



The Effect Of Islamic Financial Literation And Financial Technology On Islamic Financial Inclusion

Basrowi^{a*}, Tulus Suryanto^{b*}, Erike Anggraeni^{c*}, Muhammad Nasor^{d*}

^aSekolah Tinggi Ekonomidan Bisnis Islam (STEBI) Lampung, Indonesia

*email: basrowi2018@gmail.com

^bUniversitas Islam Negeri (UIN) Raden Intan Lampung, Indonesia

*email: tulus@radenintan.ac.id

^cUniversitas Islam Negeri (UIN) Raden Intan Lampung, Indonesia

*email: erike@radenintan.ac.id

^dUniversitas Islam Negeri (UIN) Raden Intan Lampung, Indonesia

*email: nasor@radenintan.ac.id

ARTICLE INFO

Article History:

Received: 2020-06-16

Revised: 2020-09-22

Accepted: 2020-11-18

Keywords:

Literacy, Financial, Technology, Inclusion, Finance, Islamic

Paper Type:

Research Paper

ABSTRACT

Purpose: The purpose of this study was to determine the magnitude of the influence of Islamic financial literacy and Islamic financial technology on the inclusion of Islamic finance in students in Lampung Province both partially and simultaneously.

Design Methods: The method used is a survey method. The population of this study is all semester V students and above in Islamic Economics Study Program, Islamic Banking, and sharia accounting in all State and Private Universities in Lampung Province, totaling 3080 people. The sampling technique used is proportional grain sampling, as much as 10% of the population of 308 people. Data collected using surveys, with google form. The collected data were analyzed using simple and multiple regression analysis.

Findings: Based on the results of the analysis it can be concluded, first, there is a positive and significant influence between the literacy of Islamic finance on Islamic financial inclusion. Second, there is a positive and significant influence between Islamic financial technology on Islamic financial inclusion. Third, there is a positive and significant influence between Islamic financial literacy and Islamic financial technology together on Islamic financial inclusion.

Originality Value: Of the two independent variables, Islamic financial literacy variables contributed more than Islamic financial technology variables to Islamic financial inclusion.

INTRODUCTION

Low financial inclusion is a problem that must be solved.¹ Financial inclusion is measured as access to the use of financial services that can help to achieve the Sustainable Development Goals (SDGs).²

The positive impact of financial inclusion on economic growth has been studied by Beck, Demirguc-Kunt, & Peria as well as research by Levine, Loayza, & Beck (2000) that, there is a relationship between financial inclusion and economic growth.³ Demirguc-Kunt, Klapper, & Singer (2015) research that, increasing financial inclusion can reduce rural poverty. Burgess and Pande (2005) and research Bruhn and Love (2014) conclude, financial inclusion is able to increase employment.⁴ Dupas & Robinson, (2013), concluded that financial inclusion can increase expenditure.⁵ In contrast, the study of Brune, Giné, Goldberg, & Yang (2016) concluded that financial inclusion can increase and save.⁶

Global Findex (2017) shows that only 36% or around 90 million Indonesian adults have bank accounts. This number is far behind Malaysia 81%, China 79%, India 53%.⁷

Data from Global Findex (2017) also shows 36% or around 90 million Indonesian adults who have accounts in banks. This number is far behind Malaysia 81%, China 79%, India 53%. In other words, Indonesia's financial

¹Grohmann, Antonia, Theres Klühs, and Lukas Menkhoff, 'Does Financial Literacy Improve Financial Inclusion? Cross Country Evidence', *World Development*, 111 (2018): 84–96 . <https://doi.org/10.1016/j.worlddev.2018.06.020>.

²Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Ansar, Saniya; Hess, Jake., Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/29510> License: CC BY 3.0 IGO. Look at Levine, Loayza, & Beck, T. Financial Intermediation and Growth: Causality and Causes. *Journal of monetary Economics* (2000), 46(1): 31-77.

³Loayza Levine, and T. Beck, Financial Intermediation and Growth: Causality and Causes. *Journal of monetary Economics* (2000), 46(1): 31-77.

⁴M. Bruhn, & I. Love, The real impact of improved access to finance: Evidence from Mexico. *Journal of Finance* (2014), 69(3): 1347–1369.

⁵P. Dupas, and J. Robinson, Savings constraints and microenterprises development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics* (2013), 5(1): 163–192.

⁶L. Brune, X. Giné, J. Goldberg, & D. Yang, Facilitating savings for agriculture: Field experimental evidence from Malawi. *Economic Development and Cultural Change* (2016), 64(2): 187–220.

⁷ADB, *Accelerating financial inclusion in south-east Asia with digital finance*. Technical report. Asian Development Bank. Available at: <http://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2017/jan/Accelerating-financial-inclusion-in-south-east-asia.pdf> . (Accessed 14 November 2017).

inclusion is only 36 percent. At least 60-70% of Micro, Small and Medium Enterprises (MSMEs) also do not have access to banking.⁸

To overcome this problem, Bank Indonesia has launched the National Strategy for Financial Inclusion (NSFI) program as an effort to expand public access to financial services.⁹ The number of adults over 15 years of the world who lack access to financial services is around 2 billion inhabitants or close to 40 percent of the total population.¹⁰

According to the OJK (2016), the Islamic financial literacy index in 2016 was recorded at 8.11 percent compared to conventional at 29.66% which means that out of every 100 people only 30 people belong to the well financial literate category. While the Islamic financial inclusion index of 11.06% is far compared to the conventional of 67.82%.¹¹

The financial inclusion in Fiji is only 60%, Tonga 41%, Samoa 39%, Vanuatu 37%, and Solomon Islands 26% (Klapper, El-Zoghbi, and Hess, 2016). Survey conducted by Klapper, Lusardi, Oudheusden (2015) literacy rates in Canada are 70%, France 45%, German 66%, Italy 38%, Japan 39%, UK 67%, US 67%, Brazil 35%, China 25 %, India 24%, Russia 38%, South Africa 38%, Spain 49%, Portugal 26%.

Financial literacy is needed in making financial decisions and provides an understanding of the importance of investing,¹² and allows increasing participation in financial activities.¹³ People with low levels of financial literacy have the possibility of not doing activities in financial markets whereas those with high levels of financial literacy tend not to have the possibility of experiencing financial disputes.¹⁴

⁸ADB, *Accelerating financial inclusion in south-east Asia with digital finance*. Technical report. Asian Development Bank. Available at: <http://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2017/jan/Accelerating-financial-inclusion-in-south-east-asia.pdf> . (Accessed 14 November 2017).

⁹Ioannis Anagnostopoulos, 'Fintech and Regtech: Impact on Regulators and Banks', *Journal of Economics and Business*, 100 (2018), 7–25. <https://doi.org/10.1016/j.jeconbus.2018.07.003>.

¹⁰UNEP, UNEP Frontiers 2016 Report: Emerging Issues of Environmental Concern. United Nations Environmental Programme Nairobi. URL: https://environmentlive.unep.org/media/docs/assessments/UNEP_Frontiers_2016_report_emerging_issues_of_environmental_concern.pdf

¹¹OJK, 'Survei Nasional Literasi Dan Inklusi Keuangan 2016', 2016: 1–26

¹²Daniel A. Brent, and Michael B. Ward, 'Energy Efficiency and Financial Literacy', *Journal of Environmental Economics and Management*, 90 (2018), 181–216. <https://doi.org/10.1016/j.jeeem.2018.05.004>.

¹³Jing Zou and Xiaojun Deng, 'Financial Literacy, Housing Value and Household Financial Market Participation: Evidence from Urban China', *China Economic Review*, 55 (2019): 52–66 . <https://doi.org/10.1016/j.chieco.2019.03.008>.

¹⁴Amari Mouna and Jarboui Anis, 'Financial Literacy in Tunisia: Its Determinants and Its Implications on Investment Behavior', *Research in International Business and Finance*, 39 (2017): 568–

Lusardi & Mitchell (2014) explained, many people around the world are financially illiterate, therefore, knowledge of finance is a form of human capital, and there is causality between financial knowledge and economic welfare.¹⁵

Fintech News Singapore survey. Indonesian people use Fintech-based payment services with a percentage of 38% and are followed by loan services at 31%.¹⁶

The Islamic finance industry continues to make a number of new innovations, especially facing competition with online fintech companies and conventional financing.¹⁷ Fintech has the potential to create new risks in financial activities.¹⁸ A report from Accenture said that fintech is one of the fastest growing economic sectors. Investment in this industry reached USD12.2 billion in 2014 while in 2008 it only reached USD930 million. Indonesia was reported as one of the countries in the Asian region with growth reaching 1,842 percent from USD1, 82 million in 2013 to USD35.35 million in 2016. Even Indonesia's fintech market was higher than Malaysia which was only USD8.29 million and Thailand was USD3.72 million.¹⁹

The Indonesian Fintech Association (Aftech) noted that 144 fintech start-ups had joined. Where this activity in 2015 only scooped the market by USD 0.11 million and grew rapidly by USD21.65 million in 2016. May 2018 amounted to 199,539 accounts or an increase of 72 percent from January 2018. Meanwhile, borrower accounts increased 461 percent from 330,154 accounts in January 2018 to 1,850,632 accounts in May 2018. The accumulated loans in May amounted to IDR 6,16 trillion or an increase of 105 percent from January with an average value of loans disbursed at IDR 94,050,384 and the smallest loan

77 . <https://doi.org/10.1016/j.ribaf.2016.09.018>. Look at Shen, Chung Hua, Shih Jie Lin, De Piao Tang, and Yu Jen Hsiao, 'The Relationship between Financial Disputes and Financial Literacy', *Pacific Basin Finance Journal*, 36 (2016): 46–65. <https://doi.org/10.1016/j.pacfin.2015.11.002>.

¹⁵A.Lusardi, andO.S. Mitchell, Theeconomicimportanceoffinancialliteracy:Theoryandevidence,*JournalofEconomicLiterature*,52(1) (2014),5–44

¹⁶Amari Mouna, and Jarbouï Anis, 'Financial Literacy in Tunisia: Its Determinants and Its Implications on Investment Behavior', *Research in International Business and Finance*, 39 (2017): 568–77 . <https://doi.org/10.1016/j.ribaf.2016.09.018>.

¹⁷Benedict J., André Schweizer Drasch, and Nils Urbach, 'Integrating the "Troublemakers": A Taxonomy for Cooperation between Banks and Fintechs', *Journal of Economics and Business*, 100 (2018): 26–42 . <https://doi.org/10.1016/j.jeconbus.2018.04.002>.

