

## THE EFFECT OF FOREIGN DEBT, EXPORTS AND LABOR ON GROSS DOMESTIC PRODUCTS IN INDONESIA 1991-2020

Oleh :

**Fatma Husin**

Department of Economics, Faculty of Economics, Universitas Negeri Gorontalo

E-mail: [husinfatma96@gmail.com](mailto:husinfatma96@gmail.com)

**Fahrudin Zain Olilingo**

Department of Economics, Faculty of Economics, Universitas Negeri Gorontalo

E-mail: [fzo@ung.ac.id](mailto:fzo@ung.ac.id)

**Ivan Rahmat Santoso**

Department of Economics, Faculty of Economics, Universitas Negeri Gorontalo

\*Corresponding Author Email: [ivan\\_santoso@ung.ac.id](mailto:ivan_santoso@ung.ac.id)

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### Abstract

*This study aims to determine the effect of foreign debt, exports, and labor on Gross Domestic Product. This research is a quantitative study using Indonesian secondary data from 1991 to 2020. The data analysis technique uses time series data analysis with ECM (Error Correction Model). The results showed that: (1) External debt variable had a negative effect (0.050382) and was not significant (0.5611) in the long term and consistently had a negative effect (-0.258494) and not significant (0.11161) in the short term. This shows that any increase in the external debt variable will reduce the value of Indonesia's Gross Domestic Product in the long and short term. (2) The labor variable has a negative effect (-0.006608) and is not significant (0.9800) in the long term and consistently has a negative effect (-0.017525) and not significant (0.9177) in the short term. This shows that every increase in the percentage of the labor variable will reduce the value of Indonesia's Gross Domestic Product in the long and short term. (3) The export variable has a positive effect (1.168843) and is significant (0.0002) in the long term and consistently has a positive effect (0.347710) but not significant (0.2762) in the short term. This shows that every increase in the percentage of the export variable will reduce the value of Indonesia's Gross Domestic Product significantly in the long term but not significantly in the short term.*

### Keyword :

*External Debt, Exports, Labor*

## 1. INTRODUCTION

Economic growth is a measure of how a country's economic activities generate additional income for the community over a period of time. This basically happens because economic activity is the process of using factors of production to produce production. This is measured by economic growth and shows the economic growth in the production of goods and services in an economic region in a given time interval. Production is measured by the concept of value added created by the economic sectors of the region in question. This is known as the overall Gross Domestic Product (Gusta et al., 2020).

The economic development of a country as measured by economic growth shows the growth of production of goods and services in an economic region in a certain time interval. This production is measured in terms of the added value created by the economic sectors of the region concerned, which in total is known as the gross domestic product (GDP). For developing countries, economic growth is one of the goals that must be achieved in the implementation of development. High economic growth is an indicator of the success of economic development. With high economic growth, it is expected to improve people's welfare (Gusta et al., 2020).

An economy is considered to be growing if all real services to the use of factors of production in a particular year are greater than in the previous year. The indicator used to measure economic growth is the growth rate of gross domestic product (GDP). Nominal gross domestic product refers to the sum of the monetary values spent on gross domestic product and raw GDP refers to this figure corrected by taking into account the effects of inflation to estimate the real amount of goods and services as the calculation of gross output Basic domestic product. To describe changes in the economy, we need to create a figure for GDP itself, which is usually divided into two categories, GDP at current prices and GDP at constant prices. GDP at current prices refers to the value added of goods and services using current prices for the current year each year, while GDP at constant prices refers to goods calculated using current prices at a point in the year and time value added for services, with a specific year as the base year.

Unemployment in Gorontalo Province is still a serious problem to be considered by the government. The problem of unemployment is indeed very complex to discuss, because it can be linked to socio-economic indicators that will affect unemployment, namely population growth, economic growth, inflation and the human development index. Based on data from the Central Bureau of Statistics, the unemployment rate in Gorontalo Province has fluctuated. The development of the unemployment rate in Gorontalo Province for the last five years can be seen in Figure 1.1 as follows:

**Table 1. Indonesia's Gross Domestic Product 1991-2020**

TAHUN	PDB	TAHUN	PDB	TAHUN	PDB
1991	227.163	2001	1.467.655	2011	7.419.187
1992	260.789	2002	1.610.565	2012	8.230.926
1993	382.220	2003	1.786.691	2013	9.087.277
1994	379.309	2004	2.273.142	2014	10.565.817
1995	454.514	2005	2.774.281	2015	11.540.790
1996	532.631	2006	3.339.480	2016	12.401.729
1997	672.696	2007	3.957.404	2017	13.589.826
1998	955.754	2008	4.954.000	2018	14.838.756
1999	1.109.980	2009	5.609.203	2019	15.832.657
2000	1.264.919	2010	6.446.852	2020	15.438.018

Source: (Central Bureau of Statistics, 1991-2020)

High and sustainable economic growth is a prerequisite for economic development. For example, the ongoing poverty in many countries is one of the consequences of the absence of economic growth in these countries. Therefore,

the problem of growth has received a lot of attention from economists, both in developing countries such as Indonesia and industrially developed countries.

