Analysis of the Effect of Macroeconomic Variables and External Debt on Indonesia's Economic Growth for the First Quarter 2010 - First Quarter 2020

Cindy Fredlina¹, Ella Silvana Ginting², Apren Halomoan Hutasoni³

¹,²,³Program Studi Manajemen STIE Mikroskil Medan

Email: ella.silvana@mikroskil.ac.id

Abstract

This study aims to determine and analyze the Effect of Net Exports, Exchange Rates, Investment, Household Consumption and External Debt on Indonesia's Economic Growth for the period I quarter 2010 – first quarter 2020. The type of research used in this study is quantitative method. The type of data used in this study is secondary data obtained from the website of the Central Statistics Agency and Bank Indonesia. Based on the results of the classical assumption test on the independent variables of net exports, exchange rates, investment, household consumption and foreign debt, they do not pass the multicollinearity test. Therefore, the method to pass the multicollinearity test is to exclude several independent variables, namely household consumption and debt variables. overseas, so that the independent variables used in this study are net exports, exchange rates, and investment. The results of this research show that simultaneously net exports, exchange rates and investment have a significant effect on economic growth. Partially, the exchange rate has a significant effect on economic growth, while net exports and investment have no effect on economic growth.

Keywords: Economic Growth, Net Exports, Exchange Rate, Investment, Household Consumption, Foreign Debt

1. Introduction

Indonesia's economic growth experienced a decline in the first quarter of 2020 where the decline in growth did not only occur in Indonesia but throughout the country. This is due to the instability of the global economy caused by the Covid-19 pandemic. The Covid-19 pandemic has caused restrictions on the movement of people and the movement of goods, thus hampering the production and distribution of businesses. This caused Indonesia's economic growth to decline by 4.97% in the previous quarter to 2.97% in the first quarter of 2020. This decline also continued in the second quarter of 2020 where it experienced minus 5.32%.

Economic growth is one of the indicators that can be used to assess a country's economy [1]. A country can be said to have a good economic condition through the calculation of a high economic growth rate or simply measured by the increase in the amount of production of goods and services in an economy known as Gross Domestic Product (GDP) [2].

[Graph showing Economic Growth Per Quarter 2010- Quarter I 2020]

Source: Badan Pusat Statistik Q1 2010-Q1 2020
Based on Figure 1, the highest economic growth was in the first quarter of 2011 at 6.5%. Furthermore, in the following year, economic growth decreased to the second lowest recorded in the first quarter of 2010—the first quarter of 2010—the first quarter of 2020, namely in the first quarter of 2015 at 4.71%. However, in the following year GDP grew to increase until the first quarter of 2019 by 5.07%. The decline in economic growth was seen drastically in the first quarter of 2020 where the lowest economic growth during the first quarter of 2010—the first quarter of 2020 was 2.97%.

Economic growth in the first quarter of 2011 was the highest economic growth from the first quarter of 2010–2020 at 6.5%. This growth was supported by an increase in net exports by 3.3%, household consumption grew by 4.5%. The rupiah exchange rate against the dollar strengthened Rp. 8,897,- as well as an increase in investment of Rp. 543 trillion [3] The decline in economic growth in the quarter I 2012 to 2015. The decline in economic growth was caused by the fiscal policy of the United States. As a result, in the first quarter of 2015 there was an increase in foreign debt of US$299,365,- compared to the previous quarter of US$276,897,- to help boost economic growth. [4].

Furthermore, economic growth in the first quarter of 2016 to 2019 increased. However, in 2019 trade issues between the United States and China also affected the economic growth of many countries including Indonesia [3]. The easing of the trade war between the US and China subsided at the end of 2019, uncertainty emerged at the beginning of the first quarter of 2020, namely the impact of the Covid-19 pandemic where Indonesia’s economic growth in the first quarter of 2020 was 2.97%. The decline in Indonesia’s economic growth in the first quarter of 2020 came mainly from the contraction in household consumption from 5.01% to 2.84%. Global financial market conditions that were depressed by the uncertainty of the pandemic caused the Rupiah exchange rate to weaken considerably during February to March to Rp. 16,367,- [3].

In international trade can not be separated from export and import activities. Exports are goods and services produced domestically to be sold abroad, while imports are goods and services produced abroad to be sold domestically. The net exports of each country are the value of that country's exports minus the value of its imports [5].

