*Original Article*

# The Impact of Indonesia's Trade with China and the United States on Indonesia's Macroeconomic Indicators

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*Abstract: The purpose of this study is to analyze the effect of exports and imports to the United States and China on economic growth, employment, and Indonesia's foreign exchange reserves. Data used in the study is sourced from the Asian Development Bank with a period study 2000 to 2021. The method of analysis used is with approach quantitative use regression double. Regression results show that export to the America Union has influential positive significance to backup foreign exchange, no significance to growth economics, and positive significance to absorption power work. Temporary import to America Union No influential significant to backup foreign exchange, growth economy and power work. Regression results other show that export to China has No influential significance to backup foreign exchange and influence positive significance to growth economic, and negative significance to absorption power work. Temporary import to China is influential and positively significant to backup foreign exchange, negatively significant to growth economics, and positively significant to absorption power work.*

*Keywords: Exports, Imports, Foreign Exchange Reserves, Growth economics, Absorption power, Work.*

## I. INTRODUCTION

Since the beginning, starting from the Old Order period until now, Indonesia has been consistent in carrying out a free and active foreign policy, which means not taking sides or joining any block, both the Western liberal capitalist block and the Eastern socialist communist block. It is active in world organizations, based on which Indonesia opened itself against any country that wants to carry out cooperation, both bilateral cooperation between countries and regional multilateral in nature with several countries; such cooperation includes economic cooperation or foreign trade. Indonesia is a country that has an open economy, so it is open to foreign trade cooperation with any country, both selling goods abroad (Exports) and buying goods from abroad (Imports).

The United States and China are two large countries currently considered to be two countries with superpowers in the world's economy. For the United States, this is understandable because this country has always been far superior in economic and military strength since the era of the World War. The resources they have, but specifically for the State of China a few decades ago, the situation was not like what is happening today; where at that time, the State of China, which had the largest population in the world with the highest level of population density was considered to be still underdeveloped even during the war. In the Second World War, China was invaded by Japan, which at that time had a strong military and resources, so it colonized countries in the Asian region, including China. But now this has changed very much in the last few decades. China's economic growth has grown remarkably, and the development progress of cities in China has increased, like metropolitan cities in other developed countries, so it can be said that China has left Indonesia far behind. Based on existing statistical data and facts in the field with developments in the progress of the development of cities in China to the military who are capable of having aircraft carriers. Thus, China is considered one of the countries of the communist-socialist bloc that can compete with the United States, which has been dominant and has world economic hegemony.

Siddiqui and Singh (2021) in Identifying markets and developing an export promotion strategy for woollen textiles from India. Concluded that India needs efforts and strategies to increase its textile exports so that it does not depend on certain countries by diversifying. Sezgin (2020), in "An analysis on Turkish exports during the covid 19 pandemic: electronic Turkish studies", found that during the covid 19 pandemic, Turkish exports experienced a decline. Ni Putu Ayuning Wulan Pradnyani et al. 2018 (IPB Bogor Agricultural Institute), in a study conducted on exports in Indonesia that used LC payments, showed that inflation, exchange rates and the central bank of Bank Indonesia had a significant effect on exports using LC Darman (Binus University) (2017) in his research in Indonesia obtained the results that the export variable had a significant influence on Indonesia's gross domestic product. Ria Yani Fatmawati (2015), in her research in Indonesia, obtained that export and import results significantly affected Indonesia's gross domestic product. Yusuf and Widyastuti (2007) found that trade liberalization and the export and import of food commodities significantly negatively affected Indonesia's trade balance. Yeti andriani and Andre (Andalas University in Journal International Studies 2017), with research on the implications of the

Indonesia-Australia comprehensive economic partnership agreement on foreign trade, found that such cooperation can facilitate Indonesian and Australian foreign trade.

When compared to the United States and China's economies, referring to data from the World Bank and other economic institutions such as the IMF, in 2016, the US GDP reached 18.6 trillion US dollars, while China's GDP was 11.2 trillion US dollars, compared to Indonesia, which only had a GDP of 0.9 Trillion US Dollars, based on this data, it is clear that the United States is still superior to China, but if you look at it only based on nominal GDP, if you look at the price levels in the two countries, it turns out that what makes America's GDP higher is because the price level in these countries is more expensive or higher than price level in China, according to the IMF. In real terms, China's GDP is 21.3 trillion US dollars, and the United States is 18.6 trillion US dollars. However, it is not fair to compare China's GDP with a population of nearly 1.4 billion people with America, which is around 300 million people. So, based on GDP Per Capita, the United States is still superior. However, based on this description, it can be seen that China sooner or later is a competitor country that emerges from Asia that can compete with America. In 2018, the era of United States President Donald Trump emerged a trade war between the United States and China by setting import duties of 50 billion US Dollars on Chinese goods, which China reciprocated by imposing tariffs on American goods exported to China. This is what becomes an inner attraction _ researching impact trading to America Union and China to a number of indicator economy Indonesian macro, namely backup foreign exchange, growth economy and absorption power work.

