Effect of exports and development spending on Indonesia's economic growth

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ABSTRACT
Economic growth is a significant increase in national income within a certain calculation period. This thesis entitled "The Influence of Exports and Development Expenditures on Indonesia's Economic Growth in the 2003-2012 Period" secondary 10-year time series data between 2003-2012. Data were obtained from various sources, including the Central Bureau of Statistics (BPS), and scientific journals and other literature related to this research topic. The analytical method used in this study is multiple regression analysis which is used to determine the magnitude of the effect of changing one variable on another variable with the help of SPSS 17. From the regression results above the R squared (R2) value is 0.957, this means 95.7% variation changes in economic growth variables can be explained simultaneously by variations in export and development expenditure variables, the remaining 4.3% is determined by other variables or factors outside the model. For exports, the results of the study show a significance value lower than the significant level (0.000 < 0.05) so that Ho is rejected, Ha is accepted, thus exports have a positive and significant effect on economic growth. While development expenditure, the significant value is greater than the significance level (0.251 > 0.05) so that Ho is accepted Ha is rejected. Thus the results of the study show that the coefficient of development expenditure (X2) is not significant to Indonesia's economic growth.

1. INTRODUCTION
Economic growth is a process of increasing the production capacity of goods and services to a country's economy on an ongoing basis towards a more prosperous standard of living for a certain period. Economic growth is a central theme in the life of a country, because the success or failure of development programs is judged on the basis of the level of growth in output and national income.

Indonesia's economic growth was quite good, experiencing an increase from 2003 to 2007, except for 2005 which experienced a decline caused by an increase in world oil. The global crisis that occurred in 2008 led to a decrease in growth from 6.3% in 2007 to 6.0% and further decreased in 2009 to 4.58%.

Indonesia's economic growth rate projection in 2012 will experience a current account deficit of minus 2.8% and continue until 2014. Several factors cause the trade deficit, namely: First, Indonesia's exports are still dominated by primary products or raw materials. As a result, when the
demand for and prices for primary products decreased as a result of the economic crises in Europe and the United States, Indonesia's trade balance was immediately in deficit. Second, imports of crude oil and fuel jumped dramatically, swallowing up the non-oil and gas trade surplus.

Indonesia's economic management is further exacerbated by the deficit in the primary balance of the State Budget. Realization of state revenue is not able to cover state spending excluding interest payments and debt repayments. To pay debts, the government must create new debt. The 2012 state budget primary deficit was minus 1.3%. The main causes of the primary APBN deficit are the still large fuel subsidies and non-selective routine spending.

In line with the deepening global crisis, exports are expected to become the driving force for the process of national economic recovery. Exports are purchases by foreigners of various domestically produced goods and services. The economic base theory states that the main determinant of a region's economic growth is determined by the magnitude of the increase in exports.

Based on data released by the Central Bureau of Statistics, Indonesia's total exports from 2003 to 2008 were quite encouraging, exports grew by an average of 13.74% annually. But three years later it experienced decline and increase. In 2011 Indonesia's exports reached the highest total compared to previous years, where the export value reached US$ 203.50 billion. In mid-2008 there was a world economic crisis which caused Indonesia's exports in 2009 to experience a negative growth of 14.97%. Over the past decade, the role of exports to the United States and European Union countries, which are Indonesia's traditional markets in terms of Indonesia's total exports, has shown a declining trend of 0.46% and 0.35%. However, in the same timeframe, Indonesia's exports to CAFTA grew by 28.49%. From this it can be seen that the establishment of CAFTA is a solution to export dependency on traditional Indonesian markets (the United States, the European Union and Japan).

In general, the obstacle that greatly influences the development of Indonesian exports is the low competitiveness in the international market. The 2000 survey results from the International Management Development (IMD) regarding Indonesia's competitiveness were influenced by a lack of investor confidence, and low business competitiveness and weak infrastructure. $ is expected to remain high with the trend of increasing import growth.

So, based on the description above, the writer is interested in further analyzing Indonesia's economic growth and also knowing the extent to which factors such as exports and development spending stimulate Indonesia's economic growth. So the authors are interested in conducting research with the title "Analysis of the Influence of Exports and Development Expenditures on Indonesia's Economic Growth in the Period of 2003-2012".