Based on Figure 2, the net export of goods and services in the first quarter of 2011 was 3.3%, which was the highest net export during the first quarter of 2010—the first quarter of 2020. Furthermore, net exports decreased. In the first quarter of 2013 it was recorded at -0.4% where net exports were the lowest from QI 2010 – Q1 2020. Furthermore, in the next quarter net exports increased every quarter I to quarter I 2017 by 1.8%. However, in the following quarter it decreased until the first quarter of 2019 by -0.1%. In the first quarter of 2020, net exports again increased by 0.9%.

Net export growth in the first quarter of 2011 and 2013 was influenced by the global economy, which was the fiscal policy of the United States (US) and the recession of the European economy [3]. In the first quarter of 2020, in terms of expenditure, only net exports contributed positively to Indonesia’s economic growth of 2.97%[6]. Net exports in the first quarter of 2020 increased by 0.9%. This is because the Covid-19 pandemic has limited the purchase of imports from other countries due to the lockdown from trading partner countries. Meanwhile, exports have increased. This increase in exports was caused by Indonesia taking
advantage of the situation by filling China's export market share which was declining due to Covid-19 [7]. Based on the results of previous studies, net exports have a significant effect on economic growth [8].

According to Bank Indonesia, the exchange rate is the value of a country's currency expressed in the currency of another country. The exchange rate is an important variable in the economy of a country. The rise and fall of the exchange rate is related to foreign trade and the payment of foreign debt.

**Fig 3. Rupiah Exchange Rate Against US Dollar Quarter 1 2010-Quarter I 2020**

Source: Bank Indonesia Q1 2010-Q1 2020

Based on Figure 3, the strongest rupiah exchange rate against the US dollar in the first quarter of 2011 was Rp. 8,897,- from the first quarter of 2010 – the first quarter of 2020. In the next quarter, the rupiah exchange rate weakened against the dollar until the first quarter of 2020 by Rp. 16,370,- . The rupiah exchange rate against the dollar was strongest in the first quarter of 2011 which was Rp. 8,897,-. Which is caused by the Fed (Federal Reserve) implementing a Quantitative Easing policy which causes the US dollar exchange rate to weaken [10]. Furthermore, the exchange rate of the rupiah against the dollar weakens every year. This is due to the strengthening of the US dollar which is supported by the improving US economy and the ECB's Quantitative Easing policy [3]. In the first quarter of 2020, the rupiah exchange rate against the dollar was recorded to weaken to Rp. 16,370,-. Which is caused by the uncertainty of global financial markets after the spread of the Covid-19 pandemic which is increasingly widespread [3]. Based on the results of previous studies, it is stated that the exchange rate has a significant effect on economic growth [1]. However, it is different from other research results which state that the exchange rate has no significant effect on economic growth [11].

Capital formation or capital accumulation and often known as investment is an effort to increase capital within a certain period by means of part of the income being saved and reinvested with the aim of increasing output and income at a later date whose ultimate goal is to increase national economic growth [12].

**Fig 4. Investment Quarter I 2010- Quarter I 2020**

Source: Badan Pusat Statistik Q1 2010-Q1 2020

Based on Figure 4, the highest investment in 2011Q1 was 8.63%. however in the following years the investment decreased until in 2016Q1 the investment rate was 4.6%. In the following years, the investment rate increased to the highest in 2018Q1 of 7.92%. However, these improvements did not last long.

The highest level of investment in 2011Q1 was caused by the shift of investors to invest from developed countries to developing countries. This is due to the Quantitative Easing policy of the Fed. However, in the following years there was a change in policy, namely the Tapering Off policy so that investors returned to invest in developed countries. The decline in 2020 Q1 occurred in construction investment caused by delays in investment projects and non-building investment in line with weak external performance and falling...
domestic demand amid weak manufacturing performance. The decline in investment was due to the declining confidence of business actors in the Covid-19 pandemic [3]. Based on the results of previous studies stated that investment has a significant effect on economic growth [9].

Consumption is one of the determinants of Indonesia's economic growth which is also an indicator of the welfare of the Indonesian population. Because household consumption provides income to national income. Household consumption has an impact in determining fluctuations in economic activity from one time to another [13].

**Fig 5.** Household Consumption Quarter I 2010- Quarter I 2020

Based on Figure 5, the level of household consumption in the first quarter of 2010 to the first quarter of 2014 increases every year. The highest was in the first quarter of 2014 at 5.61%. However, in the following quarters it decreased until in the first quarter of 2018 it increased slightly by 4.95%, followed by the first quarter of 2019 by 5.01%. In the first quarter of 2020, household consumption experienced a drastic decline of 2.84%.

