The Impact of Covid-19 on Share Price Index in Indonesia

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Abstract:

This study aims to examine the effect of a pandemic on share price index (IHSG), analyzing the influence of externalities on the dynamics of capital market developments in Indonesia, and examining whether differences in social distancing policies affect the dynamics of the Indonesian capital market movements. The research method uses quantitative analysis with a dummy variable multiple regression approach. JCI as the dependent variable, whereas the independent variable is the number of cases of the Covid-19 pandemic in Indonesia, China and Spain, then the movement of the FTSE100 (London), Hangseng (Hong Kong) and NASDAQ (New York) stock indexes, as well as differences in social distancing policies in Indonesia (Task Force, WFH and PSBB). Finding of this study is that the movement of the composite stock index (IHSG) in the Jakarta Stock Exchange is affected by the internal and external conditions. Internally, the conditions of the Covid-19 pandemic and domestic social distancing policies (WFH and PSBB) have affected the dynamics of the capital market (indicated by the movement of the JCI index on the JSE). Externally, the Covid-19 pandemic in China and Spain also affecting the dynamics of the capital market in Indonesia (IHSG index). Likewise, the dynamics of the stock market in Hong Kong (Hangseng), London (FTSE100) and News York (NASDAQ). The coronavirus pandemic in Indonesia, China, the dynamics of the Nasdaq stock market in New York, and social distancing policies (WFH and PSBB) have had a negative impact on the movement of the JCI stock index. While the pandemic in Spain, the dynamics of the capital market in Hong Kong (Hangseng) and London (FTSE100) actually had a positive impact on the conditions of the capital market in Indonesia (BEJ).

Keywords: *IHSG, Covid-19 Pandemic, Stock Market, Social Distancing, PSBB*

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) has become a pandemic, a global outbreak, spreading across continents. Until the end of September 2020, there were at least 30 million people and 1 million of them died and from 212 countries infected. The outbreak has also caused more than 8.9 billion people in Asia, America, Europe, Australia, Africa and Antarctica to worry. Some of them are forced to undergo a social distancing phase (maintaining a safe distance, staying at home, working at home, even praying at home) for months. Covid-19 first broke out in Wuhan, China, towards the end of December 2019 (CRC John Hopkins University, 2020). Then a great outbreak in Hubei Province and made China go into lockdown. Almost all provinces there are under quarantine. In less than two months, the core coronavirus has caused 80,000 cases and 3,000 deaths. Starting the third week of January 2020 ,. Covid then crossed to a number of countries in Asia, America, Europe, Australia and Africa. When this outbreak subsided in China, the Covid-19 transmission actually exploded in a number of countries in America, Europe, Asia, then Africa. As of 8

May 2020, the number of infected cases in the US, Spain, Italy, Britain, Russia, France, Germany, Brazil, Turkey and Iran has surpassed China as the initial epicenter. To prevent, or at least suppress, the rate of transmission of a number of the main affected countries have implemented lockdowns, regional quarantines, and large-scale social restrictions. (PSBB). A number of flights were suspended in many countries. Land and sea transportation is also restricted. A number of industries stopped producing. Human movement is also prevented between countries, between provisions, between affected districts and cities. This condition makes economic activity also affected.

The IMF and the World Bank predict that the Covid-19 pandemic has triggered a global economic recession. Some experts estimate the effect is equal to or worse than the great depression in the period 1920-1930 (BBC, 16 April 2020). Central bank of Indonesia (BI) and the Indonesian Minister of Finance share the view that Indonesia's economic future is also bleak. At least until the beginning of 2021. Economic growth will be under pressure to minus in 2020 (Sri Mulyani, 2020). What about the capital market in Indonesia. Is the capital

market (in this case the stock market) affected? As a result of the announcement of the second lockdown/ PSBB on September 24, the JCI fell by 400 points. How big is the impact of externalities on the development of the capital market in Indonesia? This has never been studied in previous research studies, so it is a novelty of this research. This study will analyze the influence of a pandemic on the development of the capital market (IHSG), the influence of externalities on the dynamics of capital market development in Indonesia and examine whether differences in social distancing policies have an effect on the dynamics of the movement of the Indonesian capital market?