Indicators of economic growth are said to be good is to be seen from the value of gross domestic product (GDP) from year to year but if we look at the table above Indonesia's economic growth rate in the last ten years fluctuates where in 2011 the growth of Indonesia's gross domestic product reached Rp 7,419,187, in 2012 it reached Rp 8,230. 936, then the GDP in 2013 reached Rp 9,087,277, in 2014 it reached a figure worth Rp 10,565,817, then in 2015 it became Rp 11,540,790, in 2016 it became Rp 12,401,729, 2017 rose to Rp 13,589,826, 2018 gross domestic product also recorded Rp 14,838,756, in 2019 it became Rp 18,832,657 and in 2020 recorded Rp 15,438,018.

From a theoretical point of view, the ups and downs of Indonesia's Gross Domestic Product are basically influenced by foreign debt (ULN). One of the benefits of foreign debt is as a source of financing development or economic growth. Foreign debt is one of the indicators that cannot be separated (Tambunan, 2008). According to (Yustika, 2009), the utilization of foreign debt is intended as an effort to overcome savings or investment gaps and balance of payments imbalances in assisting developing countries in carrying out independent economic development. The following foreign debt is presented in tabular form.

**Table 2. Foreign Debt in Indonesia 1991-**

TAHUN	ULN	TAHUN	ULN	TAHUN	ULN
1991	89.640.000	2001	742.320.800	2011	1.075.845.656
1992	109.871.608	2002	700.967.520	2012	1.219.570.730
1993	121.371.420	2003	733.551.505	2013	1.505.926.572
1994	140.113.600	2004	812.800.680	2014	1.613.915.840
1995	148.660.588	2005	1.322.174.320	2015	1.972.809.155
1996	140.660.588	2006	1.196.349.660	2016	277.618.656.123
1997	269.049.000	2007	1.329.744.420	2017	302.543.033.814
1998	573.538.725	2008	1.698.126.000	2018	375.430.000.000
1999	573.140.400	2009	1.624.987.400	2019	403.446.000.000
2000	782.462.655	2010	1.066.548.384	2020	597.352.000.000

**2020**

Source: (Central Bureau of Statistics, 1991-2020)

Since the economic crisis, Indonesia has been plagued by foreign debt. The government's foreign debt takes up the largest portion of the state budget (APBN). From the table above we can see that from year to year, instead of the value

of foreign debt decreasing, on the contrary, every

TAHUN	EKSPOR	TAHUN	EKSPOR	TAHUN	EKSPOR
1991	437.105.23	2001	844.767.13	2011	3.052.282.03
1992	509.476.13	2002	857.336.41	2012	2.850.138.48
1993	552.313.70	2003	915.818.10	2013	2.738.124.83
1994	600.760.95	2004	1.073.714.15	2014	2.639.550.42
1995	681.231.39	2005	1.284.827.19	2015	2.254.102.26
1996	747.182.66	2006	1.511.899.32	2016	2.166.327.23
1997	801.614.57	2007	1.711.418.01	2017	2.049.633.85
1998	732.678.48	2008	2.055.183.53	2018	2.700.026.99
1999	729.933.63	2009	1.747.550.97	2019	2.515.102.47
2000	931.807.19	2010	2.366.550.89	2020	2.447.726.29

year the position of foreign debt always increases and continues to decline. The amount of principal and interest debt payments is almost double the development budget, and takes up more than half of tax revenues. If you look at the table above, Indonesia's foreign debt position always increases every year, proving that Indonesia needs more funding to support economic growth. Limited domestic sources of funds make the government impose a foreign debt policy (ULN). As a cover for a country's deficit.

Indonesia's foreign debt and GDP have been used as sources in previous writings by many people, including economists, observers, and especially scientists, but with the rapid development of the economy, both in worse conditions and increased economic growth, this article is no longer relevant. External debt is one option that can be implemented for a variety of reasonable reasons. Not only can it help in terms of trade, it can also increase cooperation with other countries, trade can also increase cooperation with other countries in various fields. By using foreign debt for development, it is possible to revitalize the domestic economy, implement labor-intensive projects, and improve the infrastructure of public facilities such as roads, schools, buildings, and government. Komunitas / community. There are also programs financed to improve the quality and quantity of domestic products, such as establishing KUDs throughout Indonesia to indirectly improve the welfare of the community and promote economic growth.

