# CHAPTER IV RESULT AND DISCUSSION

### **4.1 Descriptive Statistics**

### 4.1.1 Stationary Test

Table I Ullit Koot Test						
Variable	p-value < 5%	Difference				
JKFINA	0.0000	0				
DJIA	0.0000	0				
USAC	0.0000	0				
CHINAAC	0.0000	0				
SSCE	0.0000	0				

Table 1 Unit Root Test

Sources: author's calculation from research dataset

From the table above, the ADF test results are obtained by comparing critical values of 5%. Based on the ADF test decision, when p-value < 5%, means the data is in stationary condition at the level of (0) which means it has no unit root. Based on these results, it can be done the next test.

### 4.1.2 Lag Length Determination

varsoc

	ction-order Le: 3 - 22		L			Number of	obs	= 224
lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	278.005				6.0e-08	-2.43754	-2.4068	-2.36139
1	478.155	400.3	25	0.000	1.3e-08	-4.00138	-3.81695	-3.54447*
2	536.667	117.02*	25	0.000	9.3e-09*	-4.3006*	-3.96247*	-3.46292

Endogenous: JKFINA DJIA SSCE USAC CHINAAC Exogenous: \_cons

### Figure 1 Lag Length Determination

It can be observed from the table above that the criteria of SBIC (Schwartz Bayesian Information), HQIC (Hannah Quin Information), AIC (Akaike Information), LR (Likelihood Ratio), and FPE (Final Prediction Error) are obtained results that in this model, the optimal lag is 2 (marked with \*).

### 4.1.3 Stability Test

varstable

Eigenvalue stability condition

Eigenvalue	Modulus
.5146676 + .6453823i	.82547
.51466766453823i	.82547
02881921 + .5730832i	.573807
028819215730832i	.573807
4516716 + .02223118i	.452218
451671602223118i	.452218
02443474 + .3328904i	.333786
024434743328904i	.333786
.231571	.231571
1306597	.13066

All the eigenvalues lie inside the unit circle. VAR satisfies stability condition.

#### **Figure 2 Stability Test**

The figure above shows the stability test results of this study. It has Found the result of the modulus value of each eigenvalue is less than 1, then the estimated result meets the eigenvalue stability condition. A VAR is called stable if all eigenvalues of A1 have modulus less than one. By a mathematical lemma, this condition is equivalent to **det** (**IK** – **A1z**) 6=0 for  $|z| \le 1$ . No roots within or on the unit circle. The stability is not equivalent to stationarity: a stable process started in t = 1 is not stationary; a backward-directed entirely unstable process is stationary (Kunst, 2011)

#### 4.1.4 VAR Model

VAR model in this thesis is then given by the following system of equations. Here the result of VAR estimation:

VAR Estimation					
Equation	Coef				
USAC JKFINA	14.63365				
CHINAAC JKFINA	-0.8890804				
DJIA JKFINA	0.2053597				
JKFINA DJIA	0.3550369				

Table 2 VAR Estimation

Sources: Pesaran (2015), authors (2020)

Based on the VAR estimation results, it is known that there are the total active cases of Covid-19 in the United States (USAC) which have a positive impact on the financial market conditions in Indonesia, the results of data analysis show a coefficient value of 14,633. In contrast, the VAR estimation results also show that the total negative impact of active cases of Covid-19 in China (CHINAAC) on the Indonesian financial market (JKFINA) has a coefficient value of -0.8890. VAR estimation also shows that the DJIA has a positive impact on financial markets in Indonesia with the results of data analysis a coefficient value of 0.2053. VAR estimation also showed the JKFINA results gave a positive impact to the DJIA with the results of data analysis a coefficient value of 0.3550.

The Dow Jones Industrial Average closed down nearly 1,861.81 points or  $6.9\%^1$ . The Dow's breathtaking drop Monday was the biggest since the <u>Black Monday crash<sup>2</sup></u> of October 1987, when the blue-chip index lost 22%. The deep stock market sell-off reflects broad concerns that despite these economic measures, the U.S. economy is likely heading toward a recession<sup>3</sup>.