## II. METHOD

To answer the first and second problems in this study, quantitative descriptive analysis was used with multiple regression analysis tools with several regression models, namely:

1. $Cd = \beta_0 + \beta_1 Xa + \beta_2 Ma + \varepsilon$
2. $PE = \beta_0 + \beta_1 Xa + \beta_2 Ma + \varepsilon$
3. $TK = \beta_0 + \beta_1 Xa + \beta_2 Ma + \varepsilon$
4. $Cd = \beta_0 + \beta_1 Xc + \beta_2 Mc + \varepsilon$
5. $PE = \beta_0 + \beta_1 Xc + \beta_2 Mc + \varepsilon$
6. $Tk = \beta_0 + \beta_1 Xc + \beta_2 Mc + \varepsilon$

Where:
PE    : Economic growth
Cd    : Foreign exchange reserves
Tk    : Labor
Xc    : Export to China
Xa    : Export to the United States
Ma    : Import to the United States
Mc    : Import to China
$\beta_0$    : Constant
$\beta_{1,2,}$    : Regression Coefficient of Independent Variable
$\varepsilon$    : Error term

## III. RESULTS AND DISCUSSION

### A) Indonesian Trade to the United States and China

#### a. Indonesian exports to China and the United States

For known development, Indonesia's exports to the United States and China can seen in Table 1. following this:

**Table 1. Indonesia's export data to the United States and China in Millions of USD**

| Year | XC | % | XA | % | Total Exports | % |
|------|------|--------|--------|--------|---------------|--------|
| 2000 | 2,768 | | 8,489 | | 62,096 | |
| 2001 | 2,201 | -20.48 | 7,761 | -8.57 | 56,254 | -9.40 |
| 2002 | 2,903 | 31.91 | 7,570 | -2.45 | 57,063 | 1.43 |
| 2003 | 3,803 | 30.98 | 7,386 | -2.43 | 61,004 | 6.90 |
| 2004 | 4,605 | 21.09 | 8,787 | 18.96 | 71,519 | 17.23 |
| 2005 | 6,662 | 44.68 | 9,889 | 12.54 | 85,579 | 19.65 |
| 2006 | 8,344 | 25.23 | 11,259 | 13.85 | 100,696 | 17.66 |
| 2007 | 9,676 | 15.96 | 11,644 | 3.42 | 113,971 | 13.18 |
| 2008 | 11,637 | 20.26 | 13,080 | 12.33 | 136,860 | 20.08 |
| 2009 | 11,499 | -1.17 | 10,889 | -16.75 | 116,378 | -14.96 |
| 2010 | 15,693 | 36.46 | 14,302 | 31.34 | 157,778 | 35.57 |
| 2011 | 22,941 | 46.19 | 16,498 | 15.35 | 203,478 | 28.96 |

| Year | XC | % | XA | % | Total Exports | % |
|------|-----|-------|--------|-------|---------------|-------|
| 2012 | 21,660 | -5.58 | 14,910 | -9.62 | 190,024 | -6.61 |
| 2013 | 22,601 | 4.34 | 15,741 | 5.57 | 182,546 | -3.93 |
| 2014 | 17,606 | -22.10 | 16,560 | 5.20 | 176,288 | -3.42 |
| 2015 | 15,045 | -14.54 | 16,267 | -1.77 | 150,390 | -14.69 |
| 2016 | 16,791 | 11.60 | 16.172 | -.58 | 136,842 | -9.00 |
| 2017 | 23,049 | 37.27 | 17,811 | 10.13 | 168,662 | 23.25 |
| 2018 | 27,121 | 17.66 | 18,462 | 3.66 | 174,048 | 3.19 |
| 2019 | 27,919 | 2.94 | 17,749 | -3.86 | 167,492 | -3.76 |
| 2020 | 31,776 | 13.81 | 18,667 | 5.17 | 163,306 | -2.49 |
| 2021 | 53,782 | 69.25 | 25,820 | 38.32 | 229,609 | 40.60 |
| **Average** | **16,367** | **17.41** | **13,896** | **6.18** | **134,631** | **7.59** |

*Source: ADB*

Table 1 shows that developmental data Indonesia's exports to the United States and China experienced fluctuation with an average over the period for each country, i.e. to the United States by 6.18% and to China by 17.41%. Moreover, Combined, Indonesia's total exports to the United States and China grew by an average of 7.59%. During the period, Indonesian exports to the United States experienced development highest occurred in 2021, namely 38.32%, and the lowest occurred in 2009, namely -16.75 %. Temporary development exports highest to China occurred in 2021, namely 69.25%, and the lowest was in 2014, namely -22.10 %.