Apart from foreign debt, there is another variable that determines GDP growth: exports. Exports are purchases of goods by domestic companies in other countries. The most important factor determining exports is the ability of the country to produce goods that can compete in foreign markets (Sukirno, 2008). As can be seen in the export data presented in tabular form below.

**Table 3. Export in Indonesia in 1991-2020**

Source: (Central Bureau of Statistics, 1991-2020)

The table above shows that Indonesia's exports have always increased even though only slightly. The increase is considered capable of supporting Indonesia's economic growth. According to the Ministry of Trade of the Republic of Indonesia, in research conducted by Bonokeling (Eka Bonokeling, 2016) states that the main thing that becomes an obstacle to exports is physical barriers at customs. This obstacle occurs in the inspection of goods that must be in accordance with the documents. The research also explains that other barriers are in the form of import duties that have been applied by the destination country.

Exports have a significant effect on economic growth, because exports are one of the factors that have a positive effect on the calculation of GDP. The more exports compared to imports, the higher the gross domestic product. GDP is the best measure to determine the economic growth of a country. Each country has strict requirements to control goods entering the country. Improving the quality and quantity of products produced by Indonesia will help increase the volume of exports of goods to that country. This is so that Indonesian products can meet the standards set by the country and allow Indonesia to sell products to the country, and as the number of exports increases towards, the total value of production increases, which will affect the increase in gross domestic product.

In addition to foreign debt factors, exports in Indonesia are also influenced by labor factors. Indonesia is one of the countries that has the largest population in the world so that it is able to produce a lot of labor per year. According to (Todaro, 2002) population growth and labor force growth are traditionally considered as one of the positive factors that spur economic growth. A larger labor force means a larger domestic market size. However, this still leaves the question of whether the rapid population growth rate will actually have a positive or negative impact on economic development. To answer this concern. It is worth paying attention to the data table of Indonesia's labor force in 1991-2020

**Table 4. Number of Workers in Indonesia 1991-2020**

TAHUN	TENAGA KERJA	TAHUN	TENAGA KERJA	TAHUN	TENAGA KERJA
1991	73.911.624	2001	90.807.417	2011	107.416.309
1992	75.991.561	2002	91.647.166	2012	112.504.868
1993	76.718.265	2003	92.810.791	2013	112.761.072
1994	79.678.230	2004	96.950.954	2014	114.628.026
1995	80.110.060	2005	95.356.277	2015	114.819.199
1996	83.110.060	2006	98.018.791	2016	118.411.973
1997	85.047.007	2007	101.853.665	2017	121.022.186
1998	87.292.541	2008	104.642.625	2018	126.282.186
1999	88.816.859	2009	107.416.309	2019	128.755.271
2000	89.837.730	2010	109.589.715	2020	128.454.184

Source; (Central Bureau of Statistics, 1991-2020)

The rapid influx of migrants creates many new jobs so that the number of workers increases. The table above notes that the development of labor from year to year is always increasing. Certainly, this is a major concern for the government, especially regarding the increase in the number of workers, whether it affects economic growth or vice versa.

From a positive point of view, labor is one of the most important resources in driving the economic growth and progress of a country (Ahmad Soleh, 2017). However, if seen from another point of view, often the increase in the number of workers becomes an economic problem that is difficult for the government to solve. This is due to the lack of provision of employment by the government as a result of the increase in the existing population. As a result, the absorption of labor is uneven and consequently creates unemployment. The main factors that become obstacles to employment in Indonesia are the lack of educated labor, poor infrastructure, and convoluted frameworks.

According to (Kawet, Masinambow, & Kawung, 2019) population growth and labor force (LF) growth are traditionally considered as one of the positive factors that drive economic growth. More workers mean higher production levels, and greater population growth means a larger domestic market. However, it remains a question whether rapid population growth will actually have a positive or negative impact on development. Labor is an important factor in the production process compared to other production facilities such as raw materials, land, water, and others. Since it is people who mobilize all these resources to produce goods and services, and according to Lewis, an oversupply of labor does not pose a problem for economic development. It is better that surplus labor is actually income-

generating capital, assuming that the movement of workers from the subsistence sector to the modern capacity sector is smooth and the movement will not become too much. The quantity and quality of labor itself and can drive an increase in GDP.

