

THE INFLUENCE OF EXCHANGE RATE AND FREIGHT COST TOWARD EXPORT VOLUME OF ADIDAS

Adelia Regita Putri¹, Endang Sulistiyani² and Paniya³

^{1,2,3}Politeknik Negeri Semarang
Corresponding author: ²endangsulis15@polines.ac.id

Article Info: Received: January 15, 2020; Revised: February 16, 2020; Accepted: February 30, 2020.

Abstract: This study aims to determine the effect of the exchange rate and freight cost partially and simultaneously on the export volume of Adidas at PT Apparel One Indonesia 1. This research uses an explanatory research type with a quantitative approach. The data used in this study is secondary data from documentary research and observation. The data comes from PT Apparel One Indonesia 1 and Bank Indonesia from January 2014 to December 2019. The sampling technique that used was purposive sampling with the number of samples are 72 data. The output of this study shows that exchange rate and freight cost affect export volume simultaneously and are able to explain the changes of export volume for 44,5%. Meanwhile, partially, the exchange rate variable has a negative and significant effect on the export volume of Adidas. The freight cost variable has a negative and significant effect on the export volume of Adidas. Exchange rate variable has dominant influence toward export volume.

Keywords: Exchange rate, Freight cost, Export Volume, PT Apparel One Indonesia 1

Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh nilai tukar dan biaya angkut secara parsial dan simultan terhadap volume ekspor Adidas pada PT Apparel One Indonesia 1. Penelitian ini menggunakan jenis penelitian eksplanatori dengan pendekatan kuantitatif. Data yang digunakan dalam penelitian ini adalah data sekunder dari penelitian dokumenter dan observasi. Data berasal dari PT Apparel One Indonesia 1 dan Bank Indonesia periode Januari 2014 hingga Desember 2019. Teknik pengambilan sampel yang digunakan adalah purposive sampling dengan jumlah sampel 72 data. Output dari penelitian ini menunjukkan bahwa nilai tukar dan biaya angkut mempengaruhi volume ekspor secara simultan dan mampu menjelaskan perubahan volume ekspor sebesar 44,5%. Sedangkan secara parsial variabel nilai tukar berpengaruh negatif dan signifikan terhadap volume ekspor Adidas. Variabel biaya angkut berpengaruh negatif dan signifikan terhadap volume ekspor Adidas. Variabel nilai tukar memiliki pengaruh dominan terhadap volume ekspor.

Kata kunci: Nilai tukar, Biaya angkut, Volume Ekspor, PT Apparel One Indonesia 1

INTRODUCTION

The development of the industry in this era of globalization is growing rapidly. Several sectors of the industry rely on international trade as the main activity in making profits. International trade is trading activity that involves more than one country. This happens because in certain companies, they sell all of their industrial products to other countries or by exporting them. Exports are selling goods abroad by using the payment system, quality, quantity and other terms of sales approved by the exporters and importers (Amir, 2007).

Garment manufacturing industry build its investment and production capacity mainly based on foreign markets and export. Based on data from the Ministry of Industry, garment has become the fourth biggest export commodities of Indonesia. One of the companies that focuses on the garment industry is PT Apparel One Indonesia 1. Established in 2011, PT Apparel One Indonesia 1 has the largest customer, Adidas International Trading. This company is a manufacturing company that produces various kinds of sportswear with different models or styles and materials. All the products are exported to many countries in European, Asian and America continent. The amount of Indonesia export in USD kept fluctuating from 2014 to 2018. Then, in 2019, there was a slight drop in from 7.322.500.000 USD to 7.072.500.000 USD. Besides, the export volume in ton decrease gradually from 2015 to 2019. Data from PT Apparel One Indonesia 1 showed and explained the total volume of all exported products of PT. Apparel One Indonesia 1.

