

# The Determinants of Exports of Leading Commodities in Encouraging Economic Growth in South Sulawesi Province

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## ABSTRACT

*The purpose of this study was to analyze the effect of investment on exports, the competitiveness of commodities, bilateral agreements on exports, market penetration of commodities, and the exchange rate on exports to encourage economic growth in South Sulawesi Province. Using a quantitative method with a descriptive analysis approach, carried out by the Province of South Sulawesi in 2021. The data used in this study is secondary, which is time series data for the last 20 years. Secondary data for this study were obtained from a variety of sources, including the World Bank, Uncomradely, and the BPS statistical portal, among others. The data analysis model uses the Revealed Comparative Advantage Index (RCA), the Index of Export Market Penetration (IEMP), and Two Stage Least Square (2SLS). The results of this study are: 1) investment has no significant effect on exports in encouraging economic growth; 2) competitiveness has a significant negative effect on exports in encouraging economic growth; 3) bilateral agreements do not significantly affect exports in encouraging economic growth; 4) market penetration has a significant effect on exports in encouraging economic growth; and 5) the exchange rate has a significant effect on exports in encouraging economic growth.*

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## INTRODUCTION

Trade activities are currently not only carried out within the country, namely in the regional scope, but along with the development of many countries trading outside their countries, it means that there are no more countries that do not interact with other countries, especially in the trade sector. Throughout 2020, the Indonesian Ministry of Trade has been very aggressive in conducting free trade agreements, which of course aim to increase the volume of trade in the global market. This is because the existence of trade cooperation is likened to an engine of rapid economic recovery. Given this pandemic, the impact will greatly affect the economy. One of the macroeconomic indicators as a source of external economic growth is exports. Export activities for developing countries such as Indonesia can undoubtedly contribute to the country's foreign exchange reserves. So that it will increase state income, which can also increase economic growth. According to Jung and Marshall (1985) in Ginting (2017), there are four hypotheses that explain the relationship between exports and economic growth. One of these hypotheses states that exports are the driver of ELG (export-led growth) economic growth.

Kalaitzi and Cleeve (2018), in testing the export growth hypothesis (ELG), show that there is a long-term effect that contributes to economic growth. ELG (export-led growth) is one of the government's strategies where the government encourages economic growth but is

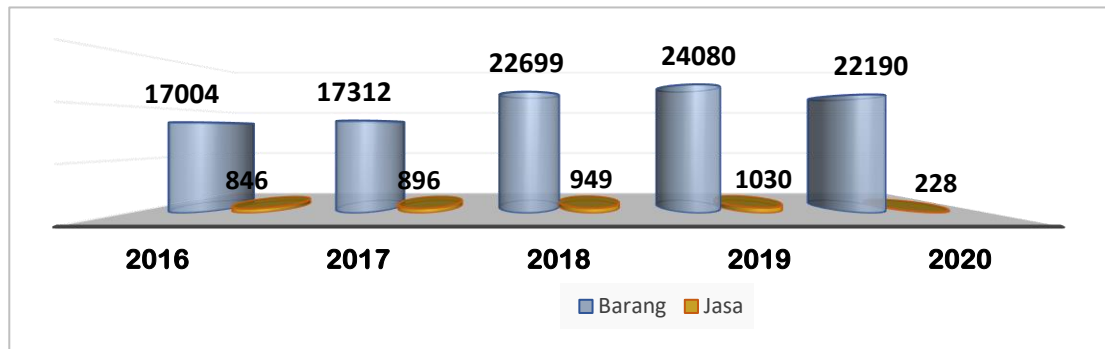
strongest in the export category (goods), which can contribute more to the country's economic growth. Realizing trade activities in South Sulawesi Province that are innovative and competitive, which is the node of national and international trade networks, is the basis of the vision of the province of South Sulawesi. The aim of autonomy is to promote regional development from a better economic and social welfare perspective. The economic growth of a region is basically determined by the magnitude of the value of the comparative advantage it possesses. If South Sulawesi Province encourages production growth in sectors that have a competitive advantage (base sector) for export activities, So the economic growth of South Sulawesi Province can increase rapidly due to an increase in export volume. For the macro, it will have a large multiplier effect on the economy of South Sulawesi Province.