¹⁸Julapa Jagtiani and Catharine Lemieux, 'Do Fintech Lenders Penetrate Areas That Are Underserved by Traditional Banks?', *Journal of Economics and Business*, 100 (2018): 43–54 . [://doi.org/10.1016/j.jeconbus.2018.03.001](https://doi.org/10.1016/j.jeconbus.2018.03.001).

¹⁹Saksanva, Svetlana dan Irina Kuzmina- Merlino, "Fintech as Financial Innovation – The Possibilities and Problems of Implementation". *European Research Studies Journal* (2017), Volume XX, Issue 3A,

figure in the amount of IDR 5,000. The total value of investments in Fintech in Indonesia in 2017 reached 2.29 trillion rupiah.²⁰

Fintech Syariah is expected to increase public trust in Islamic-based financial services. Not without reason, attitudes and community affinity²¹ and the existence of communication patterns between families related to financial knowledge²² can influence Islamic financial inclusion. Efforts to improve Islamic financial literacy and the implementation of Fintech sharia are supposed to move quickly to face financial market competition. As the purpose of the principles of Islamic to realize the welfare of society. If you do not take preventative measures and evaluate performance, there will be a crisis of financial literacy and technological misuse and will be further from the goals of the Islamic maqasid.

TEORITICAL REVIEW

In a global perspective, "Inclusive finance is a condition in which the population aged at least 15 years old has a savings account or electronic money registered with a formal financial institution."²³The element that has the most role in financial inclusion is " access, availability of products and services, use, and quality of financial services."²⁴

The Financial Inclusion Center, defines full financial inclusion as "a country where everyone who can use it, has access to a range of quality financial services²⁵ provides financial services to individuals in the formal financial system through microfinance products²⁶ use of formal financial services by poor people, having a formal Zapata bank account."²⁷

Financial inclusion, measured through access and use of financial

²⁰Saksanva, Svetlana dan Irina Kuzmina- Merlino, "Fintech as Financial Innovation – The Possibilities and Problems of Implementation". *European Research Studies Journal* (2017), Volume XX, Issue 3A,

²¹Skagerlund, Kenny, Thérèse Lind, Camilla Strömbäck, Gustav Tinghög, and Daniel Västfjäll, 'Financial Literacy and the Role of Numeracy—How Individuals' Attitude and Affinity with Numbers Influence Financial Literacy', *Journal of Behavioral and Experimental Economics*, 74 (2018): 18–25. <https://doi.org/10.1016/j.socec.2018.03.004>.

²²Hanson, Thomas A., and Peter M. Olson, 'Financial Literacy and Family Communication Patterns', *Journal of Behavioral and Experimental Finance*, 19 (2018), 64–71. <https://doi.org/10.1016/j.jbef.2018.05.001>.

²³Bank Indonesia, 'PBI 18/40/PBI/2016 Penyelenggaraan Pemrosesan Transaksi Pembayaran', (2016): 51.

²⁴OJK, 'Survei Nasional Literasi Dan Inklusi Keuangan 2016', 2016: 1–26

²⁵*Ibid.*,

²⁶Sakdiyah, M & Arifin, M.A. 2014. Pengembangan Produk-Poduk Lembaga Keuangan Mikro Syariah. *EQUILIBRIUM* 2 No. 1 (2014): 157-173.

²⁷Loayza Levine, &T. Beck, Financial Intermediation and Growth: Causality and Causes. *Journal of monetary Economics* 46 no. 1 (2000): 31-77

services with the aim of financial development and as an important policy tool that can help to achieve the Sustainable Development Goals (SDGs),²⁸ has several benefits for poor households. This provides low-income individuals with the possibility to save for a future that encourages stability in personal finances²⁹ can give poor households the opportunity to build savings, make investments and access credit.³⁰ Financial inclusion also allows them to deal with shocks that come due to unforeseen emergencies such as sickness or job loss³¹ having a positive effect on financial stability by reducing the risk of procyclicality.³²

Hannig and Jansen (2010) show that financial institutions that serve lower-class individuals tend to survive through the macro crisis well and help sustain local economic activities.³³ In addition, Prasad also observed that the lack of adequate access to credit for small and medium enterprises and small entrepreneurs has an adverse effect on employment growth.³⁴ The interest rate is the main policy tool for macroeconomic stability, which has a positive effect on economic growth.³⁵

In terms of intensity, inclusive financial services schemes are intended to address the poverty situation. From the supply side, providing access and promoting the use of financial services can directly reduce extreme poverty.³⁶

Adhering to the agreed proposition, the religious rules that apply in society will experience prolonged stagnation throughout the ages, rejecting the benefits means freezing the Shari'a because the benefits prove the perfection of the Shari'a.³⁷

²⁸L. Klapper, A. Lusardi, P. van Oudheusden, Financial literacy around the world: Insights from the standards and poor's ratings service global financial literacy survey. <https://www.finlit.mhfi.com>, Accessed 2015.

²⁹R.Han, andM. Melecky, *Financial inclusion for financial stability: Access to bank deposits and the growth of deposits in the global financial crisis. World bank policy research working paper 6577*. WorldBank, 2013.

³⁰K. Ellis, A. Lemma, andJ. P. Rud, (2010),*Financial inclusion, household investment and growth in Kenya and Tanzania*. London: ODI Project Briefing No.43 Overseas Development Institute

³¹D. Collins, J. Morduch, S. Rutherford, &O. Ruthven, *Portfolios of the poor: How the world's poor live on \$2 a day*. Princeton University Press, 2009.

³²H.R.Khan, *Financial inclusion and financial stability: are they two sides of the same coin. Speech at BANCON. BIS Working Paper*. Available: <http://www.bis.org/review/r111229f.pdf>, 2011.

³³ A. Hannig, andS. Jansen, *Financial inclusion and financial stability: Current policy issues*, 2010.

³⁴E. S.Prasad, *Financial sector regulation and reforms in emerging markets: An overview (No. w16428)*. National Bureau of Economic Research, 2010.

³⁵S. Cecchetti, andE. Kharroubi, *Reassessing the impact of finance on growth. BIS Working Paper 381. BIS (2012), Basel*

³⁶L. Klapper, A.Lusardi, P. van Oudheusden, Financial literacy around the world: Insights from the standards and poor's ratings service global financial literacy survey. <https://www.finlit.mhfi.com>, Accessed 2015.

³⁷Maimun, Metode Penemuan Hukum dan Implementasinya, cet VI, (Bandar Lampung Anugrah Utama Raharja (AURA), 2019: 60-61

Determine the conditions for using the benefits, namely: 1) Must be in line between the benefits with the intention of syara; 2) benefits must be rational, 3) taking benefits cannot eliminate difficulties. For example, in non-profit financial institutions such as the empowerment of zakat that can realize sharia maqasid because rational zakat is an obligation of Muslims and on the other hand is distributed to the poor.³⁸

Financial literacy is knowledge, skills, and attitude);³⁹ knowledge of basic economic and financial concepts, and the ability to use financial knowledge and skills⁴⁰ awareness and understanding of financial products, financial institutions, and concepts of financial skills⁴¹ basic economic numerical skills for savings and loans.⁴²

Islamic financial literacy is, "Islamic financial literacy can be defined as the ability to understand finance based on sharia compliance. This should be an issue of concern for Muslim students. Muslims must seek to understand Islamic finance because it is a religious duty. Using the conventional financial system is certainly sinful for Muslims⁴³."

The level of financial literacy in developing countries Financial literacy helps individuals avoid financial problems.⁴⁴ The Islamic financial system can be used to meet the needs of the Muslim community.⁴⁵ Financial literacy is

³⁸Muhammad A. Zahrah, *Ushul Fiqh*. Kairo: Dar Al-Fikr Al-Arabi, 1964. Look at P. Utami, Strategic Management in the Zakat Growth Acceleration Framework in Indonesia. *International Journal of Economics*(2019), *Business and Management Studies*, 6(2), 149-158; P. Utami, Digital Banking Reflection and Zakat Accountability Sharia Banking in Indonesia. *Eastern Journal of Economics and Finance*(2019), 4(1), 31-40; P. Utami, Basrowi, and Julianas, Management of Zakat Payment Based on Fintech for the Good Corporate Governance Improvement. *Eastern Journal of Economics and Finance*, 4 no. 2 (2019), 41-50.

³⁹Monique Cohen and Nelson, Candace, *Financial Literacy : A Step for Clients Towards Financial Inclusion*. Valladolid : Global Microcredit Summit, 2011.

⁴⁰Hung, et.al. (2009). Defining and Measuring Financial Literacy. *RAND Labor and Population Working Paper Series*. WR-708.

⁴¹L. Xu and Bilal Z. Financial literacy around the world – an overview of the evidence with practical suggestions for the way forward. The World Bank: Finance and Private Sector Development. *Policy Research Working Paper*. 6107 (2012): 1-58.

⁴²Olga Kharchenko, 'Financial Literacy In Ukraine: Determinants and Implications for Saving Behavior', *A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of MA in Economics Kyiv MA in Economics (Kyiv School of Economics)*, (2011): 1–47.

⁴³Yazilmiwati Yaacob and Ilhaamie Abdul Ghani Azmi, 'Entrepreneur's Social Responsibilities From Islamic Perspective: A Study of Muslim Entrepreneurs In Malaysia', *Procedia - Social and Behavioral Sciences*, 58 (2012): 1131–38, <https://doi.org/10.1016/j.sbspro.2012.09.1094>.

⁴⁴Yazilmiwati Yaacob and Ilhaamie Abdul Ghani Azmi, 'Entrepreneur's Social Responsibilities From Islamic Perspective: A Study of Muslim Entrepreneurs In Malaysia', *Procedia - Social and Behavioral Sciences*, 58 (2012): 1131–38, <https://doi.org/10.1016/j.sbspro.2012.09.1094>.

⁴⁵Irma Setyawati and Sugeng Suroso, 'Sharia Financial Literacy And Effect On Social Economic Factors (Survey On Lecturer In Indonesia)', *International Journal of Scientific &*

beneficial for people's welfare and economic stability.⁴⁶ Lack of financial literacy among individuals causes tremendous negative effects on the economy.⁴⁷

Financial technology is, "One implementation is the use of information technology related to finance,⁴⁸ technological innovation in financial services;⁴⁹ innovation in financial services;⁵⁰ integrated business models with technology.⁵¹

Utilization of technology produces loans and deposits, investments and e-payments); includes a number of new financial products, financial business, financial software;⁵² access to payments, savings and credit facilities through online; the internet as a widely recognized distribution channel for the banking industry.⁵³

The role of fintech is increasing access, increasing transparency, accountability and collaboration across sectors;⁵⁴ reach people who do not yet have access to banks;⁵⁵ contribute to poverty reduction.⁵⁶

There are three components of digital finance: digital transactional

Technology Research, 5 (2016): 82–102. <https://www.ijstr.org/.../Sharia-Financial-Literacy-And-Effect-On-Social-Economic-Fa>.