The increase in household consumption in the first quarter of 2014 was due to an increase in income, retail sales, and the impact of the legislative election, although not as strong as previously estimated. After the increase in household consumption in the first quarter of 2014 there was a decline in the following years. This decline was influenced by the decline in the Consumer Confidence Index (IKK) towards an increase in reduced income and tended to restrain consumption and increase savings.

The same thing also happened in the first quarter of 2020, which experienced a drastic decline of up to 2.84% [3]. Based on the results of previous studies stated that household consumption has a significant effect on economic growth [14]. However, it is different from other research results which state that household consumption has no significant effect on economic growth [15].

Indonesia as a developing country needs funding sources in carrying out national development. One of the efforts made by the government is in the export sector, in fact it is not sufficient for development costs so that the government implements an external debt policy [16]. Foreign debt is very appropriate as a source of domestic capital financing to cover the shortage of development funds [17].

**Fig 6.** Foreign Debt Quarter I 2010- Quarter I 2020

Based on Figure 6, Indonesia's foreign debt has increased every year. In 2018Q1, external debt increased by 8.8% due to the government issuing global debt securities and reselling them overseas. Until the
first quarter of 2020 recorded US $ 389,252 million. The impact of the Covid-19 pandemic requires the government to issue a stimulus both in the health and economic sectors which results in the budget deficit having to widen from the initial estimate in the 2020 State Budget. Based on the results of previous research, it is stated that foreign debt has a significant effect on economic growth [18]. However, it is different from other research results which state that foreign debt has no significant effect on economic growth [19].

2. Research methods

This study uses a quantitative approach. Quantitative method can be defined as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative or statistical, with the aim of testing predetermined hypotheses [34].

2.1 Population and Sample

Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then drawn conclusions [35]. The population in this study is the overall data on economic growth, net exports, exchange rates, investment, household consumption and foreign debt on the official website of the Central Statistics Agency and Bank Indonesia.

The sample is part of the number and characteristics possessed by the population [35]. The sample in this study is data on economic growth, net exports, exchange rates, investment, household consumption and foreign debt in the first quarter of 2010 - first quarter of 2020 as many as 41 samples.

2.2 Method of collecting data

Data collection techniques are methods or methods used to collect data. The method refers to a way of collecting data so that it can be shown whether its use is through questionnaires, interviews, observations, tests, documentation and so on [35].

In this study, the data collection methods used are:

a. Documentation

Documentation method is a way to find data or information from documents that record events that have passed, it can be in the form of writing, pictures, or monumental works of someone [35]. This method is carried out by taking documentation or data that supports research, such as economic growth, net exports, exchange rates, investment, household consumption and foreign debt in the first quarter of 2010 – the first quarter of 2020 obtained from the official website of the Indonesian Central Statistics Agency and official websites. Bank Indonesia.

b. Literature review

Literature studies are carried out by studying and taking data from related literature and other sources such as books, notes, journals and reports of previous research results which are considered to be able to provide information about this research [36].

3. Research Results and Discussion

Economic growth is an indicator used to measure the economic development of a country in a given year compared to the previous year by assessing the country experiencing growth or slowing down the country's economy as measured by the level of economic growth. To be able to calculate the increase from year to year, goods and services that can be calculated based on fixed / constant prices are prices that apply in a certain year which are then used to assess goods and services produced in the following years.

Indonesia's economic growth in the period 2010Q1 – 2020Q1 has increased and decreased in which there are 4 phases. The first phase, Indonesia's economic growth has successfully increased from the 2008-2009 economic crisis where Indonesia's economic growth in 2010-2011 increased. This increase was supported by household consumption, net exports and investment. The second phase, the declining economic growth in 2012-2015, this was due to the uncertainty of the global economy which caused net exports, exchange rates, investment to weaken, resulting in a slowdown in Indonesia's economic growth. The third phase, which occurred in 2016-2018, in which Indonesia's economic growth continued to increase, supported by macroeconomic policies. The increase came from household consumption, investment and net exports. phase four, economic growth declined again in 2019 until quarter 1 2020. Economic growth declined in 2019 due to the trade war between the United States and China which resulted in a weakening exchange rate,
investment and net exports declined. While the 2020 Q1 economic growth declined due to the Covid-19 pandemic which caused household consumption and investment to decline and the exchange rate to weaken.

