

# Investigating the role of Financial Technology on the Performance of Islamic Financial Institutions

Muhammad Naeem Anjum<sup>1</sup>, Shahid Kalim Khan<sup>\*2</sup>, Waqas Patras<sup>3</sup>

<sup>1</sup>Assistant Professor, Department of Business Admiration GCUF, Layyah Campus, Punjab, Pakistan

<sup>2\*</sup>Assistant Professor, Department of Business Administration, Thal University Bhakkar, Punjab, Pakistan

<sup>3</sup>Scholar, Hailey College of Commerce, Lahore, Punjab, Pakistan **Corresponding author:** shahid.khan@tu.edu.pk

**Keywords:** Financial Innovation, Financial Technology, Digitization, Cvid-19, Islamic financial institutions.

Article		History
Date	of	Submission:
26-10-2022	2	
Date	of	Acceptance:
28-12-2022	2	
Date	of	Publication:
31-12-2022	2	

How to cite? Anjum M.N., Khan S.,K., Patras W., (2022). Investigating the role of Financial Technology on the Performance of Islamic Financial Institutions. Research Journal for Societal Issues. 4(1), 118-127.

**DOI No:** 10.56976/rjsi.v4i1.37

The purpose of this research is to investigate the significant part that Financial Innovation (FI) plays in maintaining the stability of Islamic financial institutions. The research philosophy of interpretivism serves as the basis for this body of work. To acquire information, interviews were conducted with various people. The method of purposive sampling was used by the researchers, and the samples were selected with the purpose of the study in mind. As a direct consequence of this, 10 industry professionals agreed to be interviewed for this research. In addition to having a thorough understanding of the fundamentals of Islamic financial innovation, these professionals have worked in the industry for a minimum of five years, making them exceptionally qualified. The researchers used the analytic software known as N-Vivo to do data analysis and interpretation. According to the results, the function of financial innovation in the present environment is crucial, and it has become a lifeline for Islamic financial institutions. In addition, the results of NVivo indicated that financial innovation in IFIs plays significant roles in the areas of digitalization, financial technology, financial inclusion, religiosity, as well as consumer and market acceptability.

Vol 4 No 1 (2022): 118-127



#### Introduction

At the end of the COVID-19 epidemic, can financial innovation (FI) contribute to the stability of Islamic banking? This issue raises several problems that must be addressed. Without a doubt, the recent COVID-19 epidemic has caused havoc on every element of human civilization, prompting experts and governments throughout the globe to scurry to discover a method to lessen the damage. Even though the pandemic affected all economic sectors, the global financial sector was the most severely affected, resulting in an unsustainable burden (Baldwin, Mauro, Mauro, Mariscal, & Lustig, 2020) owing to the sector's direct and indirect influence on everyday human activities (M. H. Banna et al., 2020). Following the epidemic, measures such as social isolation, lockdown, and quarantine were enforced, which prevented people from going about their normal lives and halted the economy (La Torre, Liuzzi, & Marsiglio, 2021). Various sectors, such as tourism, manufacturing, sports and leisure, and banking, may feel the consequences of the economic closure. There is a significant likelihood that the banking sector will be the most affected, given this is where most people manage their funds (H. Banna & Alam, 2020).

Therefore, the economic health of a country is dependent on the stability of its banking sector. To maintain smooth global financial sustainability, the banking sector (both conventional and sharia-based) must stay stable (Salami et al., 2020). For the time being, experts are concentrating on Islamic banks because of their shown stability and resilience following the 2007–2009 Global Financial Crisis (GFC), which devastated global economies and the banking sector (Ahmed, 2010). In addition, Islamic banks offered financial services to unbanked individuals who are religiously opposed to conventional banks (Ben Naceur & Roulet, 2017). Therefore, Islamic banking is the best alternative for these individuals, as it conforms to Islamic stipulations in its financial services and offers them both now and future salvation. Given the significance of Islamic banks to the well-being of humanity, it is only reasonable that their stability and expansion be given high attention. To ensure the stability of Islamic banking, it is necessary to thoroughly examine the proper implementation of FI.

Even though FI is of utmost significance to Islamic banks, there are a relatively limited number of empirical research that investigate the effect that FI has on the stability of Islamic banks. Even though Banna (2020) discovered that FI had a positive influence on banking stability, Khraisha and Arthur (2018) discovered that FI might have a negative impact on financial stability due to the excessive level of financial innovations. Banna (2020) discovered that FI had a beneficial influence on banking stability. It is not obvious, since FI has both good and negative characteristics, whether the proper application of FI would improve the level of stability in the Islamic banking sector in the face of the COVID-19 epidemic. This research investigates the function that the application of FI plays because of the epidemic.