2. METHOD

The research method is a way to be able to understand the objects that are the target or purpose of a study. Therefore, the selection of methods must be in accordance with the research objectives concerned.

2.1 Types and Research Locations

The type of data collected and used and processed in this research is secondary data, namely processed results obtained from official offices and agencies related to this research. The data was obtained in the form of a quantitative time series over a period of 10 years. This method approach departs from data and then it is processed into valuable information for decision making. This method must also use quantitative tools in the form of computer software in managing the data.

The research location was conducted in Indonesia. The research is in the form of data collection on Exports, Development Expenditures, and Indonesia's Economic Growth through the BPS of South Sulawesi Province, Makassar City. This research began in December 2013.

2.2 Research Approach

In preparing this thesis, the author uses an economic approach, namely research in the form of scientific writings, data, reports, theories, or journals that have a relationship with economic phenomena related to the problems to be studied.

2.3 Method of collecting data

In compiling this thesis, the author uses the library search method, namely research conducted with library materials in the form of scientific writings and scientific research reports that have a
relationship with the topic under study. The data collection technique used was direct recording in
the form of time series data over a period of 10 years (2003-2012).

2.4 Data Processing and Analysis Techniques
In this study, comparative and quantitative methods were used, namely comparing a problem and
analyzing data and matters related to the numbers or calculation formulas used to analyze the
problem being studied. This study uses multiple analysis with time series data. To test whether
or not the regression can be used and to test the hypotheses that are carried out, statistical tests
are needed, as follows:

\[ Y = a + b_1X_1 + b_2X_2 + e \]

Where:
- \( Y \) = Economic Growth Variable
- \( a \) = Constant
- \( X_1 \) = Export Variable
- \( X_2 \) = Development Expenditures Variable
- \( b_1 \) – \( b_2 \) = Regression coefficient of each independent variable
- \( e \) = term error

The above equation is a non-linear equation, so to facilitate the regression it can be transformed
into a linear one in the form of natural logarithms (ln) as in the following linear regression estimation
equation:

\[ Y = \ln \alpha + b_1 \ln X_1 + b_2 \ln X_2 + e_i \]

Information:
- \( Y \) = Natural Logarithm of Economic Growth Ln
- \( x_1 \) = Natural Logarithm of Export Ln
- \( x_2 \) = Logarithm of Ln Development Expenses
- \( \alpha \) = Constant
- \( b_1, b_2 \) = Estimated Parameters
- \( e \) and \( \mu \) = Natural Numbers and random errors

Before carrying out an economic analysis of the data based on the model that has been formed,
tests and changes to the model are carried out using statistical testing methods, including:

2.4.1 t test
The t-statistic test is used to test the partial effect of the independent variables on the dependent
variables. The criteria used in this study is a two-way test at a significance level \( \alpha \) and degrees
of freedom (df) = nk, where n denotes the number of observations and k denotes the number of
parameters including constants.

2.4.2 Test f
This is used by means of testing the independent variables together which is carried out to see the
effect of the independent variables individually on the dependent variable. Here the examiner uses
the F test by using probability.

2.4.3 R-Square (R2)
The R2 value indicates the magnitude of the independent variables in influencing the dependent
variable. R2 values range between 0 and 1 (0 ≤ R2 ≤ 1). The greater the value of R2, the greater
the variation in the dependent variable which can be explained by the variation in the independent
variables. The nature of the coefficient of determination is: a. R 2 is a non-negative quantity b. The
limit is (0 0 ≤ R2 ≤ 1). If R2 is 0, it means that there is no relationship between the independent
variables and the dependent variable. The greater the value of R2, the more precise the regression
line is in describing the observed values.

3. RESULTS AND DISCUSSION

3.1 Overview of the Indonesian Economy
After the Indonesian economic crisis in 1998, economic turmoil returned to Indonesia in 2008. The
global economy experienced a financial crisis caused by the crisis experienced by the United States
which also indirectly affected the Indonesian economy. Throughout 2008, economic growth began
to slow down, namely by 6.1%, down from 6.3% in 2007.
Economic growth experienced a turning point, when the prices of various export commodities declined following the fall in world oil prices. The world community’s fear of a recession has caused a decline in demand for various products. As a result, Indonesia, which initially relied on exports as the spearhead of economic growth, began to enter difficult times. Various manufacturing industries, especially those that are export-oriented, such as textiles, shoes and electronics, have begun to reduce their activities, including reducing the workforce due to declining export market demand.

