



Proceeding Paper

# Comparison of Daily Transaction Performance of Indonesia Stock Exchange against Singapore, Thailand, and Philippines Stock Exchanges during the COVID-19 Pandemic <sup>†</sup>

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Abstract: This study aims to determine the performance of daily transactions in the Indonesia Stock Exchange during the COVID-19 pandemic against those in other ASEAN countries such as Singapore, Thailand and the Philippines. This research is conducted against the background of the COVID-19 global pandemic that has affected stock exchanges across all countries in the world. The results of this research confirm those of several other studies that state that the COVID-19 pandemic has reduced the performance of stock exchanges in several countries in the world. The research method used in this study involves a descriptive quantitative approach with a random sampling technique on four stock exchanges from four ASEAN countries, namely Indonesia, Singapore, Thailand and the Philippines, with 2017–2020 as the observation period. The results showed that at the beginning of the COVID-19 pandemic, the four countries responded positively to the impact of COVID-19, which resulted in a decrease in the value of daily transactions. However, not long after Q2, all exchanges slowly experienced a recovery, and even the Indonesia Stock Exchange recorded the highest growth in transaction value in the last 20 years.

Keywords: composite index; daily transaction value; capital market



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## 1. Introduction

The COVID-19 pandemic has affected the world's economic activity and capital markets globally, and the condition of stock exchanges in several countries shows the impact caused by the spread of the coronavirus. A result of study showed a significant influence of the COVID-19 pandemic on two stock indices—the Shanghai Composite Index and the Dow Jones Industrial Average [1]. The Shanghai Composite Index showed resilience to the COVID-19 pandemic with a significant rise in the value of the stock during the first fifty days of entering the pandemic; in contrast, the Dow Jones Industrial Average suffered a devastating impact resulting from the COVID-19 pandemic with a significant loss of stock market value during the first fifty days after entering the COVID-19 pandemic. Meanwhile, the predictability of stock prices has increased for stocks in several industries, namely telecommunications, manufacturing, business equipment, finance, and stores (wholesale and retail) [2]. Thus, the results show that the COVID-19 crisis has led to an increase in inefficiencies in the stock market. The same occurred in China; investors were recommended to avoid excessive panic and to adjust investment strategies to avoid risk effectively based on the characteristics of various industries, and suggested that regulatory bodies and government departments should pay more attention to monitoring abnormal market fluctuations and prevent and control financial risks in the main industries in the capital market [3].

Similar conditions were the case in Indonesia. The Jakarta Composite Index (JCI) stated Indonesian capital market experienced a very sharp decline (5.09%) during COVID-

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19 pandemic. In addition, according to the IDX Monthly Statistics Report in January (2020), the average daily transaction value of the Indonesia Stock Exchange was IDR 6366 trillion, down by 22.1% from December 2019. The COVID-19 pandemic also caused a drastic decline in the composite index of all exchanges in ASEAN, inseparable from the Indonesia Exchange, which reported a decrease in the JCI to -5.09% according to the IDX's 2020 annual report. Likewise, the Singapore Exchange in its SGX-Dec-2020 Monthly Market Statistics Report reported a decrease in THE IMS of -12%; similarly, the Thai Exchange recorded a decline in the SET Index of -8% during 2020.

Observing the dynamics of the ASEAN capital market, which was turbulent during the COVID-19 pandemic, the author became interested in explaining the comparison of capital market performance of several countries by undertaking a study on the comparison of capital market performance on the Indonesian, Singapore, Thailand, and Philippine Stock Exchanges during the COVID-19 pandemic based on the average daily transaction value.

#### 2. Research Problem

This study will examined how the dynamics condition of capital market performance on Indonesia, Singapore, Thailand, and Philippines Stock Exchanges were affected based on the average daily transaction value during the COVID-19 pandemic. The aim of this study is to reveal the comparison of the performance of the Indonesian capital market with several ASEAN countries related to investor growth, issuer growth, and the movement of composite indices, as well as observe patterns of movement of average transaction values so that changes in capital market conditions in Indonesia, the Singapore Exchange, Thailand, and the Philippines after the COVID-19 pandemic can be observed based on the average performance of daily transaction values.