The Indonesian stocks plunged deep in the red on Friday morning following a market rout seen by Wall Street in Thursday's session as investors grew wary of a second wave of the coronavirus pandemic in the United States. "We note that the Dow [Jones Industrial Average] plunged more than 1,800 points yesterday as investors grew concerned about the spike in COVID-19 cases in some [US] states as lockdown eases," Mirae Asset Security of Indonesia analyst Andy Wibowo Gunawan wrote in a research note on Friday<sup>4</sup>.

The Covid-19 cases in the United States have affected many people living in the United States infected with Covid-19. Many of the effects are permed by the Covid-19 outbreak. The unemployment rate rose from 3.5% in February 2020 - its lowest level in more than 60 years - to 14.7% in April, the highest level in 80 years. The U.S. GDP fell 11.2% from 2019Q4 to 2020Q2, the biggest decline since the Great Depression (Dave et al., 2020). This is due to the spread of Covid-19, which has caused economic conditions in the United States to be raging. Although the U.S. economy in the third quarter of 2020 again accelerated during the Covid-19 pandemic, on the other hand, the Central Statistics Agency of Indonesia (BPS) noted, as of - August 2020, Indonesia has a surplus in the trade balance with the United States. The value of Indonesia's exports to the United States reached US\$ 1.6 billion, the safe value of US\$ 578.8 million so that the surplus amounted to US\$ 1 billion<sup>5</sup>. The US economic recovery will provide points of export products of Indonesia there<sup>6</sup>. The credit activity at Rural Banks during the Covid-19 pandemic at the end of August 2020, even though only reached 1.28%<sup>7</sup>, many companies in Indonesia or Indonesian Small Enterprises (MSMEs) dared to provide the capital loans to the banks and the financial industry, to meet the target of orders from the United States, so it made a turnover of banking and the financial credit increased.

Meanwhile, in China, the imposition of lockdowns has caused a decrease in consumption and production disruptions throughout the world. This means, as a whole, the functioning of the global supply chain is disrupted and affects companies around the world<sup>8</sup>. Moreover, in recent years, China's industrial structure adjustment decreased the proportion of the primary industry, and the

<sup>&</sup>lt;sup>1</sup> https://www.usnews.com/news/economy/articles/2020-06-11/stocks-plunge-in-worst-day-since-march-ascoronavirus-cases-rise

<sup>&</sup>lt;sup>2</sup> https://www.npr.org/2017/10/19/558625600/the-30th-anniversary-of-black-monday-a-day-that-made-wall-streetquake

<sup>&</sup>lt;sup>3</sup> https://www.npr.org/2020/03/16/816382835/stocks-shudder-despite-emergency-measures

<sup>&</sup>lt;sup>4</sup> https://www.thejakartapost.com/news/2020/06/12/indonesian-stocks-plunge-after-wall-street-free-fall.html

<sup>&</sup>lt;sup>5</sup> https://databoks.katadata.co.id/datapublish/2020/09/17/neraca-perdagangan-indonesia-as-di-agustus-2020-surplusus-1-miliar

<sup>&</sup>lt;sup>6</sup> https://lokadata.id/artikel/pulihnya-ekonomi-amerika-serikat-untungkan-indonesia

<sup>&</sup>lt;sup>7</sup> Kinerja Kredit Terhadap Profitabilitas Bpr Pada Masa Pandemi Covid-19 / Jurnal Akrab Juara. (n.d.). Retrieved January 9, 2021, from http://akrabjuara.com/index.php/akrabjuara/article/view/1290

<sup>&</sup>lt;sup>8</sup> The Wuhan Coronavirus: Impact On Supply Chain Operations Amid The Lunar New Year Resilience360 Special Report. (2020).

level of contribution to economic growth was 3.8%. Therefore, from a macroeconomic perspective, the epidemics have a limited impact on primary industries.

Based on the data from the Investment Coordinating Board (BKPM), throughout 2019, China placed second in the list of countries with the most capital in Indonesia with 4.74 billion US dollars consisting of 2,130 investment projects. The closure of factories in China has disrupted the global supply chains. In Indonesia, the businesses are also worried because of the supply of raw materials from China disrupted by the outbreak of the corona<sup>9</sup>. This certainly puts pressure on the financial and banking sector in Indonesia. The closure of some companies in China will hamper the business turnover of companies in Indonesia that rely on raw materials from China (Singhania & Mehta, 2017). Many companies have closed down and ended up not paying their salaries to the banking sector of the stock market in Indonesia.

