Islamic banks do not have access or authority to monitor the decisions and management of the mudharib, especially in the event of a loss claim. This will directly affect bank liquidity because Islamic banks obtain most of their funding from depositors. Finally, financial risk affects business risk. When funds are insufficient to continue operating a project, business risk can increase dramatically (Yustiardhi et al., 2020). All Sharia contracts, including mudharabah ones, should follow the same criteria as current financial contracts (Laldin & Djafri, 2019).

Credit Risk Management is a critical aspect of Islamic banking operations, and it is necessary to establish optimal standards for financing portfolio development. An additional cushion should be included to deal with unintended consequences such as increased defaults, non-performing financing, or an industry-wide economic depression. According to Akram and Rahman (2018), the findings indicate that Islamic banks outperform conventional banks in Credit Risk Management under certain conditions. It is essential to consider the critical factors of credit quality and Asset quality when making policies regarding Credit Risk Management.

The concept and implementation of the mudharabah contract in Islamic banking are considered less competitive than other financing schemes and contract models, such as murabaha, which has less risk for the fund provider. FinTech is one of the tools available to mitigate risk. According to Kahf and Mohomed (2016), mudharabah is a legitimate and ideal financing instrument

in Sharia because every investment made will convert goods or assets with intrinsic use. Profits will be generated when these tangible goods or assets are sold.

Moreover, the various risk-sharing contracts available in Islamic fund administrations provide an ideal medium for all other borrowers, as they are not required to bear all the risks associated with lock-in in monetary administration (Wonglimpiyarat, 2017). Financial intermediaries are exposed to very high total risk in mudharabah contracts because they bear the risk (ownership) in proportion to their capital contribution and the risk of the project product price, liquidity, and moral hazard. Otherwise, the risk is on the other side. When Islamic banks are involved in mudharabah financing, they bear additional risks such as financial risk, business risk, rate of return risk, equity investment risk, and fiduciary risk.

In order to distribute wealth and income, proponents of equity-based financing contend that a profit-and-loss sharing system is more effective and equitable than a debt-based one (Al Amine, 2016). While banking (sahibul al-maal) and mudharib involve comparable business risks, this contract is more profitable for industry participants than Islamic banking. In this case, efforts to mitigate business risk through mudharabah financing contracts remain a point of contention in the global Islamic banking industry. If industry players develop a mechanism to mitigate these risks, it will enable more active interaction between banks and business actors through the mudharabah financing scheme.

2.4 Relationship Between FinTech and Mudharabah in Islamic Finance: Strengthening the Islamic Bank's Customer Base Through Islamic FinTech

Islamic finance, embedded within the structures of various developing economies, has an intricate relationship with financial innovation, particularly FinTech (Kamarudin & Ismail, 2013). There is a compelling need to intertwine Islamic financial principles with modern technologies, aiming at broadening its scope, achieving societal equity, and enhancing the quality of life for Muslims globally (Hassan et al., 2020). While FinTech has cemented itself as an invaluable asset in addressing fiscal challenges and bolstering economic activities, especially in predominantly Muslim nations, it demands a robust infrastructure, astute regulatory frameworks, and consumer-focused service provision in the context of Islamic finance (S&P Global Ratings, 2021); Singh et al., 2020).

Integration between Islamic FinTech startups and established Islamic financial institutions has become pivotal (DinarStandard, 2018). Nevertheless, anchoring Islamic FinTech effectively necessitates adequate funding sources and meticulous solutions to market dilemmas or innovative advancements (Salim & Ilyas, 2020); Knewtson & Rosenbaum, 2020). Moreover, to stay

