



Financial Technology: Inclusive Finance in the Post-Covid-19 Era

Bambang Susanto, Aryanti Ratnawati, Eva Rachmawati, Audita Setiawan,

Department of Management Faculty of Economics, Universitas Sangga Buana Bandung, Indonesia
bambang.susanto@usbykp.ac.id, audita.setiawan@usbykp.ac.id, aryanti.ratnawati@usbykp.ac.id,
eva.rachmawati@usbykp.ac.id

Muhammad Ariq Khalingga,
University of California Santa Cruz
akhaling@ucsc.edu

ARTICLE INFO

Research Paper

Article history:

Received: 19 July 2022

Revised: 18 August 2022

Accepted: 15 October 2022



<https://doi.org/10.54099/aijbs.v2i2.334>

ABSTRACT

Purpose – This paper aims to investigate how the optimization or effectiveness of the use of financial technology in the volume of stock trading with the JCI as an indicator in the Indonesian capital market that occurred before the Covid-19 pandemic and after or during the Covid-19 pandemic remained active and did not affect investor behavior in invest

Methodology – The research method used in this research is descriptive analysis technique, and the data used is normally distributed. The data collection technique uses a quantitative approach, including stock transaction volume data with the JCI indicator at PT. Indonesia Stock Exchange before and after the covid 19 virus pandemic.

Findings – From the analysis it was found that the volume of stock trading in PT. The Indonesia Stock Exchange during the COVID-19 pandemic was larger than before the COVID-19 pandemic. From the calculation of the NGain Score, the use of financial technology was more effective and optimal for use in the post-pandemic period than in the pre-pandemic period.

Value – Empirical studies conducted usually look at how much influence the COVID-19 pandemic has on the level of the economy, but this research looks at how investor behavior is in optimizing or effectively using financial technology in the period before and after the COVID-19 pandemic.

Keywords : Financial Technology, COVID-19, Financial Inclusion, NgainScore

[This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.](#)

INTRODUCTION

In March 2020, many businesses began to close, schools were closed and students and students study at home with a distance learning system, people stay home unless they are doing essential tasks, social distancing is a way to slow down the spread of COVID-19, new and sometimes deadly coronavirus, medical professionals battling a pandemic, widespread business shutdowns spread financial losses across economies. Stock market crashes, Businesses are suspended or permanently closed. Employees started losing their jobs. It is too early to accurately describe the toll this financial



hardship will inflict on society and the wider economy. In 2021, since the pandemic began, many businesses have reopened although gradually, the stock market has been and is starting to recover, but it is still uncertain when life will return to normal, and how normal will be different from life before the pandemic.(Hill, 2021). However, even at this initial point, a depressed and challenging economic condition in Indonesia due to the Covid-19 coronavirus pandemic, makes financial inclusion play an important role for the economy (Herwina, 2022; Iskanto et al., 2019; Lubis & Irawati, 2022; Rama Nopiana & Rusmiati Salvi, 2022; Saputri et al., 2021).

Openness to financial access or financial inclusion for the community is one of the keys to development in the current digitalization era. (Marginingsih, 2021). The pandemic will also change the approach to bank regulation for financial technology or financial technology companies. Having seen the risks that arise when technology doesn't deliver on its promises, regulators will look closely at the use of technology by banks and bank-financial technology partnerships. At the same time, having seen the promise of technology, regulators will use more technology in their supervision of banks. Finally, the pandemic will accelerate the transformation of some financial technology companies from those operating largely outside of a significant regulatory framework, to mainstream financial services companies that are regulated more like traditional banks. Government regulations are made, after witnessing the government relying on financial technology companies instead of banks to implement stimulus measures, it will be more interested in bringing these companies directly under government authority. Countries will modernize and standardize their laws to compete with government regulatory options (Hill, 2021).