#### 3. Theoretical Review

This research refers to several previous research results. Performance of the Singapore, Malaysian, Thailand and Philippine stock exchanges has an influence on the development of the Indonesian Stock Exchange [4]. There is a relationship between the Indonesian capital market and those of Singapore, Thailand and the Philippines. Meanwhile, in the Malaysian capital market, no relationship was found. The number of capital market investors itself is currently still lagging in terms of the ratio of the number of investors compared to other ASEAN countries [5]. The level of involvement of the Indonesian people in the capital market is still very low compared to those of neighboring countries such as Malaysia and Singapore [6].

An important part of this study involves the relevance of governmental efforts to control the market and recover public trust during the COVID-19 pandemic. That capital markets in developing countries initially reacted negatively to public information campaigns that increased public fear [7]. However, in the end, the market responded positively to testing or contact-tracing policies that could reduce the spread of the COVID-19 pandemic. The government policy reflects efforts and measures that not only allow people to survive, but also encourage the labor force and support the recovery of economic activity. This research also confirms the results of research carried out by refs. [1–3], who state that the COVID-19 pandemic has affected capital market performance in various countries.

In addition to the research results above, this research is also supported by several theories and definitions related to several research variables.

## 3.1. Capital Market

The capital market is a means that can be used by issuers or companies that need funds to develop their business, as well as investors who need a place or media to invest in so that they can make a profit [8]. The definition of capital market according Law of the Republic of Indonesia Number 8 of 1995 is an activity related to public offerings and securities trading, public companies related to the securities it issuer, as well as an institutions and professions

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related to securities. From the economic side, the function and benefits of the capital market is to support the growth of the economy in Indonesia.

## 3.2. Capital Market Investors

The investors can generally be classified into two types, namely individual investors (retail investors) and institutional investors (institutional investors) [9]. Individual investors consist of individuals who carry out investment activities, while institutional investors usually consist of insurance companies, depository institutions (banks and savings and loan institutions), pension fund institutions and investment companies. In assessing developments in the Indonesian capital market, it can be seen from the market capitalization value of issuers and increasing number of shareholdings (investors). The ratio of the number of investors to the total population in Indonesia is 2%; in Singapore, it is 26%, in Thailand 5%, and in the Philippines 3% [10].

#### 3.3. Securities Issuer

An issuer is a company that lists its shares for public trading. According to the official website of the Financial Services Authority in Indonesia, an issuer is a party that conducts a public offering, which is a securities offer made by the issuer to sell securities to the public based on the procedures regulated in the applicable laws and regulations. Issuers can take the form of natural persons, corporations, joint ventures, associations, or organized groups. The corporations that will sell securities or issue on exchanges are called issuers. In issuing, issuers have various purposes and this is usually stated in the general meeting of shareholders (GMS) including business expansion, improvement of capital structure, and transfer of old shareholders to new shareholders [11].

#### 3.4. Composite Stock Index

The capital market that experiences an increase (Bullish) or decrease (Bearish) can be seen from the ups and downs of stock prices which are reflected in the movement of the index. A stock index is a statistical measure that reflects the overall price movement of a set of stocks selected based on certain criteria and methodologies, and it is evaluated periodically (www.idx.co.id (accessed on 26 June 2021)). One of the benchmarks to find out the development of the stock exchange is the development of the Composite Stock Price Index. The Jakarta Composite Index (JCI) is one of the indicators of capital market growth in Indonesia.

#### 3.5. Economic Growth

One of the indicators that affects a country's economy is investment [12]. Economic growth is the change in output produced by an economy in a certain period [13]. The increase in economic growth is inseparable from the development of investment that occurs in the investment capital market [12].

#### 3.6. Transaction Value

Transaction value is the overall trading value of a stock in a given period. The transaction value is formed from the total amount of multiplication of the transaction volume by the share price [14]. One measure of the success of the Indonesia Stock Exchange (IDX) in developing the capital market industry can be seen based on the large value of stock buying and selling transactions in the capital market every day [10]. In addition, the transaction value is also one of the descriptions of the Exchange's income because there is a securities transaction service fee in each transaction.