competitive, Islamic FinTech should focus on consumer interests, digitizing services like social aspect assessments, community considerations, and Islamic finance principles adherence (Wang et al., 2019); Zhussupov, 2021).
Islamic FinTech entities, while innovating, must ensure that their financial products, such as online loans, adhere to Islamic Sharia principles (Marzuki & Nurdin, 2020). The potential for utilizing financial technology, notably smart contracts, within Islamic finance agreements is significant. However, FinTech entrepreneurs should prioritize innovative developments to safeguard their edge while shielding them from replication by larger financial institutions (Haddad & Hornuf, 2019).
Despite their multifaceted obligations and concomitant risks, Islamic financial institutions provide a viable platform for FinTech startups (Ahmed & Khan, 2007). Strategic collaborations, enabling FinTech firms to leverage the Islamic banking network and localized customer knowledge, could enhance prospects for success (Mohamed & Ali, 2018). The automation potential provided by FinTech addresses the manual, time-intensive financing processes prevalent in many Islamic banks, reflecting a crucial adaptation within the financial services sector towards digital transformation (Kayed, 2012); Poon et al., 2020). Technological applications offer a pathway toward heightened transparency in Islamic finance transactions, providing stakeholders with a clear overview and contributing to enriched customer satisfaction and loyalty through user-friendly, automated processes (Hasan & Sunarti, 2019). Furthermore, FinTech enables swifter product and service launches within Islamic banks, accelerating market penetration and supporting customer-centricity (Chen & Peng, 2019); Panjwani & Shili, 2020). Consequently, the capabilities and policies of Islamic banks to anticipate and navigate market shifts become pivotal to their success (Aisyah, 2018).
While FinTech undoubtedly presents opportunities for enhancing Islamic banking service quality and growth, it introduces new challenges requiring meticulous navigation (Baidhowi, 2018). The growing sphere of Islamic FinTech, with its digital components and service provision capabilities, is poised for ascendancy in the Muslim world, navigating through the continuous evolution of technology (Hui et al., 2019).
This relationship between Islamic FinTech and the mudharabah contract remains to be more thoroughly explored. The intertwining of technology with Islamic finance, especially with specific reference to contracts like mudharabah, necessitates a more profound examination to comprehend its implications and applications fully. Further research should aim to elucidate this relationship, providing insight into how FinTech can facilitate and enhance the application and management of mudharabah contracts in contemporary Islamic finance.

Islamic FinTech, while burgeoning, encapsulates a rich tapestry of opportunities and challenges. Its intricate relationship with Islamic finance

principles, notably the mudharabah contract, warrants a deeper exploration, promising insights that could steer the course of Islamic finance towards greater inclusivity, innovation, and sustainable development.

3. General Evaluation

Islamic banks must introduce innovative financing products to mitigate risks and be globally accepted as a sustainable banking model. The fundamental tenet of Islamic finance centers around profit-sharing, which is believed to foster affluence and unleash economic possibilities. Nevertheless, numerous Islamic banks refrain from introducing financing products structured on contracts, like the mudharabah financing scheme, owing to a confluence of interconnected risks, challenges of asymmetric information, instances of moral hazards, and intricacies in the assessment of financial arrangements (Yustiardhi et al., 2020).

Islamic banks may face a greater risk of achieving something higher when using mudharabah contracts for financing because they have to share the risk with customers, transferring it as conventional banks do. Low returns coupled with bank money multiplier factors and long duration are minor factors less attractive to Islamic banking. This also needs to be brought to the attention of all stakeholders. In addition, Islamic banks also need to mitigate the risk of investing in other projects by choosing a lower duration and higher rate of return. According to Prastiwi (2020), Islamic Banks can counter the risk of mudharabah investment through sound administration practices in the bank's daily budget system, both from internal and external sources.

Continued government regulation, public education and socialization about the benefits of mudharabah refinement, and the involvement of related parties like Islamic financial institutions, academics, and community leaders in enhancing the application of mudharabah are all required to increase literacy and decrease asymmetric information about the mudharabah contract.

FinTech is one of the tools available to mitigate risk by analyzing customer payment capabilities and anticipating business risks. Sharia FinTech optimization will be increasingly essential to support Sharia funds and Sharia money deposits because of their cost-effectiveness and outreach to the public. The Sharia banking industry needs to continue encouraging the implementation of Sharia FinTech to increase business profitability by using mudharabah contracts. Many Muslim entrepreneurs are concerned with the development of Sharia businesses and how to make them simple, fast, and efficient. At the same time, information literacy and asymmetry play an essential role in industry players using mudharabah contracts, and the last is a business risk, which is the main factor why banks do not like financing schemes with mudharabah contracts.

