

The Impact of the Covid-19 Pandemic on the Capital Market in Indonesia (Indonesia Stock Exchange Composite (IDX) Case Study)

Tasya Rahmania*, Rani Eka Arini, Yusuf Iskandar, Fitriana Lestari

Nusa Putra University, West Java, Indonesia

*Corresponding author:

E-mail: tasyarahmania_mn18@nusa-putra.ac.id

ABSTRACT

The aim of this study is to (1) evaluate the effect of the Covid-19 pandemic on the growth of the Indonesian capital market (IDX); and (2) assess the influence of externalities and social distancing policies on the dynamics of the Indonesian capital market's progress. The case study approach is paired with a statistical research methodology that allows the use of dummy variables in multiple regression. The dependent variable is IDX, while the independent variables are the amount of Covid-19 instances in Indonesia, China, and Spain, the FTSE100 (London), Hangseng (Hong Kong), and NASDAQ (New York) stock indices, as well as differences in Indonesia's social distancing policies (Satgas, WFH and PSBB). According to the study's conclusions, both internal and external influences influenced the IDX's push. Inside Indonesia, the financial market has been impacted by the Covid-19 pandemic and social distancing policies. The Covid-19 pandemic in China and Spain had an impact on the ISHG index externally. Likewise, Hong Kong, London, and New York's capital markets.

Keywords: Covid-19 Pandemic, Indonesian Capital Market, IDX

Introduction

Coronavirus Disease 2019 (COVID-19) has developed into a pandemic, a worldwide outbreak that has spread to almost every country on Earth. As of the November 2020 weekend, there were at least 62.5 million people (1.4 thousand of whom died) infected across 212 countries. Additionally, this epidemic has caused fear for over 8.9 billion people across Asia, America, Europe, Australia, Africa, and Antarctica. According to Junaedi & Salistia (2020) For months, some of them are obligated to participate in a time of social distancing (maintaining a healthy distance, sitting at home, working at home, and even praying at home (Junaedi & Salistia, 2020).

The capital market is a means of funding for companies and other institutions, and as a means for investing activities. Thus, the capital market facilitates various facilities and infrastructure for buying and selling activities and other related activities. During the pandemic period, stock exchanges from various countries were observed to weaken throughout March and April 2020. The decline was still triggered by the spread of the coronavirus. Director of Investa Saran Mandiri Hans Kwee (2020), the determination of the status of the coronavirus as a pandemic by the World Health Organization (WHO) adds to market concerns, thereby suppressing stock movements. The decline occurred due to the decrease in people investing in shares.

To prevent, or at least suppress, the rate of transmission of a number of the main affected countries have implemented lockdowns, territorial quarantine, and large-scale social restrictions. (PSBB). Numerous flights were canceled in some countries. Transportation by land and sea is also prohibited. Numerous factories halted production. Human travel between nations, between provisions, and between affected districts and cities is also limited. This circumstance also affected economic activity (Junaedi & Salistia, 2020).

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According to the IMF and the World Bank, the Covid-19 pandemic has precipitated a global economic crisis. According to some scholars, the result is comparable to or greater than that of the Great Depression between 1920 and 1930. (BBC, 20 November 2020). BI and Indonesia's Finance Minister accept that the country's economic outlook is still bleak. At the very least before the start of 2021. In 2020, economic growth will be limited to a negative amount (Mulyani, 2020).

Research purposes

The objectives of this research paper are to measure the pandemic's effect on Indonesia's capital market growth (IDX) and to examine the impact of externalities and disparities in social distancing policies on the dynamics of capital market development in Indonesia.

Handling the Covid-19 outbreak

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Capital market

Stocks are the most important and popular capital market instruments. Stock, according to Hamilton (1922), is a form of security that shows the holder has proportional ownership in the issuing company. Businesses market them to collect capital for the expansion of their activities. Stocks are mainly purchased and traded on exchanges, though private transactions do occur, and they form the backbone of virtually any portfolio (Siegel, 2008).

The Indonesian Stock Exchange (IDX, 2019) describes the capital market (capital market) as a market for a range of long-term tradable financial instruments, including debt securities (bonds), equity securities (stocks), mutual funds, and derivative instruments. The stock market acts as a source of finance for corporations and other organizations (for example, the government), as well as a mechanism for investment. Thus, the stock exchange enables a variety of services and infrastructure for buying and selling, as well as other related operations.

Financial securities traded on the capital exchange are mostly long-term (more than one year) instruments such as commodities, shares, contracts, rights, and mutual funds, as well as a variety of derivative instruments such as options, futures, and others. The Indonesian Stock Market mainly exchanges financial instruments (products) in the form of shares, bonds, mutual funds, exchange-traded funds (ETFs), and derivatives.