⁴⁶Nyamute, Effect Of Financial Literacy On Personal Financial Management Practices: A Case Study Of Employees Of Finance And Banking Institutions. Department Of Finance And Accounting, School Of Business, University Of Nairobi, 2010.

⁴⁷A. Atkinson and F. Messy, Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15 (2012), OECD Publishing. <http://dx.doi.org/10.1787/5k9csfs90fr4-en>.

⁴⁸Wahyu Alimirucchi, 'Analyzing Operational And Financial Performance On The Financial Technology (Fintech) Firm (Case Study on Samsung Pay)', (2017): 1- 3.

⁴⁹FSB (Financial Stability Board), Peranan Tantangan Industri FinTech (*Financial Technology*) dalam Perekonomian, diakses pada <https://www.ajarekonomi.com/2018/01/peran-dan-tantangan-industri-fintech.html>,

⁵⁰Muzdalifa, Irma & dkk, "Peran Fintech Dalam Meningkatkan Keuangan Inklusif Pada UMKM di Indonesia (Pendekatan Keuangan Syariah)", Jurnal Masharif al- Syariah: Jurnal Ekonomi dan Perbankan Syariah Vol. 3, No. 1(2018): 1-5.

⁵¹V. Dhar & R.M. Stein, *FinTech platforms and strategy. Communications of the ACM*: 2017, 32-35. Retrived from <https://doi.org/10.1145/3132726date3> Oktober 2018 pukul 16.00 WIB

⁵²P. Gomber, J. A. Koch, & M. Siering, Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 67 no. 5 (2017), 537e580

⁵³ P. Barbesino, R. Camerani, and A. Gaudino Digital finance in Europe: Competitiveness and online behaviour. *Journal of Financial Services Marketing*, 9(4) (2005): 329e343.

⁵⁴United Nations Environment Program (UNEP), Fintech and Sustainable Development : Assessing the Implications. Desember 2016.

⁵⁵Irma Muzdalifa and dkk, "Peran Fintech Dalam Meningkatkan Keuangan Inklusif Pada UMKM di Indonesia (Pendekatan Keuangan Syariah)", Jurnal Masharif al- Syariah: Jurnal Ekonomi dan Perbankan Syariah, 3 no. 1 (2018): 1- 5.

⁵⁶Bank Indonesia, 'PBI 18/40/PBI/2016 Penyelenggaraan Pemrosesan Transaksi Pembayaran', (2016), 51.

platforms, retail agents, and device agents.⁵⁷ Financial technology classification includes Crowdfunding and peer to peer (P2P) lending, market aggregators, Risk and investment management, Payment, settlement, and clearing.⁵⁸

Digital finance benefits financial inclusion,⁵⁹ has the potential to provide banking services, increases gross domestic product, has a long-term positive effect on banking performance⁶⁰ increases the volume of financial transactions.⁶¹

The implementation of information technology-based financing services should not be in conflict with the principles of Islamic, orati among others, usury, gharar, maysir, tadlis, dharar, zhulm, and haram⁶² Business that is polite, business that is full of togetherness and respect for the rights of each - each party.⁶³ Islamic business is an embodiment (implementation) of the shari'ah of Allah SWT; implement the Shari'a and the provisions of Allah SWT. in that case bermu'amalah. Compliance with Islamic principles is an obligation for financial service institutions that conduct business with Islamic principles.⁶⁴

Organizational theory is a conception, perspective, a review, teachings, opinions or approaches to solving organizational problems so that they are expected to be more successful and able to achieve the goals set.⁶⁵

Organizations are social entities that are deliberately coordinated and have limits that are able to be understood and moved based on references that run all the time in order to achieve common goals.⁶⁶

⁵⁷CGAP, *What is Digital Financial Inclusion and Why Does it Matter?* 10 March 2015. Available at: <http://www.cgap.org/blog/what-digital-financial-inclusion-and-why-does-it-matter>.

⁵⁸Indonesia, Bank, 'PBI 18/40/PBI/2016 Penyelenggaraan Pemrosesan Transaksi Pembayaran', 2016, 51

⁵⁹Indonesia, Departemen Pengembangan Akses Keuangan dan UMKM Bank, 'Booklet Keuangan Inklusif', 2014: 1-17

⁶⁰S. V. Scott, J. Van Reenen and M. Zachariadis, The long-term effect of digital innovation on bank performance: An empirical study of SWIFT adoption in financial services. *Research Policy*, 46 no. 5 (2017): 984-1004

⁶¹J. Manyika, S. Lund, M. Singer, O. White, and C. Berry, *Digital finance for all: Powering inclusive growth in emerging economies*. (USA: McKinsey Global Institute, 2016).

⁶²Salinan Fatwa DSN No 117/DSN-MUI/II/2018 Tentang Layanan Pembiayaan Berbasis Teknologi Informasi, (2018), URL: <https://drive.google.com/file/d/1qCu2X6MTIFnYqK22eMx7uFL53AXBT9Vo/view>

⁶³Fiska S. R. Roro and Usanti, Ghansham Anand T. P., *Pengantar Lembaga Keuangan Syariah*. Surabaya: Zifatama Jawara, 2017.

⁶⁴Adrian Sutedi, *Perbankan Syariah: Tinjauan Dan Beberapa Segi Hukum*, (Jakarta: Ghalia, 2009).

⁶⁵Joseph E. Champoux, & Thomson S. W., *Organizational Behavior*, (USA: Essential Tenets, 2003).

⁶⁶Stephen P. Robbins, *Perilaku Organisasi Cet-2*, (Jakarta: Salemba Empat, 2002).

The company will succeed if it has a good organization.⁶⁷ The components of the organization include marketing, risk, trust, innovation.⁶⁸

METHOD

This type of research is explanatory research in which the researcher explains the causality relationship through variables with hypothesis testing to answer the questions and research objectives.⁶⁹ The approach used in this research is correlational quantitative research. When viewed from the data collection techniques, this research is including survey research. The location of this research is in Lampung Province, precisely in all universities that have Islamic Economics Study programs, such as FEBI UIN Radin Intan, Department of Sharia Economics, Muhammadiyah University, Lampung, STEBI Lampung, STEBI Tanggamus, IAIN Metro, STAI YASBA Kalianda, and STEBIS Nur Ilmi Al Isma'iliyun Lampsel. The time of the study starts from January 2019 until October 2019.

This study uses a non-probability sampling technique with convenience sampling method, which is to choose units of analysis in a way that is considered appropriate by researchers or members of the population who have a minimum of semester IV Bachelor (S-1) education in sharia economics. The sample size uses Roscoe cited by Sugiyono (2011) giving suggestions on sample size, in this case 10% of the population, in this case the population is 3080, the number of samples is 308 people. The data in this study use primary data and secondary data. Primary data obtained through filling out the questionnaire to respondents. Meanwhile, secondary data was obtained from supporting data through literature study. Data collection methods used in this study were questionnaires.⁷⁰ The financial literacy and financial inclusion questionnaire refers to the 2016 revised The Organization for Economic Co-Operation and Development (OECD)/ International Network of Financial Education (INFE) questionnaire. Data were analyzed using simple regression analysis and two-predictor regression.

RESULT

The majority of respondents have moderate knowledge of Islamic financial literacy. The number of respondents who have high Islamic financial

⁶⁷A. Makarevich, Organizing for success in internal corporate venturing: An inductive case study of a multinational consumer goods company, *Creativity and Innovation Management*, 26 no. 2 (2017): 189-201.

⁶⁸Tushmaan, M. & Nadler, D., Organizing for Innovation, *California management review*, 28 no. 3 (1986), : 74-92.

⁶⁹Singarimbun, M. & Effendi, S. *Metode Penelitian Survei*, (Jakarta : LP3ES, 1989).

⁷⁰S. Siregar, *Statistika Deskriptif untuk Penelitian*, (Jakarta (ID): PT Raja Grafindo Persada, 2010).

literacy competence are 127 people (41.23%), have medium Islamic financial literacy as many as 153 people (49.68%), and are still low as many as 28 people (9.09%).

The majority of respondents have moderate knowledge of Islamic financial technology. The number of respondents who have an understanding of Islamic financial technology is high as many as 18 people (5.84%), while as many as 75 people (75.32%), and still as low as 58 people (18.83%).

The majority of respondents have a high understanding of Islamic financial inclusion. The number of respondents who have high Islamic financial inclusion is 169 people (54.87%), 118 people (38.31%), and 21 people (6.81%) are still low.

First Hypothesis Test

The first hypothesis in this study relates to the influence of Islamic financial literacy on Islamic financial inclusion which is mathematically formulated as follows.

Ho1: $\beta_1 \leq 0$, Islamic financial literacy has no positive and significant effect on Islamic financial inclusion.

Ha1: $\beta_1 > 0$, Islamic financial literacy has a positive and significant effect on Islamic financial inclusion

Table 1.
Correlation Test Results and X1 Determinant Coefficients For Y

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,771 ^a	,594	,593	9,65391

a. Predictors: (Constant), Literasi_Keu_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Table 2.
Hypothesis Test Results t X1 on Y

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10,662	1,898		5,617	,000
	Literasi_Keu_Sy	1,614	,076	,771	21,163	,000

a. Dependent Variable: Inklusi_Keu_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Based on the results of the regression analysis of the resulting t value of 21.163 with a significance probability of 0.000. t count for $21.163 >$ from t table 1.646. It appears that the resulting significance value is less than 0.05 (0,000 <0.05); Likewise, the value of t arithmetic $21,163 >$ t table 1,646 means H0 is rejected and Ha1 is accepted. In other words, Islamic financial literacy has a positive and significant effect on Islamic financial inclusion.

It is known that the calculated value of t is $21.163 >$ from t table 1.646 and is in the rejecting area of H01. Thus Ha1 in this study was declared accepted, that is, Islamic financial literacy has a positive and significant effect on the inclusion of Islamic finance.

Based on the analysis results obtained an R coefficient of 0.771, with an R square of 0.594, which means that the predictor variable in this case Islamic financial literacy (X1) in the model can explain the variable response to Islamic financial inclusion (Y) by 59.4%. While the rest (40.6%) is explained by other variables outside the model not examined.