To encourage the implementation of mudharabah products, we recommend that regulators and industry players change the operational pattern of Islamic banking and mudharabah schemes, increase consumer awareness and literacy, and optimize FinTech functions to reduce costs. In addition, maintaining supervision of mudharabah financing is very important because it can help prevent business losses caused by customer financing as mudharib (Heradhyaksa & Markom, 2018). Although the agreement has been in a legal memorandum with sufficient force, many things could still be improved in the supervision of mudharabah financing. This provides new opportunities and space for Sharia banking business activities (rabb al-mal) to continue to optimize the function of Sharia FinTech in embracing and facilitating financing to business and industry players (mudharib) because Sharia FinTech has been proven to help transactions in Islamic banking in providing convenience in transactions and shortening the flow of employees. This finding is expected to provide valuable input, especially for regulators, Islamic banks, and Islamic finance industry players, to develop further an integrated ecosystem between FinTech, Islamic Banks, and the Islamic business sector.

4. Conclusion and Recommendation

In previous studies, it has been found that mudharabah is challenging to develop because it does not significantly impact the profitability of Islamic banking. Some research findings conclude that mudharabah is too risky for Islamic banking because it has the most high-risk financing scheme. However, in conclusion, we find that the significance of mudharabah financing can be increased by optimizing the role of technology to cut administrative costs, reduce business risk, increase efficiency, and optimize the role of financial institutions, academician, and religious leaders to improve literacy and suppress information asymmetry on the theory and practice of mudharabah financing in Islamic banking.

These findings provide valuable input, especially for regulators, Islamic banks, and the Islamic finance industry, to develop an integrated ecosystem between FinTech, Islamic Banks, and the Islamic business sector to develop risk, cost efficiency, and accelerate market expansion. In addition, literacy is critical in the mudharabah decision of the mudharabah contract. Other means are needed to cover business risks and increase the profitability of both parties. Therefore, Islamic banks must broaden their business perspective and react and adapt to current market conditions and needs.

This research establishes that the primary factors leading to the non-availability of financing products incorporating profit-sharing contracts (mudharabah) within Islamic banks are elevated business risk, asymmetric information, and intricate evaluation processes. Simultaneously, regulators must increase risk mitigation for the current mudharabah scheme because it contains high risks in Islamic banking. The concept and implementation of

the mudharabah contract in Islamic banking are considered less competitive than other financing schemes and contract models such as mudharabah and musharakah, which offer a lower risk for fund providers because the mudharabah contract on the side of Islamic banking is considered to contain a higher risk for the fund provider or "rabb al-mal" because it carries the concept of profit-and-loss sharing. Islamic banks must carefully design their credit management policies to utilize funds obtained through deposits and interbank obligations to channel quality financing and reinvest into the real sector. In order to increase the portfolio and reduce non-performing financing, this will have a significant impact on the level of customer confidence.

In conclusion, considering the viewpoint of clientele, the principal factor contributing to the limited embrace of profit-and-loss sharing financing is the customer, acting as an external influence. Customers' adoption of this financing model is not solely driven by individual preferences but rather stems from an inadequate grasp of product information. Consequently, the Islamic banking sector is obligated to enhance awareness and provide education to its customer base. A Sharia-compliant risk management framework becomes imperative to address potential risks without Sharia principles. As an integral facet of risk management, Islamic financial institutions can incorporate Islamic FinTech solutions, such as intelligent contracts and blockchain technology, to establish streamlined financing mechanisms to mitigate asymmetrical information and moral hazard.

References

Abd Razak, A. H. (2015). The fundamentals of Islamic banking and finance: A prologue. *European Journal of Islamic Finance*, *2*, 1-11. doi: 10.13135/2421-2172/790.

Afkar, T. (2017). Influence analysis of mudharabah financing and qardh financing to the profitability of Islamic Banking In Indonesia. *Asian Journal of Innovation and Entrepreneurship (AJIE), 2*(03), 340-351.

Ahmad, S. M., & Al Mamun, A. (2020). Opportunities of Islamic fintech: The case of Bangladesh and Turkey. CenRaPS Journal of Social Sciences, 2(3), 412-426.