Economic growth in the investment sector also has an important role (engine growth). Investment will increase domestic capital so that the economy will run and will encourage export activities so as to increase the country's foreign exchange in importing, which will add value in the production process. Great and good economic growth will certainly encourage the improvement of the prosperity of the local community by increasing the gross regional domestic product where the added value comes from sectors that have the potential to be the basis or the leading sector. The growth orientation of a region or country, of course, also sees a place to market its products. In other words, the basic sector that has the potential to be marketed is required to be able to see the opportunities that exist. A market penetration strategy is one of the strategies undertaken to increase sales of various products in existing markets through more aggressive marketing efforts. One of the ways market penetration must be encouraged is through exports, one of which is through foreign direct investment. Foreign direct investment will encourage exports to meet economic needs and, of course, support a special base sector that is competitive in international markets (Hobbs, Paparas, and AboElsoud 2021). So market penetration is an important factor in trading activity.

Leading commodities are also sectoral products serving the market, both domestically and internationally, especially in the international market. Exports are an indicator of an increase in income. This is one of the most important aspects of increasing the economic growth of a region and will have an impact on increasing the total income of the country. This economic base sector states that the main determining factor for a region's economic growth is directly related to the demand for goods and services from outside the region. The production process in a sector or industry in an area that uses local production resources, including labor and raw materials, Where the output will be exported, resulting in increased economic growth. Through simultaneous export trade activities, namely the release of commodity exports in several regions of Indonesia. South Sulawesi Province continues to make efforts to encourage its export activities. Although there are still various obstacles, for example, the current pandemic. This export transaction illustrates various goods and services that are not consumed in the domestic economy but are consumed by foreign parties from other countries, either indirectly or directly, including purchases made by embassies (consulates), international agencies, ship crews (sea and air) that stop in South Sulawesi Province and so on.

It is also very important to pay attention to the exchange rate in international trade transactions because fluctuations in exchange rates can lead to competition. So the government must keep the exchange rate in a stable condition. A freely developing exchange rate will lead to faster capital flows, both foreign and domestic. The inflow of capital will have a positive impact on the exchange rate. because this can encourage an increase in investment trends. The increased investment can certainly be used by the government for development and other economic activities, one of which is exports.

The data on the development of exports of goods and services in South Sulawesi Province in the last five years (2016-2020);



**Figure 1. Development of Exports of Goods & Services for South Sulawesi Province 2016-2020**

*Source: Central Bureau of Statistics of South Sulawesi Province*

Figure 1. Describes the structure of the final demand for exports of goods and services. It can be seen in the data that 2019 was the peak point, where exports of goods increased from previous years. But in 2020 it is clear that the foreign trade climate is not good because of the Covid-19 pandemic. In 2020 there was a decline in exports of goods and services. The decline in exports of goods was 7.85% while exports of services was 77.86%. Thus, the export of goods is still quite large despite a decline, while the export of services has fallen sharply. This is caused by restrictions on human mobility in various countries. The contribution of the total foreign export value of South Sulawesi Province to GRDP fluctuates in the range of 4-5%. Responding to the decline in exports that occurred in South Sulawesi Province. So the government should have a strategy in increasing the volume of exports so that economic growth also increases. The decline in exports is one of the factors of the economic crisis (Duragesh Pujari, 2020). So it can be concluded that the government must really use all the factors, for example increasing the ability and expertise in trade, commitment by building good communication in trade so as to lead to better performance. The production of superior commodities of a country must be encouraged. One of them with government policies with the right target in increasing economic growth. The trade balance deficit in Sulawesi Province that occurred from 2016-2020 also fluctuated. The highest figure in 2020 is IDR -30, 28 million and the lowest figure in 2017 was IDR -13.39 million. The increase in the trade balance deficit in 2020. So it must be emphasized the need for government efforts to stabilize the trade balance in a surplus or balance position. Basically, the size of exports and imports is very dependent on economic conditions and the needs of the people.

