The influence of Container Availability on Company Performance and Exchange Rate as Moderator Variable at PT. Samudera Agencies Indonesia Semarang Branch

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ABSTRACT

PT. Samudera Agencies Indonesia Semarang Branch's company performance which can be explained by export volume, fluctuates every month from 2017-2020. Factors that could be the cause of these fluctuations are the container availability and exchange rates. The research aims to analyze the influence of Container Availability on export volume, and the influence of Container Availability on export volume with Exchange Rate as a moderator variable at PT. Samudera Agencies Indonesia Semarang Branch's and to find out the contributions of all independent variables and moderator variable to dependent variable. This research is an explanatory research with quantitive approach. Simple Linear Regression Analysis and Moderator Regression Analysis method is used in this study equipped with the Descriptive Statistics Test, Classic Assumption Test, Coefficient of Determination, and T-Test. Data used in this study are secondary data which are obtained by collecting the data from Samudera Agencies Indonesia Semarang Branch and Bank of Indonesia from January 2017-February 2020. The output from this research shows that the independent variable has a significant effect on the company performance of Samudera Agencies Indonesia Semarang Branch, and exchange rate can moderate the influence between container availability and company performance. Suggestion that can be taken are paying attention to the number of container availability so they can meet exporters' demand and export volume of the company will meet higher number at maximum, and an effective strategy to allow them to benefit from advantageous rates, as well as deal with the downside risk. Further study is needed to investigate the other factors that influence export volume/company performance.

Keyword: Container Availability, Exchange Rate, Export Volume.

Pengaruh Ketersediaan Peti Kemas terhadap Kinerja Perusahaan dan Nilai Tukar Sebagai Variabel Moderator pada PT. Samudera Agencies Indonesia Cabang Semarang

Abstrak

PT. Kinerja perusahaan Samudera Agencies Indonesia Cabang Semarang yang dapat dijelaskan oleh volume ekspor, berfluktuasi setiap bulan dari tahun 2017-2020. Faktor yang bisa menjadi penyebab fluktuasi tersebut adalah ketersediaan peti kemas dan nilai tukar. Penelitian ini bertujuan untuk menganalisis pengaruh Ketersediaan Peti kemas terhadap volume ekspor, dan pengaruh Ketersediaan Peti Kemas terhadap volume ekspor dengan Nilai Tukar sebagai variabel moderator pada PT. Samudera Agencies Indonesia Cabang Semarang dan untuk mengetahui kontribusi semua variabel independen dan variabel moderator terhadap variabel dependen. Penelitian ini merupakan penelitian eksplanatori dengan pendekatan kuantitatif. Metode Analisis Regresi Linier Sederhana dan Analisis Regresi Moderator yang digunakan dalam penelitian ini dilengkapi dengan Uji Statistik Deskriptif, Uji Asumsi Klasik, Koefisien

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Determinasi, dan Uji-T. Data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh dengan mengumpulkan data dari Samudera Agencies Indonesia Cabang Semarang dan Bank Indonesia periode Januari 2017-Februari 2020. Output dari penelitian ini menunjukkan bahwa variabel independen berpengaruh signifikan terhadap kinerja perusahaan. di Samudera Agencies Indonesia Cabang Semarang, nilai tukar dapat memoderasi pengaruh antara ketersediaan peti kemas dan kinerja perusahaan. Saran yang dapat diambil adalah memperhatikan jumlah ketersediaan peti kemas agar dapat memenuhi permintaan eksportir dan volume ekspor perusahaan akan memperoleh keuntungan dari tarif yang menguntungkan, serta menghadapi risiko penurunan. Studi lebih lanjut diperlukan untuk mengetahui faktorfaktor lain yang mempengaruhi volume ekspor / kinerja perusahaan.

Kata Kunci: Ketersediaan Kontainer, Nilai Tukar, Volume Ekspor.