Indonesia should take the advantage of opportunities to meet export targets to the United States, and companies in Indonesia should put more pressure on the use of domestic materials to carry out domestic production activities. The government must be consistent in buying domestic products. Now, the momentum is right to impose a high level of domestic components (TKDN) obligations and Indonesian National Standard (SNI), because other countries have carried out strict protections to protect the domestic industrial market in line with the outbreak of the Covid-19 pandemic<sup>10</sup>. With the suppressed domestic products and utilizing export targets to the United States, it will certainly provide a fresh wind to the Indonesian economy and reflected in the Indonesia Financial Market Index.

As is know, China is a world economic power due to its role as a major consumer as well as a producer of goods and services, where Indonesia's exports to China in 2019 reached US \$ 29.7 billion or Rp.464.5 trillion regarding the currency of exchange rates. According to the Bank of Indonesia, with that value, China is the main export destination of Indonesia<sup>11</sup>. However, when the Covid-19 spread, the imports of materials or supporting the materials in Indonesia has decreased. The machinery imports until the end of February 2020, recorded at USD 139.7 million, down 20.48 percent compared to the last week of January 2020<sup>12</sup>. With the decline in imports of materials to Indonesia, it certainly becomes an obstacle to the production activities in Indonesia and gives a negative signal to the Indonesian Financial Market Index.

There is a link between the spread of Covid-19 in the United States and the United States Stock Index (DJIA). VAR estimation analysis data resulting from both variables are positive value to the financial markets in Indonesia (JKFINA). This is due to the increase in exports from Indonesia to the United States. Increased exports from Indonesia to the United States mean that the people, business players, and companies have been producing local products to meet the demands of the United States. This certainly causes capital turnover in and out of Indonesia's financial sector to be better. When the companies incorporated in the Dow Jones Industrial Average index (DJIA) are

<sup>&</sup>lt;sup>9</sup> https://republika.co.id/berita/q6zffr475/corona-porak-porandakan-rantai-pasokan-elektronik-dunia

<sup>&</sup>lt;sup>10</sup> https://investor.id/market-and-corporate/pemerintah-harus-konsisten-beli-produk-dalam-negeri

<sup>&</sup>lt;sup>11</sup> https://www.bbc.com/indonesia/indonesia-52322753

<sup>&</sup>lt;sup>12</sup> https://money.kompas.com/read/2020/03/03/170956926/impor-dari-china-ke-ri-anjlok-51-persen-akibat-virus-corona?page=all

unable to meet the supply needs of products to the United States, it will cause the companies in Indonesia to get the opportunity to make high exports to the United States. This will have a good impact on the Financial Sector Index in Indonesia because the capital turnover to the financial services will be better.

### 4.1.5 Granger Causality

Causalities of Research Variables (Lag-2)				
Varia	bles	Prob < Chi <sup>2</sup>		
USAC	JKFINA	0.04		
CHINAAC	JKFINA	0.01		
JKFINA	DJIA	0.004		
DJIA	JKFINA	0.010		

 Table 3 The Relationship of Research Variables

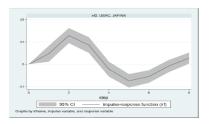
Sources: Pesaran (2015), authors (2020)

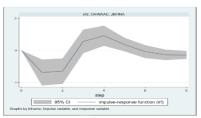
Obtained the results JKFINA has the interrelationship with USAC and CHINAAC, whereas the United States and China are two major countries in the economy and have great influence in the world, especially in Indonesia. It is clear earlier that, the impact of positive results by USAC on JKFINA again resulted from the rise of the U.S. economy in the 3<sup>rd</sup> quarter and gave a good one-way impact of the U.S Covid-19 case in the Indonesian Financial Market Index.