LITERATURE REVIEW

Coronaviruses are a large family of viruses that cause illness ranging from mild to severe symptoms. There are at least two types of coronavirus that are known to cause diseases that can cause severe symptoms such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronavirus Disease 2019 (COVID-19) is a new type of disease that has never been previously identified in humans. The virus that causes COVID-19 is called Sars-CoV-2. Corona viruses are zoonotic (transmitted between animals and humans). Research states that SARS is transmitted from civet cats to humans and MERS from camels to humans. Meanwhile, the animal that is the source of transmission of COVID-19 is still unknown.

Common signs and symptoms of COVID-19 infection, according to WHO (2020), include symptoms of acute respiratory disorders such as fever, cough and shortness of breath. The average incubation period is 5-6 days with the longest incubation period of 14 days. Severe cases of COVID-19 can cause pneumonia, acute respiratory syndrome, kidney failure and even death. The clinical signs and symptoms reported in most of the cases were fever, with some cases having difficulty breathing, and the X-ray showed a large pneumonia infiltrate in both lungs.

The Covid-19 outbreak started in Wuhan, China. On December 31, 2019, the WHO China Country Office reported a case of pneumonia of unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China identified pneumonia of unknown etiology as a new type of coronavirus (coronavirus disease, COVID-19). On January 30, 2020, WHO has declared it a Public Health Emergency of International Concern (KKMMD / PHEIC). The increase in the number of COVID -19 cases is progressing fast enough and there has been a spread between countries. (CDC, 2020). As of 3 October 2020, Worldometer reported a total of more than 34,836,028 million confirmed cases and 1,033,330 thousand deaths (CFR 2.97%) where cases were reported in 213 countries

/ regions. The world's main epicenters are the US, Brazil, Spain, Italy, France, Germany, Britain, Iran, Turkey, Russia, and Belgium. Among these cases, thousands of health workers have reportedly been infected and died.

Worldometer statistics show that a significant increase in cases occurred in the US, England, Russia, Japan, Chile, Czech, Ghana, Portugal, Peru, France, Qatar, Maldives, Kazakhstan, Belgium, Netherlands, Panama, Afghanistan, Sweden, Indonesia, Ukraine and Dominica. Meanwhile, the decline in cases was significant in Spain, Belarus, Bangladesh, Brazil, Turkey, Italy, Poland, Tanzania, Mexico, Singapore, Ecuador, Germany, Nigeria, Romania, Bosnia, Iran, Colombia, Finland, Oman, South Africa, Argentina, Algeria and Malaysia. The daily mortality rate decreased significantly in the US, Spain, France, Belgium, the Netherlands, Brazil, Italy, the Philippines, Japan, South Africa, Portugal, Egypt, Iran and Poland. Meanwhile, the mortality rate increased in Canada, Mexico, Peru, Belarus, Ireland, Panama, Mauritius, Czech, Ecuador, Sweden, India, Switzerland and Turkey, Cuba, Hungary, Germany and Chile. Accumulatively, the 10 countries with the epicenter of the Covid-19 pandemic are the US (1,095,019 cases and 63,656 deaths), Spain (239,639 cases and 24,543 deaths), Italy (205,463 cases and 27,967 deaths), United Kingdom (171,253 cases and 26,771), France (167,178 cases and 24 376 deaths), Germany (163,009 cases and 6,623 deaths), Turkey (120,204 cases and 3,174 deaths), Russia (106,498 cases and 1,073 deaths), Iran 94,640 cases and 6,028 deaths), Brazil 85,380 cases and 5,901 deaths, China (82,862 cases and 4,633 deaths). Under China, there are Canada, Belgium, the Netherlands, India, Peru and Switzerland with cases in the range of 30-55 thousand. (Gontornews, 1 May 2020)

As reported in the media inside and outside in horror, the Covid-19 outbreak became a pandemic towards the end of February. Rapid transmission began in early March. Within two weeks, the number of cases had skyrocketed from tens of thousands on March 14 to 70,000 per day by the end of March. During April to early May 2020, every day the number of cases has never increased by less than 75 thousand. It reached its peak on April 24, 2020, to more than 105 thousand. Then slowly it drops to the level of 90 thousand, 80 thousand and starts sloping down to 75 thousand, like. Although it is still fluctuating, there is a downward trend in the number of cases entering May 2020, along with the arrival of the fasting season of Ramadan 1441 H for Muslims. The number of daily deaths also began to increase rapidly entering the second half of March 2020. More than 600 deaths as of 15 March shot up to around 5,000 as of early April.

