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The Role of Financial Technology in Mediating the Influence of Islamic Financial Literacy on Islamic Financial Inclusion in Banda Aceh City

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Abstract

This research aims to test the role of Financial Technology (Fintech) in mediating the Islamic Financial Literacy (IFL) influence on Islamic financial inclusion (IFI) in Banda Aceh City, Indonesia. The research population was the people of Banda Aceh, which is 252,899 people. The sample amounted to 300 people, who were the number productive age population in the age range of 15-64 years in Banda Aceh City. Data were collected (primary data) taken by distributing questionnaires to all respondents and were tested using SEM-AMOS. The results reveal that IFL influences Fintech, IFL influences Islamic IFI, Fintech influences IFI, and IFL influences IFI through Fintech. The results also prove that Fintech in the research model functions as a partial mediation, which means that IFL can affect IFI directly or through Fintech mediators. The findings at the same time prove that the model of increasing IFI is a function of increasing IFL and increasing the use of Fintech.

Keywords: Fintech, Islamic Financial Literacy, Islamic Financial Inclusion

1. Introduction

The Indonesian government is currently working to increase financial inclusion so that the welfare of citizens increases. Financial inclusion is a major supporting factor in development. Increasing inclusion can support the economic empowerment of people and help them manage their businesses and lives better. According to data from the 2015-2019 Indonesian Financial Services Sector Master Plan (MPSJKI), Indonesian people's access to formal finance when compared to several other ASEAN countries where the percentage of Indonesian people's access to formal finance is 40%, which is one level above the Philippines' 31.3%, but below Thailand at 78.1%, Malaysia at 80.7% and Singapore at 96.4%. From the data above, the lack of access to Indonesian people to formal finance makes Indonesia ranks second lowest compared to other ASEAN countries, especially Thailand, Malaysia, and Singapore.

The minimal use of formal finance in Indonesian society can be one of the reasons for the low level of financial inclusion in society because the majority of people still rely on non-financial institutions as a source of funding (MPSJKI OJK, 2015-2019). This is why the Government should pay serious attention to cooperating with other relevant parties to increase financial inclusion in Indonesia. It has become a global issue that various developed and developing countries have begun to formulate strategies and policies to increase financial inclusion in the financial services sector. According to (Atkinson & Messy, 2013), financial inclusion is the process of providing affordable, timely, and adequate access to various financial products and services, which can expand the reach of users for all segments of society, including awareness of financial well-being. in this case in the form of payment, savings, credit, and insurance transactions that are used responsibly and sustainably. Indonesia's Financial Inclusion Index in 2019 is 76%, lower than Singapore (98%), Malaysia (85%), and Thailand (82%) (SNLKI OJK, 2019). The Indonesian President issued Presidential Decree concerning the National Strategy for Financial Inclusion (SNKI). This Presidential Decree is part of efforts to improve people's welfare by ensuring financial inclusion for all Indonesians and achieving Indonesia's financial inclusion index to 90% in 2024.

Today the digital divide is still a challenge that needs to be overcome immediately. The development of technology-based services is needed to support financial inclusion programs. (Shen, Hueng, & Hu, 2020) found that the use of the Internet and the use of digital finance have an important role in increasing financial inclusion. Financial Technology (Fintech) or what is commonly referred to as fintech is a combination of technology and financial features or can also be interpreted as innovation in the financial sector with a touch of modern technology (Pribadiyono, 2002). (Soediro, 2019) added that fintech can also make financial services more affordable, and easy to access and accelerate the use and involvement of several financial services to increase financial inclusion. Financial literacy is a combination of awareness, knowledge, attitudes, and behavior needed to make financial decisions to achieve individual prosperity, which is later expected to be able to manage finances well to increase the number of financial products and services (OECD, 2011). Increasing financial literacy in society has an impact on more people who will save and invest so it has a good impact on financial inclusion. In the Financial Services Authority (OJK) survey on Islamic financial literacy (IFL) and integration of Islamic finance in 34 provinces, the results varied from one province to another. Of the 34 provinces, Jakarta Province has the highest IFL score compared to other provinces, namely 34.03%, while Kalimantan Utara Province has the lowest IFL Index, namely 0.79%. On average most provinces in Sumatra, Jawa, and Nusa Tenggara Barat have a higher IFL Index than provinces on other islands. In a survey conducted by OJK in 34 provinces in Indonesia, it is known that the average Islamic Financial Inclusion (IFI) Index is higher than the Financial Literacy Index (SNLKI, 2021-2025). It is different in Aceh Province, the IFI index and the IFL index are both in fifth position out of 34 provinces. The figure achieved in IFL is 20.21%, while the figure achieved in IFI is 18.64%. This means that there is still a need to increase Sharia financial education in the community so that the use of Sharia financial products and services can increase, so this must be accelerated through the use of information technology (SNLKI, 2021-2025). This is why the government should pay serious attention to cooperating with other relevant parties to increase Sharia financial inclusion.