Also with the CHINAAC against JKFINA. As a country that is a business partner of Indonesia, China has a negative impact 1-way relationship with Indonesia, which is due to the difficulty of material production in China, so it was disrupting the production activities in the Indonesian companies. There is also a reciprocal relationship between JKFINA and DJIA. This is supported by the close cooperation between Indonesia and the United States from various sectors.

# 4.1.6 IRF

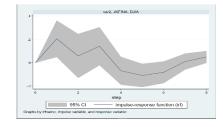
Figure 5 below is the response of USAC and CHINAAC to JKFINA. It can be seen from the shock experienced by USAC during periods 0 to 4 where the highest positive shocks were in the second period. However, after 4 periods, the JKFINA shock variable turned negative and continued to increase until the end of the period. Neither the shock variable in CHINAAC against JKFINA that at the beginning of experiencing a negative response, and then deteriorate into the 3rd period, but after the 3rd period increased. However, until the 8th period, the graph line shows the line that carries the balance line to the end of the period.

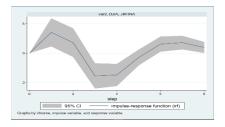




 (a) USAC and JKFINA
 (b) CHINAAC and JKFINA
 Figure 3 The Impulse Respond of the US and China Active Cases of Covid-19 to Financial Stock Index Sources: Grossmann & Orlov (2014), Pesaran (2015), authors (2020)

Figure 6 below is the response of JKFINA to DJIA, vice versa. It can be seen from the shock experienced by JKFINA during periods 0 to 3 where the shock is highest positive shocks were in the second period. Even though, after 3 periods the DJIA shock variable turned negative and continued to increase slowly until the end of the period. Then the shock variable of DJIA against JKFINA started of experienced by DJIA during periods 0 to 2 where the shock is highest positive shock were in the first period. Neither the shock variable of JKFINA changed negative and continued to increase until the end of the period.





(c) JKFINA and DJIA

(d) DJIA and JKFINA

**Figure 4 The Impulse Respond of US Index and Indonesia Finance Stock Index** Sources: Grossmann & Orlov (2014), Pesaran (2015), authors (2020)

### 4.1.7 Variance Decomposition

irf table fevd, irf (irf2) impulse (USAC) response (JKFINA)				irf table fevd, irf (irf2) impulse (CHINAAC) response (JKFINA)				
Step	1 fevd	l Lower	l Upper	Step	1 fevd	l Lower	l Upper	
								0
1	0	0	0	1	0	0	0	
2	0,01659	(-) .012473	0,045652	2	0,040404	(-) .006141	0,08695	
3	0,113473	0,053744	0,173131	3	0,05148	0,010205	0,092754	
4	0,151889	0,083831	0,219947	4	0,050968	0,008328	0,093609	
5	0,14661	0,079728	0,213492	5	0,058977	0,009301	0,108653	
6	0,169048	0,091073	0,247022	6	0,057503	0,009692	0,105314	
7	0,181822	0,099164	0,26448	7	0,056172	0,009121	0,103223	
8	0,180928	0,099131	0,262724	8	0,056644	0,008946	0,104342	

#### Table 4 The Contribution of US and China Active Cases of Covid-19 to Financial Stock Index

(a) USAC and JKFINA

(b) CHINAAC and JKFINA

Sources: Grossmann & Orlov (2014), Pesaran (2015), authors (2020)

Table 5 above showed that the decomposition from USAC to JKFINA, and CHINAAC to JKFINA. It can be observed in the USAC variable to JKFINA, in period 0 to 1, the shock value is still worth 0. Then in the 2 periods, the shock value changed to 0.01659. Then increased in the 4th period with a value of 0.151889, and decreased in the 4th period with a value of 0.14661. In the 6 and 7 periods, the shock value increased with a value of 0.181822 in the 7 periods and decreased at the end of the period with a shock value of 0.180928. CHINAAC provides shock values of 0 in periods 0 and 1. Then the fluctuation of shock value given by CHINAAC to JKFINA in each period, until the end period with the shock value is 0.056644.