## 4. Methodology

This study uses a quantitative approach that explains the numbers in the form of statistical results of the average daily transaction value, the number of issuers, and the movement of indices on the Indonesia, Singapore, Thailand, and Philippine Stock Ex-

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changes. The variables in this study are the number of investors, the number of issuers, and the combined indices of Indonesia, Singapore, Thailand, and Philippine Exchanges. The population in this study came from ASEAN countries and the author then performed a simple random sampling technique from the population, which was carried out randomly without paying attention to the strata in the population, namely stock exchanges in Indonesia, Singapore, Thailand and Vietnam in the 2017–2020 period. The selection of the four countries was planned by the Singapore and Thailand Exchanges to have an average transaction value that is higher than the IDX so that it can be used as a reference in increasing the transaction value of the Indonesia Exchange. Meanwhile, the Philippines Exchange can be a comparison for countries that have a transaction value lower than that of the Indonesia Exchange [15]. The analysis technique is carried out descriptively, which aims to explain the picture systematically, actually, and accurately through sample data and population as it is, in addition to providing a picture of variables.

This research is also supported by secondary data obtained through records, books, reports, newspapers, among others, such as annual reports, market statistics reports, and investor demographic data from each institution and party related to data processing using Microsoft Office Excel.

#### 5. Analysis and Discussion

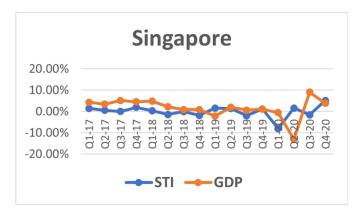
5.1. Gross Domestic Product (GDP) Growth and the Composite Stock Index

The COVID-19 pandemic has posed a threat of global uncertainty that has led to an economic recession. The pace of economic growth based on GDP continues to move in a negative direction in each country. Gross domestic product (GDP) is an economic variable that occupies the most important position of the various macroeconomic variables that exist to measure the economic performance of a country [9].

GDP growth indicates the growth of a country's economy. Economic growth conditions come from people's purchasing power; if the economy improves, it means that people's purchasing power is high [12]. This is an opportunity for the company to increase its sales. This increase in sales signals a good performance of the company and this will increase the stock price. The increase in stock prices due to the increase in GDP will encourage an increase in composite indices on the stock exchange [9]. The movement of GDP and composite indices of each country is reflected in the chart below.

The movements of Stock Index and GDP in Indonesia, Singapore, Thailand and the Philippines in 2017–2020 are as follows (Figure 1):

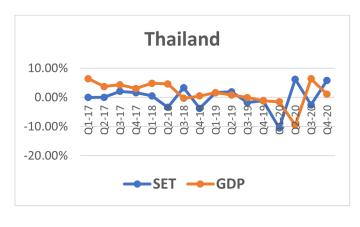




(a) (b)

Figure 1. Cont.

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(c)



(d)

**Figure 1.** Stock Index and GDP in Indonesia in 2017–2020 in (a) Indonesia; (b) Singapore; (c) Thailand; (d) Philippines. (Source: Processed by the Author, 2021).

As can be observed from Figure 1a, Indonesia has a fluctuating chart with a relatively constant trend; however, JCI experienced a significant decline in early January 2020. Meanwhile, as can be observed from Figure 1b, Singapore has a relatively constant chart trend and only slightly decreased STI in early January 2020. Likewise, Thailand in Figure 1c is the same as Singapore; however, throughout the 2017-2020 observation period, the chart fluctuated more, especially in early January 2020. Not unlike the Philippines, the chart tends to be constant, where the economic performance line of GDP is better than the composite stock index.

The movement of GDP and the composite stock index of each country shows the economic condition of the country. The chart from the above four countries shows a unidirectional position between GDP and its composite index; however, in mid-2018, all four composite indices showed a negative growth in contrast to stable GDP growth; this was due to the turmoil of the US trade war with China. The trade war between China and the US affected the decline in composite indices such as JCI, STI, SET, and PSEi and provided negative sentiment, although it did not have a direct impact on GDP between countries. Unlike 2020, which showed a decline in the composite index and a simultaneous decline in GDP, the decline was caused by the COVID-19 pandemic that hit all parts of the world, including Indonesia, Singapore, Thailand, and the Philippines. The COVID-19 pandemic had a direct impact on the composite index and GDP of each country which resulted in the composite index experiencing a very sharp decline.

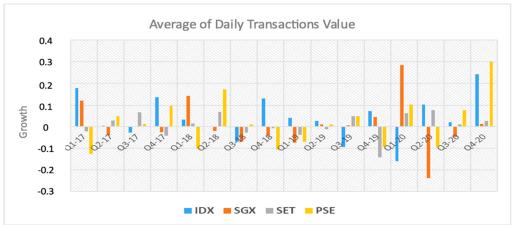
# 5.2. Movement of Transaction Value before and after the Pandemic

The COVID-19 pandemic led to uncharacteristic movements of the value of transactions on each Exchange, which is shown in the chart below (Figure 2).