Figure 2

Export Volume PT AOI 1 2014-2019



The amount of the export volume of Adidas at PT. Apparel One Indonesia 1 was 4.123.112 pieces in 2014, 5.211.598 in 2015, 5.100.720 in 2016, 4.860.332 pieces in 2017, 3.843.474 in 2018 and 3.860.911 pieces in 2019. We can conclude that the number of export fluctuate from year to year and decrease from 2016 until 2018. However, in 2019 the volume increased. As an export oriented company, PT. Apparel One Indonesia 1 must face up new challenges to come. Some factors affecting exports are exchange rate and freight cost. Exchange rate is an important factor in international trading as it is used as a guidelines in international payment. In carrying out export-import activities, PT Apparel One Indonesia 1 uses the USD (US Dollar) currency as a means of payment. Changes in the rupiah exchange rate against the US dollar have always been considered by the company.

Sasono (2013:186) stated that “international trade is influenced by the exchange rate. The exchange rate is a comparison of the purchasing power of each country's currency”. According to Sukirno (2015:397) the exchange rate shows the price or value of a country's currency expressed in the value of another currency. It can also be defined as the amount of domestic money needed or the amount of Rupiah needed to obtain one unit of foreign currency. In a previous research, Edward and Hlatshwayo (2020) concluded that exchange rate has a significant and positive effect on export volume. On other hand, Cardebat, and Firguet (2019) stated that exchange rate has a significant negative impact on export volume. Meanwhile Gallego et al. (2019) stated that exchange rate non significant on export volume because exchange rate volatility does not seem to be a major factor in determining volumes of trade.

In export activity, the process of transferring the products it is necessary. In the process of transferring the product, costs are needed. Freight Cost is the amount of packing cost and shipping cost to transport goods from one place to another, whether by land, sea, or air. PT. Apparel One Indonesia 1 uses the services of logistic companies in carrying out export activities. The export transaction carried out certainly cannot be separated from type of incoterm used.

According to research conducted by Prasojo (2017) stated that the distribution costs have a significant and negative effect on the export volume of organic fertilizer PT. Indmira Yogyakarta. It means that the higher distribution cost, then the export volume will decrease. On other hand, Chi (2016) stated freight cost influences export volume. Meanwhile, Jiang et

al (2018) concluded that freight cost not significant toward export volume. Factors of exchange rates and freight costs can be used as company considerations when it will make improvements to the increase in export volume. The company needs to evaluate these factors in order to be able to increase its export volume every month. This makes the company need to know which factors have the greatest influence on the export volume so that when making policy, company management knows which factors should be prioritized for review. Given this background, in this research interested in analyzing The Influence of Exchange Rate and Freight Cost Toward Export Volume of Adidas at PT. Apparel One Indonesia 1.

International trade is a commercial relationship between the parties in two different countries, generally carried out in the form of exports and imports. International trade is an area of business activity that is quite complex, requires adequate knowledge and heavy regulation (Renaldy et al, 2018:5). International trade occurs as a consequence of countries looking for markets overseas to market their products or domestic commodities, which are superior natural resources. International trade is a trade relationship between two countries and is very necessary to meet the needs of each country. Concretely, the benefits of international trade are as follows (Rinaldy, 2018:17):

1. Obtaining commodities or goods that cannot be produced domestically. These goods are needed by the people of a country both for consumption and production purposes.
2. To gain benefits and specialization. The surplus from the difference in export commodity prices will be an additional source of foreign exchange earnings for the exporting country.
3. Selling technology that is not owned by other countries, especially if the results of technology production are needed by the community.
4. Expanding the market to increase profit or profitability.
5. As a form of technology transfer.

A commodity that is usually produced manually can be replaced with production technology.

Export

Referring to Law No. 17 of 2016 concerning customs, it can be explained simply that export is the activity of removing goods from customs areas. Goods have been exported if the goods have been transported out through the customs boundaries.

Some factors that could improve export according to Mohdari (2017: 93) are:

- a. Enhancement in the prosperity of the world community.
- b. Lower inflation in exporter country than in importer country.
- c. Foreign exchange rates that are profitable to the importer country.
- d. Increases in domestic production efficiency.
- e. The failure of the same commodities producing countries.
- f. Government policies (taxation & subsidies) that are beneficial for exporter.