Second Hypothesis Tes

The second hypothesis in this study relates to the influence of Islamic financial technology (X2) on Islamic financial inclusion (Y) which is mathematically formulated as follows.

Ho2: $\beta_1 \leq 0$, Islamic financial technology has no positive and significant effect on Islamic financial inclusion.

Ha2: $\beta_1 > 0$, Islamic financial technology has a positive and significant effect on Islamic financial inclusion

Table 3.
Correlation Test Results and X2 Determinant Coefficients for Y

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,766 ^a	,587	,586	9,73226

a. Predictors: (Constant), Fintech_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Table 4.
Hypothesis Test Result t X₂on Y

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients	Std. Error	Standardized Coefficients		
		B		Beta		
1	(Constant)	-12,292	2,993		-4,107	,000
	Fintech_Sy	1,636	,078	,766	20,876	,000

a. Dependent Variable: Inklusi_Keu_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Based on the results of the regression analysis of the resulting t value of 20.876 with a significance probability of 0,000. t count is 20.876 > from t table 1.646. It appears that the resulting significance value is less than 0.05 (0,000 < 0.05); as well as the value of t arithmetic 20.876 > t table 1.646 means that H₀ is rejected and H_{a1} is accepted. In other words, Islamic financial technology has a positive and significant effect on Islamic financial inclusion.

It is known that the calculated value of t is 20.876 > from t table 1.646 and is in the area rejecting H₀. Thus H_{a1} in this study was declared accepted, that is, Islamic financial technology has a positive and significant effect on Islamic financial inclusion.

Based on the analysis results obtained an R coefficient of 766, with an R square of 0.587, which means that the predictor variable in this case Islamic financial technology (X₂) in the model can explain the variable response to Islamic financial inclusion (Y) of 58.7%. While the rest (41.3%) is explained by other variables outside the model not examined.

Three Hypothesis Test

This test is intended to examine the effect of Islamic financial literacy (X₁) and Islamic financial technology (X₂) together on Islamic financial inclusion (Y)

H₀₃: $\beta_1 \leq 0$, Islamic financial literacy and Islamic financial technology together do not have a positive and significant effect on Islamic financial inclusion.

H_{a3}: $\beta_1 > 0$, Islamic financial literacy and Islamic financial technology together have a positive and significant effect on Islamic financial inclusion

Table 5.
Correlation Test Results and determinant coefficients X1 and X2 against Y

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,790 ^a	,623	,621	9,31474

a. Predictors: (Constant), Literasi_Keu_Sy, Fintech_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Table 6.
Multiple regression test results (2 predictors) between X1 and X2 on Y

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43797,095	2	21898,547	252,391	,000 ^b
	Residual	26463,152	305	86,764		
	Total	70260,247	307			

a. Dependent Variable: Inklusi_Keu_Sy
b. Predictors: (Constant), Literasi_Keu_Sy, Fintech_Sy

Source: Results of data processing with IBM SPSS Statistics 25 in 2019

Based on the analysis results above, when referring to the regression line equation = $a + b_1X_1 + b_2X_2$, the equation $Y = 2,970 + 0,821X_1 + 0,892 X_2 + e$ is obtained. Based on the results of the multiple regression analysis analysis, obtained the coefficient of Fregression of 252.391 with a significance level of $0.000 < \alpha < 0.05$. $F_{arithmetic} (252,391) > F_{table} (2.9957)$ Thus the regression model constructed can be said to be a valid regression model as a predictor model.

Based on the analysis results obtained an R coefficient of 0.790, with an R square of 0.623, which means that a set of predictor variables in this case is Islamic financial literacy (X1), and Islamic financial technology (X2) in the model can explain the response variable (Y; financial inclusion Islamic) at 62.3%. While the rest is explained by other variables outside the model that are not examined.

The adjusted R Square value (in this case as the R Square value that has been corrected by the standard error value, so it is believed to be better in predicting the contribution of all predictor variables (X1 and X2) together against the response variable (Y), amounting to 0.621. Thus, all predictor

variables can be explained together by 62.1%, while the remaining 37.9% is explained by other variables outside the model not examined.

DISCUSSION

The effect of literacy on Islamic Finance to Islamic Financial Inclusion

From the results of the regression equation test it can be seen that, the Islamic financial literacy variable has a coefficient value of 0.821, the coefficient is positive. It can be stated that each increase in syariah financial literacy by 1 unit will increase Islamic financial inclusion by 82.1 units. Significance value of 0,000 where the increase in Islamic financial literacy will affect the increase in financial inclusion, the hypothesis stating that, Islamic financial literacy has a positive and significant effect on the inclusion of Islamic finance.

It can be stated that the better Islamic financial literacy owned by Islamic economics students, will have implications for the increasingly high Islamic financial inclusion. Conversely, when the shari'ah financial literacy of students decreases, their Islamic financial inclusion will decrease.

Through factor analysis it can be seen that, from three dimensions, namely: 1) Islamic financial knowledge, 2) Islamic financial behavior, and 3) Islamic financial attitude, known Islamic financial knowledge dimension which has the highest eigen value (23.871%). This gives the meaning that Islamic knowledge provides the highest contribution to the Islamic financial literacy variable. In the sense that when wanting to improve the ability of Islamic financial literacy of students, it must first be increased knowledge of Islamic economics.

When viewed from the average value, 1) the dimension of Islamic economic knowledge also has the highest average of 8.902 while, 2) the dimension of Islamic financial behavior has an average of 8.733 and 3) the dimension of Islamic financial attitude has an average of 3.737 .

Islamic financial literacy that has been mastered by respondents in this case Islamic Economics study program students (Islamic economics, sharia accounting, and Islamic banking) based on descriptive analysis results are still in a moderate condition, it can be understood because some respondents (students) are still in semester V (class of 2017), so that they have theoretically obtained Islamic economic material, but in their daily lives they have not applied the material they have. The focus of attending lectures with limited funds as a student whose majority is immigrants, is also a cause, they have not been able to apply Islamic economic literacy that they have learned well.

The results of the study are in line with research by Grohman, Khuhs, & Menkoff (2018) which concluded that the high level of financial knowledge of bees has a beneficial effect on financial inclusion. Good financial literacy

contributes to good financial decision making. Temporary relations between financial literacy and financial inclusion at the country level.⁷¹

The results of this study differ from the findings of Bongomin et.al (2016) who concluded that, financial literacy does not have a direct effect on financial inclusion. Financial literacy has failed to increase the level of financial inclusion among rural poor households in Uganda.⁷²

The results of this study are consistent with the findings of Cohen, Monique and Nelson, Candace (2011) who concluded that financial education would greatly affect financial inclusion. Financial education can be done both formally and informally including through TV media, social media, the internet will be able to increase financial inclusion.⁷³

The results of this study reinforce the findings of Cordero, R.C.H & Marouzé (2016) who concluded that, financial education has an impact on financial inclusion. Every initiative of all financial education actions can be used to achieve financial inclusion.⁷⁴

The findings of this study also agree with Sari Rahmawati's findings which concluded that, financial literacy has a significant effect on financial inclusion.⁷⁵

The results of this study successfully strengthen the research of Saputra and Dewi (2017) which concluded that, there is a significant relationship between financial literacy and financial inclusion. Also the Saputra and Dewi study concludes that financial literacy affects financial inclusion."⁷⁶

⁷¹ Antonia Grohmann, Theres Klühs, and Lukas Menkhoff, 'Does Financial Literacy Improve Financial Inclusion? Cross Country Evidence', *World Development*, 111 (2018): 84–96 . <https://doi.org/10.1016/j.worlddev.2018.06.020>.

⁷²Bongomin, George O. C., Joseph Mpeera Ntayi, John C. Munene, Isaac Nkote Nabeta, "Social capital: mediator of financial literacy and financial inclusion in rural Uganda", *Review of International Business and Strategy* (2016), Vol. 26 Issue: 2: 291-312, <https://doi.org/10.1108/RIBS-06-2014-0072>

⁷³Monique Cohen and Nelson, Candace, *Financial Literacy : A Step for Clients Towards Financial Inclusion*. Valladolid : Global Microcredit Summit, 2011.

⁷⁴R.C.H Cordero and P.D. Marouzé, *Financial Inclusion through Financial Education in Mexico: Is Financial Education the way to achieve Social and Financial Inclusion. Thesis*. International Master in Microfinance for Entrepreneurship from the Universidad Autónoma de Madrid. https://www.mastermicrofinance.com/Investigacion/WP4_2016-Hernandez_Marouze-Financial_Inclusion_through_Financial_Education_in_Mexico_p.pdf

⁷⁵Sari Rahmawati, *Pengaruh Literasi Keuangan Terhadap Inklusi Keuangan Dengan Modal Sosial Sebagai Pemediiasi (Survey pada masyarakat usia produktif di Kabupaten Bandung)*. Bandung: Universitas Telkom. <https://openlibrary.telkomunivers ity.ac.id/pustaka/142571/pengaruh-literasi-keuangan-terhadap-inklusi-keuangan-dengan-modal-sosial-sebagai-pemediasi-survey-pada-masyarakat-usia-produktif-di-kabupaten-bandung-.html>, Accessed 2020.

⁷⁶Rachmat S.Saputraand Andrieta S. Dewi, "Peran Modal Sosial Sebagai Mediator Literasi Keuangan Dan Inklusi Keuangan Pada Kaum Muda Di Indonesia(Studi Kasus Pada Komunitas

Tsalitsa and Rachmansyah's research (2017) is also confirmed by this study, because its research concludes that, Financial Literacy is financial inclusion.⁷⁷

The results of this study corroborate previous research conducted by Antara, Musa and Hassan (2016) which concluded that the literacy of Islamic Finance was able to increase the level of awareness, knowledge and skills of halal and Islamic financing among business people.⁷⁸

The results of this study are also able to corroborate the findings of Bellefatho, D'Hondt, and De Winne (2018) subjective financial literacy, which is self-reported by investors and business behavior which explains that subjective financial literacy helps explain investor behavior. With a higher level of financial literacy it seems that investing is smarter and not prone to disposition effects.⁷⁹

The results of this study were also able to corroborate the findings of Hsiao and Tsai (2018); and Anderson, Baker, and Robinson (2017) who concluded that, financial literacy provides benefits to financial literacy.⁸⁰

The influence of Islamic Financial Technology on Islamic Financial Inclusion

From the results of the regression equation test it can be seen that, the Islamic financial technology variable has a coefficient of 0.892 with a positive coefficient. It can be stated that every increase in syariah financial technology by 1 unit will increase Islamic financial inclusion by 0.892 units. Significance value of 0,000 where the increase in Islamic financial technology will affect the increase in financial inclusion, then the hypothesis stating that, Islamic financial technology has a positive and significant effect on the inclusion of Islamic financial inclusion.