Based on Figure 2, it can be observed that there were change in the average growth of the average daily transaction before the COVID-19 pandemic. The average daily transaction value of the four exchanges experienced less volatile growth, with the highest growth not reaching 0.2% in each quarter. However, when the pandemic occurred, the four exchanges showed an aggressive response, as seen in Q-1 of 2020; the Indonesia Exchange showed a very sharp decline in transaction value and this is because in early March 2021, the first COVID-19 case was announced in Indonesia; thus, the decline can be interpreted as a decrease in transactions that occurred on the Indonesia Exchange. When the pandemic occurred in Indonesia, investors behaved as though transacting in the stock market was not interesting and not a good idea [15]. From these observations, it can be concluded that Indonesian investors prefer to wait and see action to respond to this information; however, in Q-2, when the peak of the pandemic occurred until the end of 2020, the average value of

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Indonesian transactions showed positive growth and the highest growth of the last 20 years even occurred in Q-4.



**Figure 2.** Changes in the average daily transaction value of the Indonesia, Singapore, Thailand and Philippines Stock Exchanges before and after the pandemic.

The other three countries, at the beginning of the pandemic, showed a positive response to the growth in the average transaction value, meaning that the pandemic information in the country did not affect investors' decisions to invest in stocks. Investors in Singapore were more emboldened to take action at the beginning of COVID-19; high selling pressure resulted in high transaction value but lowered the composite index recorded, registering a decrease in IMS by -12%. Only the Thai exchange did not show negative growth from the COVID-19 pandemic as the pandemic that occurred did not hinder investors' intentions in making transactions; there are other factors that can be considered because the Thai exchange still maintains its transaction value. With a large number of stock investors, they apply the difference in transaction fees; thus, the more transactions are made, the lower the cost level the transactions impose. This is one of the ways through which the Thai Exchange maintained its liquidity amid the COVID-19 pandemic. Overall, during the pandemic, even though the capital market is bearish, the average daily transaction value continues to increase. Even for developing countries such as Indonesia and the Philippines, the increase that occurs is quite significant; it can be observed that the average daily transaction value after the COVID-19 pandemic was higher than the average daily transaction value before the pandemic.

# 5.3. Capital Market Performance in Several Countries

# a Indonesia Stock Exchange

The descriptive statistical results of transaction value data, number of investors, number of issuers, and JCI of the Indonesia Exchange are shown in Table 1:

**Table 1.** IDX descriptive statistics.

	IDX Transaction Value	Number of IDX Investors	Number of IDX Issuers	JCI
Mean	IDR 8.7 trillion	883,51	619	5849
Standard Deviation	IDR 2.09 trillion	285,781	57	527
Range	IDR 12.7 trillion	1,143,891	178	2067
Minimum	IDR 5.68 trillion	522,167	535	4538
Maximum	IDR 18.4 trillion	1,666,058	713	6605
Count	48	48	48	48

(Source: Processed by the author, 2021).

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Based on Indonesian capital market performance as presented in Table 1, the number studied was 48 samples with an average transaction value of IDR 8.67 trillion, a standard deviation of IDR 2.09 trillion which means a maximum increase value of +IDR 2.09 trillion and a decrease in the maximum transaction value of -IDR 2.90. The minimum value is IDR5 68 trillion and the maximum is IDR 18.4 trillion. As regards the number of investors, the average number of investors is 883,751, the standard deviation is 285,781, which means that the increase in the number of investors is a maximum of +285,781 and the maximum decrease is -285,781. The lowest number of investors was 522,167 and the highest number of investors was 1,666,058. The number of issuers obtained an average of 619, with a standard deviation of 57, which means the maximum increase in the number of issuers is +57 and the decrease is -57. The lowest number of issuers was 535 and the highest number of issuers was 713. The average JCI is at the level of 5849, with a standard deviation of 527, which means that the maximum JCI increase is +527 and the maximum decrease is -527. The lowest JCI value is 4538 and the highest value is 6605.