INTRODUCTION

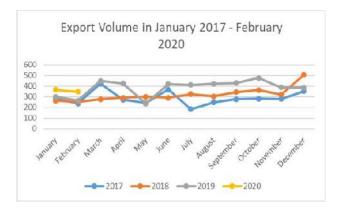
Almost every country at the moment cannot ignore its economic interactions with foreign countries. This is caused by the increasing number and variety of community needs that cannot be met only by domestic production. With this condition, it encourages foreign trade activities both in the form of goods and services between countries. It also applies in Indonesia. Within the development of industry where globalization era is always growing from time to time, it starts with the increasing of Indonesia role in international trade.

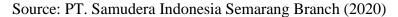
Indonesia is doing international trade by exporting and importing goods. With the

tremendous growth of international trade and globalization in international economic, making the relation between each related countries create export flow to increase between countries.

One customs broker that also contribute in helping exporter send their goods outside Indonesia is PT. Samudera Indonesia in Semarang Branch. PT. Samudera Indonesia is a public customs broker company engaged in shipping, cargo transportation and logistics. Performance of the company can be explained by the export volume which they do. That's why, this company has a very important role to provide services for the flow of goods in and out Indonesia.

Figure 1. Export Volume In January 2017 – February 2020





The rise and fall of export volume happened because of several reasons. In previous research, Edirisinghe, Zhihong, and Wijeratne (2016: 606) in "The Global Impact of Container Inventory Imbalance and the Factors that Influence Container Inventory Management Strategies" stated that freight reduction activities on export/import is caused by the container inventory imbalance, while Lawrence Edward and Ayanda Hlatshwayo (2020) in "Exchange rates and firm export performance in South Africa" concluded that exchange rate has a significant and positive effect on export performance.

PT. Samudera Indonesia must be able to maximize the number of its export volume to achieve maximum profits as well. Some factors affecting export are the number of container availability and exchange rate. As a shipping companies, having a number of containers is an obligation for PT. Samudera Indonesia to respond to market demand. The fluctuating of market demand effecting many containers are being unused when low season and lack of required containers during high season. Every shipping company certainly wants to balance the needs and availability of containers in order to achieve efficiency. Therefore, customs broker company must be able to determine how many containers the company must control if it wants to answer all market demands. The more containers being available, the more shipping company should be able to receive more exports, which in turn will increase the amount of volume that can be exported.

In previous research, Li et al (2007:407) stated that export-dominant port demand more empty containers. In addition, Edirisinghe, Zhihong, and Wijeratne (2016: 606) also stated that when the degree of confidence of carriers to perform budgeted exports/imports lower, that leads to more freight reduction activities on imports.

In recent times, the international trade volume has significantly increased and many countries have a battle to maintain their international trade level and boost their share. However, in developing countries, trade volume seems to be at risk in internal and external shocks (Ebadi, A, 2015). One of the most important factors in this regard is the exchange rate volatility. In carrying out export-import activities, PT. Samudera Indonesia uses 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.

Previous empirical studies have reported a significant relationship between export and exchange rate changes. Wondemu, K. A., & Potts, D. J (2016) stated that exports in both countries are highly responsive to changes in the real exchange rate. The same studies from Sugiharti, L., Esquivias, M. A., & Setyorani, B.(2019) conclude that the findings suggest that exchange rate volatility has a significant effect on exports of commodities. Otherwise, In research conducted by Ginting (2013), the exchange rate has a negative and significant influence on Indonesian exports. It shows that the stronger the exchange rate (appreciation) will cause a decline in Indonesia's exports.

To achieve improvements in the increasing of export volume, factors of containers availability and exchange rate can be used as company considerations. 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 company management knows which factors should be prioritized for review. Therefore, this research is aimed to determine the influence of container availability on company performance with exchange rate as a moderator variable at PT. Samudera Agencies Indonesia Semarang Branch.

Literature Review

The Influence between Container Availability toward Company Performance

As in Regulation of The Minister of Transportation No. PM 52 of 2018, container is part of a box-shaped conveyance and is made of materials that meet the requirements, are permanent and can be used repeatedly, which has a pair of angles and is specifically designed to facilitate the transportation of goods with one or more modes of transportation, without having to load back.