**b. Indonesia imports from the United States and China**

Trading Indonesia's international relations with the United States and China are not only exports, but Indonesia also imports from the two countries. Following This is the progress data on Indonesian imports from the American Union and China:

**Table 2. Indonesian Import Data to the United States and China in Millions of USD**

| Year | MC | % | MA | % | Total Imports | % |
|------|--------|--------|--------|--------|---------------|--------|
| 2000 | 2022 | | 3,393 | | 33,500 | |
| 2001 | 1,843 | -8.86 | 3,210 | -5.41 | 31,064 | -7.27 |
| 2002 | 2,427 | 31.73 | 2,644 | -17.62 | 31,284 | 0.71 |
| 2003 | 2,957 | 21.83 | 2,702 | 2.20 | 32,547 | 4.03 |
| 2004 | 4.101 | 38.67 | 3,236 | 19.72 | 46,440 | 42.68 |
| 2005 | 5,843 | 42.46 | 3,886 | 20.09 | 57,698 | 24.24 |
| 2006 | 6,637 | 13.59 | 4,066 | 4.64 | 60,996 | 5.71 |
| 2007 | 8,558 | 28.94 | 4,797 | 17.98 | 74,192 | 21.63 |
| 2008 | 15,249 | 78.18 | 7,898 | 64.62 | 128,552 | 73.26 |
| 2009 | 14,002 | -8.17 | 7,094 | -10.17 | 96158 | -25.19 |
| 2010 | 20,424 | 45.86 | 9,416 | 32.72 | 135,663 | 41.08 |
| 2011 | 26,212 | 28.33 | 10,834 | 15.06 | 177,430 | 30.78 |
| 2012 | 29,387 | 12.11 | 11,614 | 7.20 | 191,689 | 8.03 |
| 2013 | 29,849 | 1.57 | 9,082 | -21.80 | 186,624 | -2.64 |
| 2014 | 30,624 | 2.59 | 8,189 | -9.83 | 178,178 | -4.52 |
| 2015 | 29,411 | -3.96 | 7,617 | -6.98 | 142,694 | -19.91 |
| 2016 | 30,800 | 4.72 | 7,319 | -3.90 | 135,581 | -4.98 |
| 2017 | 35,767 | 16.12 | 8,150 | 11.35 | 156,626 | 15.52 |
| 2018 | 45,538 | 27.31 | 10,212 | 25.30 | 192,283 | 22.76 |
| 2019 | 44,908 | -1.38 | 9,313 | -8.80 | 170,734 | -11.20 |
| 2020 | 39,635 | -11.74 | 8,643 | -7.19 | 141,575 | -17.07 |
| 2021 | 56,227 | 41.86 | 11,309 | 30.84 | 200,855 | 41.87 |
| Average | 21,928 | 19.13 | 7,028 | 7.62 | 118,289 | 11.40 |

*Source: ADB*

In the data table 5.2. can is known that developmental data Indonesia's imports to the United States and China experienced fluctuation with an average over the period for each country, i.e. to the United States by 7.62% and to China by 19.13%. Moreover, Combined, Indonesia's total imports to the United States and China grew by an average of 11.40%. During this period, Indonesian imports to the United States experienced development highest occurred in 2008, namely 64.62%, and the lowest occurred in 2013, namely -21.8%. Temporary development imports highest to China occurred in 2008, namely 78.18% and the lowest in 2020, namely -11.74 %.

**B) Indicator Economy Indonesian Macro namely Growth Economy, Foreign Exchange Reserves and Absorption Power Work**

For known circumstances, the growth economy reserves foreign exchange, and absorption power can work in Indonesia, as seen in Table 5.3. following this:

**Table 3: The growth data economy reserves foreign exchange and absorption power work in Indonesia.**

| Year | Exchange Reserves ( Million USD) | % | PE (%) | power _ Work ( Thousand People) | % |
|------|-----|-----|-----|-----|-----|
| 2000 | 28,280 | | 4.9 | 89,838 | |
| 2001 | 27,048 | -4.36 | 3.6 | 90,807 | 1.07 |
| 2002 | 30,754 | 13.70 | 4.5 | 91,647 | 0.92 |
| 2003 | 34,742 | 12.96 | 4.8 | 92811 | 1.27 |
| 2004 | 34,724 | - 0.05 _ | 5.0 | 93,722 | 0.98 _ |
| 2005 | 32,926 | -5.18 | 5.7 | 93,958 | 0.25 _ |
| 2006 | 40,866 | 24.11 | 5.5 | 95,457 | 1.59 |
| 2007 | 54,737 | 33.94 | 6.3 | 99,930 | 4.68 |
| 2008 | 49,339 | -9.86 | 6.0 | 102553 | 2.62 |
| 2009 | 60,572 | 22.76 | 4.6 | 104,871 | 2.26 |
| 2010 | 89,970 | 48.53. | 6.2 | 108,208 | 3.18 |
| 2011 | 103,611 | 15.16 | 6.2 | 107,416 | - 0.73 _ |
| 2012 | 105,907 | 2.21 | 6.0 | 112505 | 4.73 |
| 2013 | 93,427 | -11.78 | 5.6 | 112,761 | 0.22 |
| 2014 | 106073 | 13.53 | 5.0 | 114,628 | 1.65 |
| 2015 | 100,626 | -5.13 | 4.9 | 114,819 | 0.16 |
| 2016 | 110,931 | 10.24 | 5.0 | 118,412 | 3.12 |
| 2017 | 124,143 | 11.91 | 5.1 | 121,022 | 2.20 |
| 2018 | 114,776 | -7.54 | 5.2 | 126,282 | 4.34 |
| 2019 | 122,707 | 6.91 | 5.0 | 128,755 | 1.95 |
| 2020 | 128,398 | 4.63 | -2.1 | 128,454 | - 0.23 |
| 2021 | 131,405 | 2.34 | 3.7 | 131051 | 2.02 |
| **Average** | **78,453** | **8.52** | **4.85** | **108,178** | **1.82** |