## b Singapore Exchange

The descriptive statistical results on the data on transaction value, number of investors, number of issuers, and STI Bursa Singapore are shown in Table 2:

<b>Table 2.</b> SGX descriptive statis	tics.
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	SGX Transaction Value	Number of SGX Investors	Number of SGX Issuers	Ims
Mean	SGD 1.2 billion	1,572,632	735	3110
Standard Deviation	SGD 233 million	147,400	16	310
Range	SGD 1.35 billion	423,367	63	1190
Minimum	SGD 837 million	1,404,739	696	2423
Maximum	SGD 2.19 trillion	1,828,106	759	3613
Count	48	48	48	48

(Source: Processed by the author, 2021).

The number studied was 48 samples with an average value on the SGX transaction value of SGD 1.2 billion and a standard deviation of SGD 233 million, which means that the maximum increase is SGD +233 million and the maximum decrease in transaction value is SGD -233 million. The minimum value is SGD 837 million and the maximum is SGD 2.19 trillion. As regards the number of investors, the average number is obtained by 1,572,632, the standard deviation is 147,400 which means that the increase in the number of investors is a maximum of +147,400 and a maximum decrease of -147,400. The lowest number of investors was 1,828,106. As regards the number of issuers, an average number of 735 is obtained, with a standard deviation of 16, which means that the maximum increase in the number of issuers is +16 and the decrease is -16. The lowest number of issuers was 696 and the highest number of issuers was 759. The average STI is at 3110, with a standard deviation of 310, which means that the maximum STI increase is +310 and the maximum decrease is -310. The lowest value of STI is 2423 and the highest value is 3613.

#### Stock Exchange of Thailand

The descriptive statistical results on the data on transaction value, number of investors, number of issuers, and SET Bursa Thailand are shown in Table 3:

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**Table 3.** Set descriptive statistics.

Transaction Value SET	Number of Investors SET	Number of Set Issuers	Set
THB 57.2 billion	2,537,543	780	1575
THB 6.1 billion	431,296	11	169
THB 23.2 billion	1,543,312	43	705
THB 45.4 billion	1,970,685	760	1125
THB 68.6 billion	3,513,997	803	1830
48	48	48	48
	Value SET  THB 57.2 billion  THB 6.1 billion  THB 23.2 billion  THB 45.4 billion  THB 68.6 billion	Value SET         SET           THB 57.2 billion         2,537,543           THB 6.1 billion         431,296           THB 23.2 billion         1,543,312           THB 45.4 billion         1,970,685           THB 68.6 billion         3,513,997	Value SET         SET         Set Issuers           THB 57.2 billion         2,537,543         780           THB 6.1 billion         431,296         11           THB 23.2 billion         1,543,312         43           THB 45.4 billion         1,970,685         760           THB 68.6 billion         3,513,997         803

(Source: Processed by the author, 2021).

The number studied was 48 samples with an average value at a SET transaction value of THB 57.2 billion and a standard deviation of THB 6.1 billion, which means that the maximum increase in the value of the maximum increase is THB +6.1 billion and the maximum decrease in transaction value is THB -6.1 billion. The minimum value is THB 45.4 billion and the maximum is THB 68.6 billion. As regards the number of investors, the average number is obtained at 2,537,543 and the standard deviation is 431,296, which means that the increase in the number of investors is a maximum of +431,296 and the decrease is -431,296. The lowest number of investors was 1,970,685 and the highest number of investors was 3,513,997. As regards the number of issuers, the average number of issuers obtained is 780, with a standard deviation of 11, which means that the increase in the number of issuers is a maximum of +11 and the decrease is -11. The lowest number of issuers was 760 and the highest number of issuers was 803. The average SET value is at 1575, with a standard deviation of 169, which means that the maximum SET increase is +169 and the maximum decrease is -169. The lowest value of SET is 1125 and the highest value is 1830.

# d Philippines Stock Exchange

The descriptive statistical results on the data on transaction value, number of investors, number of issuers, and PSEi Bursa Philippines are shown in Table 4:

**Table 4.** PSE descriptive statistics.

	PSE Transaction Value	Number of PSE Investors	Number of PSE Issuers	PSEi
Mean	PHP 6.1 billion	867,164	275	7431
Standard Deviation	PHP 1.2 billion	152,707	9	823
Range	PHP 6.8 billion	506,820	35	3442
Minimum	PHP 4.12 billion	623,037	261	5319
Maximum	PHP 10.9 billion	1,129,857	296	8761
Count	48	48	48	48

(Source: Processed by the author, 2021).