The results of the researcher's analysis of the background description above in this study can be raised various problems such as, Indonesia's foreign debt initially greatly encouraged GDP growth, but at a certain point it caused an economic crisis due to the emergence of a surplus with an increase in foreign exchange reserves, too many private companies have foreign debt but do not mitigate risks, so that aggressive private foreign debt if not managed can cause an economic crisis. In addition, Indonesian exports are still hampered by the destination country, Indonesian products enter the destination country and protect the domestic products of the destination country from the invasion of foreign products, so that the export value of Indonesian products has not been maximized because the tariffs imposed reduce the competitiveness of products in the destination country, in terms of labor, it can be seen that there is still a lack of qualified human resources to process goods, so that the quality of the products produced is not optimal, and this has an impact on the cheap selling value of the product and the lack of information dissemination of vacancies that are not evenly distributed throughout the country makes it difficult for people to find vacancies that match their abilities. As a result, it is difficult for people/job seekers, especially job seekers in remote areas, who are less accessible to informal media such as print, electronic and online media, some of these problems can be considered to have an effect on Indonesia's own GDP.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **Gross Domestic Product**

Gross Domestic Product or (GDP) is the most important economic statistic as it is considered the best measure of people's well-being. This is because GDP simultaneously measures two things: the total income of everyone in the economy, and total government spending on goods and services produced by the economy. The reason GDP can measure total income and expenditure is because for the economy as a whole, income must equal expenditure (Rahardja, 2018). GDP is basically the value added generated by all business units in a particular country, or is the total value of final goods and services

produced by all economic units. GDP at current prices depicts the value added of goods and services calculated. Gross domestic product is basically the value added generated by all business units in a particular country, or the total value of final goods and services produced by all economic units. Gross domestic product at current prices describes the value added of goods and services calculated using prices prevailing in each year, while GDP at constant prices shows the value added of these goods and services calculated using prices prevailing in a particular year as a basis. Gross domestic product at current prices can be used to determine the transformation and structure of the economy, while constant prices are used to determine economic growth (BPS) from year to year. Other definitions of GDP are GDP at constant prices and GDP at current prices.

- a. A. Gross domestic product at current prices is the total value of production, income or expenditure valued at prices prevailing in the year in question.
- b. GDP at constant prices is the sum of income or expenditure generated in a given year at constant prices.
- c. GDP per capita is GDP divided by the mid-year population.

From some of these experts' understandings, I can conclude that GDP refers to the total value of goods and services produced by a country in a year from the factors of production (including those owned by nationals) present in the country.

### **External Debt**

#### **Definition of Foreign Debt**

Foreign debt is foreign aid (loans) provided by the government of a developed country or an international organization, which is formed specifically to oblige the loan to repay and pay interest on the loan (Djamin, 1996). According to (Akbar, 2018), In essence, foreign loans can be studied from various points of view. From the perspective of the lender or creditor, research focuses on various factors that allow the loan to be repaid in time for certain gains. On the other hand, lenders and borrowers emphasize various factors that allow them to maximize added value, repayment capacity, and the ability to promote economic growth. Foreign loans or external debt are one of the alternative loans that need to be made in development and can be used to increase investment to support economic growth (Basri, 2002). Foreign debt or debt is a loan from a person or other state agency.

External borrowing is usually voluntary, involving a transfer of wealth (money) from the lending country (creditor) to the borrowing country (debtor) at the time of the loan (Suparmoko, 2000). According to (Sukirno, 1985), capital flows from abroad are called foreign debt if they have the characteristics of capital flows, are not profit-seeking, and provide conditions that are lower than those prevailing in the international market. Komponen Utang Luar Negeri

### **Components of External Debt**

The foreign loan component consists of the issuance of foreign currency SBN, both traditional and sharia-based securities, and the withdrawal of foreign loans. Foreign debt includes program loans, which are foreign loans in foreign currency that can be converted into rupiah to finance general activities or government expenditures, and project loans, which are state ministries. Foreign loans or debts are loans from people or other national institutions, usually voluntary, and include transfers of wealth (funds) from the lending country (creditor) to the borrowing country (debtor) at the time the borrowing increases (Suparmoko, 2000).

According to (Sukirno, 1985), the flow of funds from abroad is called foreign debt if it has the characteristics of capital flows provided on lighter terms than the international market, not for the purpose of pursuing profits. Traditional and sharia securities, and the withdrawal of foreign debt. External debt includes program loans, which are foreign loans in foreign currencies that can be converted into rupiah to finance general activities or government expenditures, and project loans, which are state ministries. Project loans are used to fund specific activities in state ministries, as well as to transfer loans to state-owned enterprises or local governments. Each group takes into account the principal amount to be paid either as installment payments of external debt or repayment of SBN in the domestic market.