irf table fevd, irf (irf2) impulse (DJIA) response (JKFINA)			irf table fevd, irf (irf2) impulse (JKFINA) response (DJIA)				
1	1	1		1	1	1	
Step	fevd	Lower	Upper	Step	fevd	Lower	Upper
0	0	0	0	0	0	0	0
1	0	0	0	1	0.34507	0.244307	0.445833
2	0.070272	0.007797	0.132746	2	0.323653	0.232558	0.414747
3	0.101086	0.038356	0.163815	3	0.331781	0.245118	0.418445
4	0.098144	0.038368	0.157919	4	0.320904	0.234861	0.406946
5	0.126705	0.054965	0.198445	5	0.303408	0.218551	0.388264
6	0.131264	0.058639	0.20389	6	0.297796	0.21035	0.385241
7	0.128134	0.057347	0.198922	7	0.298716	0.210017	0.387415
8	0.13133	0.058984	0.203675	8	0.295922	0.207848	0.383998

Table 5 The Contribution of the US Index and Indonesia Finance Stock Index

(a) DJIA and JKFINA

(b) JKFINA and DJIA

Sources: Grossmann & Orlov (2014), Pesaran (2015), authors (2020)

Table 6 above showed that the decomposition from DJIA to JKFINA and JKFINA to DJIA. It can be observed in the DJIA to JKFINA, in period 0 to 1, the shock value is still worth 0. Then in the 2 periods, the shock value changed to 0.070272. After that, the shock value increased in the 3 periods with a value of 0.101086. Then the shock value decreased in the 4 periods with a value of 0.098144. In the 5 periods to the 6 periods, the shock value increased with a value of 0.126705 and 0.131264, but in the 7 periods and the 8 periods, the shock value decreased with a value of 0.128134 and 0.13133. The decomposition from JKFINA and DJIA can be observed that in the 0 periods, the shock value is still worth 0. Then in the 1 period, the shock value increased with a value of 0.34507 and increased to in the 3 periods, with the shock value are 0.323653 and 0.331781. In the 4 periods, the shock value decreased with the shock value given by JKFINA to DJIA in each period, until the end period with the shock value is 0.295922.

### 4.2 Estimation Result and Discussion

The global economic downturn and the spread of the COVID-19 pandemic in the country will have an impact on Indonesian economic growth. Meanwhile, the social distancing protocol to prevent the spread of COVID-19 will have an impact on the people's income and cause a decrease in productivity, and eventually lower the domestic demand, both for the household consumptive goods and investment<sup>13</sup>. In an interconnected and integrated world, the disruption of the global supply chain and a slowdown in the Chinese economy with the disruption of production will make the companies around the world, regardless of size, who depend on input from China, begin to experience a contraction in the production. The travel between restricted countries has further slowed global economic activity. Most importantly, some panic among consumers and companies has distorted the consumption patterns in general and created market anomalies. The global financial markets are also responsive to changes and the global stock indices have fallen (Astuti & Samudra Mahardhika, 2020; McKibbin & Fernando, 2020).

<sup>&</sup>lt;sup>13</sup> https://visiglobal.co.id/cantingnews/economyc-news/how-indonesia-deal-with-covid-19-pandemic/2020/05/

The Indonesian government imposed the first social distancing measures (PSBB I) on April 9, 2020. Less than a month later, on 5 June 2020, with the number of new Covid-19 cases appearing to be stabilized, the government eased these restrictions and shifted into a transition mode (PSBB Transition I) (Habir & Wardana, n.d.). In these conditions, the economy is a field that gets a severe impact, especially in the capital market. In this case, the capital market conditions as reflected by the stock index or Indonesia Composite Index tend to be associated with some important trigger events from the World Health Organization's timeline and situation report of Covid-19 and the situation reports supported with the daily statistics from the National Disaster Management Authority of the Republic of Indonesia (Novi Swandari Budiarso et al., 2020). The outbreak of Covid-19 affects capital market players is seen by lowering JCI which in December 2019 by 6299,539 is seen decreased to 4194,944 on March 20, 2020<sup>14</sup>.