In general, shipping lines and container leasing companies have different perspectives on empty container management. Fung Ng, A. S (2016:35) stated that usually shipping lines are responsible for the full management of empty containers, including their repositioning and repair, leasing companies tend to ignore the issue of empty container repositioning because they can still make a profit even when their containers become empty within the lease period. Obviously, shipping lines are seriously affected by the imbalance of trade. The effects are also passed onto other partners in the supply chain, such as shippers and container haulage companies.

In previous research, Li et al (2007:407) stated that export-dominant port demand more empty containers. In addition, Edirisinghe, Zhihong, and Wijeratne (2016: 606) also stated that when the degree of confidence of carriers to perform budgeted exports/imports lower, that leads to more freight reduction activities on imports. Based on the explanation above, the stated hypothesis is as follows:

Ha1 : There is significant influence between container availability on Samudera's company performance.

The Influence between Container Availability toward Company Performance and Exchange Rate as Moderator Variable

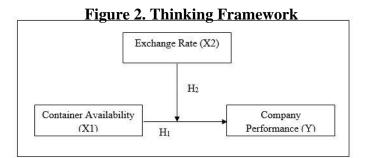
According to Purba, J. H. V. and Magdalena A. (2017: 287), exchange rate is an agreement known as the currency exchange rate against current or future payments between the two currencies of each country or region.

Previous empirical studies have reported a significant relationship between export and exchange rate changes. Wondemu, K. A., & Potts, D. J (2016) stated that exports in both countries are highly responsive to changes in the real exchange rate. The same studies from Sugiharti, L., Esquivias, M. A., & Setyorani, B.(2019) conclude that the findings suggest that exchange rate volatility has a significant effect on exports of commodities under code 26 (ores), 38 (chemicals), 40 (rubber), and 47 (pulp paper) to India, Japan, South Korea, and the United States, either in the short or long-run. Otherwise, In research conducted by Ginting (2013), the exchange rate has a negative and significant influence on Indonesian exports. It shows that the stronger the exchange rate (appreciation) will cause a decline in Indonesia's exports. Based on this explanation, the hypothesis are as follows:

Ha2 : Exchange rate moderates the influence of container availability towards company performance.

Thinking Framework

According to the development of hypothesis, it can be describe the theoretical framework that shows in the Figure 2.



Source: Developed for research, 2020

METHOD

This research used explanatory a quantitative approach. research with According to Sugiyono (2014), explanatory research is a research method that explains the position of the variables studied and the effect of one of the variables with other variables. It is a type of research design which focuses on explaining the aspects of your study in a detailed manner. Based on the type of research, the research to explain the influence availability on company of container performance and exchange rate as moderator variable which take place in PT. Samudera

Indonesia Semarang Branch. The data in this research were the secondary data from PT. Samudera Indonesia Semarang Branch and Bank Indonesia in January 2017-February 2020. The data collected by observation, interview, and documentary research. In this research, The data are processed using IBM SPSS 25. The result of data analysis consist of classic assumption test, descriptive statistics and simple linear regression.

FINDING AND DISCUSSION Descriptive Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
CONTAINER AVAILABILITY	38	185	494	338.08	69.644	
EXCHANGE RATE	38	13319	15227	13932.87	490.664	
EXPORT VOLUME	38	185	508	332.37	77.025	
Valid N (listwise)	38					

 Table 1. Descriptive Statistics

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

Table 1 shows that the number of data used in this study (N) is 38. The numbers of data are collected from January 2017 to February 2020. The minimum data value in Container Availability is 185, the maximum is 494, the means is 338.08. In Exchange Rate, the minimum is 13,319, the maximum is 15,227, the means is 13,932.87. In Export Volume, the minimum is 185, the maximum is 508, the means is 332.37.