Ahmed, A. M. E. T., & Grais, W. (2014). *Islamic finance and economic development: Risk, regulation, and corporate governance*. John Wiley & Sons.

Ahmed, H., & Khan, T. (2007). "Chapter 10: Risk Management in Islamic Banking". In *Handbook of Islamic Banking*. Cheltenham, UK: Edward Elgar Publishing. doi: 10.4337/9781847205414.00019.

Ahmed, M. (2006). Practice of mudaraba and musharaka in Islamic banking. *Journal of Islamic Economics, Banking and Finance, 2*(1), 59-86. doi: 10.2139/ssrn.3161208.

Aisyah, M. (2018). Islamic bank service quality and its impact on Indonesian customers' satisfaction and loyalty. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah, 10* (2): 367–88. doi: 10.15408/aiq.v10i2.7135.

Akram, H., & Ur Rahman, K. (2018). Credit risk management: a comparative study of Islamic banks and conventional banks in Pakistan. *ISRA International Journal of Islamic Finance, 10*(2), 185-205. doi: 10.1108/IJIF-09-2017-0030.

Al Amine, M. A. B. M. (2016). *Islamic finance and Africa's economic resurgence: Promoting diverse and localized investment*. Springer.

Alabdullah, T. T. Y., Ahmed, E. R., & Nor, M. I. (2020). The world declining economy and coronavirus pandemic: Systems should be continued. Russian Journal of Agricultural and Socio-Economic Sciences, 102(6), 89-96. doi: 10.18551/rjoas.2020-06.11.

Alharbi, A. (2015). Development of the Islamic banking system. *Journal of Islamic Banking and Finance, 3*(1), 12-25. doi: 10.15640/jibf.v3n1a2.

Ali, S. S. (2007). Financial distress and bank failure: Relevance for Islamic banks. Islamic Banking and Finance: Fundamentals and Contemporary Issues, edited by Salman Syed Ali and Ausaf Ahmad, Islamic Research and Training Institute-Universiti Brunei Darussalam, IRTI.

Aminah, S., Erisna, N., Tarmizi, R., & Redaputri, A. P. (2020). The role of fintech and sharia banking industries in increasing economics inclusion in Indonesia. *International Journal of Scientific and Technology Research, 9*(2), 979-982.

Arsyadona, A., Siregar, S., Harahap, I., & Ridwan, M. (2019). The effects of mudharabah and musyarakah financing on the profitability of sharia commercial banks in Indonesia. In Proceeding International Seminar of Islamic Studies (Vol. 1, No. 1, pp. 682-689).

Azman, N. H. N., Zabri, M. Z. M., Masron, T. A., & Malim, N. A. K. (2020). The utilization of Islamic fintech (I-Fintech) in promoting sustainable inclusive growth: Evidence from micro-entrepreneurs in Malaysia. *Journal of Islamic Monetary Economics and Finance*, *6*(3), 555-576.

Baber, H. (2020). Financial inclusion and FinTech: A comparative study of countries following Islamic finance and conventional finance. *Qualitative Research in Financial Markets, 12*(1), 24-42. doi: 10.1108/QRFM-12-2018-0131.

Baidhowi, B. (2018). Sharia Banking Opportunities and Challenges in the Digital Era. 192 (Icils), 157–161. doi: 10.2991/icils-18.2018.30.

Basrowi, B., Noviarita, H., & Hayati, M. (2021, January). Financial Technology And Financial Inclusions In Indonesia. In *Proceedings of the 1st International Conference on Science and Technology in Administration and Management Information, ICSTIAMI 2019, 17-18 July 2019, Jakarta, Indonesia*.

Basrowi, B., Suryanto, T., Anggraeni, E., & Nasor, M. (2020). The Effect Of Islamic Financial Literation And Financial Technology On Islamic Financial Inclusion. *AL-FALAH: Journal of Islamic Economics*, 5(2), 231-263. doi: 10.29240/alfalah.v5i2.1669.

Beik, I. S., & Arsyianti, L. D. (2008). Why the rate of financing in Islamic banks is high? An analysis based on Malaysian case. *Tazkia Islamic Finance and Business Review*, *3*(1).