Investment describes one aspect of driving the economic growth of a region, which is useful for increasing the economy, generating equity, reducing poverty and improving the welfare of the region and people. When parties who need funds (companies) carry out trading transactions with investors who have excess funds, trading activities occur in the capital market. With the development of digital technology and industry 4.0 produces Financial Technology technology to invest, but there are still few investors especially the younger generation who use this Financial Technology technology to invest in the capital market. It is hoped that this technology will describe financial inclusion, because it is a situation when every member of the community has access to various quality official financial services in a timely, easy, and comfortable manner, with an affordable budget. The presence of technology-based financial services (Financial Technology) in Indonesia has become a necessity in line with the growth of data and communication technology. In line with the concept of the Indonesian Financial Services Sector Master Plan (MPSJKI), Financial Technology can synergize with the existing financial industry to provide multi-benefits to citizens. Regulators need to develop strategic policies that allow financial technology risks to be mitigated and provide protection to Financial Technology (Financial Technology) citizens in Indonesia (Basriani et al., 2021; Erwin & Nasfi, 2022; Nasfi, 2022).

During the Covid-19 pandemic , everything focused on banking, business finance and its customers towards technology, this made a reorientation for bank regulations, financial authorities and the government more broadly. The government, which had been hesitant to embrace financial technology, suddenly saw themselves using technology to carry out bank activities and products. And as governments grapple with ways to implement stimulus measures designed to blunt the economic impact of the coronavirus, they find that traditional banks don't always provide a complete solution. In short, the COVID-19 pandemic is forcing governments to embrace financial technology and financial technology companies in a way they have never done before. Prior to the COVID-19 pandemic, the global economy was still showing positive developments and the overall global economic situation before the Covid-19 pandemic was still good and prospective for investing, not only the global economy was still positive, before the pandemic the national economy was still pretty good judging

from the JCI at the beginning of January which once held the number 6300, this is a good and interesting achievement for Indonesia.

When the Covid-19 virus arrived in Indonesia around the beginning or mid-March 2020, the JCI trend declined and this decline caused our JCI to decline to below the 4000 level. It has not been serious in dealing with Covid-19 so that when the health crisis occurs and those sentiments exist, it makes investors prefer to withdraw their funds from the capital market so that this of course makes stock prices decline. Even though many companies are unable to survive in the midst of the current conditions, telecommunication or food and beverage companies have actually improved their performance during this pandemic. (Fakhrunnas, 2020)

Fluctuations that continue to occur due to increased transactions through *financial technology* refer to the increasing number of capital market investors in the form of *single investor identification* (SID) by 1.69 million or 49.75%. Based on the above background, the focus of this research is to look at the optimization or effectiveness of the use of financial technology in the volume of stock trading with the JCI as an indicator in the Indonesian capital market that occurred before the covid -19 pandemic and after or during the covid -19 pandemic remained active and did not affect behavior of investors in investing because in analyzing the capital market we do not only look at numbers, but we also look at the behavioral financial or economic aspects of an investor's behavior.

LITERATURE REVIEW

Financial Inclusion

Financial inclusion is the availability of access to various financial institutions, products and services in accordance with the needs and abilities of the community in order to improve welfare. Financial inclusion can be said to be realized if everyone can access financial services easily. The expected effect is of course an increase in economic capacity and a reduction in poverty and economic inequality. The positive impact of financial inclusion will be felt by many people if the available financial services reach the wider community. In other words, the more people who easily access financial services, the faster the economy will grow. (Financial Services Authority Regulation Number 76/POJK.07/2016).

The National Financial Inclusive Survey conducted by the Secretariat of the National Council for Inclusive Finance (S-DNKI) in 2020 showed that 81.4% of adults have used the products or services of formal financial institutions. This figure increased when compared to 2018 which was 78.8%. Meanwhile 61.7% of adults already have an account. This figure also increased when compared to 2018, which was 55.7%.

