

The Effects of Production, Prices and International Trade on The Europe's Export Volume

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Abstract

This research examines about the EU's export volume. The issues that will be discussed is about the variables that influence the export volume in 2017-2019. The purpose of this study is to prove influence of Production, Price, and International Trade on The export volume. To analyze and prove the hypothesis an empirical test was carried out in the form of Q Square Prediction with Smart PLS 3.0. on the magnitude of the influence of the export volume. The method used in data collection is combination of secondary data derived from EU's database. The method used to analyzed is the time series data method. Based on the results of the hypothesis testing, the significant of Production (X_1) is $0.1911 > 0.05$, the significant of Price (X_2) is $0.7300 > 0.05$, the significant of International Trade (X_3) is $0.6555 > 0.05$, which means Production, Price and the International Trade has affects on the Export Volume.

Keywords : Production, Price, International Trade, Export Volume.

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1. Introduction

Exports are the goods and services produced in one country and purchased by residents of another country. It doesn't matter what the good or service is. It doesn't matter how it is sent. It can be shipped, sent by email, or carried in personal luggage on a plane. If it is produced domestically and sold to someone in a foreign country, it is an export.

Export is one of the international trade activities which has an important role for the economy of a country which can generate foreign exchange and can be used to finance imports and development of the domestic sector. Exports occur when goods produced in one country are sent to another country for sale or trade. Exports are important to the country's economy. International trade is a trading activity that exceeds the borders of a country where there are export and import activities (Amaden, 2020). The global market continues to open with the emergence of products from other countries. Globalization plays a role in providing opportunities for countries to increase national income or foreign exchange and increase their economic sector through international trade activities. Most countries want to increase their exports. Their companies want to sell more. If they've sold all they can to their own country's population, then they want to sell overseas as well. The more they export, the greater their competitive advantage. They must make the best price and quality. They gain expertise in producing the goods and services. They also gain knowledge about how to sell to foreign markets.

Governments encourage exports. Exports increase jobs, bring in higher wages, and raise the standard of living for residents. As such, people become happier and more likely to support their national leaders. Exports also increase the foreign exchange reserves held in the nation's central bank. Foreigners pay for exports either in their own currency or the U.S. dollar. A country with large reserves can use it to manage their own currency's value. They have enough foreign currency to flood the market with their own currency. That lowers the cost of their exports in other countries.

2. Literature Review

2.1. Production

Production is a series of activities to create and add value to an item, with the aim of meeting needs. Production can also be referred to as an activity to increase the usability of an object, without having to change the form of the goods or it is also called service production. Meanwhile, if it increases the usefulness of an object and changes its nature, it is called the production of goods. Gilarso (2004) states production are all human business activities in produce useful goods and services to meet the needs of human life. Meanwhile, Jakib et al. (2021) argue that production is the end result of the process economy by leveraging input or input to produce an output. It is concluded that production is a process the economy that humans do in produce an output in the form of goods or services which can be utilized to fulfill daily necessities of human life. Hareebin (2021) mentions four basic group of production factors, namely resources human, natural resources, equipment or capital, and entrepreneur activities. Four basic groups if combined will be a business activities. It was concluded that production is the combined result between the four groups these production factors. Komalasari (2009: 65) states that the production relationship with export volume is if production increases, hence the export volume increases, and vice versa.

2.2. Price

According to Martins et al., (2021), the definition of the amount of price that must be submitted by consumers to buy a product or service. Price is the only element related to income. According to Duan (2021), price is the amount of money charged for a product or service or the amount of value that is exchanged by consumers for the benefits of owning or using the product or service. Price according to Liang (2021) is the amount of money needed to get a combination of goods and services. Characterizing indicators. Dharmesta and Irawan (2005) argue that price is the amount of money needed to get a product and service. Budiarto (2007) states that price is the exchange value for the benefits of a good for consumers or producers expressed in monetary units such as rupiah. In business, it is determined by the seller or the manufacturer. This is because the price is an amount of money that the buyer must give to the buyer in order to obtain goods or services and the amount of money given is in accordance with the value of the goods or services. Carpenter (2021) states that there are three main functions of price, namely to determine sales volume, to determine the amount of profit, and to determine the image or product. Gilarso (2004) explains that the amount of goods purchased is inversely proportional to the price of the goods, where when the price is high, the purchase will decrease, and vice versa. This is related to the Law of Demand. Danish et al (2021) explains that the relationship between international prices and export volume is that if the price of commodities in the global market is greater in the domestic market, then the number of commodities exported is greater.