Table 4 explains that the number studied was 48 samples with an average value of the PSE transaction value of PHP 6.1 billion and a standard deviation of PHP 1.2 billion, which means that the maximum increase in the value of the maximum increase is PHP +1.2 billion and the maximum decrease in transaction value is PHP -1.2 billion. The minimum value is PHP 4.12 billion and the maximum is PHP 10.9 billion. As regards the number of investors, the average number is 867,164 and the standard deviation is 152,707, which means that the increase in the number of investors is a maximum of +152,707 and the maximum decrease is -152,707. The lowest number of investors was 623,037 and the highest number of investors was 1,129,857. As regards the number of issuers, an average number of 275 is obtained,

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with a standard deviation of 9, which means that the maximum increase in the number of issuers is +9 and the decrease is -9. The lowest number of issuers was 261 and the highest number of issuers was 296. The average PSE value is at 7431, with a standard deviation of 823, which means that the maximum PSE increase is +823 and the maximum decrease is -823. PSE's lowest score was 5319 and the highest score was 8761.

Based on the discussion above, several findings can be summarized, namely the COVID-19 pandemic has created a momentum for increasing the number of retail investors on stock exchanges in Southeast Asian countries, the growth of the number of stock investors in Indonesia in 2020 increased by 53% and, until 30 December 2020, it was recorded at 1.68 million SIDs (www.idx.co.id, accessed on 19 April 2021). In line with that, the Thailand Exchange also recorded the addition of new investors by 230,000 until August 2020. In the Singapore Exchange, Janice Kan Managing Director, Head of Markets Equities at SGX, said that there was an increase in the daily transaction value by 40%, while for opening a securities account, it increased by 25%. The number of issuers in Indonesia until the time this study was conducted was 728, which is not so far from other country issuers such as Singapore, whose total issuers are 697, Thailand, which has 814 issuers, and it is far higher than that in the Philippines, which has total of 337 issuers.

Meanwhile, the Market Statistics Report January 2021 SGX (Singapore Exchange) reported an average daily transaction value for January 2021 of USD 1485 million, equivalent to IDR 21.58 trillion. The Thai Exchange (SET) in Monthly Market Statistics 2021-January reported THB 98,584 million or around IDR 45.81 trillion, and Indonesia was above the Philippine Exchange (PSE) which recorded an average daily transaction value for January 2021 at weekly market watch January 2021 of PHP 11.04 million, equivalent to IDR 3.29 trillion.

If you look at the average daily transaction value on an annual basis for 2020, it was IDR 9.21 trillion because the market experienced a gradual recovery and it was seen that in November 2020 there was a very rapid increase in the value of daily transactions of IDR 13.163 trillion until January 2021, when the average daily trading value reached IDR 20,513 trillion. This remarkable figure is a new record for the Indonesia Stock Exchange, being the highest daily transaction value in the past 20 years. A unique fact in the midst of the COVID-19 pandemic is the Indonesia Stock Exchange was actually able to record its highest transaction value.

#### 6. Conclusions

Based on the results of the discussion on the performance of transaction value, the growth in the number of investors, the number of issuers and the composite index against the average daily transaction value on the Indonesia, Singapore, Thailand and Philippines Exchanges for the 2017–2020 period shows that data movement of GDP and index composite of the four countries ahead of the onset of the COVID-19 pandemic, namely in the 2017–2018 period, recorded a stable GDP growth; however, the composite index recorded a negative value triggered by the trade war between the US and China. However, during the COVID-19 pandemic, GDP and the Composite Index both consistently decreased.

The movement in the value of stock transactions on four stock exchanges recorded a decline starting in Q-1 2020. Meanwhile, in Q-2, when the peak of the pandemic occurred until the end of 2020, the Indonesia Stock Exchange slowly experienced a recovery and recorded an average transaction value showing positive growth. The Indonesia Stock Exchange recorded an increase in the number of investors by 53% with an increase in the number of SIDs of 1.68 people. The same is true for investors in all countries that recorded significant growth rates. However, the increase in Indonesia's transaction rate in Q-4 has recorded the highest growth that occurred in the last 20 years. The results of this study can verify that the Indonesia Stock Exchange consistently needs to continue to encourage an increase in the number of investors and the number of issuers. This increase needs attention because changes due to decreases or increases can have an impact on the average daily transaction value. Meanwhile, the government also needs to maintain its current policy

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of handling the COVID-19 pandemic and continue to accelerate the recovery of economic stability in various sectors.