If trading involves two types of currencies, the foreign exchange market will appear. Foreign exchange rate is the foreign currency needed to carry out international transactions (Eacharnd, 2011:75). Exchange rate is one of the problems in export activities. In addition, transportation costs are things that need to be considered in export activities.

The Influence between Exchange Rate toward Export Volume

Exchange rate is the value of a foreign currency compared to domestic currency (Sasono, 2015:186). Foreign trading is definitely more complex than domestic trading because of the currency difference between two countries. Sukirno (2015:397)) stated that exchange rate indicates the price or value of a country's currency expressed in the value of another country's currency. It can also be defined as the amount of domestic currency needed, or the amount of rupiah needed to obtain one unit of foreign currency.

According to Sukirno (2015:80) The factors that affect changes in exchange rates are caused by many factors, as follows:

1. Inflation

Inflation is the process of increasing general prices of goods continuously (Nopirin, 201: 25). A high inflation rate in a country will cause the prices of domestically produced goods to be more expensive, so that goods are less competitive in the international market. When the domestic inflation rate increases (relative to foreign inflation) it causes the demand for imports to increase so that the need for foreign currency (US dollars) increases so that the exchange rate against the US dollar weakens or depreciates. When the domestic inflation rate decreases, the demand for imports decreases so that the need for foreign currency (US dollars) decreases so that the rupiah exchange rate against the US appreciates.

2. Interest Return

The rate of interest is one of the factors that influence exchange rates. When the domestic currency interest rate decreases, capital will leave the country causing the currency to depreciate. When the domestic currency interest rate is high, capital will enter the country which will cause the domestic currency to strengthen (Arifin, 2018).

3. Purchasing Power Parity

The purchasing power parity theory forms the basis of an exchange rate theory. The law of one price states that in competitive markets free from transportation costs and official barriers to trade, it is certain to sell in various countries at the same price. In the long run, the purchasing power parity applies so that prices can go up or down. When prices rise, the exchange rate weakens or depreciates. In the short term the purchasing power parity does not apply, which causes a fixed or sticky price level which will cause interest rates to fall, which will also lower expectations of returns on domestic assets. So that the demand for assets in rupiah will decrease or depreciate (Arifin, 2018).

According to the Sasono (2013:186) international trade is influenced by the exchange rate. Exchange rate is stated to be one of the factors affecting export volume. According to Amir (2007:11) export is shipping goods out of Indonesian customs areas. Export activities start from the presence of parties that involved, namely exporters and importers of goods or services where both are in different countries and make written agreements in a sale and purchase contract. Therefore, this research predicts a significant influence of the exchange rate on export volumes. For example if the IDR depreciates, the purchase price for the importer will be cheaper. Therefore the demand for goods will increase so that the export volume will increase. Conversely, if the Rupiah appreciates against the dollar, the price of goods for importers will be expensive. Therefore, demand will decrease so export volumes will also decrease. This is also in accordance with previous research by Edward and Hlatshwayo (2020) and Auliya (2018) which stated that the exchange rate influences and has a significant effect on export volume. Based on the explanation above, the stated hypothesis is as follows:

Ha1 : Exchange rate influences export volume.

The Influence between Freight Cost toward Export Volume

According to (Barua et al, 2020) international freight transportation pertains to the physical process of moving goods between countries by ship, air, rail, truck, pipeline or

intermodal. International freight transportation can involve a multitude of stakeholders including one or multiple shippers, carriers, forwarders, third-party logistics services, and customs of two or more countries for each movement. Compared to domestic goods movement, international freight transportation is characterized by large volume.

According to Sasono (2013:50) the factors that influence the amount of freight costs are as follows:

1. Ship production factors
 - a. Carrying capacity
 - b. Speed
 - c. Ship price
 - d. Fuel and lubricant consumption
 - e. Maintenance and repair costs
 - f. Ship insurance
 - g. Crew costs
 - h. Shrinkage of the ship.
2. Port productivity factors, consisting of:
 - a. Loading and unloading capacity
 - b. Port hours
 - c. Idle time waiting for additional facilities

3. Marine factor

Distance between loading port and unloading port. There are other factors that influence the amount of freight rates, namely the increase in fuel and oil.