2.3. International Trade

International trade is the exchange of capital, goods, and services across international borders or territories because there is a need or want of goods or services (Ismail, 2020). International trade allows countries to expand their markets and access goods and services that otherwise may not have been available domestically. As a result of international trade, the market is more competitive. This ultimately results in more competitive pricing and brings a cheaper product home to the consumer.

international trade was key to the rise of the global economy. In the global economy, supply and demand- and therefore prices- both impact and are impacted by global events.

2.4. The Export Volume

Export is the activity of removing goods from the customs area. Customs area is an area belonging to the Unitary State of the Republic of Indonesia which consists of land, water and air territory which also covers all certain areas in the Exclusive Economic Zone. So simply export is the activity of releasing goods from within the country to abroad while still meeting the standards of existing regulations and provisions.

Sun (2021) explains that export is the process of moving an item or trading commodities from country to country others legally, and generally required cooperation of both customs in the sending country (exporter) as well as in the receiving country (importer). The role of exports is a means of impetus the country's economic growth with increase foreign exchange. This activity is generally carried out by a country if the country is able to produce goods in large enough quantities and the number of products of these goods has been fulfilled domestically, so that they can be sent to countries that are unable to produce these goods. goods or because the amount of production cannot meet. the needs of the people of the destination country. Li et al (2021) alludes to several factors affect exports, such as international prices, exchange rates, export-import quotas, tariff policies and non-tariffs, and discretion increases non-oil and gas exports. Aghion et al (2021) states that production is for export the product should have the potential to compete in the global market.

3. Method

This study uses a data analysis method using SmartPLS software version 3.0. which is run on computer media. Secondary data on the export volume sourced from the Eurostat database (European Statistical” <https://ec.europa.eu/eurostat/web/main/data/database>). The measurement model is used to test the validity and reability, while the structural model is used to test casuality.

4. Result and Discussion

4.1. Result

4.1.1. Data Descriptive

The descriptive statistics in this study are as follows in Table 1.

Table 1. Descriptive Statistics

	No.	Missing	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
X1	1	0	993.017	1063	106	1265	298.663	5.025	-2.526
X2	2	0	991.5	1032	98	1161	206.962	15.033	-3.96
X3	3	0	1073.367	1089	99	2022	295.233	6.003	-0.837
Y	4	0	973.917	1072	94	1531	354.142	2.151	-1.806

Source: Results of processing with Smart PLS.

Based on the Table 1, it can seen that the average value of Production (X1) is 993.017 with the minimum value 106 and the highest value 1265. Price (X2) with an average value 991.5 with the lowest value 98 and the highest value 1161. International Trade (X3) with an average value 1073.367 with the lowest value 99 and the highest value 2022. The export volume (Y) with an average production value 973.917 with the lowest value 94 and the highest value 1531.

The results of t-statistics value in the table path coefficients is presented in the following Figure 1 as a follows :