Free trade activities of a country where the country must have the highest competitiveness among exporting countries of the same commodity. If a country has competitiveness, of course, it will enjoy and get optimal benefits from free trade activities, while for a country that lacks competitiveness or fails to improve its competitiveness, it will be difficult to have an advantage in free trade and only tend to be a market for other countries that have a competitive advantage. comparative advantage. Competitiveness also has an effect that is not only foreign trade but indicates a strengthening of the domestic economy by being oriented towards global competitiveness. In line with export trade data in South Sulawesi Province which shows a decline and has limitations in various things that are happening at this time, especially due to the emergence of Covid-19 at the end of 2019. Limitations to developing this market through a market penetration strategy market development and product development. The growth strategy is through market penetration, namely by developing an existing market (existing market) and existing products (existing

product). Market penetration is often perceived as a low-risk growth method in expanding the market to reach new users and also as a market penetration strategy that can increase export volume. Production from the existing base sector in each district/city in South Sulawesi Province is not only marketed domestically or between provinces or districts/cities only. But also marketed abroad. If the production from various leading sectors in the South Sulawesi Province is indicated to be feasible and competitive to be sold abroad.

## RESEARCH METHOD

This research is a type of quantitative research with a descriptive analysis approach, which is to describe systematically, factually, and accurately on an activity in a certain area, meaning that this quantitative method aims to explain something and describe the results of the calculated analysis. The quantitative method is more suitable for use in research because it will identify and analyze the economic potential that exists in the South Sulawesi Province. The related variables are also analyzed to reveal and prove simple mathematics with various quantitative data in relation to increasing economic growth to minimize the risk of failure and have advantages from foreign trade or export activities. The location of this research was conducted in South Sulawesi Province and when this research was conducted in 2021, it departed from secondary data that had been presented by the Central Statistics Agency of Sulawesi Province and other related sources. The data used in this research is secondary, which is time series data for the last 20 years. The secondary data used in this study were obtained from various sources such as worldbank, uncomtrade, BPS statistical portal and so on. To complete the data and references needed in the preparation of this research, a library research method was adopted, namely from various documents, bulletins, articles and scientific works related to this research to obtain secondary data references.

The data analysis model used in this study consists of;

- a. *Revealed Comparative Advantage (RCA) Index*, aims to see the competitiveness of the leading commodities in this study is the RCA index value  $> 1$ , meaning that the commodity is superior and has high competitiveness, while the RCA index value is  $< 1$ , meaning it is not included in the leading commodity for export and has low competitiveness. The formula for the RCA index is as follows;

$$RCA_{ij} = \frac{\frac{X_{ij}}{X_{tj}}}{\frac{X_{iw}}{X_{tw}}}$$

Information:

$RCA_{ij}$  = Commodity I comparative advantage index in area j

$X_{ij}$  = Value export 10 commodities from South Sulawesi

$X_{tj}$  = Total value South Sulawesi export

$X_{iw}$  = Value export 10 commodities in the world

$X_{tw}$  = Total value of world exports

- b. *Index of Export Market Penetration (IEMP)*, bThe aim of this research is to see the market penetration power of the leading commodity in this study, namely the IEMP index value  $> 1$ , meaning that the commodity market penetration is high, while the IEMP index value  $< 1$ , meaning the commodity market penetration is low. The formula of the IEMP is as follows;

$$IEMP = \frac{S_{xi}}{TC_m}$$

*Information:*

- Sxi =Hummels-Klenow (product) Intensive Margin is measured by the export share of 10 South Sulawesi commodities to total world exports for 10 commodities  
 TCm =Total countries that import 10 commodities exported by South Sulawesi

- c. *Two Stage Least Square (2SLS)*, The research model is Two Stage Least Square using Eviews software. Where to estimate the relationship between variables that have been set based on existing theory. Furthermore, the first stage of data will be processed to be presented as a description and general description for research with simultaneous equation regression analysis. Further to the second stage, namely simultaneous equation regression analysis, it will be estimated according to the reduced form coefficient. Furthermore, to the third stage where the results of the estimated reduced form coefficients of this simultaneous equation will be analyzed with a significant level of = 0.05. As implications and recommendations as a result of the findings of this study. The equation model of this research is as follows:

$$Y1 = f(X1, X2, X3, X4, X5)$$

$$Y2 = f(Y1)$$

*Where:*

- Y1 = Export  
 Y2 = Economic Growth  
 X1 = Investment  
 X2 = Competitiveness  
 X3 = Bilateral Agreement  
 X4 = Market Penetration Power  
 X5 = Exchange Rate