Classic Assumption Test

Classic Assumptions	Output	Decision	
Multicollinearity	VIF>10	No Multicollinearity	
Autocorrelation	Du < 1.933 > 4-dU	No Autocorrelation	
Heteroscedasticity	Data spread around at scatterplot graphic	No Heteroscedasticity	
Normality	P-Plot data spread close to diagonal line and sig. value > 0.005	Data have normal distribution	
Linearity	Deviation from linearity (0.512) > 0.05	Data have linear correlation	

Table 2. Classic Assumption Test Output

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

Based on Table 2 it is found that all variables qualify the requirement of the classic assumption test, namely the normality test, the multicollinearity test, autocorrelation test, heteroscedasticity test, and linearity test.

Simple Linear Regression

		Coeffi	cients ^a			
			dardized icients	Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	122,987	52,687		2,334	,025
	CONTAINER AVAILABILITY	,619	,153	,560	4,055	,000

Table 3. Simple Linear Regression

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

Based on the SPSS calculation, the following simple linear regression equations are obtained.

Y = 122.987 + 0.619 X1 + e

Note:

Y = Export Volume (Y)

X1 = Container Availability (X1)

E = Disturb Factor

The constants value in the simple linear regression equation is 122.987. This means that when the Container Availability variables are considered constant or there are no changes, the Company Performance in PT. Samudera Agencies Indoensia Semarang Branch is 122.987 teus.

X1 means the effect of container availability on company performance. The container availability variable regression coefficient is 0.619. This means that if there is an increase in number of container of 1 teus, it will add export volume in PT. Samudera Indonesia for 6.19 teus. Based on the significance of the regression model it can be seen that the Container Availability significance value is lower than 0.025 (0.000

< 0.025) and the t-count of 4.055 is greater than t-table of 2.02809. So we can say that Ha1 is accepted. It means that there is significant influence of Container Availability (X1) on Company Performance (Y) in PT. Samudera Indonesia Semarang Branch.

Moderating Regression Analysis

		Co	efficientsa			
		Unstandardiz	ed Coefficients	Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	134,224	48,602	31.5.000	2,762	,009
	CONTAINER AVAILABILITY * EXPORT VOLUME	4,194E-5	,000	,571	4,174	,000

Table 4. Moderating Regression Output

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

From Table 14 can be explained that the results of the analysis moderating regression test shows that the exchange rate is able to moderate the effect of container availability on company performance. This shows by the significance value which is greater than alpha, 0.000 < 0.025 and the Tcount value is 4.174 which is greater than T- table 2.02809. So it can be concluded that Ha2 is accepted.

Coefficient Determinant

In moderating variable analysis, coefficient determinant must be done twice the test, before adding the moderating variable and after. The result of determination coefficients test can be seen Table 5.

		Model Su	immary	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,560ª	,314	,295	64,696

 Table 5. Coefficients Determinant Test Result

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

Based on table 5, the value of R Square is 0.314 which means that the variability of the dependent variable (company performance) can be explained by the variability of the independent variable (container availability) of 31.4%. While the remaining 68.6% is explained by other variables not included in the regression model. After adding the moderating variable, the coefficient determinant becomes:

(E)		Model Su	immary	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,571ª	,326	,307	64,105

Table 6. Second Coefficients Determinant Test Result

Source: Data Processing Output IBM SPSS Statistics 25 (2020)

From Table 6, we can know that the R Square value is increasing by 0.326. It means that the variability of the dependent variable (container performance) can be explained by the variability of the independent variable availability) (container and moderating variable (exchange rate) of 32.6%. While the remaining 67.4 is explained by other variables not included in the regression model. In addition from Table 5 and Table 6, there is a change in increasing in the number of R Square by 1.2%. Therefore, it can be concluded that moderating variable (exchange rate) can strengthening the influence of the independent variable (container availability) on dependent variable (company performance).