In the first half of 2020, the banking growth slowed in line with a weakening in the real sector activity. The Financial Services Authority data shows banking loans only grew by 1.5% year-on-year (YoY) in the first half of the year to IDR5,549.2 trillion. The growth percentage is lower than the realization at the end of 2019 (6.1% YoY) or in comparison to the same period in 2019 (9.9% YoY). The weakening demand for consumption, investment, and working capital loans are likely to continue. The demand for consumption and working capital loans is likely to remain weak. The operating activities have fallen due to the possibility as the government extended restrictions on large-scale outdoor activities, while the spread of the pandemic has not yet reached its peak. In the first half of 2020, the weak loan demand has resulted in a contraction in working capital loans. This segment, which covers 45.6% of total bank outstanding, decreased by 1.3% YoY to IDR2,528.9 trillion in the first half of 2020. During the same period, the consumption loan growth slowed from 7.6% YoY to 2.3% YoY, with the outstanding value from IDR1,502.6 trillion in June 2019 to IDR1,537.5 trillion as of June 2020. In line with the weaker loan growth, investment lending to slow even further in the coming months. During the first half of 2020, the investment loans grew only by 5.6% YoY to IDR1,482.8 trillion, much lower than the first half of 2019 (13.8% YoY). This is in line with the business investment that fell from 3.75% YoY to -6.90% YoY due to the significant pressure on revenues and profits. Besides, the decline in household consumption has reduced the prospects for the demand and the investment of goods and services. The Central Bureau of Statistics shows the household consumption contracted 5.51% in Q2 2020, in contrast to 2.83% YoY growth in the previous quarter. As such, the companies are likely to review and postpone expansion plans, decreasing demand for investment loans. The financial services sector also contracted with the loans fell -3.5% YoY to IDR241.3 trillion. One of the main reasons is the shrinking activities of the multi finance industry. The financing from the industry fell 8.8% YoY in the first half of 2020 as the automotive demand dropped significantly (car sales fell 45.9% YoY to 260,933 units; the motorcycles sales dropped 42.2% YoY to 1.9 million units. At the same time, the time of deposits experienced slower growth, as reflected by the growth rate is only of 4.8% YoY in June 2020 or lower than 8.3% YoY in June 2019, despite the offering higher interest rates around 4.32% above the current demand rate. Meanwhile, the demand deposits grew stronger from 7.2% YoY in June 2019 to 12.9% YoY in June 202015.

The spread of Covid-19 in the United States has a positive impact on the financial stock index in Indonesia. The rapid spread in the United States has led the United States government to work hard to address the problems caused by the pandemic. The united states economy has improved and caused Indonesia to get a

<sup>14</sup> http://jurnal.pancabudi.ac.id/index.php/jepa/article/view/912/863

<sup>&</sup>lt;sup>15</sup> https://www.pefindo.com/fileman/file/966

surplus of exports to the country. This has a good impact on the Indonesia Financial Stock Index. So that the economy's life in Indonesia has increased <sup>(16)</sup>. This also led to the reciprocal relationship between the United States Stock Index (DJIA) and the Indonesian Financial Stock Index (JKFINA). There is a link between the spread of Covid-19 in the United States and the United States Stock Index (DJIA). When the companies incorporated in the Dow Jones Industrial Average index (DJIA) are unable to meet the supply needs of products to the United States, it will cause the companies in Indonesia to get the opportunity to make the high exports to the United States. This will have a good impact on the Financial Sector Index in Indonesia because the capital turnover to the financial services will be better.

However, the spread of Covid-19 occurring in China is the opposite. The spread of Covid-19 in China has a negative impact on Indonesia's Financial Stock Index. China is Indonesia's largest business partner <sup>(17) (18)</sup>. The hampered production of raw materials that occur in China, causing obstacles in the production activities in existing companies in Indonesia. This caused the production activities in Indonesia to be hampered and decreased revenues. This turned out to have a negative impact on the Indonesia Financial Stock Index.

# 4.3 Current Status of Covid-19 Pandemic and Current Condition of Stock Market

The global economic downturn and the spread of the COVID-19 pandemic in the country will have an impact on Indonesian economic growth. Meanwhile, the social distancing protocol to prevent the spread of COVID-19 will have an impact on the people's income and cause a decrease in productivity, and eventually lower the domestic demand, both for the household consumptive goods and investment<sup>19</sup>. In an interconnected and integrated world, the disruption of the global supply chain and a slowdown in the Chinese economy with the disruption of production will make the companies around the world, regardless of size, who depend on input from China, begin to experience a contraction in the production. The travel between restricted countries has further slowed global economic activity. Most importantly, some panic among consumers and companies has distorted the consumption patterns in general and created market anomalies. The global financial markets are also responsive to changes and the global stock indices have fallen (Astuti & Samudra Mahardhika, 2020; McKibbin & Fernando, 2020).