To see an initial description of IFIs, IFLs, and Fintech in the city of Banda Aceh, a survey was conducted using various IFI indicators proposed by (Bongomin, Ntayi, Munene, & Nabeta, 2016). It can be seen that the data from the initial survey related to respondents' perceptions of IFIs in Banda Aceh City resulted in an overall average value of 3.97 and this figure can be said to be in the good category. Nonetheless, there is an IFI indicator which is the underlying phenomenon of the problems in this research, in the welfare dimension, namely the products or services provided by Islamic financial institutions have not increased access to financial benefits and facilities. An initial survey was also conducted regarding respondents' perceptions of Fintech in Banda Aceh City, using various indicators from Fintech put forward by (Shen et al., 2020). The survey produces an overall average value and the Fintech variable is 3.90 and this figure is included in the good category. Even so, there are 2 indicators which were the basic phenomenon of this research on the Fintech variable, namely on the Fintech knowledge dimension, where people do not know and can use Fintech-based sharia financial products and services properly, then on the market provision dimension, where respondents only still use a product from Fintech in Islamic financial service institutions.

Furthermore, from the various IFL indicators put forward by (Soetiono & Setiawan, 2018), an initial survey was also conducted regarding respondents' perceptions of IFL in Banda Aceh City, which resulted in an overall average score of 3.57 and this figure is in the category Good. Even so, there are 3 indicators from the IFL dimension which are the basic phenomena of the IFL problem in this research, namely the behavioral dimension of Islamic finance, where: people are unable to set aside their money regularly; have not been able to use money following the budget and have not routinely saved in any form every month and also have not been able to allocate personal funds. According to (Rizky & Rachmatan, 2016), increased income has not made Indonesian people, especially the people of Banda Aceh City, more inclined to save, a higher lifestyle makes people more consumptive than saving and investing in financial service products. Therefore, the Government of Aceh needs to take steps to increase public awareness of the importance of the Islamic financial system (Portalsatu.com, 2019). Thus the author feels the need to measure and look deeper into the role of IFIs and Fintech in achieving IFIs in the people of Banda Aceh City.

2. Literature Review

Islamic Financial Literacy

The Global Financial Development Report (2014) defines Financial Inclusion as follows: "The proportion of individuals and firms that use financial services has become a subject of considerable interest among policymakers, researchers, and other stakeholders." Thus it can be interpreted that financial inclusion is a situation where the majority of individuals and companies that use financial services have become of considerable interest among policymakers, researchers, and other stakeholders. (Salim & Sun, 2014) added that the goal of financial inclusion is to reduce poverty, economic stability and increase economic growth, while the strategy for increasing financial inclusion is through financial knowledge education activities, providing access to financial institutions, consumer protection services, ratification of banking regulations and policies. , and minimize negative information about banking. According to the Organization for Economic Cooperation and Development or (OECD, 2016) there are five indicators, namely Savings/Investments, Payment Products, Insurance Products, Credit Loans, and Understanding of Financial Products. Meanwhile, several dimensions of financial inclusion adopted by (Bongomin et al., 2016) are welfare, access, quality, and usage.

Fintech

According to Pribadiono et al (2016), FinTech is a combination of technological and financial characteristics, or can also be interpreted as innovation in the financial sector with a touch of modern technology. According to (Dorfleitner, Hornuf, Schmitt, & Weber, 2017), FinTech is a very fast and dynamic industry with many different business models. According to (Hsueh & Kuo, 2017), Fintech or also called FinTech is a new financial service model developed through information technology innovation. Thus it can be concluded that Fintech (fintech) is a service that combines technology and finance, where this service provides innovation for businesses. Measurements of Fintech adopted from (Shen et al., 2020) and (Jaya, 2019) are : Risk and Investment Management, Market Provisioning, Cashless Society, and Fintech Knowledge.

Islamic Financial Inclusion

Financial literacy is a set of skills and knowledge that enables a person to make effective decisions using all the financial resources they have (Manurung & Rizky, 2009). According to (Chen & Volpe, 1998) financial literacy is the ability to manage finances so that life can be more prosperous in the future. Financial literacy is also defined by The President's Advisory Council on Financial Literacy (PACFL) (2008) as the ability to use knowledge and skills to manage financial resources effectively for financial well-being. The 2016 OECD INFE conducted an international survey using measurements of financial literacy levels, namely financial knowledge, financial behavior, and financial attitudes which will produce a national level of financial literacy (Soetiono & Setiawan, 2018).