Investor Saham Pemula.” *Jurnal Manajemen Teori dan Terapan* Tahun 10. No. 3, (Desember 2017), <https://e-journal.unair.ac.id/JMTT/article/viewFile/3064/pdf>

⁷⁷Tsalitsa A, Rachmansyah Y., Analisis pengaruh literasi keuangan dan faktor demografi terhadap pengambilan kredit pada pt. columbia cabang kudas. *Media Ekonomi dan Manajemen* (2017). 31(01) :1-13

⁷⁸Purnomo M. Antara, Rosidah Musa, and Faridah Hassan, ‘Bridging Islamic Financial Literacy and Halal Literacy: The Way Forward in Halal Ecosystem’, *Procedia Economics and Finance*, (2016) . [https://doi.org/10.1016/S2212-5671\(16\)30113-7](https://doi.org/10.1016/S2212-5671(16)30113-7).

⁷⁹Anthony Bellofatto, Catherine D'Hondt, and Rudy De Winne, ‘Subjective Financial Literacy and Retail Investors’ Behavior’, *Journal of Banking and Finance*, 92 (2018): 168–81 . <https://doi.org/10.1016/j.jbankfin.2018.05.004>.

⁸⁰Yu Jen Hsiao, and Wei Che Tsai, ‘Financial Literacy and Participation in the Derivatives Markets’, *Journal of Banking and Finance*, 88 (2018): 15–29 . <https://doi.org/10.1016/j.jbankfin.2017.11.006>. Look at Anderson, Anders, Forest Baker, and David T. Robinson, ‘Precautionary Savings, Retirement Planning and Misperceptions of Financial Literacy’, *Journal of Financial Economics*, 126 (2017): 383–98. <https://doi.org/10.1016/j.jfineco.2017.07.008>.

In other words, any increase in knowledge about Islamic financial technology, it will be followed by an increase in Islamic financial inclusion. conversely, if there is a decline in understanding of Islamic financial technology, it will also be followed by Islamic financial inclusion.

Through factor analysis it can be seen that, from three dimensions namely: 1) market aggregator, 2) financial technology, and 3) risk and investment management, the market aggregator dimension which has the highest eigen value is 48.481%, while the second dimension is financial technology was able to contribute 11,149%, and the third dimension of risk and investment management contributed 8,872. This gives the meaning that the market aggregator dimension provides the highest contribution to the Islamic financial technology variable. In the sense that when you want to increase the ability of Islamic technology financial capabilities, the market aggregator dimension must be increased first.

The results of research conducted by Alwi (2018) concluded that "The provision of information technology based lending and borrowing services, which of course is considered to have contributed to Islamic financial inclusion. One of them is the financing system by bringing together those who apply for financing with those who provide funding online. This is facilitated through Islamic lending services based on information technology (fintech) on a Islamic basis. The reason for launching a Islamic-based fintech service is to accommodate service users who want Islamic-based loan borrowing transactions. As we know that, "Islamic-based fintech services in addition to offering and schemes that are different from existing services, also provide certain restrictions on the use of funds provided by investors or lenders. Increased demand for users of Islamic-based fintech services supported by a market share of service users from Indonesian communities where the majority of Muslims encourage Islamic-based Fintech services must comply with the rules of Islamic business transactions."⁸¹

Islamic-based fintech services, "In addition to offering and schemes that are different from existing services (conventional), also provide certain restrictions on the use of funds provided by investors or lenders. The convenience provided for transactions through Islamic-based fintech is inseparable from the characteristics of Islamic business which relies on Islamic economic foundations namely divinity (divine), justice (*al-adl*), prophethood (*an nubuwah*), governance (*al khalifah*), and yield (*al-kehalifah*), and yield (*al maad*). Increased demand for users of Islamic-based fintech services supported by a market share of service users from Indonesian communities who are

⁸¹Achmad Basori Alwi, 'Pembiayaan Berbasis Teknologi Informasi (Fintech) Yang Berdasarkan Syariah', *Al-Qanun: Jurnal Pemikiran Dan Pembaharuan Hukum Islam*, 21 (2018): 255–71. <http://jurnalfsh.uinsby.ac.id/index.php/qanun/article/view/684>

predominantly Muslim encourages Islamic-based Fintech services to meet the rules of Islamic business transactions.

This is consistent with the theory of Islamic economic behavior from Ariely and Yuksel (2019) relating to "Equality-Choice" which states that, "risky options with higher expectation values and safe options with lower expectation values." this majority of people will use safer financial technology even though it offers fewer benefits compared to using high-risk financial technology. Procedural justice chosen by users of financial technology is expected to benefit from their income (agency). Even though they do not use financial technology, users want no inequality of opportunity. Inequality of opportunity in using financial technology is more due to the lack of facilities and infrastructure owned. When users have good facilities and infrastructure supported by good mastery of financial literacy, their opportunities to use financial technology become more open.⁸²

The results of this study are also in line with several previous researchers, for example, Alesina et al. (2001) in Ariely and Yuksel (2019) found that redistributive policies in the form of equitable financial technology facilities and infrastructure that occur in developed countries correlate with equality in conducting transactions using those facilities. At present, the public faces different levels of direct and indirect distribution depending on supporting facilities in this case, the availability of internet networks, banking representative offices, and other hard work results of the government. when all is available, financial inclusion will occur.

In the perspective of agency theory, "where on the one hand, providers of financial technology (lenders) expect people to use the technology products (borrowers)". Problems occur because the objectives of the organizers of financial technology and society are not always the same and the agent organizers cannot control the community fully, which causes information asymmetry. In addition, it is assumed that both parties are driven by personal interests. The agency relationship is explained by the contract or agreement between the parties involved with the agency theory which aims to find the most efficient contract. Before the contract, the organizer of Fintech (start up) did not have information about the characteristics of the user community, which implies an adverse selection risk. In addition, detention can occur pre-contractually if the fintech organizer has invested and is dependent on the community fulfilling the contract while the agent may behave opportunistically. Also pre-contractual,

⁸²Dan Ariely, and Sevgi Yuksel, 'Journal of Economic Behavior and Organization When Is Inequality Fair? An Experiment on the Effect of Procedural Justice and Agency R Merve Akba S', *Journal of Economic Behavior and Organization*, 161 (2019): 114–27, <https://doi.org/10.1016/j.jebo.2019.02.014>.

fintech management cannot monitor the performance of the fintech user community that implies hidden actions and risks.⁸³

The results of this study reinforce the findings of Salampasis (2018) which concluded that, fintech can close the gap between people who do not have a bank account. This is very rational because opening up access to financial technology means that users use digital technology in an effort to obtain services from financial institutions, which will have implications for increasing financial inclusion.⁸⁴

The results of this study also corroborate the findings of Peterson K. Ozili (2018) who concluded that, digital finance through Fintech providers has a positive effect for financial inclusion in developing and developed countries. This fact provides an opportunity for everyone, including those with low income, to obtain services from financial institutions, both banks and non-banks.⁸⁵

The results of this study are also in line with the findings of Jagtiani and Lemieux (2018) who concluded that the fintech lending platform can expand credit access to consumers. With these findings, it can be seen that financial institutions will be able to provide banking services to remote areas, without having to open branches there.⁸⁶

The results of this study are also able to support ADB's findings. (2016) which concluded that, digital financial can increase financial inclusion in Southeast Asia. So with fintech, the gap between the rich and the poor is not too wide. All of them can get the opportunity to get the main financial services of payment, savings, credit, insurance, and others.⁸⁷

The results of this study also did not differ from the findings of Demirgüç et.al. (2018) which concluded that, the use of financial services for people who are not touched by the bank affects the Financial Inclusion. Thus, to

⁸³A. Wiese, and others, 'CSR Failures in Food Supply Chains – an Agency Perspective', *British Food Journal*, 115.1 (2013): 92–107. <https://doi.org/10.1108/00070701311289894>

⁸⁴D. Salampasis and Anne Laure M., *FinTech: Harnessing Innovation for Financial Inclusion, Handbook of Blockchain, Digital Finance, and Inclusion*, 1st edn (Elsevier Inc., 2017), ii . <https://doi.org/10.1016/B978-0-12-812282-2.00018-8>

⁸⁵Peterson K. Ozili, "Impact of digital finance on financial inclusion and stabili." *BorsaI_stanbulReview*18-4(2018)329e340<http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>. Accessed 2020.

⁸⁶Julapa Jagtiani, and Catharine Lemieux, 'Do Fintech Lenders Penetrate Areas That Are Underserved by Traditional Banks?', *Journal of Economics and Business*, 100 (2018): 43–54 . <https://doi.org/10.1016/j.jeconbus.2018.03.001>.

⁸⁷ADB, *Accelerating financial inclusion in south-east Asia with digital finance*. Technical report. Asian Development Bank. Available at: <http://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2017/jan/accelerating-financial-inclusion-in-south-east-asia.pdf> . (Accessed 14 November 2017).

expand access to financial service opportunities among those who do not have a bank account can be done by promoting the use of digital financial services with a wide scale.⁸⁸

The findings of this study also reinforce the findings of Zimmerman and Baur (2016) which concluded that, digital payment services will create public interest in obtaining other financial services so that financial inclusion can be improved.⁸⁹

Leonard's (2011) findings are also in line with the findings of this study. In his findings, Leonard concluded that the use of financial technology was able to improve better financial services, including the use of fund transfer schemes as a model of successful banking services in realizing financial inclusion.⁹⁰

This study was also able to contribute to strengthening the Malaguti meeting (2015), which concluded that fintech was able to increase financial inclusion. Fintech has been able to simplify the process of financial transactions, and other payment processes.⁹¹

The results of this study are also able to strengthen several previous studies such as the research of Muzdalifa, Rahma, and Novalia (2018),⁹² Milan et. al (2019)⁹³ Dranev et. al (2019),⁹⁴ Buchak, et. al. (2018),⁹⁵ and Keke Gai, et. al

⁸⁸Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Ansar, Saniya; Hess, Jake., Global Findex Database 2017 : Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/29510> License: CC BY 3.0 IGO.”