The Covid-19 cases in the United States have affected many people living in the United States infected with Covid-19. Many of the effects are permed by the Covid-19 outbreak. The unemployment rate rose from 3.5% in February 2020 - its lowest level in more than 60 years - to 14.7% in April, the highest level in 80 years. The U.S. GDP fell 11.2% from 2019Q4 to 2020Q2, the biggest decline since the Great Depression (Dave et al., 2020). This is due to the spread of Covid-19, which has caused economic conditions in the United States to be raging. Although the U.S. economy in the third quarter of 2020 again accelerated during the Covid-19 pandemic, on the other hand, the Central Statistics Agency of Indonesia (BPS) noted, as of - August 2020, Indonesia has a surplus in the trade balance with the United States. The value of Indonesia's exports to the United States reached US\$ 1.6 billion, the safe value of US\$ 578.8 million so that the surplus amounted to US\$ 1 billion<sup>20</sup>. The US economic recovery will provide points of export products of Indonesia

 $<sup>^{16} \</sup> rom \ https://www.thejakartapost.com/news/2021/01/04/oxford-economics-projects-indonesias-gdp-to-grow-6-in-2021.html$ 

<sup>&</sup>lt;sup>17</sup> https://www.thejakartapost.com/academia/2020/02/14/quick-strategies-needed-to-shift-dependency-on-china.htm

<sup>&</sup>lt;sup>18</sup> http://www.worldstopexports.com/indonesias-top-15-import-partners/

<sup>&</sup>lt;sup>19</sup> https://visiglobal.co.id/cantingnews/economyc-news/how-indonesia-deal-with-covid-19-pandemic/2020/05/

<sup>&</sup>lt;sup>20</sup> https://databoks.katadata.co.id/datapublish/2020/09/17/neraca-perdagangan-indonesia-as-di-agustus-2020-surplusus-1-miliar

there<sup>21</sup>. The credit activity at Rural Banks during the Covid-19 pandemic at the end of August 2020, even though only reached 1.28%<sup>22</sup>, many companies in Indonesia or Indonesian Small Enterprises (MSMEs) dared to provide the capital loans to the banks and the financial industry, to meet the target of orders from the United States, so it made a turnover of banking and the financial credit increased.

The outbreak of Covid-19 affects capital market players is seen by lowering JCI which in December 2019 by 6299,539 is seen decreased to 4194,944 on March 20, 2020<sup>23</sup>. The Dow Jones Industrial Average closed down nearly 1,861.81 points or 6.9%<sup>24</sup>. The Dow's breathtaking drop Monday was the biggest since the <u>Black Monday crash<sup>25</sup></u> of October 1987, when the blue-chip index lost 22%. The deep stock market sell-off reflects broad concerns that despite these economic measures, the U.S. economy is likely heading toward a recession<sup>26</sup>.

The Indonesian stocks plunged deep in the red on Friday morning following a market rout seen by Wall Street in Thursday's session as investors grew wary of a second wave of the coronavirus pandemic in the United States. "We note that the Dow [Jones Industrial Average] plunged more than 1,800 points yesterday as investors grew concerned about the spike in COVID-19 cases in some [US] states as lockdown eases," Mirae Asset Security of Indonesia analyst Andy Wibowo Gunawan wrote in a research note on Friday<sup>27</sup>.

Meanwhile, in China, the imposition of lockdowns has caused a decrease in consumption and production disruptions throughout the world. This means, as a whole, the functioning of the global supply chain is disrupted and affects companies around the world<sup>28</sup>. Moreover, in recent years, China's industrial structure adjustment decreased the proportion of the primary industry, and the level of contribution to economic growth was 3.8%. Therefore, from a macroeconomic perspective, the epidemics have a limited impact on primary industries.