Entering 2009, the Indonesian economy will face tough challenges. During 2008 the Indonesian economy was relatively good when looking at various economic indicators. Economic growth in 2008 reached 6.1%, inflation could be reduced to 11.4%. This was due to deflation in the last two months in the final quarter of 2008. Whereas in 2009 itself, economic growth was still positive and the inflation rate was 2.8% or the lowest in the last ten years. In the following, we will describe data related to the development of GDP at constant 2000 prices by business field from 2008 to 2012 and its contribution to Indonesia's economic growth.

3.2 Overview of Indonesia’s Export Conditions

Indonesia as a developing country has long been involved in international trade and the world’s economic growth is very fast. However, in the last four years, there has been a slowdown in economic growth in many countries, requiring the ability to compete in it. Export products are basically aimed at creating a strong and diverse export structure and a wide spread of markets and an increasing number of actors, so that product, market and actor differentiation is needed.

Export activity is one of the drivers of the domestic economy. Various efforts were made to encourage export activities, for example by issuing policies on import duties on several import tariff items (especially export supporting raw materials), simplification of the export trading system for certain commodities, and other policies. In addition, Indonesia together with other ASEAN countries and China formed CAFTA which aims to create a free trade area by eliminating or reducing barriers to trade in goods, both tariff and non-tariff, increasing market access to regulatory services and investment provisions as well as increasing aspects of economic cooperation to encourage relations economy in order to improve the welfare of the people of ASEAN and China.

In terms of the spread of export products, the impact of the government's incessant expansion of destination countries can also be seen. This can be seen from the portion of exports to Japan which decreased from 22.30% of total exports in 2005 to 12.25% to 8.09% in 2011. Likewise, the portion to the European Union decreased from 12.70% in 2005 to 3.68 in the last year. On the contrary, the portion of exports to ASEAN countries increased from 18.16% in 2008 to 20.08% in 2011. The increase in this portion also occurred in China from 6.43% to 11.27%.

In 2011, Indonesia's exports exceeded US$203 billion. This achievement is the highest record in the history of national exports. The achievement of this export record was due to improved export quality, product diversification and export destination markets as well as increased production capacity in line with increased investment in various sectors. Indonesia’s exports when viewed from its export ports amounted to 36.17% exported through ports from Java 32.81% through ports in Sumatra and the rest from ports from Kalimantan, Papua and Sulawesi.

Diversification and quality of export products is still low, market access is still limited, illegal import and export practices occur, there are still many protectionist practices in the form of trade blocks and unfair competition, as well as covert subsidies from developed countries, there is relocation of industrial investment to new competitor countries, as a result of the less conducive business climate in Indonesia, and the still weak negotiating ability of the Indonesian delegation in international forums.

3.3 Overview of Developments in Government Expenditures

The government's role is very important in the economy, especially in providing a multiplier effect in the macro area of a developing country. Government spending (government expenditure) is a fiscal policy that is expected to encourage increased investment through government spending in the area of development expenditure.

Although from pelita to pelita the amount of government savings as the largest source of development financing has continued to increase, its contribution to the total development funds required is still far from expectations. In other words, the dependence of development funds on foreign loans is still quite large. However, starting from the last year of Pelita I, the percentage of government savings has started to be large compared to foreign loans. This is inseparable from the
role of the oil and gas sector as well as the support of several government policies on tax issues and efforts to increase other state revenues.

To avoid a development budget deficit, Indonesia is still seeking resources from abroad, and even though the IGGI (Inter Governmental Group On Indonesia) is no longer an international forum that formally helps finance development in Indonesia, with the birth of the CGI (Consoltative Group On Indonesia) the need for foreign loans as development funds can still be expected.