Based on demand theory, if the price goes up, the demand will go down. Conversely if the price goes down, the demand for goods will go up. This can be implemented also in freight cost in export practices. For example if the price of freight costs goes up, importers are reluctant to buy products because they feel the cost of transportation costs is too expensive. So the buying interest will decreased, and the export volume will also decreased. Conversely, if the freight costs are cheap or fall, the demand for goods will rise so that export volumes will also increase. This is also in accordance with previous research by Havenga et al (2019) which stated that freight costs influences export volume. This can be seen from the decrease in freight rates

lowers the transaction cost of international trade, and therefore allows more trade enterprises access to the international trade market. Examples of freight costs affect export volume can also be seen from if there is a decrease in transportation costs and logistics can cause an increase in product competitiveness in foreign markets, it can increase the outflow of commodities or export activities. Based on this explanation, the hypothesis are as follows:

Ha2 : Freight cost influences export volume.

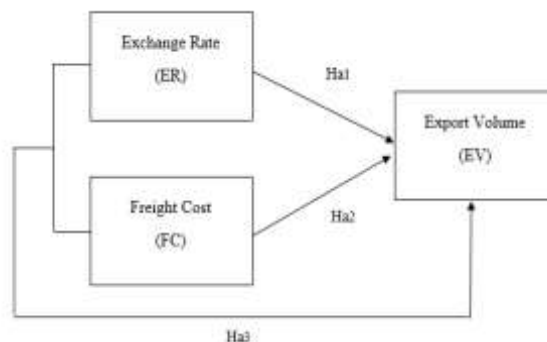
The Influence between Exchange Rate and Freight Cost toward Export Volume

The previous studies by Chi (2016) and Sembiring (2018) examined the effect of exchange rates and freight costs partially on export volume. The results state that the exchange rate and freight cost affect export volume. So, in this research also predict that the exchange rate and freight costs simultaneously affect the export volume. This is because the bilateral exchange rate is a significant factor influencing the freight flows, the exchange rate appreciation can increase the freight flows. Freight costs can be an important factor affecting outflows of the commodities. So the importer also pays attention to the exchange rate and freight costs before importing goods. For example, if the rupiah exchange rate is being appreciated and the price of freight costs is high then the export volume will decrease. This is because importers feel the costs incurred are getting higher. Conversely, if the price of freight costs is cheap and the rupiah is depreciating against the dollar, the importer will order more goods so that the volume of exports will also increased. Because this situation provides an advantage for importers because they buy goods at lower prices. So, the hypothesis stated is as follows:

Ha3 : Exchange rate and freight cost influences export volume.

According to the development of hypothesis, it can be describe the theoretical framework that shows in the following figure:

FIGURE 1 THEORETICAL FRAMEWORK



Source: Sembiring and Sasono (2018) developed in research (2020)

METHOD

This research applied explanatory research method with quantitative approach. This analysis method is used in order to solve as well as answer the problems being studied. While quantitative research method can be explained as a research method that statistically analyzes quantitative data to test the established hypothesis (Sugiyono, 2016: 8). The data in this research were the secondary data from PT Apparel One Indonesia 1 and Bank Indonesia in January 2014-December 2019. The data collected by observation, interview, and documentary research. In this research, there are two independent variables which are Exchange Rate and Freight Cost. The dependent variable in this research is Export Volume. The data are processed using IBM SPSS 25. The result of data analysis consist of classic assumption test, descriptive statistics and multiple linear regression.

RESULT

The result of descriptive analysis that out of 72 N data. The independent variable in this research, exchange rate (ER) has highest value in March 2014 and the lowest value in October 2018 from 72 N data. Meanwhile the lowest value of the other independent variable, freight cost in December 2014 and the highest value in August 2019. The result of descriptive statistics analysis on dependent variable explained that the lowest value (minimum) in December 2018 and the highest value (maximum) in January 2017.