Based on the functional relationship in the equation, it can be written in a non-linear equation as follows:

$$Y_1 = X_1^{a_1} X_2^{a_2} X_3^{a_3} X_4^{a_4} X_5^{a_5} e^{a_0 + \mu_1} \& e^{Y_2} = Y_1^{\beta_1} e^{\beta_0 + \mu_2}$$

Non-linear equations 4.3 and 4.4 are linearized using the natural logarithm as follows:

$$LnY_1 = a_0 + a_1 LnX_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 LnX_5 + \mu_1 \& Y_2 = \beta_0 + \beta_1 LnY_1 + \mu_2$$

Furthermore, to obtain the reduced form, equation 4.5 is substituted into equation 4.6 so that it is obtained as follows:

$$Y_2 = \beta_0 + \beta_1(a_0 + a_1 LnX_1 + a_2 X_2 + a_3 X_3 + a_4 X_4 + a_5 LnX_5 + \mu_1) + \mu_2$$

$$= Y_2 \beta_0 + \beta_1 a_0 + \beta_1 a_1 LnX_1 + \beta_1 a_2 X_2 + \beta_1 a_3 X_3 + \beta_1 a_4 X_4 + \beta_1 a_5 LnX_5 + \beta_1 \mu_1 + \mu_2$$

$$Y_2 = \theta_0 + \theta_1 LnX_1 + \theta_2 X_2 + \theta_3 X_3 + \theta_4 X_4 + \theta_5 LnX_5 + \mu_3$$

*Where:*

$$\theta_0 = \beta_0 + \beta_1 a_0$$

$$\theta_1 = \beta_1 a_1$$

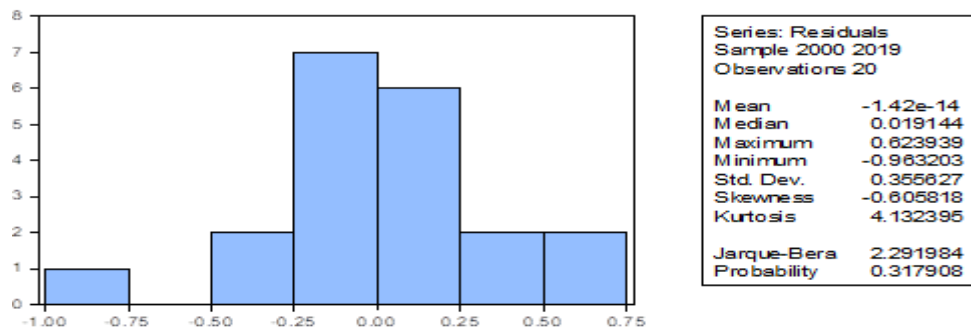
$$\theta_2 = \beta_1 a_2$$

$$\begin{aligned}\theta_3 &= \beta_1 \alpha_3 \\ \theta_4 &= \beta_1 \alpha_4 \\ \theta_5 &= \beta_1 \alpha_5 \\ &= \mu_3 \quad \beta_1 \mu_1 + \mu_2\end{aligned}$$

## RESULTS AND DISCUSSION

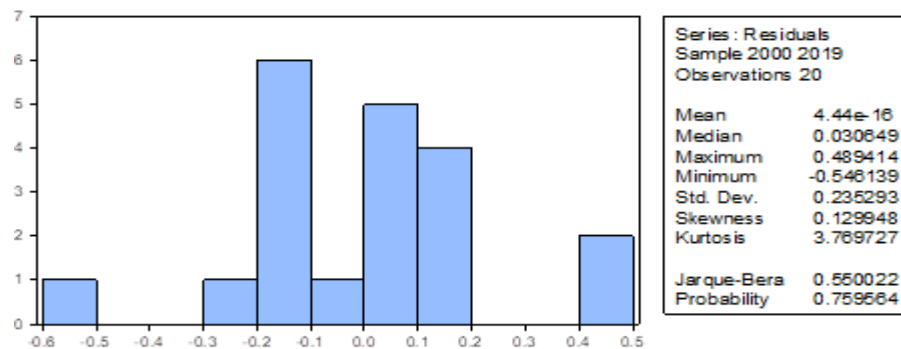
Analysis of research data using Eviews software. The model analysis that is good for this research is transformed in natural logarithm because the difference in the scale data between variables is too high. Classical assumption test which must fulfill normality test, non-multicollinearity test, non-heteroscedasticity test and non-autocorrelation. The purpose of the classical assumption is to see the normality distribution of the data used in quantitative research.