Throughout April the death toll continued to rise until it

peaked on April 17 with 8,341 deaths. The number of deaths then returned to the level of 7,000 in the 4th week of April and early May it was already at the level of 5,000. similar to conditions in early April. As with daily cases, the largest daily deaths occurred in the main epicenter of the Covid-19 pandemic among others in the US, Spain, Italy, France, UK, Germany, Iran, Turkey, China, Russia, Brazil. Russia and Brazil are among the countries that have recently become the epicenter of the Covid-19 transmission.

The Singapore University of Technology and Design is trying to predict the time of the SARS-CoV-2 (Covid-19) corona virus pandemic in a number of countries. The official SUTD website (24/04) explains that the company uses the SIR (susceptible-infected-recovered) model which is regressed based on data from various countries to estimate the pandemic life cycle curve and predict when the pandemic will end. In his statement, SUTD said that analysis and prediction were only for educational and research purposes. The SUTD Data-Based Innovation Laboratory uses artificial intelligence to make predictions. Until today, there are no accurate predictions that can predict when the pandemic will end.

Stocks are the most important and popular capital market instruments. Stock, according to Hamilton (1922), is a form of security which shows the holder has a proportional ownership in the issuing company. Companies sell them to raise funds for the development of their business operations. Stocks are bought and sold primarily on the stock exchange, although there are also private sales, and they are the basis of nearly every portfolio (Jeremy J. Siegel, Jeremy J. (2008).

The Indonesia Stock Exchange (IDX, 2019) defines the capital market as a market for various long-term tradable financial instruments, both debt securities (bonds), equities (stocks), mutual funds, derivative instruments and other instruments. The capital market is a means of funding for companies and other institutions (for example the government), 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. (BEJ, 2019).

Generally, financial instruments traded on the capital market are long-term instruments (with a term of more than 1 year) such as stocks, bonds, warrants, rights, mutual funds, and various derivative instruments such as options, futures, and others. Financial instruments (products) traded on the Indonesian Capital Market are generally in the form of: Stocks, Bonds (Bonds), Mutual Funds, Exchange Traded Funds (ETFs), and Derivatives.

Investopedia (2020) defines shares (stock) are securities that represent ownership of a portion of a company. This gives the owner a proportional right to the assets and profits of the corporation equal to the number of shares he owns. Meanwhile, the IDX defines shares as can be defined as a sign of a person's or business capital participation in a company or limited liability company. On the other hand, stocks are instruments an investment that many investors choose because stocks are able to provide an attractive rate of return.

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 include, among others, to measure market sentiment, become passive investment products such as Index Funds and Index ETFs and derivative products, Benchmarks for active portfolios, as well as proxies in measuring and modeling returns on investment (return), systematic risk, and risk-adjusted performance, as well as proxies for asset classes in asset allocations.

The object of research in this study is the movement of the Composite Stock Price Index (IHSG) or Composite Index, ISSI, JII, and JII70. Meanwhile, to see the effect of externalities, the data used is the FSTE100 stock index in London, Hangseng in Hong Kong, and the Nasdaq in New York. The Composite Stock Price Index (abbreviated IHSG, in English is also known as the Indonesia Composite Index, ICI, or IDX Composite) is one of the stock market indices used by the Indonesia Stock Exchange (IDX; formerly the Jakarta Stock Exchange (BEJ)). Introduced for the first time on April 1, 1983, as an indicator of stock price movements on the JSE. This index includes the price movements of all common shares and preferred shares listed on the IDX. The Base Day for the calculation of the JCI is August 10, 1982. On that date, the Index is determined with a Base Value of 100 and listed shares at that time totaled 13 shares (BEI, 2020). The highest intraday position achieved by the JCI 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 IHSG 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 as follows: where p is the closing price in the regular market, x is the number of shares, and d is the base value.