3. Method

The population was the residents of Banda Aceh City as many as 252,899 people (BPS, 2021). The maximum sample size for this research was 300 respondents. This sample was the number productive age population in the age range of 15-64 years in Banda Aceh City. Data were collected (primary data) taken by distributing questionnaires to all respondents. Data were tested using Structural Equation Modeling (SEM) thru the AMOS application.

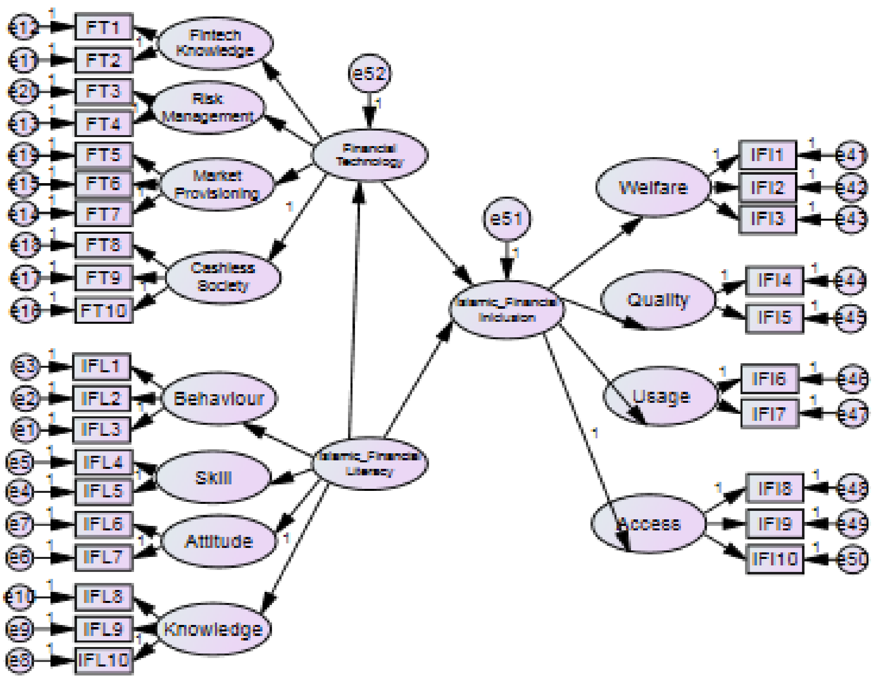

Figure 1. Research model in AMOS

The model presents the hypotheses to be tested below.

H1: IFL affects Fintech
H2: IFL affects IFI
H3: Fintech affects IFI
H4: Fintech mediates the IFL role in IFI

4. Result

Research result

Structural analysis was carried out after passing the confirmatory factor Analysis.