*Source: ADB*

In table 5.3. the seen that indicator macro Indonesia's economy is inclined to fluctuate. On reserve, foreign exchange development averaged 8.52%, while the average growth economy was 4.85%. And absorption power developmental average work by 1.82%. Development backup foreign exchange highest occurred in 2010, namely 48.53%, and the lowest happened in 2013, i.e. _ by -11.78%. Temporary absorption power Work experience development was the highest in 2012 at 4.73% and the lowest in 2011 at -0.73 %.

**C) Impact Trading to the United States to Foreign Exchange Reserves, Growth Economy and Absorption Power Work.**
   **a.  Impact trading to American Union to backup foreign exchange**
      **1.   Regression results**

Regression results influence trading to the United States (export and import) against backup Indonesia's foreign exchange earnings seen in the table following this:

**Table 4: Influence Trading to the United States ( Export And Import ) against Backup Indonesian Foreign Exchange**

| Dependent Variable: CD | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 06/06/23 Time: 13:56 | | | | |
| Sample: 2000 2021 | | | | |
| Included observations: 22 | | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | -44.48960 | 22.08095 | -2.014841 | 0.0591 |
| XA | 6.536928 | 1.611468 | 4.056505 | 0.0007 |
| HE | 2.905667 | 2.157912 | 1.346518 | 0.1948 |
| D1 | 12.85117 | 13.69222 | 0.938574 | 0.3604 |
| R-squared | 0.893971 | Mean dependent var | | 78.45282 |
| Adjusted R-squared | 0.876299 | SD dependent var | | 38.53865 |
| SE of regression | 13.55447 | Akaike info criterion | | 8.214275 |
| Sum squared residue | 3307025 | Schwarz criterion | | 8.412647 |

| Likelihood logs | -86.35703 | Hannan-Quinn criteria. | | 8.261005 |
|---|---|---|---|---|
| F-statistics | 50.58822 | Durbin-Watson stat | | 1.727254 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Eviews*

Variable D1 is The dummy COVID-19 variable, namely in 2020 and 2021, which is given the number zero for the rest. Use variable This only For meets the assumption test classic so that the model does not have a problem.

**2. Assumption test results classic**

   *i. Autocorrelation*

**Table 5: Autocorrelation Test Result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 0.040533 | Prob. F(2,16) | 0.9604 |
| Obs*R-squared | 0.110903 | Prob. Chi-Square(2) | 0.9461 |

*Source: Eviews*

Based on the results obtained in the LM test above, the mark Probability ObsRsQuared of 0.94 is bigger than alpha degrees 5%, so it is concluded That there is symptom Autocorrelation in models.

   *ii. Heteroscedasticity*

**Table 6. Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 2.689157 | Prob. F(7,14) | 0.0546 |
| Obs*R-squared | 12.61665 | Prob. Chi-Square(7) | 0.0820 |
| Scaled explained SS | 9.754748 | Prob. Chi-Square(7) | 0.2029 |

*Source: Eviews*

Based on the results obtained in the White Test above, seen mark Probability ObsRsQuared of 0.08 is big from alpha degrees 5% (0.05), so it is concluded That there is a symptom of Heteroscedasticity in the model.

   *iii. Multicollinearity*

**Table 7: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:01 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 487.5683 | 58.38391 | NA |
| XA | 2.596829 | 66.52508 | 6.479153 |
| HE | 4.656586 | 32.34131 | 4.796878 |
| D1 | 187.4769 | 20.40858 | 1.855325 |

*Source: Eviews*

Based on the results, value centered VIF above shows that value No someone is _ above 10, so it concluded No There is Multicollinearity in the model.

**3. Hypothesis Test**

   *i. Simultaneous Test (Test F )*

Based on calculated F values on the results regression seen, the result is 50.58 with probability approach zero; thereby, can conclude together _ _ variable Indonesian exports and imports to America Union influential significant to backup foreign exchange Indonesia.

   *ii. Test by Partial*

Based on the results, regression t value count variable export to America of 4.05 with a probability of 0.0007 is small of alpha 1%, so it concluded that variable export influential positive significant to backup foreign exchange. Temporary t value count variable import of 1.34 with probability 0.19 bigger from the minimum significance limit alpha10% (0.10), so concluded variable import No influential significance to backup foreign exchange.