3.4 Multiple Linear Analysis

Regression analysis was carried out to determine the level of influence between the independent variables on the dependent variable, both simultaneously and partially, as well as to test the research hypotheses that had been set previously, following the recapitulation of the results of multiple regression analysis:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient (B)</th>
<th>T table</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export (X1)</td>
<td>0.360</td>
<td>6.674</td>
<td>0.000</td>
</tr>
<tr>
<td>Development Spending(X2)</td>
<td>0.081</td>
<td>1.250</td>
<td>0.251</td>
</tr>
<tr>
<td>Constant</td>
<td>12.350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>0.978*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td>0.957</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.945</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F count</td>
<td>78.152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance of F</td>
<td>0.000*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Multiple Regression Analysis Output

Based on the results of the regression coefficient (B) above, the regression equation is obtained as follows:

\[ Y = 12.350 + 0.360 + 0.081 \]

3.4.1 Regression Coefficient

Calculations performed to measure the proportion or percentage of the total variation of the dependent variable that can be explained by the regression model. From the regression results above, an R of 0.978 is obtained. This shows a very strong positive correlation and a close relationship between variable Y and variable X.

3.4.2 Test R Squared (R2)

Calculations performed to measure the proportion or percentage of the total variation in the dependent variable that can be explained by the regression model. From the regression results above, the R squared (R2) value is 0.957, this means that 95.7% of the variation in changes in the variable exports and development expenditures can be explained simultaneously by variations in the variables of exports and development expenditures, the remaining 4.3% is determined by the variable or other factors outside the model.

3.5 Hypothesis Test Analysis

3.5.1 Analysis of Simultaneous Hypothesis Testing

Simultaneous hypothesis in this study is that Export (x1), and Development Expenditures(x2) influences simultaneously on Indonesia's Economic Growth. With the acceptance and rejection criteria as follows:

Ho : no effect simultaneously Export (x1), and Development Expenditures(x2) on Indonesia's Economic Growth.

Ha : there is an effect simultaneously Export (x1), and Development Expenditures(x2) on Indonesia's Economic Growth.

If :

\[ P \text{ value (.sig)} > \alpha \text{ (0.05)} \text{ Ho is accepted and Ha is rejected.} \]

\[ P \text{ value (.sig)} \leq \alpha \text{ (0.05)} \text{ Ho is rejected and Ha is accepted.} \]
Simultaneous test results: variable exports (X1), and development spending (X2), to economic growth (Y) simultaneously / jointly shows the results of the Fcount value of 78,152 with a Significant F of 0.000 or less than 0.05 (5%), thus receiving H0. These results state that simultaneously all the independent variables, namely the variable Exports (X1) and development spending (X2), have a significant effect simultaneously on economic growth (Y).

3.5.2 Partial Test Analysis
The partial hypotheses (alone) in this study are Alleged Exports (X1) and Development Expenditure (X2), partially influencing the Economic Growth of South Sulawesi Province (Y). The results of partial hypothesis testing are presented in table 2 below:

Table 2. Acceptance of the Partial Test Hypothesis of Export Variables (X1) and Development Expenditures (X2) on Indonesia’s Economic Growth (Y)

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>sig. value</th>
<th>α (0.05)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Export (X1)</td>
<td>0.000</td>
<td>&gt; 0.05</td>
<td>Ho accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ha rejected</td>
</tr>
<tr>
<td>2</td>
<td>Pemba's output buildup (X2)</td>
<td>0.251</td>
<td>&lt; 0.05</td>
<td>Ho rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ha accepted</td>
</tr>
</tbody>
</table>

Source: Multiple Regression Analysis Output

Based on the table above, you can explained the testing of the hypothesis of the effect of exports on economic growth, while the acceptance and rejection criteria used were:

Ho : no Export effect (x1), on Indonesia’s Economic Growth.
Ha : there is an Export effect (x1), on Indonesia’s Economic Growth

If :

P value (.sig) > α (0.05) Ho is accepted and Ha is rejected.
P value (.sig) ≤ α (0.05) Ho is rejected and Ha is accepted

The results showed a significant value of 0.000 when compared to the significance level α (0.05), indicating a significance value smaller than the significance level (0.000 < 0.05) so that Ha was accepted Ho was rejected, thus there was an effect of exports (x1) on Indonesia’s economic growth.

Testing the hypothesis of the effect of development spending on economic growth, while the acceptance and rejection criteria used are:

Ho : there is no effect of Development Expenditures (x2) on Indonesia’s Economic Growth.
Ha : there is an effect of Development Expenditures (x2) on Indonesia’s Economic Growth.

If :

P value (.sig) > α (0.05) Ho is accepted and Ha is rejected.
P value (.sig) ≤ α (0.05) Ho is rejected and Ha is accepted.