### Normality test



**Figure 2. Normality Test**

Based on Figure 1, the probability value is  $0.317 > 0.05$ , then the data is normally distributed.



**Figure 3. Equation Normality Test**

Based on Figure 3, the probability value is  $0.759 > 0.05$ , then the data is normally distributed.

**Table 1. Multicollinearity Test**

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	43,70987	5093,254	NA
LN_X1	0.000648	11.04066	1.846860
LN_X2	0.005608	48.33458	2.352274
LN_X3	0.051183	22,44528	1.912276
LN_X4	0.001885	2.667105	2.014463
LN_X5	0.478595	4799,222	1.754862

Source: 2022 Data Processing

Based on Table 1, it shows that there is no multicollinearity. Where for the X1 variable shows a coefficient value of  $0.000 < 0.06$  and a Cantered VIF value of  $1.84 < 10$  means that there is no multicollinearity, the X2 variable shows a coefficient value of  $0.005 < 0.06$  and a Cantered VIF value of  $2.35 < 10$  means that there is no multicollinearity, the X3 variable shows a coefficient value of  $0.05 < 0.06$  and a Cantered VIF value of  $1.91 < 10$  means that there is no multicollinearity, the X4 variable shows a coefficient value of  $0.001 < 0.06$  and a Cantered VIF value of  $2.01 < 10$  means that there is no multicollinearity and the X5 variable shows a coefficient value of  $0.47 < 0.06$  and the value of Cantered VIF  $1.75 < 10$  means that there is no multicollinearity.

**Table 2. Heteroskedasticity Test Glejser Equation 1 & 2**

Variable LN_X1-LN_X5	Obs*R-squared	2.539525	Prob. Chi-Square (2)	0.7705
Variable LN_Y1	Obs*R-squared	2.321918	Prob. Chi-Square (2)	0.1276

Source: 2022 Data Processing

Based on Table 2, it shows that there is no heteroscedasticity. Where equation 1 shows the value of prob. Chi-Square  $0.77 > 0.05$ , it means that there is no heteroscedasticity problem. Equation 2 shows the probability value of Chi-Square  $0.12 > 0.05$ , which means that there is no heterodastisity problem.

**Table 3. Autocorrelation Test of Equations 1 & 2**

Variable LN_X1-LN_X5	Obs*R-squared	0.653661	Prob. Chi-Square(2)	0.7212
Variable LN_Y1	Obs*R-squared	2.038909	Prob. Chi-Square(2)	0.3608

Source: 2022 Data Processing

Based on Table 3, there is no autocorrelation. Where equation 1 shows the value of prob. Chi-Square  $0.72 > 0.05$ , it means that there is no heteroscedasticity. Equation 2 shows the probability value of Chi-Square  $0.36 > 0.05$ , meaning that there is no heterodastisity.



**Table 4. Effects Between Variables**

Variable Relationship	coef. Regression	T count	p-value	Information
<b>X1→Y1</b>	0.031307	1.230108	0.2389	Not significant
<b>X2→Y1</b>	-1.046408	-13.97327	0.0000**	Not significant
<b>X3→Y1</b>	0.422141	1.865931	0.0831	Not significant
<b>X4→Y1</b>	1.074677	24.75159	0.0000**	significant
<b>X5→Y1</b>	6.247736	9.031053	0.0000**	significant
<b>Y1→Y2</b>	0.060762	2.925466	0.0090**	significant