3.1 Descriptive statistics

Descriptive statistics are used to analyze data by describing or describing the data that has been collected. Based on data obtained from the official websites of BPS and Bank Indonesia which were sampled in the study from quarter 1 of 2010 to quarter 1 of 2020. Table 1 below shows descriptive statistics on the variables in this study.

Table 1
Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Jarque-Bera</th>
<th>Probability</th>
<th>Sum</th>
<th>Sum Sq. Dev.</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>5,342,683</td>
<td>5,170,000</td>
<td>6,810,000</td>
<td>2,970,000</td>
<td>643,409</td>
<td>-0.611320</td>
<td>6,152,846</td>
<td>1,953,528</td>
<td>0.0000057</td>
<td>2,190,500</td>
<td>1,655,900</td>
<td>41</td>
</tr>
<tr>
<td>NET EXPORTS</td>
<td>32382.09</td>
<td>31696.68</td>
<td>79638.29</td>
<td>-12826.84</td>
<td>21049.6</td>
<td>-0.077876</td>
<td>2,736,059</td>
<td>0.160452</td>
<td>0.929208</td>
<td>41</td>
<td>1327666.</td>
<td>41</td>
</tr>
<tr>
<td>EXCHANGE RATE</td>
<td>11976.20</td>
<td>12998.00</td>
<td>16367.00</td>
<td>8,589.000</td>
<td>2259.063</td>
<td>-0.200474</td>
<td>1,648,867</td>
<td>3,393,296</td>
<td>0.0922908</td>
<td>41</td>
<td>491024.0</td>
<td>41</td>
</tr>
<tr>
<td>INVESTMENT RT</td>
<td>719424.4</td>
<td>713107.1</td>
<td>951395.1</td>
<td>502873.6</td>
<td>926097.5</td>
<td>0.066128</td>
<td>2,068,204</td>
<td>1,513,131</td>
<td>0.183297</td>
<td>41</td>
<td>29496400</td>
<td>41</td>
</tr>
<tr>
<td>RT CONSUMPTION</td>
<td>1207130.</td>
<td>1188362.</td>
<td>1513446.</td>
<td>926097.5</td>
<td>180834.0</td>
<td>0.116404</td>
<td>1,809,544</td>
<td>2,513,617</td>
<td>0.284561</td>
<td>41</td>
<td>49492310</td>
<td>41</td>
</tr>
<tr>
<td>ULN</td>
<td>294505.8</td>
<td>299565.0</td>
<td>404565.0</td>
<td>180834.0</td>
<td>63973.51</td>
<td>-0.047158</td>
<td>1,948,500</td>
<td>1,904,020</td>
<td>0.385964</td>
<td>41</td>
<td>12074737</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Eviews 11

Based on table 1, it is known that there are 41 samples of data during the study period. The results of the Eviews output display give the value of skewness and kurtosis of economic growth -0.611320 and 6.152846, respectively, so it can be concluded that the economic growth rate data is not normally distributed[39].

Table 1 shows the value of skewness and net export kurtosis respectively -0.077876 and 2.736059 so it can be concluded that the net export data is not normally distributed [39].

Table 1 shows the skewness and kurtosis of the exchange rate, respectively -0.200474 and 1.648867, so it can be concluded that the exchange rate data is not normally distributed [39].

Table 1 shows the value of skewness and investment kurtosis respectively 0.066128 and 2.068204 so it can be concluded that the investment data is not normally distributed [39].

Table 1 shows the value of skewness and household consumption kurtosis respectively 0.116404 and 1.809544 so it can be concluded that household consumption data is not normally distributed [39].

Table 1 shows the value of skewness and foreign debt kurtosis respectively -0.047158 and 1.948500 so it can be concluded that household consumption data is not normally distributed [39].

3.2 Discussion

This study aims to analyze the effect of Net Exports, Exchange Rates, and Investments on Economic Growth in the first quarter of 2010 to the first quarter of 2020. Based on the results of research that has been carried out, the following results are obtained:

a. Effect of Net Exports on Economic Growth

The results of hypothesis testing show that the regression coefficient value is 7.09E-07 with a probability value of 0.8048 which is greater than an alpha value of 0.05, which means that net exports have no effect on Economic Growth in the 2010 Q1 – 2020Q1 period.

The results of this study are in line with previous studies which stated that net exports had no effect on Economic Growth [9], but were not in line with other studies which stated that net exports had no effect on Economic Growth [8].