#### **Sources of External Debt**

The sources of foreign loans received by the Indonesian government in each fiscal year in the form of loans come from:

##### **1. Multilateral Loans**

Most multilateral loans are offered in pre-determined loan packages, meaning that foreign agreements are issued between the government and multilateral financial institutions to promote some development projects. These multilateral

loans mainly come from the World Bank, the Asian Development Bank (ADB) and the Islamic Development Bank (IDB), and some regional and international financial institutions.

## 2. Bilateral Loans

Bilateral loans are loans from the government of a country that is a member of the Indonesian Advisory Group (CGI) as a substitute for IGGI status. Indonesian government bilateral loans sourced from:

1. Soft Loan, which is a loan provided based on the results of the CGI session.
2. Loans in the form of export credits, which are loans provided by exporting countries to increase exports, and the governments of these countries provide certain guarantees. Loans in the form of commercial credits, which are loans provided by foreign banks with terms in accordance with international market trends. For example, LIBOR (London Interbank Transaction Rate) and SIBOR (Singapore Interbank Transaction Rate) for each type of currency.
3. Installment sales financing loans, which are loans provided by certain countries' leasing companies to finance contracts between the government and foreign suppliers, as these development contracts cannot be financed with export credits.

### ***Impact of Foreign Debt***

The burden of paying installments and interest on government debt resulted in a heavier burden on the government budget and gradually declining capital outflows, which were offset by an increase in the value of exports. In addition, government investment (development spending) is increasingly under pressure from the provision of funds to pay debt installments and interest. The increasing burden of government debt installments and interest shifts the allocation of funds to other expenses. Municipalities are indirectly affected by a lower proportion of spending on public welfare institutions (Basri, 2002).

### ***Linkage of Foreign Debt to GDP***

Indonesia has external debt due to the inability of domestic sources of development financing, namely domestic savings, to fully finance development. Domestic savings are needed to raise investment funds, and investment implementation activities do not go according to plan because savings are smaller than planned

investment activities (saving investment gaps). The gap between savings and investment can be closed by investing foreign funds. One alternative to this financing is through foreign debt.

Foreign debt also plays a role in bridging the export-import gap. This happens because foreign debt provides additional foreign exchange needed by the country due to insufficient export proceeds and to increase capital for national development. With the existence of external debt as an alternative financing for the country's development, it is expected to increase the level of domestic savings and stimulate investment which in turn can encourage economic growth. Debt and economic growth are generally negatively correlated, although there are several studies that suggest rejecting this, but because external debt is still part of investment, it also has a positive effect on economic growth, depending on how external debt is used, whether it is used for productive purposes or for consumption purposes.

Based on the exposure to the literature review above, a hypothesis is formulated which:

*H1: External Debt (X1) has a positive effect on Indonesia's GDP*

### ***Export***

According to Law Number 2 Year 2009, export is the activity of removing goods from within the customs area of Indonesia and/or the activity of removing services from within the territory of the Unitary State of the Republic of Indonesia. Exporters are legal entities incorporated, including individuals who carry out export activities, whether incorporated or not.

Export activity is a trade system that moves goods from one country to another by fulfilling the applicable regulations. Exports are the total amount of goods and services sold by a country to another country in a given year, including goods, insurance, and services (Utomo, 2000; Haryati & Hidayat, 2014). Exports are goods and services produced domestically and widely sold abroad.

The philosophy of export or collection of import duties is to protect the domestic industry from the overflow of foreign products, which are imported, in the language of trade it is often called a barrier tariff, which is the amount in percent determined by the State to be collected by the (Director General of Customs and Excise) on each product or goods. Import (Yahya, Olilingo, & Santoso, 2022). In general, for exports, the government does not collect duties to support the domestic industry and specifically for exports, the

government will provide incentives in the form of returning tax refunds on exported goods.

Based on the exposure to the literature review above, the second hypothesis is formulated

*H2: Exports (X2) have a positive effect on Indonesia's GDP*

#### **Labor**

According to Law Number 13 Year 2003 Chapter 1, Article 1 Paragraph 2, a worker is any person who is capable of doing work to produce goods and/or services for their own needs or those of the community in private. According to (Sumarsono, 2003), in relation to the labor market, population behavior is divided into 2 groups, namely economically active groups and economically inactive groups. The labor force is an economically active group. This group includes residents who offer their energy and accept it (working), and residents who offer their energy in the labor market, but do not accept it (unemployed).