Legally, the stock market is described as "activities associated with public offerings and securities trading, public entities associated with the securities they sell, as well as institutions and careers associated with securities." The stock market is critical to a country's economy because it serves two functions: first, as a means of funding enterprise, and second, as a medium for businesses to raise funds from the investor population. Capital market funds may be used for corporate growth, extension, and extra working capital, among other uses. Both capital markets allow individuals to invest in a variety of financial instruments, including stocks, shares, and mutual funds. Thus, the public can distribute funds depending on the features of each instrument's benefits and threats.

The stock index, according to the IDX (2020), is a statistical measure that reflects the overall price movement of a group of stocks selected based on certain criteria and methodology and is evaluated periodically. The objectives/benefits of the stock index, are:

- Measure market sentiment
- They are used as passive investment products, such as Index Funds and Index ETFs, and derivative products.
- Benchmarks for active portfolios Proxies in measuring and modeling the return on investment (return), systematic risk, and risk-adjusted-performance, as well
- Proxy for asset class on asset allocation.

The Indonesia Stock Exchange (IDX) is actively continuing to innovate in the development and provision of stock indices that can be used by all capital market players, whether working with other parties or not. The index book "IDX Stock Index Handbook" contains a concise and concise overview of indices provided by the IDX.

This research would concentrate on the action of the Composite Stock Price Index (IDX) or Composite Index, as well as the ISSI, JII, and JII70. Meanwhile, the FSTE100 stock index in London, the Hangseng stock index in Hong Kong, and the Nasdaq stock index in New York are used to analyze the effect of externalities.

The Composite Stock Price Index (IDC abbreviation; also called the Indonesia Compo-site Index, ICI, or IDX Composite) is one of the stock market indexes used by the Indonesia Stock Exchange (IDX; previously the Jakarta Stock Exchange (BEJ)). Introduced on April 1, 1983, as a predictor of the JSE's stock price movement. This index tracks the performance of both common and preferred stocks traded on the IDX. August 10, 1982, is used as the Reference Day for measuring the IDX. On that day, the Index was calculated using a Base Value of 100 and the total number of listed shares was 13. 2020 (IDX).

The highest intraday position achieved by the IDX was 6,689,287 points recorded on February 19, 2018. Meanwhile, the highest closing position ever reached was 6,355.65. on December 29, 2017. [IDX, 2020]

The basis for calculating the IDX is the Total Market Value of the total shares registered on August 10, 1982. Total Market Value is the total multiplication of each listed share (except for companies that are in a restructuring program) and the price on the JSE on that day. The calculation formula is:

$$IHSG = \frac{\sum p}{d} \times 100$$

where p is the closing price in the regular market, x is the number of shares, and d is the base value. The index estimation process replicates the market/exchange price fluctuations that exist as a result of the auction trading mechanism. The Basic Value would be changed promptly whether the issuer's resources or other considerations unrelated to the share price adjustment. Adjustments may be made for new issuers, HMETD (right issue), partial / business lists, warrants, and convertible bonds, as well as delistings. The Basic Value is not changed in the case of a stock split, equity dividend, or incentive securities so the Market Value is unaffected. The IDX is measured using the stock price in the normal market and is centered on the price decided by the auction mechanism. The IDX is measured regularly, precisely after the close of trade. Soon, it is anticipated that the IDX measurement can be completed several times or even in a few minutes, following the correct implementation of the automatic trading method. (2010) (IDX, 2020).

World stock index

CNN Indonesia (13/10/2020) reported that stock exchanges from various countries were observed to have weakened throughout March and April 2020. The decline was still triggered by the spread of the coronavirus. Director of Investa Saran Mandiri Hans Kwee (2020), the determination of the status of the coronavirus as a pandemic by the World Health Organization (WHO) adds to market concerns, thereby suppressing stock movements.

Many stock indexes, as reported by the mass media, moved dynamically during the Covid-19 pandemic, including the Nasdaq and Dow Jones Industrial Average (DJIA) Index, the Nikkei 225 in Japan, the Hangseng Index in Hong Kong, Shanghai in China, the FTSE 100 Index in London, and the DAX index in Germany.

Material and Methods

This analysis uses a quantitative approach and a method known as saturated sampling. The bulk of the data used are indirect references such as Bank Indonesia (BI), the World Health Organisation

(WHO), Worldometer, the Covid-19 Task Force, Wall Street, and the Japan Stock Exchange (JSE), as well as other reference sources such as books, articles, and other publications. Saturated sample data in the form of BI Rate, an exchange rate (exchange rate), IDX, ISSI, JII, JII70, Hangseng, FTSE100, and Nasdaq. The data is presented as a time series of data from May to November 2020.