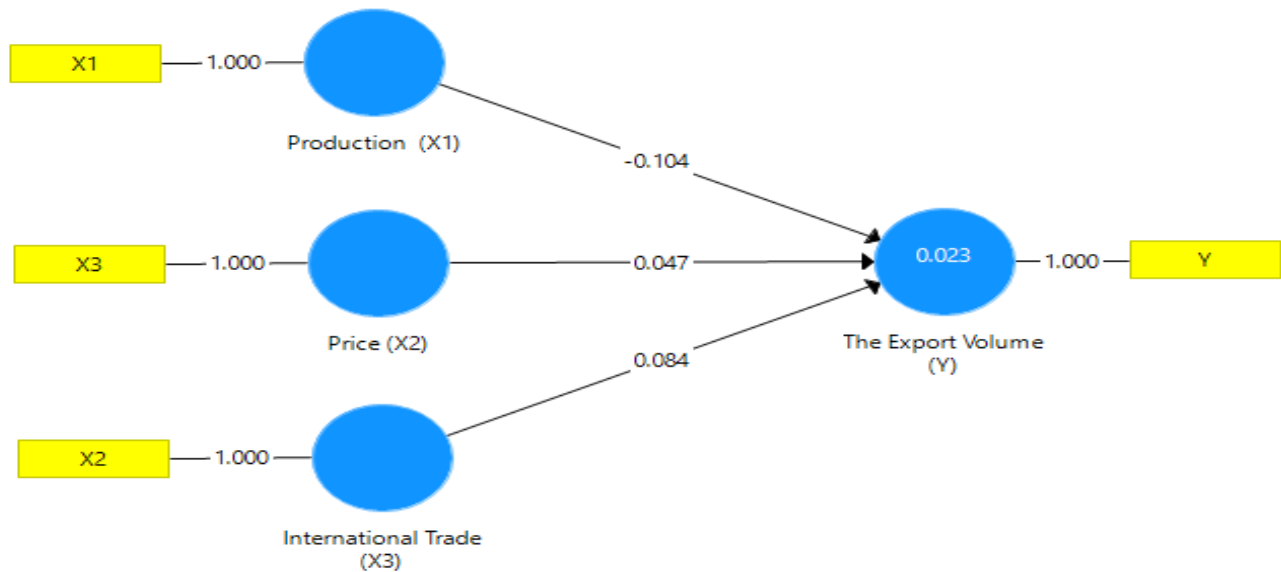


Figure 1. The overall model with coefficient

Based on the model Figure 1, it can be seen that production (X₁) has an effect on the export volume (Y) variable, price (X₂) affects the export volume (Y) variable, and the international trade affects the export volume (Y) variable. The results of hypothesis testing can be seen in the following table: The statistical results of this study can be seen in Table 2 below:

Table 2. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
International Trade (X3) -> The Export Volume (Y)	0.0842	0.0844	0.1887	0.4464	0.6555
Price (X2) -> The Export Volume (Y)	0.0468	0.0445	0.1354	0.3453	0.7300
Production (X1) -> The Export Volume (Y)	-0.1041	-0.1044	0.0795	1.3092	0.1911

Sourced : PLS Output

Based on the results of the hypothesis testing in Table 2, it can be seen that Production (X₁) is an independent variable that has positive and not significant effect on Export Volume. It can be seen from the statistical t value of 1.3092 < from the t table value of 2.00172 and this can be proven by the original sample value of -0.1041 and the significant of 0.1911 > 0.05, which means that Production (X₁) has a positive and no significant on Export Volume. Price (X₂) is an independent variable that has positive and significant effect on Export Volume. This can be seen from the statistical t value of 0.3453 < from the t table value of 2.00172 and this can be proven by the original sample value of 0.0468 and the significant of 0.7300 > 0.05, which means that Price (X₂) have positive and significant on Export Volume. International Trade (X₃) is an independent variable that has a positive and significant effect on the Export Volume. This can be seen from the statistical t value of 0.4464 < from the t table value of 2.00172 and this can be proven by the original sample value of 0.0842 and the

significant of $0.6555 < 0.05$, which means that International Trade (X_3) have positive and significant on the Export Volume.

4.1.2. Predictive Relevance

The result of Predictive Value show in Tabel 3 as follows:

Table 3. The Predictive Relevance

	International Trade (X_3)	Price (X_2)	Production (X_1)	The Export Volume (Y)
International Trade (X_3)				0.0842
Price (X_2)				0.0468
Production (X_1)				-0.1041
The Export Volume (Y)				

Source: PLS Output.

Based on Table 3, it can be seen that there is a direct relationship between each independent variable and the dependent variable.

4.2. Discussion

This study proves that the three factors, namely production, prices and international trade affect a country's export volume level. According to Yang et al (2021) who explains the concept of production which states that the exported products should have the potential to compete in the global market, because the competition there is definitely tougher. Production (X_1) is an independent variable that has positive and not significant effect on Export Volume. It can be seen from the statistical t value of $1.3092 <$ from the t table value of 2.00172 and the significant of $0.1911 > 0.05$. Price must also be good. According to Kotler and Armstrong (2008), price is the amount of money charged for a product or service or the amount of value exchanged by consumers for the benefit of owning or using the product or service. Price (X_2) is an independent variable that has positive and significant effect on Export Volume. This can be seen from the statistical t value of $0.3453 <$ from the t table value of 2.00172 and this can be proven by the significant of $0.7300 > 0.05$. Also, International Trade (X_3) is an independent variable that has a positive and significant effect on the Export Volume. This can be seen from the statistical t value of $0.4464 <$ from the t table value of 2.00172 and the significant of $0.6555 < 0.05$, which means that International Trade (X_3) have positive and significant on the Export Volume.

5. Conclusion

Most countries want to increase their exports. Their company wants to sell more. The more they export, the greater their competitive advantage. They must make the best price and quality. They must study hard in producing goods and services. Production, prices and international trade affect export volumes. Therefore, each country must keep it so that the country's export volume also increases.

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