Normality test shows that the significance value is 0,200 which is greater than the alpha of 0,05 ($0,200 > 0,05$). It can be concluded that the data are normally distributed. Multicollinearity test shows the variance inflation factor (VIF) value of both independent variables are 1,414 which is less than 10. The tolerance value are 0,707 which is greater than 0,10. Therefore, it can be concluded that there is no presence of multicollinearity.

There is no heteroscedasticity in this model because data distribution points are scattered randomly and spread above and below the zero (0) on the Y axis. Based on the autocorrelation test, there is no indication of autocorrelation. The result of this test is that C2 value is lower than C2 table. Therefore, the model in this research is linear. The result of multiple linear regression can be seen in the table 1:

Table 1 Multiple Linear Regression

Model		Coefficients	
		Standardized Coefficients B	Sig.
1	Exchange Rate	-0,271	,012
	Freight Cost	-0,786	,000
a. Dependent Variable: Export volume			

Source: Data Processing Output IBM SPSS Statistics 25, 2020

Based on the multiple regression analysis conducted in IBM SPSS Statistics 25. The results can be seen in Table 1, the multiple regression equation model obtained are:

$$EV = -0,271 ER - 0,876 FC$$

From the result it can be concluded the effect of each variable toward export volume. Exchange rate has negative effect, and freight cost also has negative effect toward export volume. From the model regression the constant value indicates that the regression coefficient obtained from the exchange rate (ER) is -0,271. This means that an increase in the exchange rate of 1 USD will be followed by an decrease in export volume of 0,271 PCS assuming other variables are fixed.

On the other hand, the regression coefficient of the other independent variable of freight cost (FC) is -0,876 which means that every time there is an increase in freight cost of 1 USD, it will reduce export volume by 0,876 pcs and vice versa. So, the variable freight cost has a negative effect toward export volume. The result of determination coefficients test can be seen in table 2, as follows:

Table 2 Determination Coefficients Test Result

Model Summary ^b	
Model	Adjusted R square

1	,445
a. Predictors: (Constant), Exchange Rate,	
b. Dependent Variable: Export volume	

Source: Data Processing Output IBM SPSS Statistics 25, 2020

In table 2, the value of the adjusted R^2 is 0,445 or 44,5%. Furthermore, it can be determined that the independent variables in this research which are exchange rate and freight cost are able to explain the changes of export volume for 44,5%. While the rest percentage of 55,5% is explained by other variables outside the analyzed regression model. The following table is the result of F-Test:

TABLE 3 F-TEST

ANOVA ^a			
Model		F	Sig.
1	Regression	29,434	,000 ^b
	Residual		
	Total		
a. Dependent Variable: Export volume			
b. Predictors: (Constant), Exchange Rate,			

Source: Data Processing Output IBM SPSS Statistics 25, 2020

Based on the table 3, it can be explained that significance value is 0,000 or less than 0,05 which can be determined that H_{a3} is accepted. Therefore, the F-test result showed that both variables of exchange rate (ER) and freight cost (FC) significantly influenced on export volume of Adidas. So it can concluded that exchange rate and freight cost simultaneously influences export volume. The result of the T-test can be seen in the following table:

Table 4 T-Test

Coefficients ^a				
Model		Standardi	T	Sig.
		B		
1	Exchange Rate	-0,271	-2,572	0,012
	Freight Cost	-0,786	-7,470	0,000
a. Dependent Variable: Export volume				

Source: Data Processing Output IBM SPSS Statistics 25, 2020

1. Exchange Rate toward Export volume of Adidas Based on Table 4, it can be concluded that a sig. value of exchange rate variable is 0,012 which is less than than 0,05. As a result, Ha1 is accepted. It means Exchange Rate (ER) partially influenced Export volume (EV).
2. Freight Cost toward Export volume of Adidas, According to Table 4, it is found that the value of significance for freight cost variable is 0,000 which is less than 0,05. The conclusion is Ha2 is accepted, so that Freight Cost (FC) partially influenced Export volume (EV).