The data obtained is then divided into dependent variables (dependent) and independent variables (independent) (independent). The IDX, ISSI, and exchange rate function as the dependent variables. The independent variable is the number of cases of Covid-19 in Indonesia, the United States of America, China, and Spain. Additionally, a dummy component is used for the strategy of establishing a Task Force, WFH, and PSBB.

$$\begin{aligned} \text{IDX} = & \beta_0 + \beta_1 \text{COVID-Ina} + \beta_2 \text{ FTSE} + \beta_3 \\ & \text{Hangseng} + \beta_4 \text{ Nasdaq} + \beta_5 \text{ Satgas} + \beta_6 \text{ WFH} \\ & + \beta_7 \text{ PSB} + \varepsilon \end{aligned}$$

Multiple regression models with dummy variables were used to interpret processed data quantitatively descriptively. The effect of the Covid-19 pandemic, response strategies, and external influences on the IDX, ISSI, and Rupiah exchange rate price indexes.

Operational definition of bound variables

There are four dependent variables tested in this study, namely: IDX or Indonesia Composite representing indicators of stock index traded in Indonesia (Jakarta).

Independent variable

Independent variables are classified into two categories: internal and external. The number of Covid-19 cases in Indonesia and three dummy variables for the handling of Covid policies in Indonesia are used as internal independent variables: Task Force, WFH, and PSSB. External independent indicators include case reports from China (Asia), the United States of America (America), and Spain (Europe), as well as the patterns of capital market values on the FTSE (London, Europe), Nasdaq (America), Shanghai (China), and Hangseng (China) (Hong Kong).

- Covid-Ina is data on the number of Covid-19 cases in Indonesia Covid-US is data on the number of Covid-19 cases in the US
- Covid-China is data on the number of Covid-19 cases in China
- Covid-Spain is data on the number of Covid-19 cases in Spain
- IDX is a composite stock index of IDX on the JSE
- FTSE100 is the stock index FTSE100 in London Hangseng is the Hangseng stock index in Hong Kong Nasdaq is the Nasdaq stock index in New York, the USA the task force was the formation of the Covid-19 task force
- WFH is the period of social distancing with the principle of work from home (work and activities at home)
- PSBB is a period of large-scale social restrictions.

Results and Discussion

From various official sources of information distributed online media, a data recapitulation has been prepared to become the basis for research analysis materials. In summary, the research data can be seen in the following two tables.

The first, Figure 1, fills a recap of data on the Covid-19 pandemic cases in Indonesia, the US, China, and Spain. The second, Table 1, contains data on stock developments in Indonesia, London, Hong Kong, China, and the US.

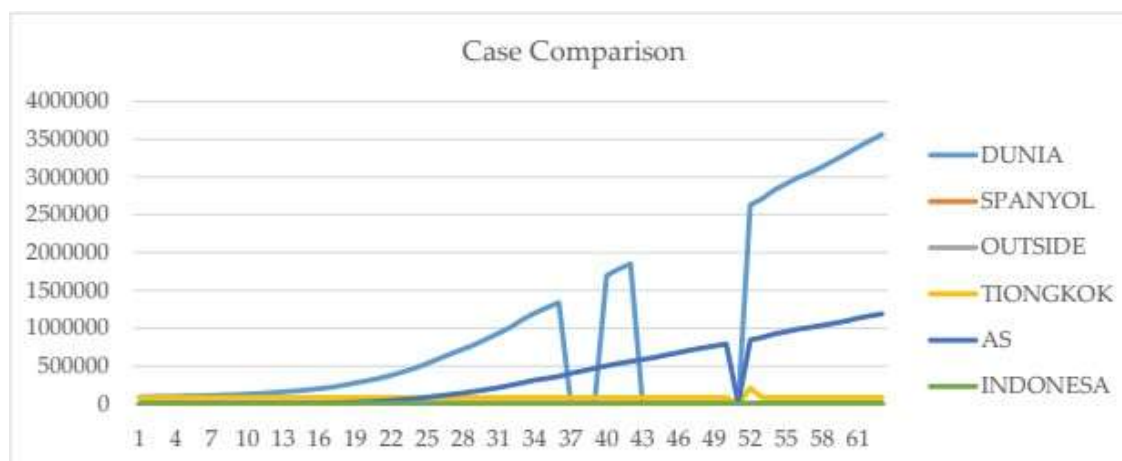


Figure 1. Covid-19 case data in Indonesia, China, the US, and Spain 2 June-27 November 2020

Source: Worldhometer data processed

Although the development of cases from day to day in Indonesia is dynamic, graphically on the global map the development of Covid-19 in Indonesia appears to be a minority. Therefore, it is necessary to look at the influence of case externalities outside

Indonesia. In particular, several countries are included in the main category of the epicentrum of the coronavirus pandemic. Researchers chose China, the US, and Spain as comparison material, as well as representing the influence of externalities.