### 7. Recommendations

This research provides optimism for the performance of daily transactions on the stock exchange in Indonesia throughout the COVID-19 pandemic, which is characterized by several indicators, namely the growth in the number of investors, the number of issuers and the movement of the composite stock price index. However, in the next study, it will be more interesting if these indicators can be measured as independent variables. Then, those variables are used to measure the influence on the value of daily transactions through multiple linear regression tests so that it can be ascertained whether the growth in the number of investors, the number of issuers and the movement of the composite stock price index are able to have a significant influence.

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# References

- Collins, C.N. Effect of COVID-19 Pandemic on Global Stock Market Values: A Differential Analysis. Acta Univ. Danub. Econ. 2020, 16, 255–269.
- 2. Lalwani, V.; Meshram, V.V. Stock Market Efficiency in the Time of COVID-19: Evidence from Industry Stock Returns. *Int. J. Account. Financ. Rev.* **2020**, *5*, 40–44. [CrossRef]
- 3. Xu, W.; Li, A.; Lu, W. The Impact of COVID-19 on China's Capital Market And Major Industry Sectors. *Procedia Comput. Sci.* **2022**, 199, 87–94. [CrossRef] [PubMed]
- 4. Asih, N.P.; Nasution, Y. Analisis Hubungan Kinerja Pasar Modal Asean Dengan Pasar Modal Indonesia Periode 2015-2019. Undergraduate Thesis, Universitas Satya Negara Indonesia, Jakarta, Indonesia, 2020.
- 5. Waworundeng, J.H.; Rate, P.V. Analisis Hubungan Pasar Modal ASEAN dengan Pasar Modal Indonesia di Bursa Efek Indonesia. *J. EMBA* **2018**, *6*, 271–280.
- 6. Muklis, F. Perkembangan Dan Tantangan Pasar Modal Indonesia. J. Lemb. Keuang. Perbank. 2016, 1, 65–76.
- 7. Aharon, D.Y.; Siev, S. COVID-19, Government Intervention and Emerging Capital Market Performance, Home to the Journal Research in International Business and Finance. *Res. Int. Bus. Financ.* **2021**, *58*, 101492. [CrossRef] [PubMed]
- 8. Abi, F.P. Semakin Dekat Dengan Pasar Modal Indonesia; Deepublish: Yogyakarta, Indonesia, 2016.
- 9. Tandelilin, E. Dasar-Dasar Manajemen Investasi; Universitas Terbuka Repository: Tangerang, Indonesia, 2010.
- 10. Fityani, I.; Arfinto, E.D. Analysis of Investor Herding Behavior with Multinomial Logit Regression on the IDX (Case Study on LQ-45 Stocks for the Period 2009–2014). *Diponegoro Manag. J.* **2015**, *4*, 1–14.
- 11. Nasution, Y.S.J. Peranan Pasar Modal Dalam Perekonomian Negara. J. Ekon. Bisnis Islam 2015, 2, 95–112.
- 12. Afrizal, F.; Silvira, A.; Talbani, F. Kontribusi Pasar Modal Terhadap Pertumbuhan Ekonomi Indonesia. *J. Ilm. Mhs. Ekomoni Pembang.* **2017**, *2*, 248–255.
- 13. Widiyanti, M.; Sari, N. Kajian Pasar Modal Syariah Dalam Mempengaruhi Pertumbuhan Ekonomi di Indonesia. *J. Ilmu Ekon. Studi Pembang.* **2019**, *19*, 21–30. [CrossRef]

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14. Sunarso, S. Effect of Transaction Volume and Value on the Development Board Stock Price Index on the Indonesia Stock Exchange. *J. Self Employ. Dev.* **2017**, *18*, 217–224.

15. Komalasari, F.; Manik, L.E.L.M.; Ganiarto, E. The Change of Investment Behavior during Covid-19 Pandemic in Indonesia Stock Market. In Proceedings of the 5th International Conference on Indonesian Social and Political Enquiries (ICISPE 2020), Semarang, Indonesia, 9–10 October 2020. [CrossRef]

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