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Analysis of the Effect of Exchange Rate, Domestic Inflation Levels, and GDP of United States on Indonesian Footwear Exports to the United States in 1990-2019

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Abstract

Indonesian footwear export products are one of Indonesia's leading export products, Indonesia itself is the 10 largest footwear exporter in the world. The purpose of this study was to determine the effect of exchange rate, inflation rate and GDP of the United States simultaneously and partially on the export value of Indonesian footwear to the United States in 1990-2019. The analysis technique used is multiple linear regression analysis. The results of the data analysis show that the exchange rate, inflation rate and GDP of the United States simultaneously have a significant effect on the value of Indonesian Footwear to the United States in 1990-2019. Partially, the exchange rate and GDP of the United States have a positive and partially significant effect on the value of Indonesian footwear exports to the United States, while the inflation rate does not have a negative and partially significant effect on the value of Indonesian footwear exports to the United States..

Keywords: *Value of Footwear, Exports, Exchange Rate, Inflation Rate, GDP.*

1. Introduction

International trade is very important support the country's economic growth in amid an increasingly linked world economy one another [1]. Indonesia is a country that is very open and active in international trade. One of the commodities that are the mainstay of exports from the Indonesian manufacturing sub-sector is footwear. Footwear or sandals are products such as shoes and sandals that are used to protect the soles of the feet. According to the data from UN COMTRADE Indonesia is the 10th largest footwear exporter in the world which is ranked 6th. One of the main export destinations for Indonesian footwear, is the United States, it is also seen from UN COMTRADE data, namely that the United States itself occupies the first position as an importer of Indonesian Footwear products. [2].

Export activities cannot be separated from the currency exchange rates of the countries of origin and destination countries. The exchange rate is the price of a foreign currency that must be paid in a certain amount of currency. The exchange rate of the currency of the country of origin and destination country is a fundamental thing to pay attention to. This is based on the assumption that each country or region has a different financial system and currency values, so that any changes in exchange rates can change the relative price of a product to be more expensive or cheaper. The exchange rate is the price of one currency relative to the currencies of other countries [3].

The second factor is the GDP or gross domestic product of the United States. Gross Domestic Product or GDP is defined as the total economy of everyone in the economy [4]. Export demand can be influenced by the real GDP of the destination country, so there is a positive correlation between the GDP of the export destination country and the demand for imported products.

The third factor is the Inflation. A high inflation rate will bring problems for the domestic economy and also in relation to trade with foreign countries. Inflation also affects exports. Inflation can make raw materials expensive or cheap because inflation can affect the price of domestic raw materials. The increase of an inflation in a country will increase the price of domestic goods, causing production goods are getting higher and exporters are not able to again in maximum production or export becomes decreased. therefore inflation has a negative relationship with exports negative with exports [5].

2. Literature Review

Mahendra (2015), in his research concluded that the exchange rate has a positive effect on Indonesian exports for the period 1992-2012 [6]. Asima Rotinua (2012) in his research on oil fuel exports concluded that GDP has a positive relationship with exports [7]. In Larasati's research, Sita (2018) concluded that the inflation rate has a negative effect on exports, which means that the higher the inflation rate, the export will decline [8].

3. Problem Formulation

The hypothesis of this project is:

i. It is suspected that the exchange rate, Inflation and GDP of the United States simultaneously affect the value of Indonesian footwear exports to the United States
ii. It is suspected that the exchange rate and GDP of the United states partially affect the value of Indonesian footwear exports to the United States positively.
iii. It is suspected that the inflation partially affect the value of Indonesian footwear exports to the United States negatively.

4. Research Methodology

- Annual secondary data on Footwear Exports, Exchange rates, GDP of USA, inflation in the 1990-2019 range
- F test analysis to fit the model
- Analysis of the classical assumption test with 4 stages: normality test, multicollinearity test, autocorrelation test, heteroscedasticity test
- Partial testing using the t test
- The test was carried out using the SPSS version 16 for windows application

5. Analysis Result

The f-test result shows the R^2 value of 0.642 which shows that the variables of exchange rate, GDP of the United States inflation, have a strong influence on the Indonesian footwear exports to the United States. This means that 64.2% of the Indonesian footwear exports to the United States variation is influenced by exchange rate, GDP of the United States, and inflation, while the remaining 35.8% is influenced by other factors not included in the model. The f test result shows that the sig 0.00 is less than 5%, which means that simultaneously the variables of trade war, inflation, net exports, and the yuan devaluation policy are significant to the exchange rate.

The normality test used a statistical test with the parametric Kolmogorov-Smirnov Test (K-S). The Kolmogorov-Smirnov statistical value is 0.496 with a Sig (2-tailed) of 0.866 greater than 0.05. This means that the residual data is normally distributed and passes the normality test. Multicollierity test using a variant inflation factor (vif). The test results show that the calculated value in the tolerance column is more than 0.10 and the value in the VIF column is lower than 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model.

The autocorrelation test uses the Run test. The autocorrelation test results show that the value of probability = 0.158 > 0.05, it is concluded that there is no autocorrelation in the regression model. Heteroscedasticity test performed using the Glejser method. The test results show that the significance probability value is above 0.05, so it can be concluded that the regression model does not contain heteroscedasticity. The results of regression testing using the t test show that partially the variable exchange rate and the GDP of the United States have a positive effect and significant on the Indonesian’s footwear Exports to the United States. Meanwhile, the inflation variables don’t have a negative effect and insignificant on the Indonesian footwear exports to the United States.

6. Conclusion

Based on the results of the analysis and discussion, it can be concluded:
1) The simultaneous test results show that the Exchange rate, Inflation and GDP of the United states have a significant effect on the value of Indonesian footwear exports to the United States.
2) The Exchange rate (X1) partially has a positive and significant effect on the value of Indonesian footwear exports to the United States.
3) The GDP of the United States (X2) partially has a positive and significant effect on the value of Indonesian footwear exports to the United States.
4) Inflation(X3) partially don't have negative effect and insignificant on the value of rubber exports in Indonesia.

7. References

1. Todaro, M and Smith, Stephen. Development Economics, 2th edition, 2006, Erlangga
2. UN COMTRADE, 1990-2019 Indonesian footwear exports in the world.
3. Ekananda, Mahyus, International Economics, 2014, Jakarta, Indonesia
4. Mankiw N, Gregory, Macroeconomics, 2009, 7th Edition, New York
5. Wardhana, Ali. Analysis of its factors Affecting Indonesia's Non-Oil and Gas Exports to Singapore 1990-2010. Faculty Undergraduate Journal, Vol 12, No.2, 2011, pp 99-102
6. Mahendra, I gede yoga. Analysis of influence of investment, inflation, dollar exchange United States of interest and credit interest Indonesian exports, 1992-2012. Journal of development Economic Udayana, Vol 4, No.5, pp 525-545
7. Asima Ronitua. Analysis of Factors Affecting Beef Imports in Indonesia. Economics Development Analysis Journal. 2012.
8. Larasati, A.A Istri Sita. Effect of US Dollar exchange and inflation on value Indonesian footwear exports to China. 2018. Journal of development Economic Udayana, Vol. 7, No. 11, pp 2430-2460.