Table 1. The data on stock developments in Indonesia, London, Hong Kong, China, and the US.

DATE	IHSG	FTSE100	SHANGHAI	HANGSENG	NASDAQ
02-JUN	4,847,51	6,220,14	2,921,40	23.995,94	9,608,38
03-JUN	4,941,01	6,382,41	2,923,37	24.325,62	9,682,91
04-JUN	4,916,70	6,341,44	2,919,25	24.366,30	9,615,81
05-JUN	4,947,78	6,484,30	2,930,80	24.770,41	9,814,08
08-JUN	5,070,56	6,472,59	2,937,77	24.776,77	9,924,75
09-JUN	5,035,06	6,335,72	2,956,11	25.057,22	9,953,75
10-JUN	4,920,68	6,329,13	2,943,75	25.049,79	10,020,35
11-JUN	4,854,75	6,076,70	2,920,90	24.480,15	9,492,73
12-JUN	4,880,36	6,105,18	2,919,74	24.301,38	9,588,81
15-JUN	4,816,34	6,064,70	2,890,03	23.776,95	9,726,02
16-JUN	4,986,46	6,242,79	2,931,75	24.344,09	9,895,87
19-JUN	4,942,27	6,292,60	2,967,63	24.643,89	9,946,12
22-JUN	4,918,83	6,244,62	2,965,22	22.511,34	10,131,37
23-JUN	4,879,13	6,320,12	2,970,62	24.907,34	10,131,37
29-JUN	4,901,82	6,225,77	2,961,52	24.301,28	9,874,15
30-JUN	4,905,39	6,169,74	2,984,67	24.427,19	10,058,77
02-JUL	4,966,78	6,240,36	3,090,57	25.124,19	10,207,63
06-JUL	4,988,87	6,285,94	3,332,88	26.339,16	10,433,65
07-JUL	4,987,08	6,189,90	3,345,34	25.975,66	10,343,89
08-JUL	5,076,17	6,156,16	3,404,44	26.129,18	10,492,50

To be continued

09-JUL	5,052,79	6,049,62	3,450,59	26.210,16	10,547,75
10-JUL	5,031,26	6,095,41	3,383,32	25.727,41	10,617,44
13-JUL	5,064,45	6,176,19	3,443,29	25.772,12	10,390,84
14-JUL	5,079,12	6,179,75	3,414,62	24.477,89	10,488,58
15-JUL	5,075,80	6,292,65	3,361,30	25.481,58	10,550,49
16-JUL	5,098,37	6,250,69	3,210,10	24.970,69	10,473,83
17-JUL	5,079,59	6,290,30	3,214,13	25.089,17	10,503,19
20-JUL	5,051,11	6,261,52	3,314,15	25.057,99	10,767,09
21-JUL	5,114,71	6,269,73	3,320,89	25.635,66	10,680,36
22-JUL	5,110,19	6,207,10	3,333,16	25.057,94	10,706,13
23-JUL	5,145,01	6,211,44	3,325,11	25.263,00	10,461,42
24-JUL	5,082,99	6,123,82	3,196,77	24.705,33	10,363,18
27-JUL	5,116,67	6,104,88	3,205,23	24.603,26	10,536,27
28-JUL	5,112,99	6,129,26	3,227,96	24.772,76	10,402,09
29-JUL	5,111,11	6,131,46	3,294,55	24.883,14	10,542,94
30-JUL	5,149,63	5,989,99	3,286,82	24.710,59	10,587,81
03-AUG	5,006,22	6,032,85	3,367,97	24.458,13	10,902,80
04-AUG	5,075,00	6,036,00	3,371,69	24.946,63	10,941,17
05-AUG	5,127,05	6,104,72	3,377,56	25.102,54	10,998,40
06-AUG	5,178,27	6,026,94	3,386,46	24.930,58	11,108,07
07-AUG	5,143,89	6,032,18	3,354,04	24.531,62	11,010,98
10-AUG	5,157,83	6,050,59	3,379,25	24.377,43	10,968,36
11-AUG	5,190,17	6,154,34	3,340,29	24.890,68	10,782,82
12-AUG	5,233,45	6,280,12	3,319,27	25.244,02	11,012,24
13-AUG	5,239,23	6,185,62	3,320,73	25.230,67	11,042,50
14-AUG	5,247,69	6,090,04	3,360,10	25.183,01	11,019,30
18-AUG	5,295,17	6,076,62	3,451,09	25.367,38	11,210,84
19-AUG	5,272,81	6,111,98	3,408,13	25.178,91	11,146,46
24-AUG	5,277,04	6,104,73	3,385,54	25.551,58	11,379,72
25-AUG	5,338,89	6,037,01	3,373,58	25.486,22	11,466,47
26-AUG	5,340,33	6,045,60	3,329,74	25.491,79	11,665,06
27-AUG	5,371,47	5,999,99	3,350,11	25.281,15	11,625,34
28-AUG	5,346,66	5,963,57	3,403,81	25.422,06	11,695,63
01-SEP	5,310,68	5,862,05	3,410,61	25.184,85	11.939,67
02-SEP	5,311,97	5,940,95	3,404,80	25.120,09	12.056,44
03-SEP	5,280,81	5,850,86	3,384,98	25.007,60	11.458,10
04-SEP	5,239,85	5,799,08	3,355,37	24.695,45	11.313,13
08-SEP	5,244,07	5,930,30	3,316,42	24.624,34	10.847,69
09-SEP	5,149,38	6,012,84	3,254,53	24.468,93	11.141,56
10-SEP	4,891,46	6,003,32	3,234,82	24.313,54	10.919,59
11-SEP	5,016,71	6,032,09	3,260,35	24.503,31	10.853,55
14-SEP	5,161,83	6,026,25	3,278,81	24.640,28	11.056,65
15-SEP	5,100,87	6,105,54	3,283,92	24.732,76	11.190,32
16-SEP	5,058,48	6,078,48	3,270,44	24.725,63	11.050,47
17-SEP	5,038,30	6,049,92	3,338,09	24.340,85	10.910,28