Index calculation represents stock price movements in the market / stock that occur through the auction trading system. The Basic Value will be adjusted quickly if there is a change in the issuer's capital or there are other factors

that are not related to the share price. Adjustments will be made if there are additional new issuers, HMETD (right issue), partial / company listings, warrants and convertible bonds as well as delisting. In the event of a stock split, share dividend or bonus shares, the Basic Value is not adjusted because the Market Value is not affected. The share price used in calculating the JCI is the stock price in the regular market which is based on the price based on the auction system. [1] The JCI is calculated every day, namely after the close of trading every day. In the near future, it is hoped that the JCI calculation can be done several times or even in a few minutes, this can be done after the automated trading system is properly implemented. (IDX, 2020) CNN Indonesia (13/3/2020) reported, stock exchanges from various countries were observed to weaken throughout March and April 2020. The decline was still triggered by the spread of the corona virus. Director of Investa Saran Mandiri Hans Kwee (2020), the determination of the status of the corona virus as a pandemic by the World Health Organization (WHO) adds to market concerns, thereby suppressing stock.

To reduce the spread of the corona virus, a number of countries have implemented lockdowns (isolation) in several cities that have been positively infected with the corona virus.

A number of stock indices, 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.

METHODOLOGY
This research is a quantitative method research with saturated sampling technique. The data used is generally secondary data obtained from Bank Indonesia (BI), WHO, Worldometer, the Covid-19 Task Force, Wall Street, JSE, and other reference sources in the form of books, journals and other publications. The data collected is saturated sample data in the form of BI Rate, exchange rate (exchange rate), IHSG, ISSI, JII, JII70, Hangseng, FTSE100, Nasdaq. The data is in the form of time series data from the January-April 2020 period. The collected data are then grouped into dependent variables (dependent) and independent variables (independent). The dependent variable is the JCI, ISSI, and Exchange Rate. The independent variable is the number of Covid-19 cases in Indonesia, the US, China and Spain. In addition, there is a dummy variable for the policy of the establishment of a Task Force, WFH, and PSBB. Processed data is analyzed quantitatively descriptively with multiple regression models below with dummy

variables in the form of the influence of the Covid-19 pandemic, handling policies, and external factors on the movement of the JCI, ISSI stock index and the Rupiah exchange rate.

$$IHSG = \beta_0 + \beta_1 COVID\text{-}Ina + \beta_2\ FTSE + \beta_3\ Hangseng + \beta_4\ Nasdaq + \beta_5\ Task\ Force + \beta_6\ WFH + \beta_7 PSBB + \varepsilon$$

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

There are two groups of independent variables: internal and external. Included in the internal independent variables are the number of Covid-19 cases in Indonesia and three dummy variables for handling Covid policies in Indonesia: Stagas, WFH and PSBB. External independent variables are cases in China (Asia), the US (America) and Spain (Europe), as well as the dynamics of capital shares in the FTSE (London, Europe), Nasdaq (America), Shanghai (China) and Hangseng (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, IHSG is the JCI composite stock index on the JSE, FTSE100 is the FTSE100 stock index in London, Hangseng is the Hangseng stock index in Hong Kong Nasdaq is the Nasdaq stock index in New York, USA. The Task Force was during the formation of the Covid-19 task force. WFH is a period of social distancing with the principle of Work From Home (work and activities at home). PSBB is a period of large-scale social distancing (PSBB). There are three hypotheses, namely:

H1: The internal Covid-19 pandemic has affected the movement of the stock index.

H2: The external Covid-19 pandemic has an effect on stock index movements.

H3: Social distancing policy affects the movement of the stock index.

RESULTS AND DISCUSSION
From various official sources of information distributed online media, a data recapitulation has been prepared earlier by author to serve as the basis for research analysis materials. In summary, the research data was compiled into two categories. The first, contains recap of the Covid-19 pandemic in Indonesia, the US, China, and Spain. The second, contains data on stock developments in Indonesia, London, Hong Kong, China and the US.

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 deemed necessary to look at the influence of case externalities outside Indonesia. In particular, several countries are included in the main category of the epicenter of the coronavirus pandemic. Researchers chose China, the US and Spain as a comparison, as well as representing the influence of externalities.

Although there are daily fluctuations, there appears to be a downward trend in the stock index along with the increasing cases of the Covid-19 pandemic. Is it true that the development of the stock index in Indonesia was influenced by the dynamics of the Covid-19 transmission? To ensure this, a multiple regression statistical analysis was performed with dummy variables.

Has the Covid-19 pandemic affected the development of the capital market in Indonesia. For this reason, statistical analysis using E views 9. A summary of the results of the statistical analysis is shown below.