International trade in the development of a country is considered an engine of growth. The net export of each country is the value of that country's exports minus the value of its imports [5]. If net exports are positive, exports are greater than imports. If net exports are negative, exports are smaller than imports.
In other words, if net exports are positive, the country's economic growth will grow. If net exports are negative, the country's economic growth will slow down. Positive or negative net exports cannot be used as a benchmark in assessing economic growth because when there is an increase or decrease in net exports, it does not affect economic growth. This can be proven based on the highest recorded net exports where in 2019Q3 which was the best net export performance during 2010 Q1 - 2020 Q2, which was Rp. 79,638.29 billion, an increase of 148.41% compared to 2018Q3 of 114.67%. However, Economic growth was not recorded to increase in 2019Q3 which was 5.02% compared to 2018 Q3 which was 5.17%. Furthermore, net exports in 2016Q1 amounted to Rp. 39,528.52 billion, a decrease of 25.05% compared to 2015Q1 of 41.26%. However, economic growth in 2016Q1 increased by 4.94% compared to 2015Q1 of 4.83%

Net exports have no effect on Indonesia's economic growth due to the slower performance of net exports compared to other economic aspects where the net export variable has the least effect on the rate of economic growth. This indicates that international trade that occurs between Indonesia and its trading partners has not been able to contribute to increasing economic growth. This is because there is still dependence on imports of raw materials in producing where there are still many export raw materials that come from imported raw materials. For example, export of motor vehicles with spare parts from imported products. In addition, existing export commodities still rely on primary commodities such as mineral fuel, animal oil, rubber, copper, etc. The prices of these primary commodities are strongly influenced by the state of the global economy. If the global economy is slowing down, the prices of primary commodities will decrease, the value of exports will also decrease, and vice versa. If the global economy is improving, the prices of primary commodities will improve, the value of exports will also increase.

b. The Effect of Exchange Rates on Economic Growth

The results of hypothesis testing show that the regression coefficient value -0.000327 with a probability value of 0.0000 is smaller than the alpha value of 0.05 which means that the exchange rate affects economic growth in the 2010 Q1 - 2020Q1 period.

The results of this study are in line with previous research which states that the exchange rate has an effect on Economic Growth [1], but is not in line with other studies which state that the exchange rate has no effect on Economic Growth [11].

Currency exchange rate or what is often referred to as the exchange rate is the price of one unit of foreign currency in the domestic currency, or it can also be said that the price of the domestic currency against foreign currencies. If the exchange rate increases it means that the Rupiah is depreciating [26]. In this case, if the exchange rate decreases, the Rupiah will appreciate.

The stability of the value of the domestic currency can be used as a tool for observing the achievement of economic activity [13]. The depreciation of the exchange rate indicates that economic growth has declined compared to the previous year. The exchange rate depreciated in the 2010 Q1 - 2020 Q1 period, namely in the 2020 Q1 period with the exchange rate weakening to Rp. 16,367 against the dollar compared to 2019 Q1 which was Rp. 14,244,- against the dollar with an increase of 14.9% compared to 2019Q1 of 3.54%. So the economic growth rate in 2020 Q1 also decreased drastically to 2.97% from 5.07% in 2019 Q1.

The exchange rate has a negative effect on Indonesia's economic growth because the exchange rate also affects international trade, investor confidence in investing and in paying off foreign debt, which is one of the factors of economic growth. Many companies in Indonesia are oriented towards imported raw materials, so that if the exchange rate depreciates, there will be problems with exports and imports where the attractiveness of exports increases due to the weakening exchange rate so that products are cheaper. However, many of the raw materials used by the company are imported raw materials where the price increases. In addition to international trade, import-based businesses with an orientation to the domestic market will also be affected by the depreciation of the rupiah exchange rate because it will increase production costs. If this condition occurs in a long period of time, it will have a direct impact on the decline in the value of the company. In addition, the exchange rate affects investor confidence in investing because if the exchange rate appreciates then the country's economic growth is considered good so that the expected level of profit can be obtained. The appreciation or depreciation of the exchange rate can affect the payment of foreign debt which usually uses the dollar exchange rate. If the
exchange rate depreciates, the amount of foreign debt that must be paid will increase and if the exchange rate appreciates, the amount of foreign debt that must be paid will be less. The exchange rate affects investor confidence in investing because if the exchange rate appreciates then the country’s economic growth is considered good so that the expected level of profit can be obtained. The appreciation or depreciation of the exchange rate can affect the payment of foreign debt which usually uses the dollar exchange rate. If the exchange rate depreciates, the amount of foreign debt that must be paid will increase and if the exchange rate appreciates, the amount of foreign debt that must be paid will be less. The exchange rate affects investor confidence in investing because if the exchange rate appreciates then the country’s economic growth is considered good so that the expected level of profit can be obtained. The appreciation or depreciation of the exchange rate can affect the payment of foreign debt which usually uses the dollar exchange rate. If the exchange rate depreciates, the amount of foreign debt that must be paid will increase and if the exchange rate appreciates, the amount of foreign debt that must be paid will be less. The appreciation or depreciation of the exchange rate can affect the payment of foreign debt which usually uses the dollar exchange rate. If the exchange rate depreciates, the amount of foreign debt that must be paid will increase and if the exchange rate appreciates, the amount of foreign debt that must be paid will be less. The appreciation or depreciation of the exchange rate can affect the payment of foreign debt which usually uses the dollar exchange rate. If the exchange rate depreciates, the amount of foreign debt that must be paid will increase and if the exchange rate appreciates, the amount of foreign debt that must be paid will be less.