Financial inclusion is a condition when every member of the community has access to various quality formal financial services in a timely, smooth, and secure manner, at affordable costs. The government through Presidential Decree No. 114 of 2020 has prepared a National Strategy for Financial Inclusion (SNKI) which aims as an effort to support economic growth and reduce poverty to realize community welfare through an inclusive financial system.

The financial inclusion work program for 2021-2024 includes increasing access to formal financial services, increasing literacy and consumer protection, expanding the reach of financial services, strengthening access to capital and business development support for micro and small businesses, increasing digital financial products and services and strengthening the integration of economic activities, and inclusive finance. (Website: www.ekon.go.id).

Financial Inclusion Currently, financial inclusion has always been an important discussion at the global and national level. One of the efforts to increase economic growth and reduce poverty, an inclusive financial program is deemed necessary to create a financial system that is more accessible to the public. Financial inclusion can be regarded as a process to ensure easy access, availability and use of the formal financial system by all economic actors.

In financial inclusion, various financial services are available, such as savings, credit, insurance, and payments at prices that all economic actors can afford, especially those with low incomes (Okaro, 2016). According to Bank Indonesia, the term financial inclusion is an effort to eliminate all forms of existing barriers to access to public financial services by utilizing formal financial institutions or banks.

The purpose of financial inclusion is to achieve economic growth through income distribution, poverty alleviation and financial system stability (AWANTI, 2018), according to the Reserve Bank of India stating that financial inclusion is a process to ensure access to financial products and services needed by every section of society. both the general public and vulnerable communities such as low-income people at a price they can afford to pay in a fair and transparent manner. (Anwar, 2017). Objectives and Benefits of Financial Inclusion Based on the Financial Services Authority Regulation Number 76/POJK.07/2016, there are at least four objectives of financial inclusion. The first is to increase public access to a product, institution or financial service. Second, to provide various financial products or services for PUJK (Financial Service Business Actors). Third, to improve financial products or services that can be adapted to the abilities and needs of the wider community. Lastly, to improve the quality of financial products and services. Meanwhile, according to Bank Indonesia, the benefits of financial inclusion are as follows: 1. Able to increase economic efficiency. 2. Support financial system stability. 3. Reducing the occurrence of shadow banking or irresponsible finance. 4. Support financial market deepening 5. Provide new market potential for banking. 6. Support the improvement of Indonesia's Human Development Index (HDI). 7. Contribute positively to the level of sustainable local and national economic growth 8. Reduce the level of inequality and the rigidity of the low income trap, so as to improve the welfare of the community which ultimately leads to a reduction in the poverty rate. Based on the above understanding, it can be stated that financial inclusion is a condition in which it is possible for everyone to have access to utilize financial products or services according to their needs.

1.1 Financial technology, Financial Services and Capital Market

Financial technology is the result of a combination of financial services and technology that ultimately changes the business model from conventional to moderate, which initially had to pay face-to-face and carry a certain amount of cash, now can carry out long-distance transactions by making payments that can be made in just seconds. .

Financial technology is a growing industry that uses technology to increase activities in the financial sector (Schueffel, 2016). The use of smartphones for mobile banking, for investment services and digital currency are examples of technology aimed at making financial services accessible to the wider community (Sanicola, 2017 in (Tumewu, 2019)). Financial technology investment in Europe in 2014 reached US\$1.5 billion, with UK-based companies investing US\$539 million, Netherlands-based companies investing US\$306 million, and Sweden-based companies investing US\$266 million in financial technology. .(Tumewu, 2019)

Financial technology appears in line with changes in people's lifestyles which are currently dominated by users of information technology, the demands of a fast-paced life. With Financial technology, problems in buying and selling transactions and payments such as not having time to look for goods to shopping places, to banks/ATMs to transfer funds, reluctance to visit a place because of unpleasant services can be minimized. In other words, Financial technology helps buying and selling transactions and payment systems to be more efficient and economical but still effective.