The Influence of Exchange Rate toward Export Volume

The first hypothesis of this research is exchange rate influences export volume. This hypothesis is based on Sasono (2013:186) that stated international trade is influenced by the exchange rate. Exchange rate will determine the export activities. So, exchange rate is stated to be one of the factors affecting export volume. Therefore, this research predicts a significant influence on the exchange rate on export volumes. If IDR appreciates, the purchase price for the importer will be higher. Therefore the demand for goods will lower so that the export volume will decrease. Conversely, if the Rupiah depreciates against the dollar, the price of goods for importers will be cheaper. Therefore, demand will increase so export volumes will also increase. This research is in accordance and support with previous research by Hlatshwayo (2020) and Mejaya et al (2016) that stated exchange rate has negative effect toward export volume.

From the result of the T-test, it can be concluded that a sig. the value of the exchange rate variable is 0.012 which is less than than 0.05. So, the hypothesis that stated exchange rate affects the export volume is accepted. As a result, Ha1 is accepted. It means the Exchange Rate (ER) is partially and significantly influenced by Export volume (EV). It can be concluded that the higher IDR depreciation, the number of export volume will lower. If based on the data used in this research, the USD exchange rate has appreciated (IDR depreciated) so that it has an impact on the cheaper prices of exported goods for importers. This is in accordance with the demand theory from the buyer's side, if the price of goods decreases, the export demand will increase.

Thus, this result is in accordance with previous research conducted by Mejaya et al (2016) that stated if rupiah depreciates, the export volume will increase. Cardebat (2019) that also shared the same opinion that the exchange rate affects the export volume in negative effect, thus increases the export volume of a company. In other hands, the results of this research are also different from previous research by Gallego et al (2019) and Hapsari (2019) which states that the exchange rate has no effect on export volume because there are many factors that influence export volume.

This is appropriate in export practices at PT Apparel One Indonesia 1. So, if the exchange rate IDR depreciates, the rupiah exchange rate will be lower for importers. Then the price of goods for importer is cheaper, so importers will buy more goods. It will increase the volume of exports of Adidas products. This will improve export volume because the units of exports will be higher at PT Apparel One Indonesia 1.

The Influence of Freight Cost toward Export Volume

The second hypothesis of this research is freight cost influences export volume. Demand theory by Colander (2011:81), quantity demanded falls as price rises. So, if the price goes up, the demand will go down. Conversely if the price goes down, the demand for goods will go up. This hypothesis is also in accordance with previous research by Havenga et al (2019) which stated that freight costs influences export volume.

From the result of the T-test, it can be concluded that a sig. the value of the freight cost variable is which is less than than 0.05. So, the hypothesis that stated freight cost influences export volume is accepted. In other words, Ha2 is accepted. This shows that freight costs affect export volume. It can be seen from the T test results that the significance value of 0,000 is less than 0.005. From the test results produce a significant negative effect which means that if the freight cost is higher the export volume will decrease. Meanwhile, if the freight cost is cheap, the export volume will increase. In other words, if the value of freight cost rise, export volume will drop and vice versa.

This result is also consistent with previous research by Havenga et al (2019) and Prasojo (2017) which says that freight costs affect export volume. Havenga et al (2019) stated that decrease in freight rates lowers the transaction cost of international trade, and therefore allows more trade enterprises access to the international trade market. Examples of freight costs affect export volume can also be seen from if there is a decrease in transportation costs

and logistics can cause an increase in product competitiveness in foreign markets, it can increase the outflow of commodities or export activities. Meanwhile, this research different from previous research by Jieng et al (2018) and Hapsari (2019) which stated freight cost not influences export volume. This can be implemented also in freight cost in export practices at PT Apparel One Indonesia 1. If the price of freight costs at PT Apparel One Indonesia 1 goes up, importers are reluctant to buy products because they feel the cost of transportation costs is too expensive. So the buying interest will decreased, and the export volume will also decreased. Conversely, if the freight costs are cheap or fall, the demand for goods will rise so that export volumes will also increase.