**b. Impact trading to America Union to growth economy**

**1. Regression Results**

Regression results influence trading to the United States ( export and import ) against growth in Indonesia's economy can seen in the table following this:

**Table 8: Influence Trading to The United States (Export and Import) against the Growth of the Indonesian Economy**

| Dependent Variable: PE | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 06/06/23 Time: 14:12 | | | | |
| Sample: 2000 2021 | | | | |
| Included observations: 22 | | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | 6.199546 | 1.130519 | 5.483805 | 0.0000 |
| XA | -0.301387 | 0.150873 | -1.997624 | 0.0603 |
| HE | 0.403869 | 0.234802 | 1.720039 | 0.1017 |
| R-squared | 0.173572 | Mean dependent var | | 4.850000 |
| Adjusted R-squared | 0.086580 | SD dependent var | | 1.714851 |
| SE of regression | 1.638935 | Akaike info criterion | | 3.952094 |
| Sum squared residue | 51.03606 | Schwarz criterion | | 4.100873 |
| Likelihood logs | -40.47304 | Hannan-Quinn criteria. | | 3.987142 |
| F-statistics | 1.995255 | Durbin-Watson stat | | 2.037518 |
| Prob(F-statistic) | 0.163474 | | | |

*Source: Eviews*

**2. Assumption test results classic**

**i. Autocorrelation**

**Table 9: Autocorrelation test result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 0.012579 | Prob. F(2,17) | 0.9875 |
| Obs*R-squared | 0.032510 | Prob. Chi-Square(2) | 0.9839 |

*Source: Eviews 9.0*

Based on the results obtained in the LM test above, the mark Probability ObsRsQuared of 0.98 is bigger than alpha degrees 5%, so it concluded No there is symptom Autocorrelation in models.

**ii. Heteroscedasticity**

**Table 10: Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 0.381819 | Prob. F(5,16) | 0.8539 |
| Obs*R-squared | 2.345180 | Prob. Chi-Square(5) | 0.7996 |
| Scaled explained SS | 9.935921 | Prob. Chi-Square(5) | 0.0771 |

*Source: Eviews 9.0*

Based on the results obtained in the White Test above, seen mark Probability ObsRsQuared of 0.79 more bigger from alpha degrees 5% (0.05), it concluded No there is a symptom of Heteroscedasticity in the model.

**iii. Multicollinearity**

**Table 11: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:13 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 1.278073 | 10.46779 | NA |
| XA | 0.022763 | 39.88457 | 3.884523 |
| HE | 0.055132 | 26.19007 | 3.884523 |

*Source: Eviews*

Based on the results, value centered VIF above shows that value No someone is _ above 10, so it concluded No There is Multicollinearity in the model.

**3. Hypothesis Test**
**i. Simultaneous Test (F-test)**

Based on calculated F values on the results regression seen, the result is 1.99 with a probability of 0.16 exceeding 0.1 (10%). Limit significance with can thereby be concluded together variable Indonesian exports and imports to America Union No influential significant to a growth economy.

**ii. Partial Test**

Based on the results, the Regression Test is simultaneously guided by the calculated F value and level significance; a maximum of 10% is visible that together _ _ variable export and import No influential significance to growth economy so t test arithmetic No need done Because the results of the F Test are not significant.

**c. Impact trading to America Union to Absorption Power Work**
**1. Regression results**

Regression results influence trading to the United States ( export and import ) against growth in Indonesia's economy can seen in the table following this:

**Table 12: Influence Trading to the United States (Export and Import) against Absorption Power Indonesian Work**

| Dependent Variable: Kindergarten | | | |
|---|---|---|---|
| Method: Least Squares | | | |
| Date: 06/06/23 Time: 14:22 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | 68.17225 | 8.228472 | 8.284922 | 0.0000 |
| XA | 2.655905 | 0.600514 | 4.422720 | 0.0003 |
| HE | 0.250965 | 0.804147 | 0.312089 | 0.7586 |
| D1 | 1.468381 | 5.102409 | 0.287782 | 0.7768 |
| R-squared | 0.882617 | Mean dependent var | | 108.1776 |
| Adjusted R-squared | 0.863053 | SD dependent var | | 13.64920 |
| SE of regression | 5.051076 | Akaike info criterion | | 6.240045 |
| Sum squared residue | 459.2407 | Schwarz criterion | | 6.438417 |
| Likelihood logs | -64.64050 | Hannan-Quinn criteria. | | 6.286776 |
| F-statistics | 45.11458 | Durbin-Watson stat | | 1.384314 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Eviews 9.0*

**2. Assumption test results classic**
**i. Autocorrelation**

**Table 13: Autocorrelation test result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 1.213378 | Prob. F(2,16) | 0.3231 |
| Obs*R-squared | 2.897344 | Prob. Chi-Square(2) | 0.2349 |

*Source: Eviews 9.0*

Based on the results obtained in the LM test above seen mark Probability ObsRsQuared of 0.23 more bigger from alpha degrees 5%, so it concluded No there is symptom Autocorrelation in models.

**ii. Heteroscedasticity**

**Table 14: Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 2.275451 | Prob. F(7,14) | 0.0902 |
| Obs*R-squared | 11.70869 | Prob. Chi-Square(7) | 0.1106 |
| Scaled explained SS | 7.376573 | Prob. Chi-Square(7) | 0.3908 |

*Source: Eviews 9.0*

Based on the results obtained in the White Test, the above-seen mark Probability ObsRsQuared of 0.11 more bigger from alpha degrees 5% (0.05), so it concluded No there is symptom of Heteroscedasticity in the model.