The legal basis for implementing Financial technology in the payment system in Indonesia refers to Bank Indonesia Regulation No. 18/40/PBI/2016 concerning Implementation of Payment Transaction Processing Bank Indonesia Circular Letter No. 18/22/DKSP regarding the Implementation of Digital Financial Services Bank Indonesia Regulation No. 18/17/PBI/2016 concerning Electronic Money.

The advantages of financial technology for consumers, Financial technology provides benefits including getting better services, more choices, cheaper prices for Financial technology players

(traders of products or services), in addition Financial technology provides benefits of simplifying the transaction chain, reducing costs operational and capital costs, freezing the flow of information.

For the state, financial technology provides benefits, among others: 1. encouraging the transmission of economic policies 2. increasing the speed of money circulation so as to improve the economy of the people in Indonesia, 3. financial technology also encourages the National Strategy for Financial Inclusion / SKNI.

The impact of Financial technology is changing the payment system in society and has helped start-up companies to reduce capital costs and high operational costs in the beginning.

The strong flow of technology in the payment system encourages Bank Indonesia as the central bank of the Republic of Indonesia to ensure that payment traffic that has been penetrated by technology continues to run in an orderly and safe manner and supports the pillars in achieving the vision and mission of Bank Indonesia. payment traffic order related to financial technology is 1. providing a market for business actors, 2. ensuring protection for consumers, especially regarding the guarantee of the confidentiality of consumer data and information through cyber security networks.

In terms of investment and risk management, Bank Indonesia also requires every business actor to comply with macroprudential regulations, deepening of financial markets, payment systems to support operations and cyber security to safeguard consumer data and information. In terms of payment, settlement and clearing, Bank Indonesia ensures protection for consumers, especially regarding the guarantee of confidentiality of consumer data and information through cyber security networks.

Bank Indonesia conducts monitoring and assessment (assessment) of every business activity that involves financial technology and its payment system uses technology. Coordination and Communication. Bank Indonesia maintains relationships with relevant authorities to continue to support the existence of financial technology payment systems in Indonesia. Bank Indonesia is also committed to supporting business actors in Indonesia by providing regular guidance on financial technology. (Bank Indonesia, 2019).

To increase access to financial services, Financial Technology (Financial technology) is one of the innovations in financial services that is gaining popularity in today's digital era and technology with the concept of digitizing payments has become one of the most developed sectors in the Financial technology industry in Indonesia. In this case, the financial technology sector is most expected by the government and the public to encourage and increase the number of people who have access to be able to use financial services. (Muzdalifa, Rahma, & Novalia, 2018).

Based on data from the Financial Services Authority in Indonesia, the current number of securities accounts is still very small, which is less than 600,000 accounts compared to Thailand which has reached 25 million accounts. The Indonesia Stock Exchange (IDX) recorded that the number of investors through Single Investor Identification (SID) had reached 494 thousand as of August 22, 2016. The number of investors has increased every month. As of August 10, 2016, the Indonesia Stock Exchange released data on the number of Indonesian companies that successfully went public, which amounted to 517. The number of new companies can be one of the factors driving the number of investors, especially in stock investment in the capital market. However, the large number of companies alone will not have a significant effect on the growth of the number of investors if awareness of investment from the community itself is still low (Tumewu, 2019).

Indonesia has great growth potential in the capital market with the help of financial technology (*financial technology*). However, there are still challenges that may arise in the future and need to be addressed jointly by the stakeholders.

The development of the capital market through financial technology is quite rapid, even during this pandemic. KSEI data records that the number of capital market investors as of October 2020 reached 3.39 million *single investor identification* (SID), and 1.69 million or 49.75 percent came from *financial technology* sales agents. Of the number of SIDs through *financial technology*, around 99 percent are individual investors or retail investors. Based on data from the Financial Services Authority in Indonesia, the current number of securities accounts is still very small, which is less than 600,000 accounts compared to Thailand which has reached 25 million accounts. The Indonesia Stock Exchange (IDX) recorded that the number of investors through Single Investor Identification (SID)

had reached 494 thousand as of August 22, 2016. The number of investors has increased every month. As of August 10, 2016, the Indonesia Stock Exchange released data on the number of Indonesian companies that successfully went public, which amounted to 517. The number of new companies can be one of the factors driving the number of investors, especially in stock investment in the capital market. However, the large number of companies alone will not have a significant effect on the growth of the number of investors if awareness of investment from the community itself is still low (Tumewu, 2019).