#### **Literature Review**

## **Empirical studies of Financial Innovation**



There is a tendency to use the words "economic success," "technological development," and "national progress" interchangeably when referring to innovations. Because of the increasingly cutthroat nature of today's economic environment, innovation has evolved into an essential component of the expansion of any company. According to Ledzik (2013), innovation occurs not only in the process of developing new items but also in the techniques and approaches that are taken to the market. According to the definition provided, new product development (NPD) is seen because of innovation (Roberts & Amit, 2003). The domain encompasses a variety of elements, including the introduction of new styles, alterations to already available product features, new product lines, and additions to existing product lines (Jong & Vermeulen, 2004). As a direct consequence of this, a new value is provided to the customer (Akamavi, 2005). Innovation encompasses a vast variety of other factors in addition to product creation, which is only one of its many facets. The innovation process results in the introduction of a new technique, product, or idea into the firm.

The sector of banking known as Islamic banking, which is founded on the central tenets of Islamic Shariah, has seen significant growth over the last several decades. Islamic banking, on the other hand, is distinct from conventional banking in that it divides its profits and losses with its customers, allows for transactions to be completed without the payment of interest, and frowns upon business dealings that involve immoral or illegal activities like gambling, pornography, or alcohol, amongst others (Talwar et al., 2020). Because of these factors, Islamic banking has emerged as the most successful banking sector in the world, and it continues to advance in all its operations by increasing profits to maintain its overall integrity (Imam & Kpodar, 2013). As a result of this, Islamic banking has shown its resilience in the face of any kind of financial catastrophe, as seen by the fact that it has continued to operate after the Global Financial Crisis (Maherhasan & Jemmadridi, 2012). In addition to this, it has been noticed that the Islamic banking industry is robust because it managed to survive the crisis by developing new products in the form of FI (Banna et al., 2020).

By implementing FI, Islamic banks can improve their technical capabilities, which, in turn, leads to an improvement in the degree of consistency that is achieved across the system. The accomplishment of financial success and stability may be helpful for everyone, including those who are low-income or who live in distant places. This is because everyone, regardless of their circumstances, has the potential to benefit. It has been demonstrated that the incorporation of FI into the financial sector makes it feasible for FI to expand and results in an increase in financial development and stability. Both outcomes are beneficial to low-income individuals because they result in the reduction or elimination of poverty (Siddik and Kabiraj, 2020). According to the claims of some authors, the term "fintech" refers to an invention that reduces the amount of time that clients need to spend physically present at financial institutions (Manyika et al., 2016). Utilizing a gadget that has a connection to the internet makes it possible to access the information of a financial institution digitally or from a remote place. This is the case when utilizing a device. This has a beneficial effect on the overall productivity of the business as well as its level of consistency. It is also vital to emphasize that the correct use of FI makes it possible to formalize unrecognized firms, which, in turn, helps the overall growth of an economy in a country. This is an important point to keep in mind since it is related to the previous point. Since the government already has the information needed to collect taxes from



unregistered businesses, the government may be able to collect the taxes owed by such businesses more quickly (Klapper et al., 2019).

In their most recent study on the economies of ASEAN countries, Banna and Alam (2021) highlighted the positive impact that FI may have on the region's overall financial stability. Banna (2020), using data from a specific nation, revealed that FI has a general impact on the stability of the financial system. These studies were carried out from the perspective of traditional banking, even though technological advancement in the financial sector has a positive and significant impact on the viability of the banking system. Senou (2019) conducted empirical research to determine how the usage of FI is affected by the effect of digital finance. The data for this study came from West Africa. According to the findings of the study, proper implementation of FI, which strengthens regulatory control over financial activities, needs to be taken into consideration to quicken the pace of banking stability and overall banking performance in that location (Naumenkova, Mishchenko, & Dorofeiev, 2019).

Islamic financial institutions all around the globe have begun the process of digitalizing their business processes in preparation for the inevitable impact of FI (Knaack & Gruin, 2020). On the other hand, most of the empirical research has focused only on examining the impact of FI on banking stability, and the results of these studies have been shown in the literature to be inconsistent. Even while a few studies have investigated the effect that FI has on the stability of conventional banking, there are relatively few studies that investigate the effect that it has on the stability of Islamic banking. This may be explained, at least in part, by the fact that the FI sector of the Islamic banking industry is just in its infancy in terms of its overall growth. This research, which was prompted by the COVID-19 outbreak, investigates the impact that FI has on the stability of Islamic banking.