The Influence between Exchange Rate and Freight Cost toward Export Volume

The third hypothesis of this research is exchange rate and freight cost influences export volume. This hypothesis based on the previous studies by Chi (2016) and Sembiring (2018) examined the effect of exchange rates and freight costs partially on export volume.

From the F-table result it can be concluded the hypothesis that stated exchange rate and freight cost influences export volume is accepted. In other words, Ha3 is accepted this can be seen from the simultaneous test results, namely the significance value of 0,000 is less than 0.005. This illustrates that the exchange rate and freight cost together influence export volume. In other words the fluctuations of exchange rate and freight cost will influence export performance. For example, if the higher depreciation of exchange rate (Rp/USD) and the value of freight cost drop, it will make export volume will rise.

This result is consistent with previous research by Sembiring (2018) and Chi (2016). The results state that the exchange rate and freight cost affect export volume. Sembiring (2018) stated “bilateral exchange rate is a significant factor influencing the freight flows, the exchange rate appreciation can increase the freight flows. Freight costs can be an important factor affecting outflows of the commodities. So the importer also pays attention to the exchange rate and freight costs before importing goods”.

This result can be implemented at PT Apparel One Indonesia 1, if the rupiah exchange rate is being appreciated and the price of freight costs is high so the export volume of Adidas will decrease. This is because importers feel the costs incurred are getting higher. Conversely, if the price of freight costs is cheap and the rupiah is depreciating against the dollar, the

importer will order more goods so that the volume of exports will also increased. Because this situation provides an advantage for importers because they buy goods at lower prices.

From the table of multiple linear regression model we can concluded that the constant value indicates that if the exchange rate and freight cost are zero or fixed, the export volume will be 351821,972 PCS. The regression coefficient obtained from the exchange rate (ER) is 28480,249. This means that an increase in the exchange rate of 1 USD will be followed by an increase in export volume of 28480,249 PCS assuming other variables are fixed. The significance value of the exchange rate is 0.001, which is lower than the 0.05 significance level. Therefore, it can be concluded that the exchange rate variable has a positive effect and partially has a significant effect on Adidas's export volume.

On the other hand, the regression coefficient of the other independent variable of freight cost (FC) is -5580,716 which means that every time there is an increase in freight cost of 1 USD, it will reduce export volume by 5,580,176 pcs. The significance value is 0,000 which is lower than the 0.05 significance level. That is, the variable freight cost has a negative effect and partially has a significant effect on Adidas performance volume. So it can be concluded that all variables in this research (exchange rate and freight cost) affect simultaneously or partially toward export volume.

CLONCLUSION

The conclusion of the study entitled the effect of exchange rate and freight cost toward export volume of PT. Apparel One Indonesia 1 are as follows:

1. The result of the coefficient of determination is 0.445, which means the export volume variable can be explained by the exchange rate and freight cost of 44.5%. The remaining 55.5% is explained by other factors.
2. Exchange rate and freight cost together affect export volume of Adidas at PT Apparel One Indonesia 1 Semarang.
3. Exchange rate have a significant and negative effect toward export volume of Adidas at PT Apparel One Indonesia 1 Semarang.
4. Freight cost have a significant and negative effect toward export volume of Adidas at PT Apparel One Indonesia 1 Semarang.
5. Variable exchange rate is a variable that dominantly affect export volume.