The growth of investors in the Indonesian capital market is considered quite good. However, when compared to other countries, public interest in Indonesia to invest is still quite low, which is only around 0.15% of the Indonesian population, while the Malaysian population is around 15%, Singapore 30% and Australia 30%. (Pajar & Pustikaningsih, 2017).

1.2 *Financial technology in Indonesia*

Financial technology by the National Digital Research Center (NDRC) is defined to refer to innovation in the field of financial or financial services. The innovation is in the form of collaboration between technology and financial service providers. *Financial technology* already has a number of official legal foundations from the government and Bank Indonesia, namely:

1. Bank Indonesia Circular Letter No.18/22/DKSP regarding the Implementation of Digital Financial Services
2. Bank Indonesia Regulation No.18/17/PBI/2016 concerning Electronic Money
3. Bank Indonesia Regulation No.18/40/PBI/2016 concerning the Implementation of Payment Transactions

Financial technology in Indonesia in its development, especially during this pandemic, looks positive. Statistical data from the Financial Services Authority (OJK) stated that the total distribution of financial technology grew 113.05% to Rp128.7 trillion as of the third quarter of 2020. In addition, the accumulation of borrower accounts also grew by 103.46% or to 29.21 million. Thus, public interest in making loans during the pandemic through financial technology in 2021 will grow. So far, financial services have only focused on selling products and communicating with consumers in a conventional manner. The evolution of financial services will occur more massively in 2021, where financial products that will win are products that are able to integrate people's daily lives through digital services and technology, so that financial inclusion will become the main focus of the government and financial technology players. Data from the National Financial Inclusion Survey (2018) shows that there are still many people who are not yet connected to the banking industry. *Financial Inclusion Insight* (FII) data and the National *Financial Inclusion* Strategy (SNKI) show that the number of account ownership per year in Indonesia has increased, but is still not as high as neighboring countries, such as Malaysia and Singapore.

RESEARCH METHODS

The research method is descriptive analysis technique, and the data used is normally distributed. The data collection technique uses a quantitative approach, including stock transaction volume data with the IHSG indicator at PT. Indonesia Stock Exchange before the covid 19 virus pandemic (2018 - 2019) and during the covid 19 pandemic (2020 - September 2021).

RESULTS AND DISCUSSION

Based on the same sample source as two data, namely data before the COVID-19 pandemic and after the COVID-19 pandemic occurred in Indonesia, based on the processed data, it is known that the volume of stock trading using financial technology is used by investors in the capital market. The increased use of financial technology can be seen from an increase in the average volume of stock trading transactions, if before the covid19 pandemic the average was 399,532,274.76 shares, during the covid 19 pandemic there was an increase in the average transaction volume to 573,163,851.69 shares. or an increase of 43.46%. The standard deviation during the pandemic is higher than before

the covid 19 pandemic, this shows that the transaction volume data is increasingly spreading from its mean value.

The highest stock trading volume before the pandemic was 739,198,500 which occurred in the fourth week of October 2019, while during the pandemic the trading volume was much higher and occurred in January 2021, the second week with a large volume of 1,527,600,500, the trend is the trend of stock trading volume is increasing, which is shown in Figure 1.