Biancone, P. P., & Shakhatreh, M. Z. (2015). Using Islamic Finance for infrastructure Projects in non-muslim countries. *European Journal of Islamic Finance*, (2).

Cham, T. (2018). Determinants of Islamic banking growth: an empirical analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, *11*(1), 18-39.

Chattha, J. A. (2020). The COVID-19 pandemic: supervisory implications and priorities for Islamic banking. *Toronto Centre Notes, May (Toronto:*

Toronto Centre), Available at https://res. torontocentre. org/guidedocs/COVID19% 20and% 20Islamic% 20Finance% 20FINAL. pdf.

Chen, T. H., & Peng, J. L. (2020). Statistical and bibliometric analysis of financial innovation. *Library Hi Tech*, *38*(2), 308-319.

DinarStandard. (2018). "Islamic Fintech Report 2018: Current Landscape & Path Forward." *Dubai Islamic Economy Development Centre* 1–38.

Djafri, F. (2018). Applying Hiyal & Makharij and Other Islamic Principles. In *LSE–HBKU Workshop* (Vol. 9).

El-Gamal, M. A. (2006). *Overview of Islamic finance*. London: US Department of the Treasury.

Elipses. (2019). "The Global Islamic Fintech Report." (December):1–14.

Ernayani, R., & Robiyanto, R. (2019). Funding Analysis Of Murabahah, Musyarakah, And Mudharabah On Return On Asset On Sharia Banks In Indonesia. *Jurnal Dinamika Ekonomi & Bisnis*, *16*(2). doi: 10.34001/jdeb.v16i2.921.

Fathoni, M. A., & Suryani, S. (2020). Profit Loss Sharing (PLS) and Its Implementation in Indonesian Islamic Banking. *IQTISHODUNA: Jurnal Ekonomi Islam*, *9*(1), 121-136.

Gait, A. H., & Worthington, A. C. (2007). A primer on Islamic finance: Definitions, sources, principles and methods.

Ghozali, M. (2018). The Application of Murābaha Contract in Islamic Banking from Muslim Jurists' Perspective. *Al-Iktisab: Journal of Islamic Economic Law*, *2*(1), 15-23. doi: 10.21111/al-iktisab.v2i1.2395.

Haddad, C., & Hornuf, L. (2019). The emergence of the global fintech market: Economic and technological determinants. *Small business economics*, *53*(1), 81-105. doi: 10.1007/s11187-018-9991-x.

Hakim, R., & Irawan, M. D. (2019). Islamic Rulings and Financial Technology (Fintech): An Analysis on the Relevance and Implications. *Madania: Jurnal Kajian Keislaman*, *23*(2), 137-146.

Hasan, D. (2019). Analysis of banking service financial technology (Fintech) risk management in Islamic banks (Case Study at Bank Syariah X in Jakarta). *KnE Social Sciences*, 492-508.

Hassan, K., Kayed, R. N., & Oseni, U. A. (2013). Introduction to Islamic banking & finance: Principles and practice. Pearson Education Limited.

Hassan, M. K., Rabbani, M. R., & Ali, M. A. M. (2020). Challenges for the Islamic Finance and banking in post COVID era and the role of Fintech. *Journal of Economic Cooperation & Development*, *41*(3), 93-116.

Heradhyaksa, B., & Markom, R. (2018). Mudharabah Financing Supervision of Islamic Banking in Indonesia. *Diponegoro Law Review*, *3*(1), 1-14.

Herijanto, H. (2016). The Mudharib's Legal Responsibility for the Business Risk in Mudharabah. *Journal of Islamic Banking and Finance*, *4*(1), 22-32.

Hui, H. W., Manaf, A. W. A., & Shakri, A. K. (2019). Fintech and the transformation of the Islamic finance regulatory framework in Malaysia. In *Emerging issues in Islamic finance law and practice in Malaysia* (pp. 211-222). Emerald Publishing Limited.

Imady, O., & Seibel, H. D. (2006). Principles and products of Islamic finance. *Univ. zu Köln, Arbeitsstelle für Entwicklungsländerforschung Working paper*.