To be continued

21-SEP	4,999,36	5,804,29	3,316,94	23.950,69	10.778,80
22-SEP	4,934,09	5,829,46	3,274,30	23.716,85	10.963,64
23-SEP	4,917,96	5,899,26	3,279,71	23.742,51	10.632,99
24-SEP	4,842,76	5,822,78	3,223,18	23.311,07	10.672,27
25-SEP	4,945,79	5,842,67	3,219,42	23.235,42	10.913,56
28-SEP	4,906,55	5,927,93	3,217,53	23.476,05	11.117,53
29-SEP	4,879,10	5,897,50	3,224,36	23.275,53	11.085,25
30-SEP	4,870,04	5,866,10	3,218,05	23.459,05	11.167,51
09-OCT	5,053,66	6,016,65	3,272,08	24.199,13	11.579,94
14-OCT	5,176,10	5,935,06	3,340,78	24.667,09	11.768,73
15-OCT	5,105,15	5,832,52	3,332,18	24.158,54	11.713,87
16-OCT	5,103,41	5,919,58	3,336,36	24.386,79	11.671,56
19-OCT	5,126,33	5,884,65	3,312,67	24.542,26	11.478,88
20-OCT	5,099,84	5,889,22	3,328,10	24.569,54	11.516,49
21-OCT	5,096,45	5,776,50	3,325,02	24.754,42	11.484,69
22-OCT	5,091,82	5,785,65	3,312,50	24.786,13	11.506,01
23-OCT	5,112,19	5,860,28	3,278,00	24.918,78	11.548,28
27-OCT	5,128,23	5,728,99	3,254,32	24.787,19	11.431,35
03-NOV	5,159,45	5,786,77	3,271,07	24.939,73	11.160,57
04-NOV	5,105,20	5,883,26	3,277,44	24.886,14	11.590,78
05-NOV	5,260,33	5,906,18	3,320,13	25.695,92	11.890,93
06-NOV	5,335,53	5,910,02	3,312,16	25.712,97	11.895,23
09-NOV	5,356,10	6,186,29	3,373,73	26.016,17	11.713,78
10-NOV	5,462,74	6,296,85	3,360,15	26.301,48	11.553,86
11-NOV	5,509,51	6,382,10	3,342,20	26.226,98	11.786,43
12-NOV	5,458,60	6,338,94	3,338,68	26.169,38	11.709,59
13-NOV	5,461,06	6,316,39	3,310,10	26.156,86	11.829,29
16-NOV	5,494,87	5,421,29	3,346,97	26.381,67	11.924,13
17-NOV	5,529,94	6,365,33	3,339,90	26.415,09	11.899,34
18-NOV	5,557,52	6,385,24	3,347,30	26.544,29	11.801,60
19-NOV	5,594,06	6,334,35	3,363,09	26.356,97	11.904,71
20-NOV	5,571,66	6,351,45	3,377,73	26.451,54	11.854,97
23-NOV	5,652,76	6,333,84	3,414,49	26.486,20	11.880,63
24-NOV	5,701,03	6,432,17	3,402,82	24.588,20	12.036,79
25-NOV	5,679,25	6,391,09	3,362,33	26.669,75	12.094,40
27-NOV	5,783,34	6,367,58	3,408,31	26.894,68	12.205,85

Table 2 contains a recap of data on the development of stock indexes in Jakarta, London, China, Hong Kong, and New York. To see the trend, the graphic is made in the following image. Although there are daily fluctuations, there appears to be a downward trend in the stock index as the Covid-19 pandemic cases increase.