Figure 1. Volume Transaction Trend

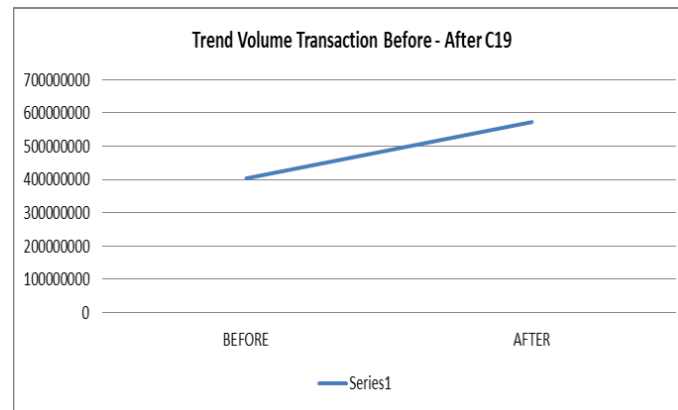


Table 1 . Mean and Standard Deviation of Volume Transaction

		Statistics	
		BEFORE	AFTER
N	Valid	103	89
	Missing	0	14
Mean		399532274,7573	573163851.6854
Std. Error of Mean		13430905,12727	34284684,43242
Median		38067100000	52603000000
Mode		1147870000.00 ^a	1198370000.00 ^a
Std. Deviation		136308799,75772	323441066,05401
Variance		18580088891388960,000	104614123210155504,000
Skewness		,260	,559
Std. Error of Skewness		,238	,255
Kurtosis		-,695	-,315
Std. Error of Kurtosis		,472	,506
Range		624411500.00	1407763500.00
Minimum		1147870000.00	1198370000.00
Maximum		739198500.00	15276005000.00
Sum		41151824300.00	51011582800.00

a. Multiple modes exist. The smallest value is shown

During the covid 19 pandemic, sales volume data at PT. The Indonesian Stock Exchange is normal, this shows that there is no occurrence or sharp and extreme increase or decrease in stock trading in the Indonesian stock market, meaning that in the regression model there are no confounding variables or residuals have a normal distribution.

Table 2. Normality Data
One-Sample Kolmogorov-Smirnov Test

	BEFORE	AFTER
--	--------	-------



N		103	89
Normal Parameters ^{a,b}	Mean	399532274,7573	573163851.6854
	Std. Deviation	136308799,75772	323441066,05401
Most Extreme Differences	Absolute	,095	,114
	Positive	,095	,114
	negative	-0.059	-,081
Test Statistics		,095	,114
asymp. Sig. (2-tailed)		,022 ^c	,006 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 3. Paired Samples Correlations

		N	Correlation	Sig.
Pairs 1	BEFORE & AFTER	89	,400	,000

The correlation results between before and after covid are significant, this shows that there is a relationship between the volume of stock transactions in the Indonesian capital market in the period before the covid 19 pandemic and after the covid 19 pandemic of 0.4 in a fairly close category.

Table 4. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pairs 1	BEFORE	402923371.9101	89	123117721,88902	13050452,41936
	AFTER	573163851.6854	89	323441066,05401	34284684,43242

Based on sample data, the average stock transaction volume before the pandemic was 402,923,371.9 with a large distribution of 123,117,721.9 and after covid with an average transaction volume of 573,163,851.7 with a distribution of 323,441,066, meaning for investors the condition The pandemic has not changed the behavior of investors to keep investing in stocks in the capital market. With the average post-pandemic volume increasing by 43.46%, it shows that a pandemic is a more profitable investment opportunity.

Table 5. Paired Samples Test

1		Paired Differences					t	d f	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pai rs 1	BEFO RE - AFTE R	- 170240479,77 528	296568226,99 257	31436169,18 894	- 232713260,19 356	- 107767699,35 700	- 5,41 5	8 8	,000

Based on the calculations above, it shows that there is a significant difference between stock trading volumes before the pandemic and after the pandemic, this shows that the pandemic has led to an increase in the use of financial technology as indicated by the average trading volume of stock transactions that is larger than transactions before the covid 19 pandemic.

In addition, data analysis shows that the volume of stock sales before the pandemic is lower than the volume of stock trading after the pandemic.