⁸⁹Jamie M. Zimmerman, and Silvia Baur, “Understanding How Consumer Risks in Digital Social Payments Can Erode Their Financial Inclusion Potential.” CGAP Brief, Consultative Group to Assist the Poor, Washington, DC. <https://www.cgap.org/sites/default/files/researches/documents/Brief-Understanding-How-Consumer-Risks-in-Digital-Social-Payments-March-2016.pdf>

⁹⁰Matt Leonard., “G2P, Expanding Financial Inclusion in the Pacific: Fiji’s Transfer of Social Welfare to a Savings-Linked Electronic Payment.” Suva, Fiji: PFIP, United Nations Development Programme Pacific Centre. https://btca-prod.s3.amazonaws.com/documents/104/english_attachments/G2P-Expanding_Financial_Inclusion_in_the_Pacific_Report.pdf?1442102502, 2011.

⁹¹Maria Chiara Malaguti, “Payment System Regulation for Improving Financial Inclusion.” Washington, D.C.: Center for Global Development. <https://www.cgdev.org/sites/default/files/CGD-Policy-Paper-70-Malaguti-Payment-Systems-Financial-Inclusion-1.pdf>, Accessed 2020.

⁹²Irma Muzdalifa, dkk, “Peran Fintech Dalam Meningkatkan Keuangan Inklusif Pada UMKM di Indonesia (Pendekatan Keuangan Syariah)”, Jurnal Masharif al- Syariah: Jurnal Ekonomi dan Perbankan Syariah Vol. 3, No. 1 (2018): 1-5.

⁹³Eduardo Z. Milian, Mauro de M. Spinola, and Marly M.de Carvalho, ‘Fintechs: A Literature Review and Research Agenda’, *Electronic Commerce Research and Applications*, 34 (2019), 100833. <https://doi.org/10.1016/j.elerap.2019.100833>.

⁹⁴Yury Dranev, Ksenia Frolova, and Elena Ochirova, “The Impact of Fintech M&A on Stock Returns”, *Research in International Business and Finance*, 48 (2019): 353–64. <https://doi.org/10.1016/j.ribaf.2019.01.012>.

(2017)⁹⁶ who all concluded that, financial technology can increase the ease for everyone to obtain and use financial services from both banking financial institutions and nonbank financial institutions so as to increase financial inclusion in general.

The Effect of Islamic Financial Literacy and Islamic Financial Technology on Islamic financial inclusion

From the results of the regression equation test it can be seen that, Islamic financial technology and Islamic financial technology variables contributed 0.621 or 62.1%. It can be stated that both of these variables together make a very large contribution even exceeding 60% each. The F-regression value was 252,391 and the significance was 0,000.

In other words, any increase in the ability of Islamic financial literacy and knowledge of Islamic financial technology will be followed by an increase in Islamic financial inclusion. conversely, if there is a decline in understanding of the literacy of Islamic finance and Islamic financial technology, it will also be followed by Islamic financial inclusion.

Through factor analysis, it can be seen that, from the four dimensions, namely: 1) product holding, 2) product awareness, 3) product choice, and 4) seeking alternatives to formal financial services, the dimensions of product holding that have the highest eigen value are 55.394%, while the second dimension was able to contribute 7.106%, the third dimension contributed 5.740, and the fourth dimension contributed 5.159. This gives the meaning that product holding provides the highest contribution to the Islamic financial inclusion variable. In the sense that when wanting to increase the reach of Islamic financial inclusion of students, it must first be increased understanding of product holding.

When seen from the average value, 1) product holding, also has the highest average of 22,266 while, 2) the dimension of product awareness has an average of 7,301, 3) the dimension of product choice has an average of 10,776, and 4) the dimensions of seeking alternatives to formal financial services, has an average of 11,090.

The students' activities in the Islamic economic program include: a) saving with various Islamic financial institution products, b) understanding Islamic financing products, c) demand deposits, deposits, Islamic capital

⁹⁵Greg Buchak, Gregor Matvos, Tomasz Piskorski, and Amit Seru, 'Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks', *Journal of Financial Economics*, 130 (2018): 453–83. <https://doi.org/10.1016/j.jfineco.2018.03.01>.

⁹⁶Keke Gai, Meikang Qiu, and Xiaotong Sun, 'A Survey on FinTech', *Journal of Network and Computer Applications*, 103 (2018): 262–73, <https://doi.org/10.1016/j.jnca.2017.10.011>.

markets, d) Islamic e-money e-money, e) insurance, liens, Islamic pension funds, and f) Islamic credit products will be able to increase financial inclusion so as to increase the number of people who receive Islamic financial services. This must be accompanied by education and literacy of Islamic finance, while increasing the ability to use Islamic financial technology services.

When viewed from the variables that most contributed to the implementation of financial inclusion is the Islamic financial literacy variable (X1). The coefficient of t count X1 that is equal to 21,163 is also higher than the t count X2 of 20,876. Thus the results of this study are in accordance with the findings of Febrina Hutabarat (2018) which concluded that "There is a significant influence between financial literacy and financial technology, both partially and simultaneously on financial inclusion in the Jabodetabek community.

This gives an understanding that in an effort to increase the literacy of Islamic finance to all students who are studying in Islamic economic study programs (including Islamic banking and Islamic accounting) should always increase Islamic financial literacy, and knowledge of Islamic financial technology. Without going through these two things, Islamic financial inclusion cannot be significantly improved.

CONCLUSION

Based on the results of the analysis and discussion can be concluded as follows. First, there is a positive influence between Islamic financial literacy on Islamic financial inclusion. These results indicate that Islamic financial literacy contributes to increasing Islamic financial inclusion. With the increase in Islamic financial literacy, it is hoped that people will become customers or users of Islamic financial services. Second, there is a positive and significant influence between Islamic financial technology on Islamic financial inclusion. The development of digital technology seems to make high use of financial technology. This is because financial technology makes it easy for people to carry out financial transactions. Third, there is a positive and significant influence between Islamic financial literacy and Islamic financial technology together on Islamic financial inclusion. These findings indicate that Islamic financial literacy and Islamic financial technology must be enhanced together to increase the inclusion of Islamic finance. The expected implication is that Islamic financial inclusion through Islamic financial literacy indicators and Islamic financial technology can support financial system stability and increase economic efficiency and contribute to the new market potential for Islamic finance. Also, it is hoped that this research can contribute to Islamic economic studies' development to benefit the Ummah.

REKOMMENDATION

To increase the number of people who use Islamic financial services, stakeholders, especially the government and Islamic financial institutions, must encourage public understanding of the benefits of Islamic financial inclusion, for example, through various socialization and social media. The community, especially Muslims, must understand how to use good Islamic financial technology, followed by an increase in Islamic financial literacy skills. Given that the large benefits provided by financial inclusion for the nation's economy. So with the increasing literacy of Islamic finance and Islamic financial technology, it is hoped that the public will know that the economic transactions carried out must be by Islamic economics principles. Namely, to support the welfare of the Indonesian people.

REFERENCES

- ADB, *Accelerating financial inclusion in south-east Asia with digital finance*. Technical report. Asian Development Bank. Available at: <http://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2017/jan/Accelerating-financial-inclusion-in-south-east-asia.pdf>. (Accessed 14 November 2017).
- Atkinson, Adele., Flore-Anne Messy, 'Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study', *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing, (2012). <https://doi.org/10.1111/j.1745-6606.2010.01170.x>.
- Alimirucchi, Wahyu, 'Analyzing Operational And Financial Performance On The Financial Technology (Fintech) Firm (Case Study on Samsung Pay)', (2017), 3
- Alwi, Achmad Basori. 2018. 'Pembiayaan Berbasis Teknologi Informasi (Fintech) Yang Berdasarkan Syariah', *Al-Qanun: Jurnal Pemikiran Dan Pembaharuan Hukum Islam*, 21 (2018), 255–71. <http://jurnalfsh.uinsby.ac.id/index.php/qanun/article/view/684>
- Anagnostopoulos, Ioannis, 'Fintech and Regtech: Impact on Regulators and Banks', *Journal of Economics and Business*, 100 (2018): 7–25. <https://doi.org/10.1016/j.jeconbus.2018.07.003>.
- Anderson, Anders, Forest Baker, and David T. Robinson, 'Precautionary Savings, Retirement Planning and Misperceptions of Financial Literacy', *Journal of Financial Economics*, 126 (2017): 383–98. <https://doi.org/10.1016/j.jfineco.2017.07.008>.
- Antara, Purnomo M., Rosidah Musa, and Faridah Hassan, 'Bridging Islamic Financial Literacy and Halal Literacy: The Way Forward in Halal

- Ecosystem', *Procedia Economics and Finance*, (2016), [https://doi.org/10.1016/S2212-5671\(16\)30113-7](https://doi.org/10.1016/S2212-5671(16)30113-7).
- Ariely, Dan, and Sevgi Yuksel, 'Journal of Economic Behavior and Organization When Is Inequality Fair? An Experiment on the Effect of Procedural Justice and Agency R Merve Akba S', *Journal of Economic Behavior and Organization*, 161 (2019): 114–27 . <https://doi.org/10.1016/j.jebo.2019.02.014>.
- Atkinson, A. and F. Messy, Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions (2012), No. 15, OECD Publishing.<http://dx.doi.org/10.1787/5k9csfs90fr4-en>.
- Bank Indonesia, 'PBI 18/40/PBI/2016 Penyelenggaraan Pemrosesan Transaksi Pembayaran', (2016): 51.
- Barbesino, P., Camerani, R., & Gaudino, A. (2005). Digital finance in Europe:Competitivedynamicsandonlinebehaviour.*JournalofFinancialServices Marketing*, 9(4),329e343.
- Bellofatto, Anthony, Catherine D'Hondt, and Rudy De Winne, 'Subjective Financial Literacy and Retail Investors' Behavior', *Journal of Banking and Finance*, 92 (2018): 168–81 . <https://doi.org/10.1016/j.jbankfin.2018.05.004>.
- Bongomin, George O. C., Joseph Mpeera Ntayi, John C. Munene, Isaac Nkote Nabeta, "Social capital: mediator of financial literacy and financial inclusion in rural Uganda", *Review of International Business and Strategy* (2016), Vol. 26 Issue: 2: 291-312, <https://doi.org/10.1108/RIBS-06-2014-0072>
- Brent, Daniel A., and Michael B. Ward, 'Energy Efficiency and Financial Literacy', *Journal of Environmental Economics and Management*, 90 (2018): 181–216. <https://doi.org/10.1016/j.jeem.2018.05.004>.
- Brune, L., Giné, X., Goldberg, J., and Yang, D., Facilitating savings foragriculture: Field experimental evidence from Malawi. *Economic Developmentand Cultural Change*, 64 no. 2 (2016): 187–220
- Buchak, Greg, Gregor Matvos, Tomasz Piskorski, and Amit Seru, 'Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks', *Journal of Financial Economics*, 130 (2018): 453–83. <https://doi.org/10.1016/j.jfineco.2018.03.01>.
- Bruhn, M., and Love, I., The real impact of improved access to finance: Evidencefrom Mexico. *Journal of Finance*, 69 no. 3 (2014): 1347–1369.