### iii. Multicollinearity

**Table 15: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:23 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 67.70775 | 58.38391 | NA |
| XA | 0.360617 | 66.52508 | 6.479153 |
| HE | 0.646652 | 32.34131 | 4.796878 |
| D1 | 26.03458 | 20.40858 | 1.855325 |

*Source: Eviews 9.0*

Based on the results, value centered VIF above shows that value No someone is _ above 10, concluding that No There is Multicollinearity in the model.

### 3. Hypothesis Test

#### i. Simultaneous Test (F-test)

Based on calculated F values on the results regression seen, the result is 45.11 with probability approach zero and thereby can be concluded together _ _ variable Indonesian exports and imports to America Union influential significant to absorption power work.

#### ii. Partial Test

Based on the results, regression t value count variable export to America of 4.42 with the probability of 0.0003 is small of alpha 1%, so it concluded that variable export influential positive significant to absorption power work. Temporary t value count variable import of 0.31 with probability 0.75 bigger from the minimum significance limit alpha10% (0.10), so concluded variable import No influential significant to absorption power work.

## D) Impact Trading to China on Foreign Exchange Reserves, Growth Economy and Absorption Power Work.

### a. Impact trading to China against backup foreign exchange

### 1. Regression results

Regression results influence trading to China (export and import) against backup Indonesia's foreign exchange earnings seen in the table following this:

**Table 16: Influence Trading to China (Export and Import) against Backup Indonesian Foreign Exchange**

| Dependent Variable: CD | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 06/06/23 Time: 14:06 | | | | |
| Sample: 2000 2021 | | | | |
| Included observations: 22 | | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | 30.39214 | 3.970366 | 7.654744 | 0.0000 |
| IC | 2.785215 | 0.412849 | 6.746335 | 0.0000 |
| XC | -0.795128 | 0.557250 | -1.426878 | 0.1698 |
| R-squared | 0.927486 | Mean dependent var | | 78.45282 |
| Adjusted R-squared | 0.919853 | SD dependent var | | 38.53865 |
| SE of regression | 10.91039 | Akaike info criterion | | 7.743431 |
| Sum squared residue | 2261694 | Schwarz criterion | | 7.892210 |
| Likelihood logs | -82.17774 | Hannan-Quinn criteria. | | 7.778479 |
| F-statistics | 121.5093 | Durbin-Watson stat | | 1.740546 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Eviews 9.0*

**2. Assumption test results classic**

**i. Autocorrelation**

**Table 17: Autocorrelation test result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 0.734903 | Prob. F(2,17) | 0.4942 |
| Obs*R-squared | 1.750735 | Prob. Chi-Square(2) | 0.4167 |

*Source: Eviews 9.0*

Based on the results obtained in the LM test above, seen mark Probability ObsRsQuared of 0.49 more bigger from alpha degrees 5%, so it concluded No there is symptom Autocorrelation in models.

**ii. Heteroscedasticity**

**Table 18: Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 2.239109 | Prob. F(5,16) | 0.1005 |
| Obs*R-squared | 9.056703 | Prob. Chi-Square(5) | 0.1068 |
| Scaled explained SS | 4.228466 | Prob. Chi-Square(5) | 0.5170 |

*Source: Eviews 9.0*

Based on the results obtained in the White Test above, seen mark Probability ObsRsQuared of 0.10 more bigger from alpha degrees 5% (0.05), so it concluded No there is symptom of Heteroscedasticity in the model.

**iii. Multicollinearity**

**Table 19: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:08 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 15.76381 | 2.913424 | NA |
| IC | 0.170444 | 23.38423 | 8.237062 |
| XC | 0.310528 | 23.61155 | 8.237062 |

*Source: Eviews 9.0*

Based on the results, value centered VIF above shows that value No someone is _ above 10, concluding that No There is Multicollinearity in the model.

**3. Hypothesis Test**

**i. Simultaneous test (F-test)**

Based on calculated F values on the results regression seen, the result is 121.5 with probability approach zero; thereby, we can conclude together _ _ variable Indonesian exports and imports to China influential significant to backup foreign exchange Indonesia.

**ii. Partial Test**

Based on the results, regression t value count variable export to China of -1.42 with the probability of 0.16 large of alpha to a maximum of 10%, so it was concluded that variable export had No influential positive significance to backup foreign exchange. Temporary t value count variable import of 6.74 with probability approach zero more small from significance maximum alpha 1% (0.01) so concluded variable import to China influential positive significant to backup Indonesian foreign exchange.