Based on the literature review above, the third hypothesis is formulated:

*H3: Labor (X3) has a positive effect on Indonesia's GDP*

### **3. RESEARCH METHODS**

#### **Location/Subject of Research**

This research is quantitative descriptive research with the target research field from 1991 to 2020, namely Indonesia. This research examines the impact of foreign debt, exports, and labor on Indonesia's gross domestic product (GDP) from 1991 to 2020.

#### **Data Type and Source**

The type of approach used. This research includes quantitative research which refers to the calculation of research data analysis in the form of numerical or qualitative data to be assessed. According to (Sugiyono, 2013), quantitative research methods are numerical research methods, and statistics are used for analysis. Based on the data source, the data used in this research is secondary data. Secondary data sources are data sources that do not provide data directly to data collectors. Judging from the level of explanation, this research includes association research with a causal relationship. The causal relationship is a causal relationship, so that in this study there are independent variables, namely X, and the dependent variable, namely Y.

#### **Research Variables and Operational Definitions**

The dependent variable in this study is gross domestic product (GDP), and the independent variable (independent) is a variable

that affects or causes the appearance of the dependent variable, and the independent variable in this study consists of quantitative variables. The independent quantitative variables used are foreign debt, exports, and employment.

#### **Data Collection Methods**

The data collection method used in this research is the literature method. The recording method is to search for data in the form of records, transcripts, newspaper books, magazines, inscriptions, meeting minutes, leggers, agendas, etc (Arikunto, 2019). In this study, we documented data on foreign debt, exports, labor, and gross domestic product (GDP). The data used is data from 2011-2020.

#### **Data Analysis Method**

The analysis method used to solve the problem in this study is time series data analysis with error correction model (ECM). Data analysis was carried out using the Eviews program. a. *Error Correction Model (ECM)* ECM is used to determine the effect of the independent variable on the dependent variable in the short run and its rapid adjustment to return to its long-run equilibrium in time series data for cointegrated variables. The ECM model is a way to identify the relationship between non-stationary variables. ECM modeling is valid under the condition that there is cointegration in the set of non-stationary variables. This condition is given in the Engle-Granger representation theorem (Ariefianto, 2012).

The type of data used in this study is time series data. Time series data can be stationary or non-stationary. For stationary data, modeling usually uses the least squares procedure (OLS). In this procedure, the equation can be expressed as:

$$PDB_t = \beta_0 + \beta_1 ULN_t + \beta_2 EXP_t + \beta_3 TK_t + \beta_4 ECT_{t-1} + \mu$$

Description:

PDB = Gross Domestic Product (GDP)  
Variable

$\beta_0$  = Constant/intercept

$\beta_1, \beta_2, \beta_3$  = Regression coefficient of quantitative independent variable

ULN = Foreign Debt Variable

EKP = Export Variables

TK = Labor Variable

B4 = Regression coefficient of independent variable ECT

ECT<sub>t-1</sub> = Error Correction Tern in the previous period  
 $\mu$  = Residual value

On the other hand, if the data is not stationary, the application of the OLS procedure leads to the phenomenon of pseudo regression. Spurious regression is a phenomenon in which the estimated regression equation is quite important, but essentially meaningless (Ariefianto, 2012). One way to identify the relationship between transient variables is to run an error correction model (ECM). ECM is a method of correcting short-term imbalances towards long-term equilibrium, and can explain the relationship between current and past dependent variables and independent variables. ECM modeling requires cointegration conditions for a group of unstable variables. The formula for the ECM model is shown as follows:

$$DPBD_t = \beta_0 + \beta_1 DULN_t + \beta_2 DEXC_t + \beta_3 DTK_t + \beta_4 ECT$$

Description:

DPBD = First difference form of GDP variable

DULN = First difference form of Foreign Debt variable

DTK = First difference form of Labor variable

DEXP = First difference form of Export variable

ECT = Error Corection Term

The ECM model specification is considered valid if the ECT coefficient is statistically significant, i.e. with a probability of less than 5%.

#### 4. RESULTS AND DISCUSSION

##### *The Effect of Foreign Debt Variables on Indonesia's Gross Domestic Product During 1991-2020.*

The results of the analysis show that the foreign debt variable in the long term has an amount of (-0.050382) and is not significant in the long term (0.5611). While in the short term it has an amount of (-0.258494) and is not significant in the short term (0.1161). At the 1 percent level, the foreign debt variable does not have a positive effect on gross domestic product and does not significantly affect the long term. While in the short term it has no positive effect and is not significant in the short term.