- Cecchetti, S., and Kharroubi, E. ,*Reassessing the impact of finance on growth. BIS Working Paper 381. BIS (2012), Basel*
- Collins, D., Morduch, J., Rutherford, S., and Ruthven, O. *Portfolios of the poor: How the world's poor live on \$2 a day.* Princeton University Press, 2009.
- Cohen, Monique dan Nelson, Candace, *Financial Literacy : A Step for Clients Towards Financial Inclusion.* Valladolid : Global Microcredit Summit, 2011.
- Cordero, R.C.H and Marouzé, P.D. Financial Inclusion through Financial Education in Mexico: *Is Financial Education the way to achieve Social and Financial Inclusion. Thesis.* International Master in Microfinance for Entrepreneurship from the Universidad Autónoma de Madrid. https://www.mastermicrofinance.com/Investigacion/WP4_2016-Hernandez_Marouze-Financial_Inclusion_through_Financial_Education_in_Mexico_p.pdf
- CGAP, *What is Digital Financial Inclusion and Why Does it Matter? 10 March 2015.* Available at: <http://www.cgap.org/blog/what-digital-financial-inclusion-and-why-does-it-matter>.
- Champos, Joseph E., & Thomson S. W., *Organizational Behavior, Essential Tenets*, 2003.
- Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Ansar, Saniya; Hess, Jake., *Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution.* Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/29510> License: CC BY 3.0 IGO.”
- Dupas, P., and Robinson, J., *Savings constraints and microenterprisedevelopment: Evidence from a field experiment in Kenya. American Economic Journal: Applied Economics*, 5 no. 1 (2013): 163–192
- Dranev, Yury, Ksenia Frolova, and Elena Ochirova, ‘The Impact of Fintech M&A on Stock Returns’, *Research in International Business and Finance*, 48 (2019): 353–64. <https://doi.org/10.1016/j.ribaf.2019.01.012>.
- Drasch, Benedict J., André Schweizer, and Nils Urbach, ‘Integrating the “Troublemakers”’: A Taxonomy for Cooperation between Banks and Fintechs’, *Journal of Economics and Business*, 100 (2018): 26–42 . <https://doi.org/10.1016/j.jeconbus.2018.04.002>.
- Dhar, V. and Stein, R.M, *FinTech platforms and strategy. Communications of the ACM: 2017,32-35.* Diakses dari <https://doi.org/10.1145/3132726> pada tanggal 3 Oktober 2018 pukul 16.00WIB

- Salinan Fatwa DSN No 117/DSN-MUI/II/2018 Tentang Layanan Pembiayaan Berbasis Teknologi Informasi, (2018), URL: <https://drive.google.com/file/d/1qCu2X6MTIFnYqK22eMx7uFL53AXBT9Vo/view>
- Fan, Pei Sai, *Singapore Approach to Develop and Regulate FinTech, Handbook of Blockchain, Digital Finance, and Inclusion, Volume 1: Cryptocurrency, FinTech, InsurTech, and Regulation*, 1st edn (Elsevier Inc., 2017), i . <https://doi.org/10.1016/B978-0-12-810441-5.00015-4>.
- FSB (Financial Stability Board), Perandan Tantangan Industri FinTech (*Financial Technology*) dalam Perekonomian, diakses pada <https://www.ajarekonomi.com/2018/01/peran-dan-tantangan-industri-fintech.html>,
- Gai, Keke, Meikang Qiu, and Xiaotong Sun, 'A Survey on FinTech', *Journal of Network and Computer Applications*, 103 (2018): 262–73 . <https://doi.org/10.1016/j.jnca.2017.10.011>.
- Gomber, P., Koch, J. A., and Siering, M., Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics* 67 no. 5 (2017), 537e580
- Grohmann, Antonia, Theres Klühs, and Lukas Menkhoff, 'Does Financial Literacy Improve Financial Inclusion? Cross Country Evidence', *World Development*, 111 (2018): 84–96 . <https://doi.org/10.1016/j.worlddev.2018.06.020>.
- Hanson, Thomas A., and Peter M. Olson, 'Financial Literacy and Family Communication Patterns', *Journal of Behavioral and Experimental Finance*, 19 (2018): 64–71. <https://doi.org/10.1016/j.jbef.2018.05.001>.
- Han, R., and Melecky, M. *Financial inclusion for financial stability: Access to bank deposits and the growth of deposits in the global financial crisis. World bank policy research working paper 6577*. WorldBank, 2013.
- Hannig, A., & Jansen, S., *Financial inclusion and financial stability: Current policy issues*, 2010.
- Hung, et.al. (2009). Defining and Measuring Financial Literacy. *RAND Labor and Population Working Paper Series*. WR-708.
- Hutabrat, Febrina. "Pengaruh Literasi Keuangan Dan *Financial Technology* Terhadap Inklusi Keuangan Pada Masyarakat Jabodetabek." *Tesis*. Fakultas Ekonomi Dan Manajemen. Institut Pertanian Bogor. <https://repository.ipb.ac.id/jspui/bitstream/123456789/95669/1/H18fhu.pdf>, Accessed 2020.

- Hökkä, Päivi, Katja Vähäsantanen, and Susanna Paloniemi, 'Emotions in Leaders ' Enactment of Professional Agency', 2019, <https://doi.org/10.1108/JWL-07-2018-0086>
- Hsiao, Yu Jen, and Wei Che Tsai, 'Financial Literacy and Participation in the Derivatives Markets', *Journal of Banking and Finance*, 88 (2018): 15–29 . <https://doi.org/10.1016/j.jbankfin.2017.11.006>.
- Indonesia, Bank, 'PBI 18/40/PBI/2016 Penyelenggaraan Pemrosesan Transaksi Pembayaran', 2016, 51
- Indonesia, Departemen Pengembangan Akses Keuangan dan UMKM Bank, 'Booklet Keuangan Inklusif', 2014: 1–17
- Jagtiani, Julapa, and Kose John, 'Fintech: The Impact on Consumers and Regulatory Responses', *Journal of Economics and Business*, 100 (2018): 1–6. <https://doi.org/10.1016/j.jeconbus.2018.11.002>.
- Jagtiani, Julapa, and Catharine Lemieux, 'Do Fintech Lenders Penetrate Areas That Are Underserved by Traditional Banks?', *Journal of Economics and Business*, 100 (2018): 43–54 . [://doi.org/10.1016/j.jeconbus.2018.03.001](https://doi.org/10.1016/j.jeconbus.2018.03.001).
- Kardinal, Pengaruh literasi keuangan terhadap penggunaan produk keuangan pada mahasiswa STIE Multi Data Palembang. *Jurnal Ilmiah STIE MDP*, 7 no.1 (2017): 55- 64
- Kunt, A. Demircuc, Klapper, L., & Singer, D. The global finindex database 2014: Measuring financial inclusion around the world. elibrary. worlbank.org. URL: <https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-7255>
- Kharchenko, Olga, 'Financial Literacy In Ukraine: Determinants and Implications for Saving Behavior', *A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of MA in Economics Kyiv MA in Economics (Kyiv School of Economics)*, 2011: 1–47.
- Khan, H. R., *Financial inclusion and financial stability: are they two sides of the same coin. Speech at BANCON. BIS Working Paper*. Available: <http://www.bis.org/review/r111229f.pdf>, 2011.
- Klapper, L., El-Zoghbi, M., Hess, J. Achieving the sustainable development goals – The role of financial inclusion. CGAP Working Paper, 2016.
- Klapper, L., Lusardi, A., van Oudheusden, P. Financial literacy around the world: Insights from the standards and poor's ratings service global financial literacy survey. <https://www.finlit.mhfi.com>, Accessed 2015.
- Ellis, K., Lemma, A., and Rud, J. P. *Financial inclusion, household investment and growth in Kenya and Tanzania*. London: ODI Project Briefing No.43 Overseas Development Institute, 2010.

- Levine, Loayza, and Beck, T. Financial Intermediation and Growth: Causality and Causes. *Journal of monetary Economics*, 46 no.1 (2000): 31-77
- Leonard, Matt, "G2P, Expanding Financial Inclusion in the Pacific: Fiji's Transfer of Social Welfare to a Savings-Linked Electronic Payment." Suava, Fiji: PFIP, United Nations Development Programme Pacific Centre. https://btca-prod.s3.amazonaws.com/documents/104/english_attachments/G2P-Expanding_Financial_Inclusion_in_the_Pacific_Report.pdf?1442102502, 2011.
- Lusardi, A., & Mitchell, O.S. The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52 no.1 (2014): 5-44
- Maimun. Metode Penemuan Hukum dan Implementasinya, cet VI. Bandar Lampung: Anugrah Utama Raharja (AURA), 2019.
- Malaguti, Maria Chiara, "Payment System Regulation for Improving Financial Inclusion." Washington, D.C.: Center for Global Development. <https://www.cgdev.org/sites/default/files/CGD-Policy-Paper-70-Malaguti-Payment-Systems-Financial-Inclusion-1.pdf>, Accessed 2020.
- Makarevich, A., Organizing for success in internal corporate venturing: An inductive case study of a multinational consumer goods company, *Creativity and Innovation Management*, 26 2 (2017): 189-201.
- Mawarni, Iska Sri, 'Analisis Presepsi Masyarakat Pengguna Layanan Transaksi Digital Pada Financial Technology', *Journal of Financial Technology*, 5 (2017): 6-13
- Manyika, J., Lund, S., Singer, M., White, O., and Berry, C. *Digital finance for all: Powering inclusive growth in emerging economies*. USA: McKinsey Global Institute, 2016.
- Muzdalifa, Irma and dkk, "Peran Fintech Dalam Meningkatkan Keuangan Inklusif Pada UMKM di Indonesia (Pendekatan Keuangan Syariah)", *Jurnal Masharif al- Syariah: Jurnal Ekonomi dan Perbankan Syariah* Vol. 3, No. 1 (2018): 1-5.
- Milian, Eduardo Z., Mauro de M. Spinola, and Marly M. de Carvalho, 'Fintechs: A Literature Review and Research Agenda', *Electronic Commerce Research and Applications*, 34 (2019), 100833. <https://doi.org/10.1016/j.eierap.2019.100833>.
- Mouna, Amari, and Jarboui Anis, 'Financial Literacy in Tunisia: Its Determinants and Its Implications on Investment Behavior', *Research in International Business and Finance*, 39 (2017): 568-77. <https://doi.org/10.1016/j.ribaf.2016.09.018>.