Is it possible that the Covid-19 transmission's dynamics affected the creation of Indonesia's stock index? To ensure this, a multiple regression statistical analysis using dummy variables was conducted.

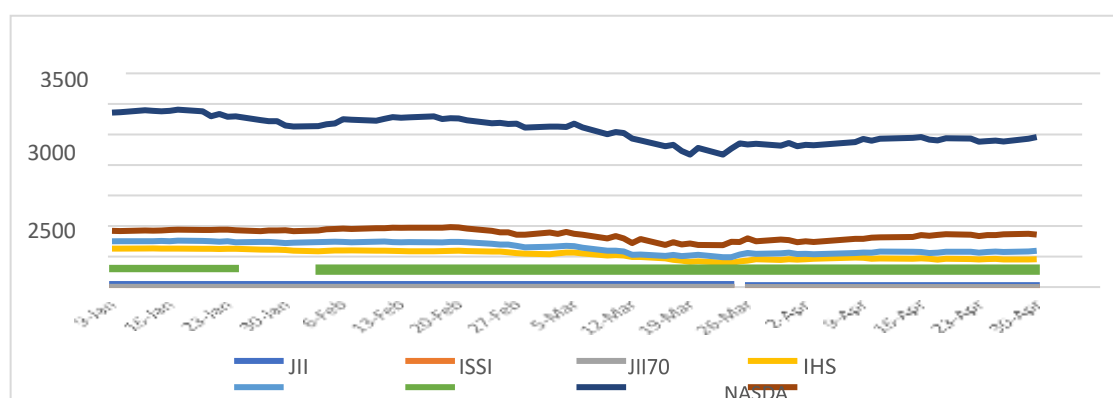


Figure 2. Recap of stock index development data in Jakarta, London, China, Hong Kong, and New York. Source: IDX, Wallstreet (Jun– November 2020)

The impact of the Covid-19 Pandemic on the IDX

Has the Covid-19 pandemic affected the development of the capital market in Indonesia? For this reason, statistical analysis using Eviews 25 is carried out. To ensure that the classical assumption test is required first. Among other things, related to aspects of autocorrelation multicollinearity, heterosexuality, and linearity. This test is necessary so that the results of the analysis are valid and reliable.

Multicollinearity test

The first step was a multicollinearity test. To ensure that there is a multicollinearity effect, the VIF (variance inflation factors) test is carried out. The results are as follows:

Table 2. A recap of data on the development of stock indexes

Variance Inflation Factor			
Variable	Coefficient Variance	Uncentered VIF	Centered VIF
J_INA	0.008995	794.9697	562.9567
J_AS	1.76E-06	2069.636	1446.796
J_CINA	3.33E-07	14.09665	1.744200
J_SPANYOL	6.88E-06	547.7793	342.0720
FTSE100	0.007836	2174.173	39.19176
HANGSENG	0.001243	5531.203	28.91898
NASDAQ	0.004989	2546.065	25.83350
SHANGHAI	8.24E-08	1.345867	1.273876
SATGAS	7833.494	4.131612	3.818612
WFH	16705.22	26.43246	20.42508
PSSB	23520.32	34.73484	27.36684

The multicollinearity effect has decreased dramatically. This model is better because most of the independent variables do not have multicollinearity. Likewise, the results of the reaction analysis are getting better. Among other things, this is indicated by the increasing number of independent variables that have a significant impact. From the following table, it can be seen that the Covid-19 cases in Indonesia, China, and Spain, then the dynamics of the stock index in Hangseng, FTSE100, and Nasdaq, as well as WFH and PSBB policies have a significant effect on the IDX.

Autocorrelation test

Next, the autocorrelation test. It starts by comparing the DW (count) value with the DW table. From the analysis, it is known that DW counts 1.6163. Then from the DW table (100, 8 DK), it is known that the dl value is 1.46 du 1.90. So, $dU > DW \text{ count} > dL$ or the calculated DW value lies between the lower limit of the DW table ($dL = 1.46$) and the upper limit ($dU 1.90$). That is, the results are dubious or uncertain.