**b. Impact trading to China against the growth economy**

**1. Regression results**

Regression results influence trading to China ( export and import ) against growth in Indonesia's economy can seen in the following table:

**Table 20: Influence Trading To China (Export and Import) against the Growth of the Indonesian Economy**

| Dependent Variable: PE | |
|---|---|
| Method: Least Squares | |
| Date: 06/06/23 Time: 14:14 | |

| Sample: 2000 2021 | | | | |
|---|---|---|---|---|
| Included observations: 22 | | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | -4.750573 | 0.956205 | -4.968153 | 0.0001 |
| XC | 0.308288 | 0.047573 | 6.480331 | 0.0000 |
| IC | -0.159348 | 0.029345 | -5.430110 | 0.0000 |
| D1 | 8.853810 | 0.802229 | 11.03651 | 0.0000 |
| R-squared | 0.883741 | Mean dependent var | | 4.850000 |
| Adjusted R-squared | 0.864365 | SD dependent var | | 1.714851 |
| SE of regression | 0.631557 | Akaike info criterion | | 2.081708 |
| Sum squared residue | 7.179553 | Schwarz criterion | | 2.280079 |
| Likelihood logs | -18.89879 | Hannan-Quinn criteria. | | 2.128438 |
| F-statistics | 45.60906 | Durbin-Watson stat | | 2.161448 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Eviews 9.0*

Those models get addition the variable D1 dumy covid 19, which aims for the results to be finer and pass from problem autocorrelation and heteroscedasticity.

## 2. Assumption Test Results classic
### i. Autocorrelation
**Table 21: Autocorrelation test result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 0.192825 | Prob. F(2,16) | 0.8265 |
| Obs*R-squared | 0.517789 | Prob. Chi-Square(2) | 0.7719 |

*Source: Eviews 9.0*

Based on the results obtained in the LM test above, seen mark Probability ObsRsQuared of 0.77 more bigger from alpha degrees 5%, so it concluded No there is symptom Autocorrelation in models.

### ii. Heteroscedasticity
**Table 22: Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 1.469828 | Prob. F(7,14) | 0.2552 |
| Obs*R-squared | 9.319257 | Prob. Chi-Square(7) | 0.2305 |
| Scaled explained SS | 2.236155 | Prob. Chi-Square(7) | 0.9456 |

*Source: Eviews 9.0*

Based on the results obtained in the White Test above, seen mark Probability ObsRsQuared of 0.23 more bigger than alpha degrees 5% (0.05), it concluded No there is a symptom of Heteroscedasticity in the model.

### iii. Multicollinearity
**Table 23: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:19 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 0.914328 | 50.43128 | NA |
| XC | 0.002263 | 51.35694 | 17.91624 |
| IC | 0.000861 | 35.25910 | 12.41997 |
| D1 | 0.643571 | 32.27021 | 2.933655 |

*Source: Eviews 9.0*

The results of the centered VIF values show a value bigger than ten, so the model experienced multicollinearity. However, multicollinearity does not become a problem because of the significance of the results; all variables _ are significant, as well as a large R Square value.

### 3. Hypothesis Test
#### i. Simultaneous test (F-test)

Based on calculated F values on the results regression seen, the result is 45.6 with probability approach zero and thereby can conclude together _ _ variable Indonesian exports and imports to China influential significant to growth economy Indonesia.

#### ii. Partial Test

Based on the results, regression t value count variable export to China of 6.48 with probability approach zero small from the maximum alpha significance of 1% so concluded that variable export influential positive significant to growth economy. Temporary t value count variable import of -5.43 with probability approach zero more small from significance maximum alpha 1% (0.01) so concluded variable import to China influential negative significant to growth Indonesian economy.

## c. Impact trading to China against absorption power Work
### 1. Regression results

Regression results influence trading to China ( export and import ) against absorption power Indonesian work can be seen in the table following this:

**Table 24: Influence Trading to China (Export and Import) against Absorption Power Indonesian Work**

| Dependent Variable: Kindergarten | | | | |
|---|---|---|---|---|
| Method: Least Squares | | | | |
| Date: 06/06/23 Time: 14:25 | | | | |
| Sample: 2000 2021 | | | | |
| Included observations: 22 | | | | |
| Variables | coefficient | std. Error | t-Statistics | Prob. |
| C | 90.64286 | 0.869194 | 104.2838 | 0.0000 |
| XC | -0.221545 | 0.121993 | -1.816041 | 0.0852 |
| IC | 0.965005 | 0.090381 | 10.67708 | 0.0000 |
| R-squared | 0.972294 | Mean dependent var | | 108.1776 |
| Adjusted R-squared | 0.969378 | SD dependent var | | 13.64920 |
| SE of regression | 2.388506 | Akaike info criterion | | 4.705337 |
| Sum squared residue | 108.3943 | Schwarz criterion | | 4.854115 |
| Likelihood logs | -48.75871 | Hannan-Quinn criteria. | | 4.740385 |
| F-statistics | 333.3871 | Durbin-Watson stat | | 1.846742 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Eviews*

### 2. Assumption test results classic
#### i. Autocorrelation

**Table 25: Autocorrelation test result**

| Breusch-Godfrey Serial Correlation LM Test: | | | |
|---|---|---|---|
| F-statistics | 0.578345 | Prob. F(2,17) | 0.5715 |
| Obs*R-squared | 1.401532 | Prob. Chi-Square(2) | 0.4962 |

*Source: Eviews 9.0*

Based on the results obtained in the LM test above, the mark Probability ObsRsQuared of 0.49 more bigger from alpha degrees 5%, so it concluded No there is symptom Autocorrelation in models.