c. The Effect of Investment on Economic Growth

The results of hypothesis testing show that the regression coefficient value is $1.75 \times 10^{-06}$ with a probability value of 0.1118 which is greater than an alpha value of 0.05 which means that investment has no significant effect on Economic Growth in the 2010 Q1 - 2020Q1 period. The results of this study are in line with previous research which states that investment has no effect on Economic Growth [9], but is not in line with other studies which state that investment has an effect on Economic Growth [1].

In macroeconomic theory discussed is physical investment, this investment is often referred to as investment in the form of fixed assets (fixed investment). In Indonesia, the equivalent term for fixed investment is Gross Domestic Fixed Capital Formation (PMTDB). PMTDB is expenditure to buy capital goods that can increase the production of goods and services in the future. Expenditures for this investment are made not for consumption but are used in producing activities in the future citations [13]. To be able to carry out economic activities that can increase economic growth, such as infrastructure, investment capital is needed. So that the increase in investment, the economic growth of the country also increases. However, this increase cannot be used as a benchmark for the rate of economic growth to also increase. This can be proven based on the investment in 2013 Q1 of Rp.628,573.64 Billion with an increase in investment of 7.54% compared to 2012Q1 of 6.99%. However, economic growth in 2013Q1 decreased by 5.54% compared to 2012Q1 of 6.11%. Furthermore, investment in 2016Q3 was Rp.769,037.14 billion which decreased by 4.24% compared to 2015Q3 with 4.93%. Although, Investment has no effect on Indonesia’s economic growth because the contribution of investment spending (Gross Fixed Capital Formation) has not been able to contribute much to economic growth. This is because the investment capital issued to support economic activities that can increase economic growth is less. Investment in Gross Fixed Capital Formation is considered to be of poor quality. This is because investment in Indonesia is predominantly in the form of buildings, while in the form of machinery and equipment around 10% which is very little compared to in the form of buildings.

To increase economic growth, it is necessary to increase investment in the form of machinery and equipment because machinery and equipment can produce various goods that can be exported. In addition to these investments to increase the number of goods that can be exported, investments in machinery and equipment can also increase the value of goods to be sold which have new added value in goods that can increase the value of these goods.
4. Conclusion

From the results of research and hypothesis testing that have been carried out, several conclusions can be drawn:

a. The classical assumption test on the variables of net exports, exchange rates, investment, household consumption and foreign debt shows symptoms of multicollinearity. Therefore, two independent variables were excluded so that the independent variables used in this study were net exports, exchange rates and investment variables.

b. Simultaneously, the variables of net exports, exchange rates and investment have a significant effect on Indonesia's economic growth in the first quarter of 2010 – the first quarter of 2020.

c. Partially, the exchange rate variable has a significant negative effect on Indonesia's economic growth in the first quarter of 2010 – the first quarter of 2020. This is because the exchange rate affects net exports, investor confidence in investing and foreign debt. Meanwhile, the variables of net exports and investment had no significant effect on Indonesia's economic growth in the first quarter of 2010 – the first quarter of 2020. This was because net export performance was still slow compared to other economic aspects and construction investment dominated investment in Indonesia.

d. The Adjusted R Square value is 0.712019 or 71.2019%, which means that the variables of net exports, exchange rates and investment are able to explain economic growth of 71.2019%.

5. Reference