For that, we need another test help. Also, it is necessary to confirm it with other test equipment. One of them is the Breusch- Godfrey Serial Correlation LM Test: LM Test. The results are as follows:

Table 4. the Breusch- Godfrey Serial Correlation LM Test

Breusch-Godfre	y Serial Co	rrelation LM Test:	
F-statistic	0.4457 21	Prob. F(2,53)	0.6427
Obs*R-squared	1.0917 34	Prob. Chi- Square(2)	0.5793

The results of the Serial LM Test show that the value of the Chi-Square probability or the probability of F statistic is greater than the standard error of 0.05. This means that it can be concluded that the regression model does not have autocorrelation.

Heteroscedality test

Following that, a test is performed to determine if the model satisfies the homoscedality criterion or is composed of heteroscedality components. This can be achieved by the usage of many heteroscedality measures, including the Breusch-Pagan-Godfrey, Harvey, Glejser, ARCH, and White tests. The following summarizes the findings:

Table 5. y Test: Breusc

Heteroskedasticit	y Test: Breusc	h-Pagan-Godfrey	
F-statistic	5.234024	Prob. F(10,55)	0.0000
Obs*R-squared	32.18230	Prob. Chi-Square(10)	0.0004
Scaled explained SS	24.42725	Prob. Chi-Square(10)	0.0065

Obs value * R-squared (0.0004) < 0.05 did not pass the Breusch-Pagan-Godfrey Test Harvey Test.

Table 6. y Test: Harv

Heteroskedasticit	y Test: Harv	ey	
F-statistic	1.583895	Prob. F(10,55)	0.1360
Obs*R-squared	14.75701	Prob. Chi-Square(10)	0.1412
Scaled explained SS	27.99997	Prob. Chi-Square(10)	0.0018

Obs value * R-squared (0.1412) > 0.05 passed the Harvey heteroscedality test.

Table 7. ticity Test: Ha

Heteroskedas	ticity Test: Ha	rvey	
F-statistic	3.259979	Prob. F(10,55)	0.0023
Obs*R- squared	24.56154	Prob. Chi-Square(10)	0.0062
Scaled explained SS	25.26378	Prob. Chi-Square(10)	0.0049

The probability value Obs * R-squared (0.00062) <0.05 does not qualify.

Table 8. ticityTest

Heteroskedas	ticityTest:	ARCH	
F-statistic	2.138675	Prob. F(1,50)	0.1499
Obs*R- squared	2.132987	Prob. Chi-Square(1)	0.1442

Obs value * R-squared (0.1442) > 0.05 passed the ARCH heteroscedality test.

Table 9. Heteroskedasticity test: White

Heteroskedasticity Test: White			
F-statistic	2.892298	Prob. F (50,15)	0.0137
Obs*R-squared	59.79757	Prob. Chi-Square (50)	0.1616
Scaled explained SS	45.38801	Prob. Chi-Square (50)	0.6587

The Obs * R-squared value (0.687) > 0.05 passed the White heteroscedality test.

Three samples passed the heteroscedality exam, although two tests failed. Since all that pass the exam is greater, it may be inferred that the model meets the homoscedality criterion or does not include heteroscedality.

Linearity test

The next step is to test the linearity using the Ramsey Reset Test. The summary of the results is as follows:

Tabel 10. Linearity test

Ramsey RESET Test			
Equation: UNTIT-LED			
Specification: IHSG J_INA J_CINA J_SPANYOL FTSE100 HANGSENG NASDAQ SHANGHAI SATGAS WFH PSSB C			
Omitted Variables: Squares of fitted values			
	Value	df	Probability
t-statistic	0.914760	54	0.3644
F-statistic	0.836785	(1, 54)	0.3644
Likelihood ratio	1.014894	1	0.3137

The test results show the probability is greater than 0.05. This means that the model meets the linearity requirements.

Dummy variable multiple regression analysis tests

After passing the classical assumption test, further analysis is now valid and reliable. The regression test was conducted to answer the research questions in this research. Do independent variables partially or simultaneously affect the development of the capital market in Indonesia (read the IDX composite stock index).