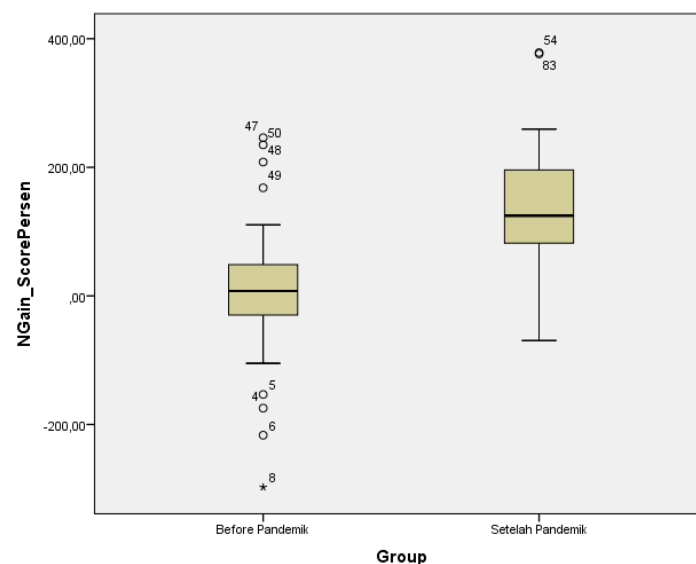
This shows that there is a difference in the volume of stock trading before the pandemic and after the pandemic, which means that there is an optimization of the use of financial technology in stock trading by investors which makes stock trading increase during the COVID-19 pandemic.

The effectiveness of the use of financial technology can be calculated using the N Gain score by calculating the difference in stock trading volume before the pandemic and after the pandemic.

Table 6. Descriptives

	Group	Statistics	Std. Error
NGain_ScorePersen	Before Pandemic	Mean	6.0437
		Variance	9279,205
		Std. Deviation	96.32863
		Minimum	27.59
		Maximum	46.92
	After Pandemic	Mean	137.5782
		Variance	8865,237
		Std. Deviation	94.15539
		Minimum	69.43
		Maximum	83.34

Figure 2. NGain Score Percent Before _ After



The average value of the NGain Score shows the category of effective use of financial technology during the Covid-19 pandemic because the value is above 70%, which is 83.34%, the use of financial technology has actually been used since before the COVID-19 pandemic occurred with a Ngain score of 46.92% meaning it is not yet effective, but it turns out Based on the NGain score, the use of financial technology has increased even more during the COVID-19 pandemic. It can be stated that the maximum value in the pandemic period is much greater than in the pre-pandemic period, meaning that the use of financial technology during the pandemic is more effective or more optimal than in the pre-pandemic period.

CONCLUSION

Financial technology has changed the financial market with technology and innovation by transforming the financial business and growing faster than ever. Digital finance is now emerging as the backbone of the business. The challenges for financial technology companies this year have increased substantially due to the coronavirus pandemic; However, the current situation also gives them the opportunity to make money from increasing digital transactions, this is indicated by the trend of increasing transaction volume during the corona virus 19 pandemic, which was higher at 83.43% compared to before the covid 19 pandemic occurred with an effectiveness rate of



43.46%. Online or digital businesses will continue to exist, and financial technology companies can learn more from the current crisis and come out strong with innovative solutions (Beyond COVID-19: New Opportunities for Financial technology Companies, 2020).