ISDB. (2020). "The Covid-19 Crisis and Islamic Finance: Response of the Islamic Development Bank Group" *Islamic Development Bank*.

Islamic Development Bank. (2018). *The Global Report on Islamic Finance 2018 : The Role of Islamic Finance in Financing Long-Term Investments*.

Ismail, A. G. & Nor, F. M. (2011). Institutional Economics Relevant to Islamic Finance. *Media Syari'ah: Wahana Kajian Hukum Islam dan Pranata Sosial*, *13*(1), 1-20.

Ismail, A. G., & Pa, A. S. C. (2015). *Financial soundness indicators and the objectives of Shari'ah in assessing the stability of Islamic banks* (No. 1436-11). The Islamic Research and Teaching Institute (IRTI).

Ismail, A. G., & Tohirin, A. (2010). Islamic law and finance. *Humanomics: The International Journal of Systems and Ethics*, *26*(3), 178-199.

Jais, M., Sofyan, F., & Bacha, A. M. (2020). Mudharabah and Musharakah as an equity financing model: issues in practice. In *Proceedings Aceh Global Conference-Business, Economics, and Sustainable Development Trends* (Vol. 2, pp. 107-114).

Jaurino, J., & Wulandari, R. (2017, June). The effect of Mudharabah and Musyarakah on the profitability of Islamic banks. In *The 3rd PIABC (Parahyangan International Accounting and Business Conference*.

Kahf, M. (2006). Islamic Finance: Business as Usual.

Kahf, M., & Mohomed, A. N. (2016). The principle of Realism in Islamic finance. *Journal of Islamic Economics, Banking and Finance*, *12*(2), 13.-47.

Kamarudin, W. N. W., & Ismail, A. G. (2013). Financial Innovation in Islamic Banking Industry: The Last Thirty Years and the Next.

Kayed, R. N. (2012). The entrepreneurial role of profit-and-loss sharing modes of finance: Theory and practice. *International Journal of Islamic and Middle Eastern Finance and Management*, *5*(3), 203-228.

Khaldi, K. & Hamdouni, A. (2011). Islamic financial intermediation: equity, efficiency and risk. *International Research Journal of Finance and Economics*, (65).

Knewtson, H. S., & Rosenbaum, Z. A. (2020). Toward understanding FinTech and its industry. *Managerial Finance*, *46*(8), 1043-1060.

Laldin, M. A., & Djafri, F. (2019). Islamic finance in the digital world: Opportunities and challenges (Kewangan Islam dalam Dunia Digital: Peluang dan Cabaran). *Journal of Islam in Asia (E-ISSN 2289-8077)*, *16*(3), 283-299.

Marzuki, M., & Nurdin, N. (2020). The influence of halal product expectation, social environment, and fiqih knowledge on intention to use shariah financial technology products. *International Journal of Innovation, Creativity and Change*, *13*(1), 171-193.

Miskam, S., Yaacob, A. M., & Rosman, R. (2019). Fintech and its impact on Islamic fund management in Malaysia: a legal viewpoint. In *Emerging Issues in Islamic Finance Law and Practice in Malaysia* (pp. 223-246). Emerald Publishing Limited.

Mohamed, H., & Ali, H. (2018). *Blockchain, Fintech, and Islamic finance: Building the future in the new Islamic digital economy*. de Gruyter.

Mohd Dali, N. R. S., Harun, M. Z. M., Mohd Khalid, F., & Abdul Hamid, H. (2004). E-Commerce in Islamic perspectives: The theoretical framework, key success factor and challenges for Islamic e-commerce business. *Jurnal Penelitian Islam* 53(9):1689–99.

Naim, A. M., Bakar, M. A., Md Hussein, M. N., & Habibi Long, M. N. (2016). Issues and Challenges in Offering Muḍārabah and Mushārakah Products in Islamic Finance. *Jurnal Pengurusan*, *46*, 137 – 147.

Nienhaus, V. (2020). The Future of Islamic Finance after the Corona Crisis. *Bait Al-Mashura Journal*, (13).

Ökte, M. K. S. (2016). The role of Islamic finance in shaping the new financial order. *International Journal of Business and Social Science*, 7(2), 229-237.