Tabel 8. Dummy variable multiple regression analysis test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
J_INA	-0.075601	0.021538	-3.510094	0.0009
J_CINA	-0.001231	0.000572	-2.152518	0.0358
J_SPANYOL	0.004179	0.000926	4.515571	0.0000
FTSE100	0.372208	0.086642	4.295942	0.0001
HANGSENG	0.179917	0.033569	5.359618	0.0000
NASDAQ	-0.128950	0.070059	-1.840583	0.0711
SHANGHAI	-0.000281	0.000278	-1.012577	0.3157
PSSB	-588.5515	141.4967	-4.159471	0.0001
C	-444.8666	568.2933	-0.782812	0.4371
R-squared	0.982998	Mean dependent var		5108.429
Adjusted R-squared	0.979907	S.D. dependent var		681.4403
S.E. of regression	96.59398	Akaike info criterion		12.12992
Sum squared resid	513171.8	Schwarz criterion		12.49486
Log likelihood	-389.2874	Hannan-Quinn criter.		12.27413
F-statistic	317.9959	Durbin-Watson stat		1.630830
Prob(F-statistic)	0.000000			

From the results of the statistical analysis of the relationship between the IDX and several independent variables, the econometric model is obtained as follows: $IDX = -444.8666 - 0.0756J_INA - 0.001231J_CINA + 0.004179J_SPANYOL + 0.372208FTSE100 + 0.179917HANGSENG - 0.12895NASDAQ - 513.7098WFH - 588.5515PSSB$

From this econometric model, we can develop the following interpretations (Junaedi & Salis-tia, 2020):

- A constant value of -444.8666 indicates that even if the pandemic is not an outbreak, there is a trend of the stock index to weaken. This is in line with the opinion of economist Rizal Ramli at the ILC event (that an economic recession is predicted to occur. Even when the Covid-19 pandemic does not exist, the existence of a pandemic exacerbates the chances of an economic recession.

- If the number of Covid-19 cases in Indonesia increases by 100 days, the composite stock index will be corrected by 0.756 points. We recommend that if, this pandemic case is reduced by 100 cases per day
- If the Covid-19 cases in China increase by 1000 per day, the IDX index will be corrected by 1.23 points. Conversely, if the pandemic in China is over or there is no growth, then the IDX will be stable without a pattern
- If the cases of the pandemic in Spain increase by 1000 per day, the IDX index in Jakarta tends to strengthen by
 - 4.18 points.
- If the capital market in Hong Kong (Hangseng) and the FTSE100 in London are excited, the IDX index in Jakarta is excited. If the FTSE100 index strengthens 1 point, the IDX index will tend to strengthen by 0.37 points. If the Hangseng index strengthens by 1 point in London, the IDX index in Jakarta will likely gain 0.18 points.
- If the NASDAQ stock index in New York, USA, strengthens by one point, then the IDX index in Jakarta tends to weaken 0.13 points.
- The work from home and PSBB social distancing policies both hurt the IDX index movement. The impact of the PSBB policy appears to be more pressing than the WFH policy

Conclusion

The composite stock index (IDX) of the Jakarta Stock Exchange is affected by both internal and external influences. Internally, the conditions around the Covid-19 pandemic and domestic social distancing measures (WFH and PSBB) also had an effect on the financial market's dynamics (indicated by the movement of the IDX index on the JSE). Externally, the pandemic of Covid-19 in China and Spain had an impact on the dynamics of the Indonesian stock market (IDX index). Similarly, the Hong Kong (Hangseng), London (FTSE100), and New York (NYSE) financial markets exhibit similar dynamics (NASDAQ). The coronavirus pandemic in Indonesia and China, Nasdaq equity market developments in New York, and social distancing strategies (WFH and PSBB) have both affected the performance of the IDX stock index. Although the Spanish pandemic had a negative influence on Hong Kong's (Hangseng) and London's (FTSE100) capital markets, the dynamics of Hong Kong's (Hangseng) and London's (FTSE100) capital markets had a positive impact on Indonesia's capital markets (BEJ).

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References

- Hamilton, W. P. (1922). *The stock market barometer*. New York: John Wiley & Sons Inc (1998 reprint)
- Junaedi, D., & Salistia, F. (2020). Dampak pandemi covid-19 terhadap pasar modal di Indonesia. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 2(2), 109-131. <https://doi.org/10.47467/alkharaj.v2i2.112>.
- Mulyani, Sri. (2020). Pemerintah waspada dampak pandemi covid-19 terhadap ekonomi Indonesia. Siaran pers Kenenterian Keuangan RI pada 17 April 2020. Diaksi dari portal <https://www.kemenkeu.go.id/publikasi/siaran-pers/siaran-pers-pemerintah-waspada-dampak-pandemi-covid-19-terhadap-ekonomi-indonesia/> pada 16 November 2020 pukul 11.00 WIB.
- Siegel, J. (2008). "Stock Market". In David R. Henderson (ed.). *Concise Encyclopedia of Economics (2nd ed.)*. Indianapolis: Library of Economics and Liberty. ISBN 978- 08.
- WHO. (2020). *Novel Coronavirus (2019-nCoV) situation reports - World Health Organization (WHO)*. Jenewa: WHO