The results showed a significant value of 0.251 when compared to the significance level α (0.05), indicating a significance value smaller than the significance level (0.251 < 0.05) so that Ho was accepted Ha was rejected, thus there was no effect of Development Expenditure (x2), on Economic Growth Indonesia.

3.6 Discussion
Simultaneous test results: the variable exports (X1) and development expenditure (X2) have an effect on economic growth (Y) showing the results of the calculated F value of 78,152 with a significant F of 0.000 or less than 0.05 (5%), thus receiving H0. These results state that simultaneously all the independent variables, namely the export variable (X1) and development expenditure (X2), have a significant effect simultaneously on economic growth (Y).

Economic growth is generally defined as an increase in real per capita Gross Domestic Product (GDP/GDP). Gross Domestic Product (GDP) is the market value of a country’s total output, which is the market value of all final goods and services produced during a certain period of time by the factors of production located within a country.

The development of a country’s economy can be seen from the increase in the production of goods and services. This, in terms of export performance in contributing to economic growth. If exports increase, the production of goods and services will also increase because, increased
exports indicate the demand for goods and services abroad is greater than the demand for foreign goods at home. Therefore, the economy will increase the amount of goods and services produced. This increase in the production of goods and services will lead to an increase in economic growth.

In addition, an increase in per capita can grow if it is accompanied by the opening of broad business opportunities (investment), as well as the preparation of adequate infrastructure and facilities (government spending in terms of investment). Development expenditures open opportunities for the community to increase their income so that people's consumption patterns increase as a result, the amount of production of goods and services also increases.

The results showed a significant value of 0.000 when compared to the significance level $\alpha$ (0.05), indicating a significance value smaller than the significance level (0.000 < 0.05) so that Ho was rejected and Ha was accepted, thus there was an effect of exports (X1), on Indonesia's Economic Growth.

Export is one of the foreign trade activities carried out by several countries, including Indonesia. According to the export basis model, the growth of a region depends on the growth of its export industries and an extreme increase in demand for the region concerned is the main determinant of regional growth. Increasing the breadth of the export base of a region will tend to increase the level of economic growth. The strengthening of the number of exports of goods and services sold abroad will have an impact on the value of exports received by the state.

So in foreign trade policies to strengthen export activities really need to be done, such as increasing the quantity and quality of exported goods and services which will increase the sales value received so that the country's foreign exchange will increase. Based on the results of research, theory and previous research, this research can be emphasized that this research supports the previous theory, namely that there is an effect of exports (X1), on Indonesia's Economic Growth. This means that exports touch the real aspect in the process of increasing national income so that it has a major influence on economic growth.

Government spending is a component of fiscal policy that aims to accelerate investment, increase employment opportunities, maintain economic stability and create an even distribution of income through state spending, both routine spending and development spending. Kunarjo revealed that government spending plays a role in matching public demand with the provision of facilities and infrastructure that cannot be met by the private sector. Government spending continues to grow resulting in state revenues must be increased. This means that the government must be able to explore sources of revenue, most of which come from taxes.

Although overall government spending is very important in its contribution to national income, what is even more important is determining the composition of these government expenditures. The composition of government spending is a strategy to achieve the goals of national development. With the composition of these expenditures, a question will be answered, namely which expenditures are more prioritized, whether routine expenditures must be greater than development expenditures or vice versa.

This is in accordance with the Macro theory where an increase in Economic Growth also means an increase in national income and an increase in per capita income so that it encourages an increase in government tax revenues so that the ability of government spending will increase even though it does not have too much influence. This is due to the dominance of government spending affecting economic growth through development spending rather than the other way around.

Based on the theories presented above, in this study it can be emphasized that this research supports the previous theory, namely that there is an effect of government spending on economic growth. The results showed that the regression coefficient ($B = 0.081$) with a significant level greater than the significance level ($0.251 > 0.05$) so that Ho was accepted, Ha was rejected, thus the results showed that the development expenditure coefficient (X2) had a positive effect, although it was not significant on growth. Indonesian economy.

4 CONCLUSION

From the results of an empirical study regarding the analysis affecting Indonesia's economic growth in the 2003-2012 period, it can be concluded that: economic growth; The results showed the value of the regression coefficient ($B = 0.081$) with a significant level greater than the significance level
(0.251 > 0.05) so that Ho was accepted Ha was rejected thus the results showed that the development expenditure coefficient (X2) was not significant to Indonesia's economic growth.

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