REFERENCE

- Anwar, K. (2017). The Effect of Financial Inclusion on Indonesia's GDP. *Student Scientific Journal (JIM) Development Economics Faculty of Economics and Business Unsyiah*.
- AWANTI, E. (2018). Analysis of the Effect of Financial Inclusion on Financial System Stability in Developing Countries in Southeast Asia. *Journal of Applied Economics*. <https://doi.org/10.20473/jiet.v2i2.6080>
- Bank Indonesia. (2019). Financial Technology Education.
- Basriani, A., Susanti, D., Zainal, R., & Sofyan, D. (2021). The Influence of Capital, Independence, and Education on Women's Entrepreneurial Motivation in Indonesia. *Husnayain Business Review*, 1(1), Article 1. <https://doi.org/10.54099/hbr.v1i1.24>
- Erwin, E., & Nasfi, N. (2022). Transformation Of IAIN Into UIN And Internal Supervision Unit Model. *International Journal of Islamic Business and Management Review*, 2(1), Article 1. <https://doi.org/10.54099/ijbmr.v2i1.157>
- Fakhrunnas, F. (2020). *Investment Before and After the Covid-19 Pandemic, How Does It Affect?* Sleman, Yogyakarta: Faculty of Business and Economics.
- Herwina, Y. (2022). The Influence of Competence on Employee Performance: Investigation of Automotive Companie. *International Journal of Management and Business Applied*, 1(1), Article 1. <https://doi.org/10.54099/ijmba.v1i1.97>
- Hill, J.A. (2021). COVID-19 and Financial technology. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3777562>
- Iskamto, D., Ghazali, P. L., & Afthanorhan, A. (2019). Analysis Of Customer Decisions In Choosing Credit Financial. *Jurnal Manajemen Bisnis (JMB)*, 32(1), 5–14.
- Lubis, K. S., & Irawati, L. (2022). The Effect of Financial Literacy on Financial and Capital Management on MSME Performance. *Asean International Journal of Business*, 1(1), 77–85. <https://doi.org/10.54099/aijb.v1i1.66>
- Marginingsih, R. (2021). Financial Technology (Financial technology) in National Financial Inclusion during the Covid-19 Pandemic. *Monetary - Journal of Accounting and Finance*. <https://doi.org/10.31294/moneter.v8i1.9903>
- Muzdalifa, I., Rahma, IA, & Novalia, BG (2018). The Role of Financial Technology in Improving Financial Inclusion in MSMEs in Indonesia (Islamic Finance Approach). *Masharif Al-Syariah Journal: Journal of Islamic Economics and Banking*. <https://doi.org/10.30651/jms.v3i1.1618>
- Nasfi, N. (2022). Good Corporate Governance At Basic Industry and Chemical Company Affecting Profitability in Review from the Aspect of Earning Per Share. *International Journal of Management and Business Applied*, 1(2), Article 2. <https://doi.org/10.54099/ijmba.v1i2.301>
- Okaro, CS (2016). Financial Inclusion and Nigerian Economy (1990 - 2015). *Journal of Policy and Development Studies*. <https://doi.org/10.12816/0041083>
- Pajar, RC, & Pustikaningsih, A. (2017). The Influence of Investment Motivation and Investment Knowledge on Investment Interest in the Capital Market in Fe Uny Students. *Profit*.
- Rama Nopiana, P. & Rusmiati Salvi. (2022). Analysis of Governance, Leverage and Financial Distress Conditions on Earnings Management in the Banking Services Sector in Indonesia. *Asean International Journal of Business*, 1(1), 34–42. <https://doi.org/10.54099/aijb.v1i1.69>
- Saputri, D., Miswardi, & Nasfi, N. (2021). The Economic Impact of Murabahah Financing On PT. PNM Mekar Syariah In Increasing The Welfare Of Pre-Prospered Women. *ADPEBI International Journal of Business and Social Science*, 1(1), Article 1. <https://doi.org/10.54099/aijbs.v1i1.38>

- Schueffel, P. (2016). Taming the beast: A scientific definition of financial technology. *Journal of Innovation Management* . https://doi.org/10.24840/2183-0606_004.004_0004
- Tumewu, F. (2019). The Interest of Young Investors To Invest In The Capital Market Through Financial Technology. *Jmbi Unsrat (Scientific Journal of Business Management and Innovation at Sam Ratulangi)* . <https://doi.org/10.35794/jmbi.v6i2.26170>