REFERENCES

- Amir, MS. (2007). *Ekspor Impor: Teori & Penerapannya*. Jakarta: Pustaka Binaman Pressindo
- Auliya, R. R., Setyadi, D., & Rini, N. (2019). "The Influence Of Selling Prices And Exchange Rates On Barecore Export Volume". *JOBS (Jurnal Of Business Studies)*, 4(1), 7-18.
- Barua, L., Zou, B., & Zhou, Y. (2020). "Machine learning for international freight transportation management: a comprehensive review". *Research in Transportation Business & Management*, 100453.
- Cardebat, J. M., & Figuet, J. M. (2019). "The impact of exchange rates on French wine exports". *Journal of Wine Economics*, 14(1), 71-89.
- Chi, J. (2016). "Exchange rate and transport cost sensitivities of bilateral freight flows between the US and China". *Transportation Research Part A: Policy and Practice*, 89, 1-13.
- Colander, David C. (2011). *Microeconomics-Seven Edition*. New York: McGraw-Hill Irwin
- Edwards, L., & Hlatshwayo, A. (2020). "Exchange rates and firm export performance in South Africa". (No. wp-2020-1). *World Institute for Development Economic Research (UNU-WIDER)*.
- Ghozali, Imam. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Semarang, Badan Penerbit Universitas Diponegoro
- Havenga, J. H., Witthöft, I. E., & Simpson, Z. P. (2019). "Macrologistics instrumentation: Integrated national freight flow and logistics cost measurement". *Transport Policy*.
- Jiang, B., Li, J., & Gong, C. (2018). "Maritime Shipping and Export Trade on "Maritime Silk Road". *The Asian Journal of Shipping and Logistics*, 34(2), 83-90.
- Mejaya, A. S., Fanani, D., & Mawardi, M. K. (2016). "Pengaruh Produksi, Harga Internasional, dan Nilai Tukar Terhadap Volume Ekspor (Studi pada Ekspor Global Teh Indonesia Periode Tahun 2010-2013)". *Jurnal Administrasi Bisnis*, 35(2), 20-29.
- Mohdari. (2017). *Bahan Ajar Ekonomi Makro*. Bogor: In Media
- Prasojo, Suryo Adi. 2017. "Pengaruh Biaya Distribusi dan Harga Produk Terhadap Volume Penjualan Ekspor Pada Pupuk Organik SAN 500 gr (Studi Kasus Pada PT. Indmira Yogyakarta)". Politeknik Negeri Semarang

AGREGAT: Jurnal Ekonomi dan Bisnis
Volume 4 (2), 2020
<http://journal.uhamka.ac.id/index.php/agregat>
p-ISSN: 2549-5658 e-ISSN: 2549-7243
DOI: 10.22236/agregat_vol4/is2pp141-157
Pp 141-157

- Ratana, Achsani and Andati. (2012). "Dampak Perubahan Nilai Tukar Mata Uang Terhadap Ekspor Indonesia". Bogor: *Jurnal Manajemen & Agribisnis*, Vol.9 No.3, November 2012.
- Rinaldy, Ikhlas dan Ardha Utama. (2018). *Perdagangan Internasional Konsep&Aplikasi*. Jakarta: PT Bumi Aksara
- Santana-Gallego, M., & Pérez-Rodríguez, J. V. (2019). International trade, exchange rate regimes, and financial crises. *The North American Journal of Economics and Finance*, 47, 85-95.
- Sasono, Herman Budi. (2013). *Manajemen Ekspor dan Perdagangan Internasional*. Yogyakarta: Andi
- Sembiring, M. J., & Sasono, H. B. (2018). "The Impact Of Inflation, US Dollar Exchange Rate And Land Transportation Freight Towards Non-Oil And Natural Gas Export To America, Japan, Australia And England Through Surabaya Port In The Year Of 2015-2017". *Archives of Business Research*, 6(12).
- Sukirno, Sadono. (2015). *Mikroekonomi Teori Pengantar*. Jakarta: PT. Raja Grafindo Persada
- .(2010). *Teori Pengantar Makroekonomi*. Jakarta:PT Raja Grafindo Persada
- Sugiyono. (2019). *Statistika untuk Penelitian*. Bandung: CV Alfabeta
- Suseno, S.I. (2004). *Sistem Kebijakan Nilai Tukar*. Jakarta:Bank Indonesia. Bea Cukai