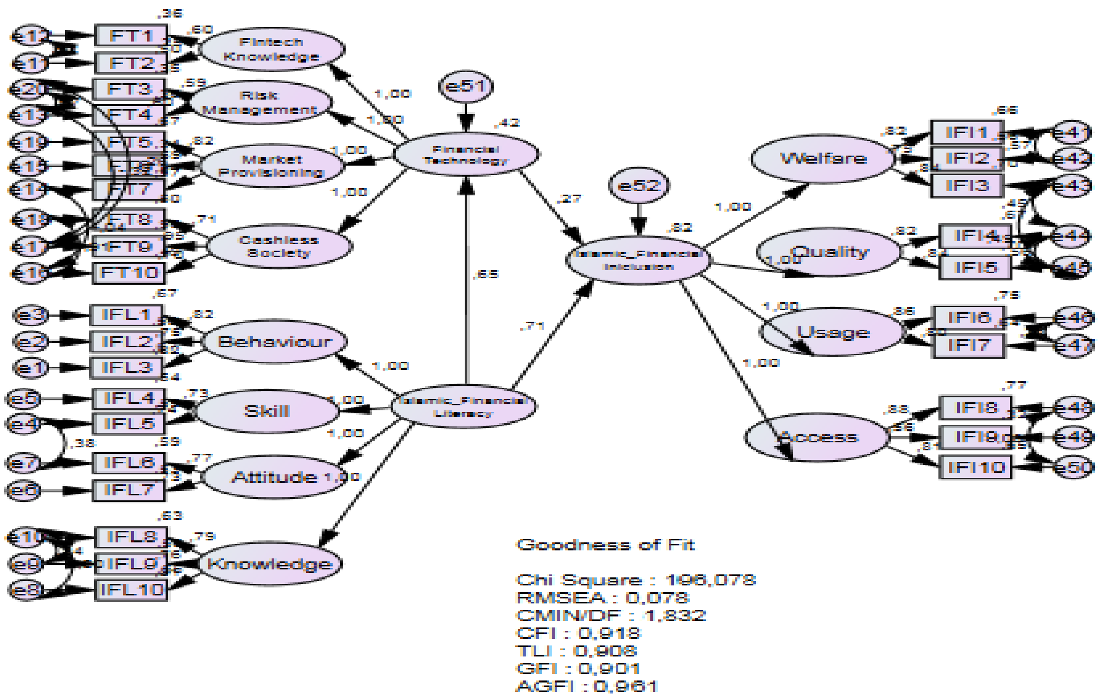

Figure 2. Structural Test Result

Hypothesis test

Testing the research hypothesis resulted in the table below.

Table 1. Standardized Regression

			Estimates	SE	CR	P
Fintech	<---	IFL	0.647	0.069	9,657	0.000
IFI	<---	Fintech	0.266	0.048	5,723	0.000
IFI	<---	IFL	0.710	0.060	12,570	0.000

Source: Primary Data Processed, (2023)

H1: IFL Role in Fintech

IFL influence test on Fintech resulted in CR 9.657, p 0.000, meaning IFL influences the improvement of using Fintech. The influence size of IFL on Fintech is 0.647, which reveals 1 unit increase in IFL will increase 0.674 units of Fintech. The findings of this positive number also prove that better IFL will lead to better the existing Fintech.

H2: IFL Role in IFI

IFL influence test on IFI resulted in CR 12.570, p 0.000, meaning that IFL influences the improvement of IFI. The influence size of IFL on IFI is 0.710, revealing a 1-unit increase in IFL will increase 0.710 units of IFI. The findings of this positive number also prove that better IFL will lead to better existing IFI.

H3: Fintech Role in IFI

The fintech influence test on IFI resulted in CR 5.723, p 0.000, meaning that Fintech affects the improvement of IFI. The influence size of Fintech on IFI is 0.266, which explains 1 unit increase in Fintech will increase 0.266 units of IFI. The findings of this positive number also prove that the better the Fintech will lead to the better the existing IFI.

H4: IFL Role in IFI through Fintech

The fintech mediation effect test on the IFL role in IFI resulted in the table below.

Table 2. Bootstrapping Test on Fintech Mediation Effect

	Origin Sample	Minimum Sample	Standard Error	T Statistics	P-value
IFL→Fintech→IFI	0.311	0.098	0.051	3,452	0.000

Source: Primary Data Processed, (2023).

From the bootstrapping test, the result is 3.452 and it is significant at $\alpha = 0.000$. Thus, Fintech acts as a mediating variable on IFL's role in IFI. Thus, because Fintech significantly acted as a mediation variable, IFL significantly can affect IFI directly, so the role of Fintech on IFL influence on IFI is as a partial mediator. Partial explains that IFL can affect IFI directly, or thru IFI.

5. Conclusion

The result proves that:

1) IFL affected Fintech positively and significantly in the Banda Aceh people. With a better understanding of IFL, there will be an increase and development in the technology-based Islamic financial services sector to carry out financial transactions according to needs and expectations.
2) IFL affected IFI positively and significantly in the Banda Aceh community. With the understanding of the people of Banda Aceh City regarding good IFL, the community will choose to use savings products or financing at Islamic financial institutions.

3) Fintech affected IFI positively and significantly in the Banda Aceh people. Public understanding of Sharia-based Fintech will encourage the use of Sharia financial products. The technology used by Islamic financial institutions is increasingly advanced and approaching conventional financial institutions so that people will find it easier to make choices about using Islamic financial institution products.
4) Fintech partially mediates the IFL significant and positive role in IFI in the Banda Aceh people. The results also prove that Fintech in the research model functions as a partial mediation, which means that IFL can affect IFI directly or through Fintech mediators. The findings at the same time prove that the model of increasing IFI is a function of increasing IFL and increasing the use of Fintech.