Source: 2022 Eviews Output Results

Table 4 describes the overall shape and magnitude of the effects of equations one and two. This analysis was carried out in accordance with the order of the hypotheses stated earlier. Where is the total influence of investment, competitiveness, bilateral agreements, market penetration and exchange rates on the economic growth of South Sulawesi Province through exports. The results of the data that have been processed in the natural logarithm transformation model, the coefficient of determination for the first equation model is Adjusted R Square of 0.976346. This means that the output growth in South Sulawesi Province of 97.63% can be explained by investment, competitiveness, bilateral agreements, market penetration power, and exchange rates. While the remaining value of 2.37 is explained by other variables. Natural logarithm transformation model of the coefficient of determination The second equation model is Adjusted R Square of 0.317950. This means that the South Sulawesi Province Economic Growth of 32.79% can be explained by exports while the remaining 67.21% is explained by other variables that are not included in this research model.

The test for the variable X1 Investment (PMA) proved to have no significant effect on exports in encouraging economic growth in South Sulawesi Province with a coefficient value of 0.031 and a t-count of 1.23. Investment in exports obtained p-value of  $0.2389 > 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The first hypothesis states "It is suspected that investment positively affects exports in encouraging economic growth in South Sulawesi Province", which is not in accordance with the initial hypothesis. The test for the X2 Competitiveness variable proved to have a significant negative effect on exports in encouraging economic growth in South Sulawesi Province with a negative coefficient value of -1.046 and a negative t count of -13.97. Competitiveness against exports obtained p-value of  $0.0000 < 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The second hypothesis states "It is suspected that competitiveness positively affects exports in encouraging economic growth in South Sulawesi Province", which is not in accordance with the initial hypothesis.

The test for the X3 variable of the Bilateral Agreement proved to have no significant effect on exports in encouraging economic growth in South Sulawesi Province with a coefficient value of 0.422 and a t-count of 1.86. Bilateral agreement on exports obtained p-value of  $0.0831 > 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The third hypothesis states "It is suspected that bilateral agreements will positively affect exports in encouraging economic growth in South Sulawesi Province", which is not in accordance with the initial hypothesis. Tests for the X4 Market Penetration Power variable have a significant positive effect on exports in encouraging economic growth in South Sulawesi Province with a coefficient value of 1.074 and a t count of 24.75. Market penetration power on exports obtained a positive coefficient (1.074677) and a p-value of  $0.0000 < 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The fourth hypothesis states "It is suspected that market penetration will positively affect exports in encouraging economic growth in South Sulawesi Province", in accordance with the initial hypothesis.



The test for the X5 variable exchange rate proved to have a significant positive effect on exports in encouraging economic growth in South Sulawesi Province with a coefficient value of 6.24 and a t-count of 9.031. Exchange rate on exports obtained a positive coefficient (6.247736) and p-value of  $0.0000 < 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The fifth hypothesis states "It is suspected that the exchange rate positively affects exports in encouraging economic growth in South Sulawesi Province", in accordance with the initial hypothesis.

## Discussion

### *The Effect of Foreign Direct Investment on Exports in Encouraging Economic Growth in South Sulawesi Province*

The results of data analysis show that foreign direct investment does not have a significant effect on exports in encouraging economic growth. The results of the effect of investment on exports obtained p-value of  $0.2389 > 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . The results of this study are in accordance with research (Pauzi and Budiana 2016) which reveals that investment (foreign capital) has no significant effect on economic growth through exports. Foreign capital investment is generally carried out by a company or individual in the business world which is basically for interests in the area and also not only for current interests but for future profits. South Sulawesi Province in general is a dynamic and conducive area for development for investment, mainly related to infrastructure, agriculture, energy and other sectors that have potential (leading sectors). The highest foreign investment project in South Sulawesi Province was recorded for electricity, water and gas business fields of Rp. 3,871,644,031. if according to the district/city the most project realizations are in the Pinrang district, namely 123 projects.