## Methodology

The research philosophy of interpretivism serves as the basis for this body of work. The investigation is furthermore predicated on an inductive methodology, which starts with the investigation of a particular incident before moving on to generalizing it. To acquire information, interviews were conducted with various people. When doing qualitative research, the number of participants is not normally specified in advance; rather, the sample size is based on the point at which the information becomes saturated. The method known as purposive sampling is being used, and the sample itself was chosen with the purpose of the research in mind. To accomplish the purpose of the research, a total of 10 specialists agreed to be interviewed. There is now a total of seven IB specialists and three academic experts on the team. These experts, each of whom has worked in the industry for a minimum of five years, have a deep comprehension of Islamic banking principles as well as the operations of Islamic banks.

In this research, thematic analysis was used since data-shortening interviews were conducted to prepare the interviewer for the data collection technique. The content analysis method was used to identify similarities and differences in themes (Sohail et al., 2020). By giving codes to themes and classifying them as patterns, topics, ideas, and concepts, this was organized. Second phase: data exhibits, in this instance reports or subjects, are explored individually and cited



accurately (Jaiyeoba et al., 2018). In the last step, which consists of demonstrating and validating the conclusion, the climax is shown at its core.

#### **Results**

## **Respondent Profile**

The characteristics of the respondents are shown in Table 4.1. To maintain the respondents' anonymity and preserve their privacy, the numbers R1 through R10 have been given to them as pseudonyms. Five of the respondents came from fully-fledged Islamic financial institutions, while the other five arrived via the Islamic windows of conventional financial institutions. Seven of the interviewees have managerial positions, while three are academics in Islamic studies. All managers can understand Financial Innovation, FinTech, Digitization, and Financial Inclusion.

**Table No 1: Demographic Detail of Respondents** 

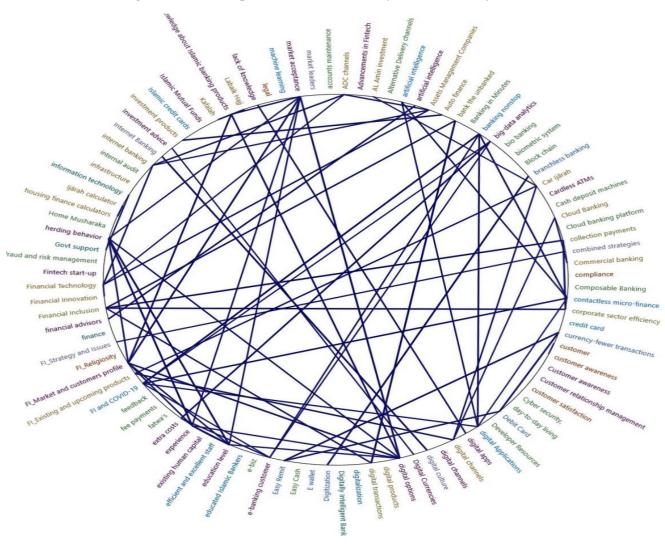
ID	Gender	Education	Experience	Position	Institution Name
R1	Male	Master	16	Manager	Meezan Bank
R2	Male	ACMA	18	Manager	Bank Islami
R3	Male	Bachelor	14	Manager	ALbarka Bank
R4	Male	MBA	11	Manager	Faisal Bank
R5	Male	MPA	06	Manager	Dubai-Islamic bank
R6	Male	Master	19	Manager	UBL- Islamic Bank
R7	Male	ACCA	10	Manager	MCB Islamic
R8	Male	Ph.D.	11	Islamic Scholar	Soneri- Bank
R9	Male	Ph.D.	04	Islamic Scholar	HBL-Islamic Bank
R10	Male	Ph.D.	08	Islamic Scholar	Alfalah-Islamic Bank

## **Cluster Analysis**

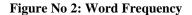
Figures 4.2 and 4.3 illustrate the ways in which the structure of hierarchies and links are comparable to one another. These illustrations illustrate how the potential for financial innovation is broken down into a variety of categories and how similar challenges are arranged. Figure 4.2 illustrates the Circle Graph, which depicts all the components as dots on the circumference of the circle. The similarities between the sketched versions are highlighted using connecting lines that vary in colour and thickness. Blue lines represent aspects of the material that are comparable to one another. According to the data, the top challenges that respondents emphasized the most were Financial Innovation, Digitization, Financial Technology, Financial Inclusion, Infrastructure, Religiosity, and Customers (see figure 1 and 2).