Based on the results of the above research, the foreign debt variable has a negative and insignificant effect in the long term and consistently has a negative and insignificant effect in the short term. This indicates that any increase in the foreign debt variable will reduce the value of Indonesia's gross domestic product in the long and short term. This occurs due to several factors, namely the large amount of foreign debt from year to year and the large amount of principal and interest installments that must be paid by the government.

The results of this study are relevant to the research (Lubis & Riva'i, 2018) with the title "Analysis of the effect of foreign debt, foreign investment and exports on gross domestic product in Indonesia in 2005-2014". His research explains that foreign debt, foreign investment has an insignificant effect but has a positive effect on the formation of gross domestic product while exports have a positive and significant effect on gross domestic product in Indonesia.

##### *The Effect of Labor Variables on Indonesia's Gross Domestic Product During 1991-2020*

The results of the analysis show that the Labor variable in the long term has an amount of (-0.006608) and is not significant in the long term (0.9800). While in the short term it has an amount of (-0.017525) and is not significant in the short term (0.9177). At the 1 percent level, the Labor variable has no positive and insignificant effect in the long term. While in the short term it has no positive and insignificant effect in the short term.

Based on the results of the above research, the labor variable has a negative and insignificant effect in the long term and consistently has a negative and insignificant effect in the short term. This indicates that every increase in the percentage of labor variables will reduce the value of Indonesia's gross domestic product in the long and short term. This is due to the lack of labor expertise so that more and more labor but the output remains even reduced. This results in the growth of the value of GDP in which there are sectors of agriculture, mining and others.

The results of this study are in line with the research of (Fatmawati, Djohan, & Nurjanana, 2021) who found that government spending, investment and labor are not significant to gross domestic product.

##### *Effect of Export Variables on Indonesia's Gross Domestic Product During 1991-2020*

The results of the analysis show that the export variable in the long term amounted to



(1.168843) and significant in the long term (0.0002). While the short term has amounted to (0.347710) and not significant in the short term (0.02762). In the 1 percent rate, the export variable has a positive and significant effect in the long run. While the short term has a positive and insignificant effect on the short term.

Based on the results of the above research, the export variable has a positive and significant effect in the long term and consistently has a positive but insignificant effect in the short term. This indicates that every increase in the percentage of labor variables will reduce the value of Indonesia's gross domestic product in the long term significantly and in the short term but not significantly. If exports in the country increase, the demand for goods and services will also increase. From these goods and services, exports are very influential on Gross Domestic Product because they can increase the economic growth of a country.

The results of this study are relevant to research (Larasati & Sulasmiyati, 2018) where the results of the research explain that inflation, exports, and labor have a positive and significant effect on gross domestic product.

## 5. CONCLUSIONS

Based on the results of the research and discussion above, the researcher adjusts the conclusions as follows: 1) Foreign debt variable has a negative effect (-0.050382) and insignificant (0.5611) in the long run and consistently has a negative effect (-0.258494) and insignificant in the short run (0.1161). This indicates that any increase in foreign debt variables will reduce the value of Indonesia's gross domestic product in the long and short term; 2) The labor variable has a negative effect (-0.006608) and is not significant in the long run (0.9800) and consistently has a negative effect (-0.017525) and is not significant in the short run (0.9177). This indicates that any increase in the percentage of labor variables will reduce the value of Indonesia's gross domestic product in the long run and short run; 3) The export variable has a positive effect (1.168843) and is significant in the long term (0.0002) and consistently has a positive effect (0.347710) but is not significant in the short term (0.2762). This indicates that any increase in the percentage of export variables will reduce the value of Indonesia's gross domestic product in the long term significantly and short term but not significantly.

Based on the above conclusions, the researcher outlines suggestions in terms of decision making: 1) Local governments are expected to increase labor capacity through budget allocations for education and training and expand employment opportunities for local workers; 2) The government should focus more on economic self-reliance by reducing the addition of new debt and endeavoring to accelerate the growth of domestic investment which will accelerate the process of capital accumulation so that little by little the Indonesian nation will not be too dependent on foreign debt. As well as the management of foreign debt (foreign debt) should be implemented more transparently and supervised in the use and management of debt so that it will be more effective and efficient in influencing economic growth.