As for the inhibition of foreign investment entering a region or country because of the licensing bureaucracy that is not easy and long, the low skill of the workforce which of course will affect the productivity of the workforce which is still below average, the level of corruption is also still very high in Indonesia and etc. Highlighting the very high corruption cases in Indonesia raises high investment costs. This will make investors incur unusual costs such as facilitation fees to certain officials to launch their business. Basically, this KKN practice disrupts the investment climate and is even considered as the main factor hindering investment in Indonesia (Azis, Handriani, and Basri 2019).

### *The Effect of Competitiveness on Exports in Encouraging Economic Growth in South Sulawesi Province*

Departing from the index numbers from the analysis of 10 leading commodities in South Sulawesi Province, it was found that the competitiveness variable had a significant negative effect on exports in encouraging economic growth in South Sulawesi Province. The results of the effect of competitiveness on exports obtained a negative coefficient (-1.046408) p-value of  $0.0000 < 0.05$ . The research results (Trisanti Saragih, Harianto, and Kuswanti 2021) find the same thing as this study which states that competitiveness has a negative effect on export growth. A developing country such as Indonesia is one of the countries with the availability of abundant natural resources.

Especially in the province of South Sulawesi, there are many superior commodities that are excellent for export every year. The prima donna commodities are salt, sulfur, lime, medicinal plants, nickel, processed animals, chocolate, wood or goods made of wood, vegetables, coffee, shrimp and so on. South Sulawesi Province in export activities continues to increase. Of course, this competitiveness must be in the spotlight to be improved. Commodity competitiveness can be seen from the existing market share. If the market share of commodities increases, of course, competitiveness will increase and vice versa. This competitiveness can be seen through its comparative advantages and competitive advantages (NM Ginting, Rahmanta, and Lindawati 2021). In accordance with the law of supply theory that the product and the price offered have a positive relationship. This means that if the price increases then the

goods offered by producers will increase and vice versa. The results of this study can also be said that if the competitiveness of the leading commodity is strong and the international price increases, it will certainly cause the export of the leading commodity to increase as well. South Sulawesi Province in increasing its competitiveness requires appropriate strategies and policies so that the increase in export volume continues to experience growth which will have an impact on its economic growth.

### ***The Effect of Bilateral Agreements on Exports in Encouraging Economic Growth in South Sulawesi Province***

The results of the study for the effect of bilateral agreements (ratification/notification status has been carried out) on exports in encouraging economic growth in South Sulawesi Province found that bilateral agreements did not significantly affect exports in encouraging economic growth in South Sulawesi Province. The results of the effect of bilateral agreements on exports obtained p-value of  $0.0831 > 0.05$  and the effect of exports on economic growth  $p = 0.0090 < 0.05$ . Bilateral agreement is a reciprocal agreement between two countries that have interests by each country. For Indonesia to be able to successfully penetrate the export market, of course, Indonesia must first know the development of the agreements made by Indonesia in the international arena. Apart from going through ASEAN, they are also exploring direct bilateral agreements between Indonesia and various countries. Japan, China, Malaysia, South Korea and so on. The results of this study are also in accordance with research in 2004-2019 (Curzi and Huysmans 2022) which revealed that bilateral agreements did not significantly affect the flow of commodity exports (cheese). This was revealed because many countries imitated and suggested limiting products that were not yet established and their legal protections or bilateral agreements were strengthened. The results of this study are also in accordance with research in 2004-2019 (Curzi and Huysmans 2022) which revealed that bilateral agreements did not significantly affect the flow of commodity exports (cheese). This was revealed because many countries imitated and suggested limiting products that were not yet established and their legal protections or bilateral agreements were strengthened. The results of this study are also in accordance with research in 2004-2019 (Curzi and Huysmans 2022) which revealed that bilateral agreements did not significantly affect the flow of commodity exports (cheese). This was revealed because many countries imitated and suggested limiting products that were not yet established and their legal protections or bilateral agreements were strengthened.

The bilateral agreement will encourage Indonesia to be more concerned with domestic products that are of interest to other countries. If a bilateral agreement is implemented, it will certainly have benefits for Indonesia in marketing products so that the country's foreign exchange will increase and will have an impact on economic stability. Bilateral agreement activities will also enhance good relations with other countries. The number of meetings held will strengthen relations between each country. For Indonesia, as a developing country, it will also increase employment opportunities by expanding production, obtaining more efficient raw materials, supporting technology and knowledge.