- Muat s, Miftah D, Wulandari H. Analisis tingkat literasi keuangan dan dampaknya terhadap keputusan pinjaman pribadi. *3rd Economics & Business Research Festival*. Universitas Kristen Satya Wacana. (2014): 465-478
- Nyamute, Effect Of Financial Literacy On Personal Financial Management Practices: A Case Study Of Employees Of Finance And Banking Institutions. Department Of Finance And Accounting, School Of Business, University Of Nairobi, 2010.
- OECD: Organization for Economic Co-operation and Development, 'Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy', Paris: OECD, 2011, 31
- OJK, 'Survei Nasional Literasi Dan Inklusi Keuangan 2016', 2016: 1–26
- Ozili, Peterson K, 'Impact of Digital Finance on Financial Inclusion and Stability', *Borsa Istanbul Review*, 18 (2018), 329–40 .
<https://doi.org/10.1016/j.bir.2017.12.003>. Salamasis, Dimitrios, and Anne Laure Mention, *FinTech: Harnessing Innovation for Financial Inclusion, Handbook of Blockchain, Digital Finance, and Inclusion*, 1st edn (Elsevier Inc., 2017), ii. <https://doi.org/10.1016/B978-0-12-812282-2.00018-8>
- Peterson K. Ozili, "Impact of digital finance on financial inclusion and stabili." *BorsaI_stanbulReview*18-4(2018)329e340 <http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>. Accessed 2020.
- Prasad, E. S. *Financial sector regulation and reforms in emerging markets: An overview (No. w16428)*. National Bureau of Economic Research, 2010.
- Pratiwi. Dwi R., Pentingnya Perkembangan Financial Technology dalam Mendorong Keuangan Inklusif, Buletin APBN. Pusat Kajian Anggaran Badan Keahlian DPR-RI, Vol. 3 No. 5 Agustus, 2018. <https://berkas.dpr.go.id/puskajianggaran/buletin-apbn/public-file/buletin-apbn-public-64.pdf>
- Rahmawati, Sari., Pengaruh Literasi Keuangan Terhadap Inklusi Keuangan Dengan Modal Sosial Sebagai Pemediasi (Survey pada masyarakat usia produktif di Kabupaten Bandung). Bandung: Universitas Telkom. <https://openlibrary.telkomuniversity.ac.id/pustaka/142571/pengaruh-literasi-keuangan-terhadap-inklusi-keuangan-dengan-modal-sosial-sebagai-pemediasi-survey-pada-masyarakat-usia-produktif-di-kabupaten-bandung-.html>, Accessed 2020.
- Robbins, Stephen P. *Perilaku Organisasi Cet-2*. Jakarta: Salemba Empat, 2002.

- Roro, Fiska S. R. and Usanti, Ghansham Anand T. P. *Pengantar Lembaga Keuangan Syariah*. Surabaya: Zifatama Jawara, 2017.
- Saputra, Rachmat S. and Dewi, Andrieta S., “Peran Modal Sosial Sebagai Mediator Literasi Keuangan Dan Inklusi Keuangan Pada Kaum Muda Di Indonesia (Studi Kasus Pada Komunitas Investor Saham Pemula).” *Jurnal Manajemen Teori dan Terapan* Tahun 10. No. 3, Desember 2017. <https://e-journal.unair.ac.id/JMTT/article/viewFile/3064/pdf>
- Saksanva, Svetlana dan Irina Kuzmina- Merlino. “Fintech as Financial Innovation – The Possibilities and Problems of Implementation”. *European Research Studies Journal* Volume XX, Issue 3A, 2017.
- Sakdiyah, M and Arifin, M.A. Pengembangan Produk-Poduk Lembaga Keuangan Mikro Syariah. *EQUILIBRIUM* 2 no. 1 (2014): 157-173.
- Salampasis, D. and Anne Laure M., *FinTech: Harnessing Innovation for Financial Inclusion, Handbook of Blockchain, Digital Finance, and Inclusion*, 1st edn (Elsevier Inc., 2017), ii . <https://doi.org/10.1016/B978-0-12-812282-2.00018-8>
- Sanistasya, Poppy Alvianolita, Kusdi Rahardjo, and Mohammad Iqbal, ‘Pengaruh Literasi Keuangan Dan Inklusi Keuangan Terhadap Kinerja Usaha Kecil Di Kalimantan Timur’, *Ekonomia*, 14 (2019), 48–59. <https://journal.uny.ac.id/index.php/economia/article/.../23192/pd>
- Setyawati, Irma, and Sugeng Suroso, ‘Sharia Financial Literacy And Effect On Social Economic Factors (Survey On Lecturer In Indonesia)’, *International Journal of Scientific & Technology Research*, 5 (2016): 82–102. <https://www.ijstr.org/.../Sharia-Financial-Literacy-And-Effect-On-Social-Economic-Fa>.
- Singarimbun, M. & Effendi, S. *Metode Penelitian Survei*. Jakarta : LP3ES, 1989.
- Siregar S. 2010. *Statistika Deskriptif untuk Penelitian*. Jakarta (ID): PT Raja Grafindo Persada
- Scott, S. V., Van Reenen, J., & Zachariadis, M., The long-term effect of digital innovation on bank performance: An empirical study of SWIFT adoption in financial services. *Research Policy*, 46 no. 5 (2017): 984-1004
- Shen, Chung Hua, Shih Jie Lin, De Piao Tang, and Yu Jen Hsiao, ‘The Relationship between Financial Disputes and Financial Literacy’, *Pacific Basin Finance Journal*, 36 (2016): 46–65. <https://doi.org/10.1016/j.pacfin.2015.11.002>.
- Skagerlund, Kenny, Thérèse Lind, Camilla Strömbäck, Gustav Tinghög, and Daniel Västfjäll, ‘Financial Literacy and the Role of Numeracy—How Individuals’ Attitude and Affinity with Numbers Influence Financial

- Literacy', *Journal of Behavioral and Experimental Economics*, 74 (2018): 18–25.
<https://doi.org/10.1016/j.socec.2018.03.004>.
- Soon, Liew Nam, and Brian Thung, 'ASEAN FinTech Census 2018', 2018, 48
- Sutedi, Adrian. *Perbankan Syariah: Tinjauan Dan Beberapa Segi Hukum*. Jakarta: Ghalia, 2009.
- Tushman, M. & Nadler, D., Organizing for Innovation, *California management review*, 28 no. 3 (1986): 74-92.
- Toolkit, Infe, The Toolkit, Infe Secretariat, and Economic Co-operation, 'For Measuring Financial Literacy And', 2015
- Tsalitsa A, Rachmansyah Y., Analisis pengaruh literasi keuangan dan faktor demografi terhadap pengambilan kredit pada pt. columbia cabang kudu. *Media Ekonomi dan Manajemen*. 31 no. 1 (2017):1-13
- Trisadini Prasastinah Usanti, Fiska Silvia Raden Roro dan Ghansham Anand. (2017).*Pengantar Lembaga Keuangan Syariah*. Surabaya: Zifatama Jawara.
- Trisadini UP dan Abdul Shomad, *Hukum Perbankan*, Surabaya: Universita Airlangga dan Lutfansah Media, 2015.
- UNEP. 2016. UNEP Frontiers 2016 Report: Emerging Issues of Environmental Concern. United Nations Environmental Programme Nairobi. URL: https://environmentlive.unep.org/media/docs/assessments/UNEP_Frontiers_2016_report_emerging_issues_of_environmental_concern.pdf
- United Nations Environment Program (UNEP), Fintech and Sustainable Development : Assessing the Implications. Desember 2016.
- Utami, P. Strategic Management in the Zakat Growth Acceleration Framework in Indonesia. *International Journal of Economics, Business and Management Studies*, 6 no. 2 (2019): 149-158.
- Utami, P. Digital Banking Reflection and Zakat Accoutability Sharia Banking in Indonesia. *Eastern Journal of Economics and Finance*, 4 no. 1 (2019): 31-40.
- Utami, P., Basrowi, and Julianas, Management of Zakat Payment Based on Fintech for the Good Corporate Governance Improvement. *Eastern Journal of Economics and Finance*, 4 no. 2 (2019): 41-50.
- Welly, Kardinal, and Ratna Juwita, 'Analisis Pengaruh Literasi Keuangan Terhadap Keputusan Investasi Di STIE Multi Data Palembang', *Jurnal Ilmu Ekonomi*, (2012): 1–16
- Wiese, A. and others, 'CSR Failures in Food Supply Chains – an Agency Perspective', *British Food Journal*, 115.1 (2013): 92–107.
<https://doi.org/10.1108/00070701311289894>

- Yaacob, Yazilmiwati, and Ilhaamie Abdul Ghani Azmi, 'Entrepreneur's Social Responsibilities From Islamic Perspective: A Study of Muslim Entrepreneurs In Malaysia', *Procedia - Social and Behavioral Sciences*, 58 (2012): 1131–38. <https://doi.org/10.1016/j.sbspro.2012.09.1094>.
- Zou, Jing, and Xiaojun Deng, 'Financial Literacy, Housing Value and Household Financial Market Participation: Evidence from Urban China', *China Economic Review*, 55 (2019), 52–66 . <https://doi.org/10.1016/j.chieco.2019.03.008>.
- Xu, L. and Bilal Z. Financial literacy around the world – an overview of the evidence with practical suggestions for the way forward. The World Bank: Finance and Private Sector Development. *Policy Research Working Paper*. 6107 (2012): 1-58.
- Zahrah, Muhammad A.,(1968). *Usbul Fiqh*. Kairo:Dar Al-Fikr Al-Arabi, 1964.
- Zimmerman, Jamie M., and Silvia Baur, "Understanding How Consumer Risks in Digital Social Payments Can Erode Their Financial Inclusion Potential." CGAP Brief, Consultative Group to Assist the Poor, Washington, DC. <https://www.cgap.org/sites/default/files/researches/documents/Brief-Understanding-How-Consumer-Risks-in-Digital-Social-Payments-March-2016.pdf>