#### ii. Heteroscedasticity

**Table 26:. Heteroscedasticity test result**

| Heteroskedasticity Test: White | | | |
|---|---|---|---|
| F-statistics | 1.817818 | Prob. F(5,16) | 0.1662 |
| Obs*R-squared | 7.969998 | Prob. Chi-Square(5) | 0.1579 |
| Scaled explained SS | 10.16254 | Prob. Chi-Square(5) | 0.0708 |

*Source: Eviews 9.0*

Based on the results obtained in the White Test above, seen mark Probability ObsRsQuared of 0.15 more bigger from alpha degrees 5% (0.05), so it concluded No there is symptom of Heteroscedasticity in the model.

### iii. Multicollinearity

**Table 27: Multicollinearity test result**

| Variance Inflation Factors | | | |
|---|---|---|---|
| Date: 06/06/23 Time: 14:27 | | | |
| Sample: 2000 2021 | | | |
| Included observations: 22 | | | |
| | coefficient | Uncentered | Centered |
| Variables | Variances | VIF | VIF |
| C | 0.755499 | 2.913424 | NA |
| XC | 0.014882 | 23.61155 | 8.237062 |
| IC | 0.008169 | 23.38423 | 8.237062 |

*Source: Eviews 9.0*

Based on the results, value centered VIF above shows that value No someone is _ above 10, concluding that No There is Multicollinearity in the model.

### 3. Hypothesis Test

#### i. Simultaneous Test (F-test)

Based on calculated F values on the results regression seen, the result is 333.3 with probability approaching zero. With thereby, can conclude together _ _ that variable Indonesian exports and imports to China are influential and significant to absorption power Work Indonesia.

#### ii. Partial Test

Based on the results, regression t value count variable export to China of -1.81 with a probability of 0.08 is a small alpha with a minimum significance of 10%, so it is concluded that variable export influential negative significant to absorption power Work Indonesia. Temporary t value count variable import of 10.67 with probability approach zero more small from significance maximum alpha 1% (0.01) so concluded variable import to China influential positive significant to absorption power Indonesian work.

### d. Implications economics and policy

Research results show a difference in the influence of variable export and import to the American Union and China for each indicator economy macro: backup foreign exchange, growth economy and absorption power work. Difference First seen from variable export to backup foreign exchange. On variables, exports to the American Union produce a positive and significant influence _ on Indonesia's foreign exchange results. This is equality with a study previously conducted by Dwi Puji Rahayu and Firdayetti (2021), Sayoga and Tan (2014) also found a positive influence _ significant export to backup foreign exchange, and Mahmudah (2019) found an influence positive significant export to backup foreign exchange. Different from the American Union, which influenced exports to China, it turns out that there was no significant impact to backup Indonesian foreign exchange. this _ is similar to that found by Yunella Safitri and Dewi Zaini Putri (2021), who found that export does No influential significance in backing up foreign exchange. At the same time, variable import shows that import to the American Union has no influential significance to back up foreign exchange. this _ own similarity with the study Apsari (2018) found import No influential significance to backup foreign exchange. Temporary imports to China show a positive influence significant to backup foreign exchange yield. This is a different result from Jalunggono et al. (2020), who found that no influence on import to backup foreign exchange exists.

Influence export and import to America Union against growth economy show no results _ significant. Different from the findings, Hodijah and Angelina (2021) found significant exports and imports to the growth economy. Whereas results of other exports and imports to China own influence significant to the growth of the economy. However, the direction is different, and export influence is positive, whereas import is negative.

Variable export and import to America Union different influence to absorption power work, variable export influential positive significant to absorption power Work temporary import No significant. Different from the findings of Dewi and Sutrisna (2015), who found No exists significant influence _ on export to absorption power work, which is interesting findings export to China show results of negative significance to absorption power Work temporary import positive significance to absorption power work,

A number of empirical findings from the study show that supporting variables _ or increase backup foreign exchange, growth economy, and absorption power Work needs to Keep going improved in a manner more effective fan efficient. Export to America Union needs to keep going improved because the impact is positive to back up foreign exchange and absorption power work. Moreover, exports to China must also improve because positive influence _ is significant to the economy's growth.

## IV. CONCLUSION

### A) *Conclusion*
The conclusion of the results this research are as follows:
1. Impact Indonesian trade to America Union based on regression results show export to America Union influential positive significance to backup foreign exchange, and no significance to growth economics, and positive significance to absorption power work. Temporary import to America Union No influential significant to backup foreign exchange, growth economy and power work.
2. Impact Indonesian trade to China based on regression results other show exports to China have No influential significance to backup foreign exchange, influence positive significance to growth economic and negative significance to absorption power work. Temporary import to China is influential and positively significant to backup foreign exchange, negatively significant to growth economics, and positively significant to absorption power work.

### B) *Suggestion*
The suggestions from this study are as follows:
1. Support _ in the form of the right policy _ from the government to enhancement export to America. The union and China order continues to enhance, with prioritized products or goods that have mark plus more big and capable impact positive to growth economy, reserves foreign exchange and absorption power work.
2. Be careful that the government imports goods and services, with prioritize goods import capital that can increase productivity producer domestic.
3. Increasing trade cooperation with America, the union, and China, the order continues to be maintained and improved with still evaluation so you can increase profit for Indonesia.

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