All of these findings contribute academically to establishing a premise for the benefit of further theory development. The findings also contribute practically to using modeling the results of this research for policymakers in developing strategies related to IFL, Fintech, and IFI development regulations. Several recommendations for those practitioners can be provided. For the IFL, the lowest average value is obtained on the indicator of being interested in dealing with Islamic financial institutions which indicates that some respondents are still not interested in dealing with Islamic financial institutions. This can be a concern for Islamic financial institutions to further increase promotion to the public so that they are more interested in using Islamic financial products. For the Fintech variable, the lowest average value is obtained on the indicators of risk management and sharia investment where there are still those that are lacking using sharia financial risk and investment management in online investment. This can be a concern for Islamic financial institutions to explain what the risks are from investments and also how to make risk management. For IFI variable obtained the lowest average value on the indicator of the cost of opening an affordable Sharia account where there are respondents who think that the initial account opening fees charged by Islamic financial institutions are less affordable. This can be a concern for Islamic financial institutions to change the initial deposit for opening an account so that it is affordable for the whole community. Future researchers can add other variables that are expected to influence IFI, and can also increase the coverage of the study area.

References

1) Atkinson, A., & Messy, F.-A. (2013). Promoting Financial Inclusion through Financial Education: OECD/INFE Evidence, Policies and Practice. OECD Working Papers on Finance, Insurance and Private Pensions, 34, 1–55. https://doi.org/10.1787/5k3xz6m88smp-en
2) Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Nabeta, I. N. (2016). Social capital: mediator of financial literacy and financial inclusion in rural Uganda. Review of International Business and Strategy, 26(2), 291–312. https://doi.org/https://doi.org/10.1108/RIBS-06-2014-0072
3) Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. Financial Services Review, 7(2), 107–128. https://doi.org/https://doi.org/10.1016/S1057-0810(99)80006-7

4) Dorfleitner, G., Hornuf, L., Schmitt, M., & Weber, M. (2017). Definition of FinTech and Description of the FinTech Industry. In FinTech in Germany (p. 101). https://doi.org/10.1007/978-3-319-54666-7_2
5) Hsueh, S.-C., & Kuo, C.-H. (2017). Effective Matching for P2P Lending by Mining Strong Association Rules. ICIBE 2017: Proceedings of the 3rd International Conference on Industrial and Business Engineering. August 2017, 30–33. https://doi.org/https://doi.org/10.1145/3133811.3133823
6) Jaya, I. M. L. M. (2019). The Impact of Financial Inclusion on Public Financial Services Education through Financial Technology in Sleman Regency, Indonesia. Esensi: Jurnal Bisnis Dan Manajemen, 9(2), 155–174. https://doi.org/https://doi.org/10.15408/ess.v9i2.13576
7) Manurung, A. H., & Rizky, L. T. (2009). Successful financial planner a complete guide. Jakarta: Grasindo.
8) OECD. (2011). Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy. Paris: International Network on Financial Education.
9) OECD. (2016). OECD/INFE International Survey of Adult Financial Literacy Competencies", OECD. Paris.
10) Portalsatu.com. (2019). Literasi Keuangan Syariah di Aceh 21 Persen, Inklusinya 41 Persen. Retrieved April 26, 2022, from Portalsatu.com website: https://portalsatu.com/literasi-keuangan-syariah-di-aceh-21-persen-inklusinya-41-persen/
11) Pribadiyono. (2002). Penggunaan Pribadi Spider Plot Dalam Penilaian Performance Untuk Perencanaan Karir Individu (Mengembangkan Kompetensi Individu & Daya Saing Organisasi Di Indonesia). Konferensi I APIO, 104–114. Surabaya: Asosiasi Psikologi Industri & Organisasi (APIO).
12) Rizky, R., & Rachmatan, R. (2016). Hubungan Antara Citra Tubuh Dengan Perilaku Konsumtif Pada Remaja Di Kota Banda Aceh. Jurnal Psikogenesis, 4(2), 182–191. https://doi.org/https://doi.org/10.24854/jps.v4i2.349
13) Salim, M., & Sun, Y. (2014). Analisis Implementasi Program Financial Inclusion Di Wilayah Jakarta Barat Dan Jakarta Selatan (Studi Pada Pedagang Golongan Mikro, Instansi Perbankan, Otoritas Jasa Keuangan Dan Bank Indonesia). Jurnal Universitas Bina Nusantara, 4(1), 123–143.
14) Shen, Y., Hueng, C. J., & Hu, W. (2020). Using digital technology to improve financial inclusion in China. Applied Economics Letters, 27(1), 30–34. https://doi.org/https://doi.org/10.1080/13504851.2019.1606401
15) Soediro, R. (2019). Peran Fintech untuk Meningkatkan Inklusi Keuangan.
16) Soetiono, K. S., & Setiawan, C. (2018). Literasi dan Inklusi Keuangan Indonesia. Depok: Rajawali Pers.