Oseni, U. A., Hassan, M. K., & Hassan, R. (2019). Introduction: Revisiting the Confines and Significance of Islamic Finance Law. In *Emerging Issues in Islamic Finance Law and Practice in Malaysia* (pp. 3-11). Emerald Publishing Limited.

Panjwani, K., & Shili, N. (2020). The impact of fintech on development of islamic banking sector in the contemporary world. *Saudi Journal of Economics and Finance*, *4*(7), 346-350.

Poon, J., Chow, Y. W., Ewers, M., & Ramli, R. (2020). The role of skills in

Islamic financial innovation: Evidence from Bahrain and Malaysia. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(3), 47.

Prastiwi, I. E. (2020). Deposit mudharabah investment risk analysis method value at risk (VAR). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *4*(02).

Romānova, I., & Kudinska, M. (2016). Banking and fintech: A challenge or opportunity?. In *Contemporary issues in finance: Current challenges from across Europe* (Vol. 98, pp. 21-35). Emerald Group Publishing Limited.

Roszkowska, P. (2021). Fintech in financial reporting and audit for fraud prevention and safeguarding equity investments. *Journal of Accounting & Organizational Change*, *17*(2), 164-196.

S&P Global Ratings. 2021. "Islamic Finance Outlook 2021 Edition." 3(January).

Salim, K., & Ilyas, A. (2020). Challenges facing Malaysia in expanding its Islamic fintech landscape & possible remedies. *International Journal Of Islamic Economics*, *2*(01), 1-18.

Singh, S., Sahni, M. M., & Kovid, R. K. (2020). What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model. *Management Decision*, *58*(8), 1675-1697.

Tatiana, N., Igor, K., & Liliya, S. (2015). Principles and instruments of Islamic financial institutions. *Procedia Economics and Finance*, *24*, 479-484.

Thaker, M. A. B. M. T., Thaker, H. B. M. T., Pitchay, A. A., Amin, M. F. B., & Khaliq, A. B. (2020). Leveraging Islamic banking and finance for small businesses: exploring the conceptual and practical dimensions (No. 1156). ADBI Working Paper Series.

UNDP. (2014). *Islamic Finance and Impact Investing*.

Visser, H. (2019). *Islamic finance: Principles and practice*. Edward Elgar Publishing.

Wang, Z., Guan, Z., Hou, F., Li, B., & Zhou, W. (2019). What determines customers' continuance intention of FinTech? Evidence from YuEbao. *Industrial Management & Data Systems*, *119*(8), 1625-1637.

Wonglimpiyarat, J. (2017). FinTech banking industry: a systemic approach. *foresight*, *19*(6), 590-603.

World Bank Group. (2020). Leveraging Islamic Fintech to Improve Financial Inclusion.

Yunus, S. M., Kamaruddin, Z., & Embong, R. (2018). The concept of Islamic banking from the Islamic worldview. *International Journal of Academic Research in Business and Social Sciences*, *8*(11), 539-550.

Yustiardhi, A. F., Diniyya, A. A., Faiz, F. A. A., Subri, N. S., & Kurnia, Z. N. (2020). Issues and challenges of the application of Mudharabah and Musharakah in Islamic bank financing products. *Journal of Islamic Finance*, *9*(2), 26-41.

Za'aba, N. S., Zanorrain, S. M., Isa, N. A. M., & Raziman, N. (2020). Islamic digital economy: The role of Islamic Fintech as economy driver. *Journal of Islamic Economics and Law (JIEL)*, *1*(2).

Zhussupov, R. (2021). Risk Elasticity of Economic Agents: Credit-Financing And Business Cycles. *Ikam Working Paper* (4).

Zulkhibri, M., & Ghazal, R. (2015). *Development of Islamic Banking Regulation in Selected IDB Member Countries: A Comparative Analysis* (No. 1436-12).

Zulkhibri, M., & Naiya, I. (2016). *Assessment of Macroprudential Policy in a Dual Banking Sector* (No. 2016-2).

Zulkhibri, M., & Sukmana, R. (2016). *Financing Channel and Monetary Policy: Evidence from Islamic Banking in Indonesia* (No. 2016-1).