Based on the data from the Investment Coordinating Board (BKPM), throughout 2019, China placed second in the list of countries with the most capital in Indonesia with 4.74 billion US dollars consisting of 2,130 investment projects. The closure of factories in China has disrupted the global supply chains. In Indonesia, the businesses are also worried because of the supply of raw materials from China disrupted by the outbreak of the corona<sup>29</sup>. This certainly puts pressure on the financial and banking sector in Indonesia. The closure of some companies in China will hamper the business turnover of companies in Indonesia that rely on raw materials from China (Singhania & Mehta, 2017). Many companies have closed down and ended up not paying their salaries to the banking sector due to business problems. This provides a negative sentiment for the financial sector of the stock market in Indonesia.

<sup>&</sup>lt;sup>21</sup> https://lokadata.id/artikel/pulihnya-ekonomi-amerika-serikat-untungkan-indonesia

<sup>&</sup>lt;sup>22</sup> Kinerja Kredit Terhadap Profitabilitas Bpr Pada Masa Pandemi Covid-19 / Jurnal Akrab Juara. (n.d.). Retrieved January 9, 2021, from http://akrabjuara.com/index.php/akrabjuara/article/view/1290

<sup>&</sup>lt;sup>23</sup> http://jurnal.pancabudi.ac.id/index.php/jepa/article/view/912/863

<sup>&</sup>lt;sup>24</sup> https://www.usnews.com/news/economy/articles/2020-06-11/stocks-plunge-in-worst-day-since-march-ascoronavirus-cases-rise

<sup>&</sup>lt;sup>25</sup> https://www.npr.org/2017/10/19/558625600/the-30th-anniversary-of-black-monday-a-day-that-made-wall-streetquake

<sup>&</sup>lt;sup>26</sup> https://www.npr.org/2020/03/16/816382835/stocks-shudder-despite-emergency-measures

<sup>&</sup>lt;sup>27</sup> https://www.thejakartapost.com/news/2020/06/12/indonesian-stocks-plunge-after-wall-street-free-fall.html

<sup>&</sup>lt;sup>28</sup> The Wuhan Coronavirus: Impact On Supply Chain Operations Amid The Lunar New Year Resilience360 Special Report. (2020).

<sup>&</sup>lt;sup>29</sup> https://republika.co.id/berita/q6zffr475/corona-porak-porandakan-rantai-pasokan-elektronik-dunia

As is know, China is a world economic power due to its role as a major consumer as well as a producer of goods and services, where Indonesia's exports to China in 2019 reached US \$ 29.7 billion or Rp.464.5 trillion regarding the currency of exchange rates. According to the Bank of Indonesia, with that value, China is the main export destination of Indonesia<sup>30</sup>. However, when the Covid-19 spread, the imports of materials or supporting the materials in Indonesia has decreased. The machinery imports until the end of February 2020, recorded at USD 139.7 million, down 20.48 percent compared to the last week of January 2020<sup>31</sup>. With the decline in imports of materials to Indonesia, it certainly becomes an obstacle to the production activities in Indonesia and gives a negative signal to the Indonesian Financial Market Index.

There is a link between the spread of Covid-19 in the United States and the United States Stock Index (DJIA). VAR estimation analysis data resulting from both variables are positive value to the financial markets in Indonesia (JKFINA). This is due to the increase in exports from Indonesia to the United States. Increased exports from Indonesia to the United States mean that the people, business players, and companies have been producing local products to meet the demands of the United States. This certainly causes capital turnover in and out of Indonesia's financial sector to be better. When the companies incorporated in the Dow Jones Industrial Average index (DJIA) are unable to meet the supply needs of products to the United States. This will cause the companies in Indonesia to get the opportunity to make high exports to the United States. This will have a good impact on the Financial Sector Index in Indonesia because the capital turnover to the financial services will be better.

<sup>&</sup>lt;sup>30</sup> https://www.bbc.com/indonesia/indonesia-52322753

<sup>&</sup>lt;sup>31</sup> https://money.kompas.com/read/2020/03/03/170956926/impor-dari-china-ke-ri-anjlok-51-persen-akibat-virus-corona?page=all