Dependent Variable: IHSG

Method: Least Squares

Date: 09/03/20 Time: 13:28

Sample (adjusted): 1 100

Included observations: 66 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
J_INA	-0.309188	0.094841	-1.151281	0.1747
J_AS	0.000783	0.001327	0.363802	0.5174
J_CINA	-0.003223	0.000577	-2.119872	0.4386
J_SPAIN	0.005287	0.003623	1.253262	0.3155
FTSE100	0.577468	0.088522	4.364117	0.0001
HANGSENG	0.376314	0.035257	5.000865	0.0000
NASDAQ	-0.329414	0.070630	-1.932280	0.0924
SHANGHAI	-0.000304	0.000287	-1.059890	0.2939
SATGAS	-64.55285	88.50703	-0.955324	0.2937
WFH	-484.1975	129.2487	-3.746247	0.0004
PSBB	-478.0423	153.3634	-3.703899	0.0005
C	-290.6953	599.3726	-0.635156	0.3280

		Mean dependent var	5208.429
R-squared	0.978040		
Adjusted R-squared	0.969585	S.D. dependent var	681.4403

Sum squared resid	561917.2	Schwarz criterion	12.35590
Log likelihood	-379.2066	Hannan-Quinn criter.	12.31509
F-statistic	274.5388	Durbin-Watson stat	1.916272
Prob(F-statistic)	0.000000		

At first glance, it appears that several independent variables have a significant effect on the movement of the JCI index. Based on data from the E views analysis, the JCI seems to be influenced, among others, by the case in China, the FTSE100, Hangseng, Nasdaq stock index, as well as the WFH and PSBB policies. However, to make sure it is necessary to first test the classical assumptions. Among other things related to aspects of autocorrelation, multicollinearity, heteroscedacity, linearity, and normality. This test is necessary so that the results of the analysis are valid and reliable.

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 appears to be a multicollinearity effect between the J-AS and J-Spanish variables. The indication is a high VIF value in both. For that, it is necessary to choose one. The rule used is to prioritize variables with smaller VIFs. Thus, the J-AS variable (an indicator of the external influence of the pandemic in the United States) is set aside to eliminate or minimize the multicollinearity effect of the pandemic in the US, the role of the US in this is represented by the pandemic in China (J-China) and the pandemic in Spain (J- Spanish). After the J-AS effect was removed from the statistical analysis, now the output of the multi-collinearity test seems clear that the multicolinearity 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. After the variables were regressed again, it was found 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 JCI.

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 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. For that 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:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.485721	Prob. F(2,53)	0.6727

Obs*R-squared	1.191734	Prob. Chi-Square(2)	0.5593

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.

Next is a test to ensure that the model meets the requirements of homoscedacity or is free from heteroscedacity elements. This can be done using several heteroscedacity tests such as the Breusch-Pagan-Godfrey, Harvey, Glejser, ARCH, White test. Here's a summary of the results:

Heteroscedacity Test: Breusch-Pagan-Godfrey

F-statistic	5.134024	Prob. F(10,55)	0.0000
Obs*R-squared	35.18230	Prob. Chi-Square(10)	0.0004
Scaled explained SS	25.42725	Prob. Chi-Square(10)	0.0065

Obs*R-squared (0,0004) < 0.05 ➔ not passed Breusch-Pagan-Godfrey Test

Heteroscedacity Test: Harvey

F-statistic	1.483895	Prob. F(10,55)	0.1360
Obs*R-squared	16.75701	Prob. Chi-Square(10)	0.1412
Scaled explained SS	29.99997	Prob. Chi-Square(10)	0.0018

Obs*R-squared (0,1412) > 0.05 ➔ Passed heteroscedacity Harvey Test

Heteroscedacity Test: Glejser

F-statistic	3.359979	Prob. F(10,55)	0.0023
Obs*R-squared	27.56154	Prob. Chi-Square(10)	0.0062
Scaled explained SS	26.26378	Prob. Chi-Square(10)	0.0049

Probability of Obs*R-squared (0,00062) < 0.05 not passed.

Heteroscedacity Test: ARCH

F-statistic	2.238675	Prob. F(1,50)	0.1499
Obs*R-squared	2.132987	Prob. Chi-Square(1)	0.1442

Obs*R-squared (0,1442) > 0.05 ➔ passed heteroscedacity ARCH Test

Heteroscedacity Test: White

F-statistic	2.972298	Prob. F(50,15)	0.0137
Obs*R-squared	58.79757	Prob. Chi-Square(50)	0.1616
Scaled explained SS	43.38801	Prob. Chi-Square(50)	0.6587

Obs*R-squared (0,687) > 0.05 ➔ passed the heteroscedacity White Test.