Figure 1: Circle Graph of Themes Clustered by words Similarity









## **Discussion**

Through Financial Innovation, banks are more efficient, providing better service to their clients while also saving them money. As a bank regulator, the State Bank of Pakistan always encourages Islamic banks to use more creative techniques to better serve their clients and also offers recommendations for the successful implementation of digital Islamic banking. Technology developments (such as mobile and internet) paired with their global acceptance are shifting customers' expectations, according to literature (Chuen & Teo, 2015).

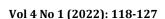
"As a result of technological advancements, financial resources and institutions have grown rapidly (R2)

"Customers can benefit from the use of financial technology by receiving services promptly and reliably. "Your thumb is your bank", according to Bank-Islami, which offers a variety of services utilizing financial technology, including Cardless ATMs". (R3)

It was said by one responder that SBP as a bank regulator must verify that any new technology used to assist clients is compliant with Sharia law. All these sharia principles are extremely essential since Islamic banking is based on Islamic responsibilities and regulations.

"Fintech and product development must comply with Shariah-compliant norms." The Islamic Finance Industry will be no different from the rest of the global financial industry in terms of digitalization' (R7)

# Research Journal for Societal Issues





During pandemics, individuals in impoverished nations require more credit and data advancements to keep in touch. They also need more contactless microfinance services to replace physical transactions. Digital channels like machine learning, big-data analytics, and artificial intelligence, on the other hand, can make a difference in handling this load using the already stretched infrastructure of such markets.

"Banks and financial institutions can't function without digital technology, even amid a crisis like COVID 19" (R2).

"During the Covid-19, SBP encourage banks to promote their digital services to its customers. I think the role of fintech during this pandemic is very crucial. Different indicators find out that more people are using mobile banking nowadays" (R10)

For the approval of any product prior to bringing financial innovation, adherence to Shariah is required. Financial innovation and religion to maintain Shariah conformity are discussed in several responses.

"Technology changes the way organization manage their products. I think innovation through fin-tech is not a bad thing and in Islam, there is no prohibition of the use of fin-tech but it should be under the guidelines of the Shariah" (R8)

"Islamic banks completely depend on Shariah Boards. In addition, the board relies on Shariah experts who are highly qualified. In Islamic banking, riba has been eliminated via their efforts. Sharia board should be consulted for any fintech innovations to see if they are compliant with the principles of sharia or not" (R9)

Lastly, some respondents discuss about Market and customers' profiles to accept and their readiness for financial innovation during a pandemic. Customer awareness creation is a key factor for financial innovation so that customers really utilize FI options as for as the market is concerned things are changing very quickly and fintech is a future for every Islamic bank.

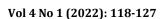
"Customers are now smart due to social and electronic media, and they also prefer things to be done in online and a convenient way than the old manual system. Majority of the public like and accept FINTECH though gradually not immediately but there is not a big hurdle in acceptance" (R5)

"Customers are a big asset for any organization. As Islamic banking is flourishing day by day, customers are also interested to deal with it. Those customers who have well knowledge about Islamic banking products and the role of fin-tech in these products are more productive for Islamic banks. The Pakistani banking sector is changing and almost every conventional bank has an Islamic window which is evidence of market acceptance of Islamic bank" (R9)

#### **Conclusion**

This paper investigates the crucial part that Financial Innovation (FI) plays in maintaining the stability of Islamic financial institutions during the current COVID-19 outbreak. According to the data, significant responsibilities that were emphasized by respondents include Financial Innovation, Digitization, financial technology, Financial Inclusion, Religiosity, FI and distant locations difficulties, and Customers' Ease. This study will make several important additions to the existing body of academic literature on Islamic banking and financial institutions.

# Research Journal for Societal Issues





Previous studies have concentrated their attention primarily on the relationship between innovative financial practices and secure banking practices, as well as the theoretical significance of financial innovation. Within the scope of this study, researchers have investigated both the function and the importance of financial intermediation on the stability of Islamic banking. A second thing to consider is that previous studies (Ahamed & Mallick, 2019; Van et al., 2020) have produced a FI index; nevertheless, the purpose of this study is to investigate the basic components that are associated with financial innovation in Islamic financial institutions. In conclusion, it is expected that the findings of this study will help speed the adoption of FI in Islamic banks by supporting governments in the effective implementation of social distancing measures intended to prevent the development of COVID-19 and promote financial stability. This research is restricted to Islamic financial institutions that are based in Pakistan. It is possible that in the future, researchers may investigate the role of financial innovation by contrasting the Islamic sector with the conventional sector. This study extends the literature regarding financial innovation and Islamic financial institutions' performance.