## 6. REFERENCES

- Ahmad Soleh. (2017). Masalah Ketenagakerjaan Dan Pengangguran Di Indonesia. *Jurnal Ilmiah Cano Ekonomos*, 6(2), 84.
- Akbar, S. (2018). Analisa Faktor-Faktor yang Mempengaruhi Kinerja. *JIAGANIS (Jurnal Ilmu Administrasi Negara & BIsnis)*, 3(2), 1–17.
- Ariefianto, M. D. (2012). *Ekonometrika: esensi dan aplikasi dengan menggunakan EVIEWS*. Erlangga.
- Arikunto, S. (2019). *Prosedur penelitian suatu pendekatan praktik*. Rineka cipta.
- Basri, F. (2002). *Perekonomian Indonesia: tantangan dan harapan bagi kebangkitan ekonomi Indonesia*. Universitas Michigan: Erlangga.
- Djamin, Z. (1996). *Masalah utang luar negeri bagi negara-negara berkembang dan bagaimana Indonesia mengatasinya*. Lembaga Penerbit, Fakultas Ekonomi, Universitas Indonesia.
- Eka Bonokeling, D. (2016). Pengaruh utang luar negeri, tenaga kerja, dan ekspor terhadap produk domestik bruto di Indonesia Tahun 1986- 2015. *Jurnal Pendidikan Dan Ekonomi*, 5(5), 427–435.
- Fatmawati, F., Djohan, S., & Nurjanana, N. (2021). Pengaruh investasi dan pengeluaran pemerintah terhadap produk domestik regional bruto serta penyerapan tenaga kerja di kota Balikpapan. *Jurnal Ilmu Ekonomi Mulawarman (JIEM)*, 6(3).
- Gusta, N. I. A., Manggala, W., Manajemen, P. S., Ekonomi, F., Bisnis, D. A. N., & Surakarta,

- U. M. (2020). *Kerja Dan Ekspor Terhadap Produk Domestik Bruto Di Indonesia Tahun 1998 – 2018*.
- Haryati, S. N., & Hidayat, P. (2014). Analisis Kausalitas antara Ekspor dan Pertumbuhan Ekonomi di ASEAN Plus Three. *Jurnal Ekonomi Dan Keuangan*, 2(6), 336–352.
- Kawet, J. A., Masinambow, V. A. J., & Kawung, G. M. V. (2019). Pengaruh Jumlah Penduduk, Pendidikan Dan Tingkat Upah Terhadap Penyerapan Tenaga Kerja Di Kota Manado. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 19(10). doi: 10.35794/jpek.d.23446.19.10.2019
- Larasati, I. S., & Sulasmiyati, S. (2018). Pengaruh inflasi, ekspor dan tenaga kerja terhadap Produk Domestik Bruto. *Jurnal Administrasi Bisnis (JAB)*, 63(1), 8–16. Retrieved from <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/2694>
- Lubis, A. I. F., & Riva'i, M. R. (2018). Analisis Pengaruh Utang Luar Negeri Dan Penanaman Modal Asing Terhadap Produk Domestik Bruto Di Indonesia Periode 2000-2009. *JEPA (Kajian Ekonomi Dan Kebijakan Publik)*, 1(2), 19-27,. Retrieved from <https://core.ac.uk/download/pdf/25485930.pdf>
- Rahardja, P. (2018). *Teori Ekonomi Mikro Suatu Pengantar*. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Sugiyono. (2013). *Metode Penelitian Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sukirno, S. (1985). *Ekonomi pembangunan: proses, masalah, dan dasar kebijakan*. Jakarta: LPFE-UI.
- Sukirno, S. (2008). *Makro Ekonomi, Teori Pengantar*. Jakarta: Raja Grafindo Persada.
- Sumarsono, S. (2003). *Ekonomi Manajemen Sumber Daya Manusia dan Ketenagakerjaan*. Yogyakarta: Graha Ilmu.
- Suparmoko, M. (2000). *Keuangan Negara dalam teori dan praktek*. Yogyakarta: BPFE-Yogyakarta.
- Tambunan, T. T. H. (2008). *Pembangunan Ekonomi & Utang Luar Negeri*. Rajawali Pers. Retrieved from <https://books.google.co.id/books?id=k-hrPgAACA AJ>
- Utomo, Y. P. (2000). Ekspor Mendorong Pertumbuhan atau Pertumbuhan Mendorong Ekspor. *Jurnal Manajemen*, 1(1).
- Yahya, E., Olilingo, F. Z., & Santoso, I. R. (2022). the Effect of Investment and Exports on Gross Regional Domestic Product (Grdp) in Gorontalo Province. *European Journal of Research Development and Sustainability*, 3(1), 1–4. Retrieved from <https://www.scholarzest.com>
- Yustika, A. E. (2009). *Ekonomi Politik Kajian Teoritis dan Analisis Empiris*. Yogyakarta: Pustaka Pelajar.