Heteroscedacity test found that three tests passed, two tests did not pass. Those who pass the test are more, so it can be concluded that the model has met the homoscedacity requirements, and does not contain heteroscedacity.

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 (see the IHSG composite stock index).

Dependent Variable: IHSG

Method: Least Squares

Date: 09/03/20 Time: 13:47

Sample (adjusted): 1 100

Included observations: 66 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
J_INA	-0.085601	0.021538	-3.610094	0.0009
J_CINA	-0.002231	0.000572	-2.252518	0.0458
J_SPAIN	0.005179	0.000926	4.715571	0.0000
FTSE100	0.392208	0.086642	4.395942	0.0051

HANGSENG	0.279917	0.033569	5.459618	0.0000
NASDAQ	-0.228950	0.070059	-1.940583	0.0711
SHANGHAI	-0.003281	0.000278	-1.212577	0.2157
SATGAS	-97.79599	85.88001	-1.293261	0.3790
WFH	-573.7098	98.82358	-5.346177	0.0000
PSSB	-588.5515	143.4967	-4.259471	0.0001
C	-457.8666	588.2933	-0.882812	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			

Simultaneously or collectively, all independent variables (internal and external factors) significantly influence the dynamics of the JCI index development. Or in other words, IHSG apart from being influenced by internal dynamics in the form of the number of casinos and Indonesia's (internal) social distancing policies, is also influenced by external conditions in the form of pandemic dynamics in China and Spain as well as the dynamics of FTSE100 stock movements in London, Nasdaq in New York, and movements Hangseng stock

index in Hong Kong. Meanwhile, the dynamics of the stock index in Shanghai had no real impact on the JCI. and China. The variable of Covid-19 cases in Indonesia and China has a negative effect on the development of the JCI. Likewise, the social distancing policies of WFH and PSBB, as well as the development of the Nasdaq stock index in New York had a negative effect on the JCI value. In contrast, developments in the case in Spain, as well as the development of the Hangseng stock index in Hong Kong and the FTSE100 in London had a positive impact on the development of the JCI. The positive ones in the FTSE and Hong Kong also received positive responses from the JCI. Likewise, if there is a negative trend, it will get a unidirectional response on the stock market in Indonesia, especially the conventional capital market.

Relatively speaking, the social distancing policy through WFH and PSBB has had a more negative impact than just the formation of the Covid-19 Handling Task Force. Based on the scale of its impact on the capital market (read the IHSG composite stock index), the PSBB policy had a more negative impact on the IHSG than the WFH policy without PSBB. Why did the pandemic case in Spain and the overall development of Hangseng shares actually have a positive impact on the development of stocks in Indonesia (JCI)? It can be interpreted that what happened in Spain immediately got a negative perception from capital market players in Indonesia. The long distance may make the market more immune to negative news about the severity of the pandemic in Spain. Meanwhile, what happened to the capital market in Hong Kong has become a reference for brokers and capital market players in Indonesia. Hong Kong's success in suppressing the Covid-19 pandemic is also a positive sentiment for market players.

From the results of the statistical analysis of the relationship between the JCI and a number of independent variables, the econometric model is obtained as follows:

IHSG = -543.8666 - 0.0656J_INA - 0.003231J_CHINA + 0.006179J_SPAIN + 0.472208FTSE100 + 0.279917HANGSENG - 0.22895NASDAQ - 613.7098WFH - 689.5515PSSB

From this econometric model we can develop the following interpretations:

• A constant value of -543.8666 indicates that even if the pandemic is not an outbreak, there is a trend of the stock index to weaken. 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 JCI index will be corrected by 1.23 points. Conversely, if the pandemic in China is over or there is no growth, then the JCI will be stable without a pattern.

• If the cases of the pandemic in Spain increase by 1000 per day, then the JCI 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, then the Jakarta Composite Index will be excited. If the FTSE100 index strengthens 1 point, the JCI index will tend to gain 0.37 points. If the Hangseng index strengthens by 1 point in London, the JCI index in Jakarta will likely gain 0.18 points.

• If the NASDAQ stock index in New York, USA, strengthens by one point, then the JCI index in Jakarta tends to weaken 0.13 points.