## References

Ahmed, D. A. (2010). Global financial crisis: an Islamic finance perspective. *International Journal of Islamic and Middle Eastern Finance and Management*, 3, 306-320. doi:10.1108/17538391011093252

Akamavi, R. (2005). A research agenda for investigation of product innovation in the financial services sector. *Journal of Services Marketing*, 19.15-27. doi:10.1108/08876040510620148 Baldwin, R., Mauro, B., Mauro, D., Mariscal, J., & Lustig, N. (2020). *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes A VoxEU*.org Book. In.

Banna, H., & Alam, M. R. (2020). Islamic banking efficiency and inclusive sustainable growth: the role of financial inclusion. *Journal of Islamic Monetary Economics and Finance*, 6, 11-29. doi:10.21098/jimf.v6i1.1089

Banna, M. H. A., Sayeed, A., Kundu, S., Christopher, E., Hasan, M. T., Begum, M. R., ... & Khan, M. S. I. (2022). The impact of the COVID-19 pandemic on the mental health of the adult population in Bangladesh: a nationwide cross-sectional study. *International Journal of Environmental Health Research*, 32(4), 850-861.

Ben Naceur, S., & Roulet, C. (2017). Basel III and Bank-Lending: Evidence from the United States and Europe. *IMF Working Papers*, 17, 1. doi:10.5089/9781484328309.001

Ellis. (2020). Banking and Financial Institutions. Retrieved from

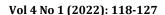
Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, *5*(1), 80-92. doi:10.1177/160940690600500107

Imam, P., & Kpodar, K. (2013). Islamic Banking: How Has It Expanded? *Emerging Markets Finance and Trade*, 49, 112-137. doi:10.2753/REE1540-496X490607

Jaiyeoba, H., Adewale, A., Haron, R., & Che Ismail, C. M. H. (2018). Investment decision behaviour of the Malaysian retail investors and fund managers: A qualitative inquiry. *Qualitative Research in Financial Markets*, 10, 00-00. doi:10.1108/QRFM-07-2017-0062

Jong, J. P. J., & Vermeulen, P. (2004). Determinants of Product Innovation in Small Firms A Comparison Across Industries. *EIM Business and Policy Research, Scales Research Reports*, 24.42-59. doi:10.1177/0266242606069268

# Research Journal for Societal Issues





Khraisha, T., & Arthur, K. (2018). Can we have a general theory of financial innovation processes? A conceptual review. *Financial Innovation*, 4(1), 4.62-756. doi:10.1186/s40854-018-0088-y

Knaack, & Gruin. (2020). FinTech, economy and space: Introduction to the special issue.

La Torre, D., Liuzzi, D., & Marsiglio, S. (2021). Epidemics and macroeconomic outcomes: Social distancing intensity and duration. *Journal of Mathematical Economics*, 93, 102473. doi:https://doi.org/10.1016/j.jmateco.2021.102473

Maherhasan, & Jemmadridi. (2012). The Effects Of The Global Crisis On Islamic And Conventional Banks: A Comparative Study. *Journal of International Commerce, Economics and Policy*, 02. doi:10.1142/S1793993311000270

Naumenkova, S., Mishchenko, S., & Dorofeiev, D. (2019). Digital financial inclusion: evidence from Ukraine. *Investment Management and Financial Innovations*, 16, 194-205. doi:10.21511/imfi.16(3).2019.18

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329-340. doi:https://doi.org/10.1016/j.bir.2017.12.003

Roberts, P., & Amit, R. (2003). The Dynamics of Innovative Activity and Competitive Advantage: The Case of Australian Retail Banking, 1981 to 1995. *Organization Science - ORGAN SCI*, 14, 107-122. doi:10.1287/orsc.14.2.107.14990

Senou. (2019). Financial inclusion dynamics in WAEMU: Was digital technology the missing piece. *Financial Economics*. Print Ahead

Śledzik, K. (2013). Schumpeter's View on Innovation and Entrepreneurship. *SSRN Electronic Journal*.75-87. doi:10.2139/ssrn.2257783

Sohail, Husssain, & Qurashi. (2020). An Exploratory Study to Check the Impact of COVID-19 on Investment Decision of Individual Investors in Emerging Stock Market. *Electronic Research Journal of Social Sciences and Humanities*, 2, 1-13. Retrieved from <a href="https://ssrn.com/abstract=3753262">https://ssrn.com/abstract=3753262</a>

Talwar, S., Talwar, M., Kaur, P., & Dhir, A. (2020). Consumers' resistance to digital innovations: A systematic review and framework development. *Australasian Marketing Journal (AMJ)*, 28(4), 286-299. doi:https://doi.org/10.1016/j.ausmj.2020.06.014