### ***The Effect of Market Penetration on Exports in Encouraging Economic Growth in South Sulawesi Province***

The results of the study on the effect of market penetration on exports in encouraging economic growth in South Sulawesi Province found that market penetration was significantly positive for exports in encouraging economic growth in South Sulawesi Province. The results of the effect of market penetration on exports obtained a positive coefficient (1.074677) and a p-value of  $0.0000 < 0.05$ . The results of this analysis are in accordance with the previously stated hypothesis. Exports of 10 (ten) prima donna commodities of South Sulawesi Province show their existence in the market. International trade is an inseparable part of technological progress. In general, every region in the world is connected to each other in sharing information, meaning that the challenges for exporting countries are increasingly real. In relation to competition, of course, the competitiveness of market penetration to market products is the

main key in successfully surviving in the current era. This competitiveness is not only in cheap and plentiful products but of course the product must be of good quality among similar products. Good product quality will be obtained through the creation of superior products among other countries or regions as exporters. Therefore, creativity and innovation are needed to continue in marketing their best products in facing the challenges of globalization. Indonesia is known as a country that is rich in natural resources and has its own uniqueness. According to research (Hariani 2022) says that the development of the right business actor is to rely on creativity or innovation. Especially in South Sulawesi Province, superior commodities with good and creative commodity processing will certainly create added value for the economy. Focusing on the market and consistently increasing production will have an impact on increasing export volume so that economic growth will increase at the same time as employment.

### ***The Effect of Exchange Rates on Exports in Encouraging Economic Growth in South Sulawesi Province***

The results of the study for the effect of value on exports in encouraging economic growth in South Sulawesi Province found that the exchange rate was significantly positive for exports in encouraging economic growth in South Sulawesi Province. The results of the effect of the exchange rate on exports obtained a positive coefficient (6.247736) and a p-value of  $0.0000 < 0.05$ . The results of this analysis are in accordance with the previously stated hypothesis. The weakness of the exchange rate, such as Indonesia, which has a free-floating exchange rate system, is that it is easy for the Indonesian exchange rate to depreciate and appreciate. The exchange rate itself has an influence on the economy, which mainly exports (Mulyono, 2022). South Sulawesi Province exports commodities, of course, to increase income. A strengthening exchange rate will affect export growth so that export volume will decrease. This is due to the fact that domestic goods are more expensive than foreign goods. The results of this study are in accordance with research (Fajar, Hakim, and Rachmina 2017) which reveals that the exchange rate has an influence on the economy which focuses on export growth. In the forex market system, exchange rate movements depend on the demand and supply of currencies. The advantage of a free-floating exchange rate system does not require large foreign exchange reserves. However, this has the disadvantage that the exchange rate will fluctuate easily. So the exchange rate will be easy to appreciate or depreciate.

## **CONCLUSION**

Based on the results of the study, it is concluded that the economic growth of South Sulawesi Province in 2000-2019 is as follows;

- a. Investment research results do not significantly affect exports in encouraging economic growth. Therefore, efforts are needed to increase investment so that it will encourage economic growth through exports.
- b. The results of competitiveness research have a significant negative effect on exports in encouraging economic growth. Therefore, efforts are needed to increase the competitiveness of the 10 leading commodities in South Sulawesi Province so that it will encourage economic growth through exports.
- c. The results of the research on bilateral agreements have no significant effect on exports in encouraging economic growth. Therefore, efforts are needed to increase bilateral agreements so that they will encourage economic growth through exports.

- d. The results of the research on market penetration have a significant effect on exports in encouraging economic growth. The greater the market penetration power, of course, will encourage economic growth through exports.
- e. The results of the study of the exchange rate have a significant effect on exports in encouraging economic growth. The more stable the exchange rate will encourage economic growth through exports.

## SUGGESTION

Based on the research results and conclusions, suggestions from the authors that can be put forward include:

- a. The regional government of South Sulawesi Province should focus on export commodities that have strong market penetration.
- b. The policy of maintaining the exchange rate at the right level is a policy that needs to be carried out by the government so that export volumes increase so as to encourage economic growth.

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