• The Work From Home and PSBB social distancing policies both had a negative impact on the JCI index movement. The impact of the PSBB policy appears to be more pressing than the WFH policy.

The results of Vina Sintya Dewi's research (2016) show that simultaneously the rupiah exchange rate inflation rate and the SBI interest rate have a significant effect on the JCI, whereas only partially the Rupiah exchange rate and interest rates have a significant effect on the IHSG on the IDX. The composite stock price index is a reflection of the capital market activities in general. An increasing movement in the composite stock price index indicates that the capital market is bullish, on the other hand, if it decreases, it indicates that the capital market is bearish. This event is influenced by several macroeconomic factors, such as: stock trading volume, exchange rates, and Indonesian interest rates.

Macroeconomic factors represented by transaction volume and interest rates have an effect on the JII composite stock price index. Meanwhile, the exchange rate does not significantly influence the JII index. Even so, together changes in transaction volume, exchange rates, and interest rates have a significant effect on the JII index. Price of Composite Shares

Nabil Alfaru (April 2020) observes that there are several sentiments that affect the movement of the JCI on the Indonesian stock exchange. Among other things, a decrease in the reference interest rate to 5% (from the previous 5.25%). The reduction in interest rates is intended to boost Indonesia's economic growth. However, according to him, market players are also worried about the realization of trade negotiations between the United States (US) and China. Other external factors are data from the US Department of Commerce which released orders for non-trading capital

goods that fell 0.5% as well as uncertainty regarding the follow-up to BREXIT in Europe. According to Alfaru, in October 2010, Brexit sentiment had pushed JCI movement to the red zone. At that time, the property and infrastructure sector stock index was corrected by 0.56% and 0.47%.

Sucor Sekuritas analyst Hendriko Gani (April 2020) argues, the position of Indonesia's foreign exchange reserves and the spread of coronavirus (Covid-19) also influenced the JCI movement from the end of March to throughout April 2020. The same thing was admitted by analyst Samuel Sekuritas Indonesia Dessy Lapagu. He estimates, the JCI will be corrected again in the following weeks. The short-term gains at the end of March were largely supported by basic industries and consumer goods, which had been on a slump since early April. According to him, the corona virus and oil prices are still the main sentiments of global exchanges.

According to Syahriyah Semaun (2020), the Covid-19 outbreak is not just a disease that affects health, but also has an economic impact. When more workers are infected, the more costs for treatment and production costs will be borne by the state. The risk to health is getting higher and economically will affect the level of productivity of care costs.

The call for social distancing has the effect of not only distancing human physical relationships, but also disrupting people's economic behavior. However, according to his analysis, the choice for social distancing is considered better than the decision to lockdown and the herd immunity policy. The discourse on lockdown can make the economy's pace even harder. The level of consumption has weakened which affects several economic supporting indicators. The decreasing supply of foodstuffs and necessities causes prices to rise. This will lead to scarcity of goods which in turn will trigger social unrest.

CONCLUSION AND RECOMMENDATION

The movement of the composite stock index (IHSG) on the Jakarta Stock Exchange is affected by internal and external conditions. Internally, the conditions of the Covid-19 pandemic and social distancing policies (WFH and PSBB) in the country have affecting the dynamics of the capital market (as indicated by the movement of the JCI index on the JSE). Externally, the Covid-19 pandemic in China and Spain also affecting the dynamics of the capital market in Indonesia (IHSG index). Likewise, the dynamics of the stock market in Hong Kong (Hangseng), London (FTSE100) and News York (NASDAQ).

The coronavirus pandemic in Indonesia, China, the dynamics of the Nasdaq stock market in New York, and social distancing policies (WFH and PSBB) have had a

negative impact on the movement of the JCI stock index whereas the pandemic in Spain, the dynamics of the capital market in Hong Kong (Hangseng) and London (FTSE100) actually had a positive impact on the conditions of the capital market in Indonesia (BEJ).

Based on the findings obtained from this research, the followings is suggested,

1. The dynamic of the capital market need social distancing policies (WFH and PSBB) that managed more carefully so as not to give negative sentiment to capital market players in Indonesia.

2. The fiscal and non-fiscal policies taken should pay attention to the dynamics in China, America and Europe. This is important given that external environmental events have a strong correlation with domestic conditions.

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