Discussion

The Influence between Container Availability toward Company Performance

Simple linear regression result shows independent variables significantly that influence the dependent variable in this research. It can be revealed by seeing the significant value of the Coefficients table. The sig. value is 0.000 which is lower than 0.025and the T-Value is 4.055 which is greater than t-table of 2.02809. Therefore, Hypothesis 1 states that there is an influence of container availability and company performance is accepted. So it can be concluded that independent variables which is container availability significantly influence dependent variable which is company performance. So, the company has to take the strategy to provide as many as possible container to meet exporters demand toward export activity.

TheInfluencebetweenContainerAvailability towardCompanyPerformanceand ExchangeRate asModeratorVariable

Meanwhile, seeing the moderating regression analysis, from the independent variables and moderating variable proposed in the regression model, it is found that exchange rate is able to moderate the effect of container availability on company performance. This result can be shown by looking coefficient table which is the significant value of container availability*exchange rate is 0.000 that is lower than 0.025, so that exchange rate positively and significantly moderates the influence of container availability on company performance.

Based on the result of the coefficient determination test, the ability of independent variables is found that independent variables which is container availability explained the variance of the dependent variable that is company performance in 31.4%. Therefore, the rest of 68.6% was explained by other factors. But after adding exchange rate as moderating variable, it is shows that the coefficient determination is increasing by 1.2% to 32.6%. So we can concluded, strengthening exchange rate can the relationship between the independent to the dependent variable.

Research Implications

Analysis conducted on company performance at PT. Samudera Indonesia

Semarang Branch can be used as a reference by companies in making decisions to evaluate export volumes. In this study, the results obtained that the variables of container availability and exchange rate have an influence of 32.6% on the company performance of PT. Samudera Indonesia Semarang Branch. While the remaining is company performance 67.4%. the is influenced by other variables which are not examined. Furthermore, container availability are influencing the company performance of PT. Samudera Indonesia Semarang Branch with exchange rate as the moderator variable.

However, from simple linear regression result shows that the independent variables influences company performance of PT. Samudera Indonesia Semarang Branch. The variable of container availability has positive and significant influence on company performance. This supports the research conducted by Edirisinghe, et al (2016) which also stated that container availability influence the export volume.

Meanwhile, the variable of exchange rate has an positive significant effect on export volume. This supports the research conducted by Edwards, et al (2016) that also said that the exchange rate had a positive exchange rate statistically effect and significantly influence the export performance in South Africa. In the other hand, research written by Riyadh, et al (2020) to study about the relationship between the exchange rate of Iraq Dinar against UK pound and export in Iraq to the UK by using annual data from 2000 to 2019. The results indicate that the exchange rate has a positive and insignificant effect on Iraq export to the UK.

This research shows that container availability variables has a significant effect on company performance of PT. PT. Samudera Indonesia Semarang Branch, and exchange rate as a moderator variable is strengthening the influence between container availability and company performance. This can be considered by companies to evaluate what marketing strategies need to be used to increase company performance which can be stated by their export sales volumes. If the company wants to increase export volume, then the company must review how many container they should provide to meet exporters demand to help them export their goods to other country. Companies must calculate the number of their container that they can offer so that export volume of the company meet higher number at maximum. However, exchange rate which can adding the influence of the company performance, thus PT. Samudera Indonesia Semarang Branch also have to pay attention.

CONCLUSION AND RECOMMENDATION Conclusion

There are several conclusions obtained in the study entitled The Influence of Container Availability Company on Performance Exchanges Rate and as Moderator Variable at PT. Samudera Agencies Indonesia Semarang branch that can be described below:

- a. The correlation coefficients value between independent variable and dependent variable shows positive sign showing that the independent variables is directly related to the dependent variable. It shows that container availability have a contribution proportion considerably in explaining company performance. Furthermore, exchange rate also have contribution strengthening to the influence between container availability and company performance by explaing the determination coefficient value by 0.326 which means company performance variable can be explained by container availability and exchange rate as much 32.6%. The remaining 67.4% is explained by other factors.
- b. According to simple linear regression result, it is found that container availability have a significant influence on company performance of PT.

Samudera Indonesia Semarang Branch. In other words, the least container is available, the more it will hamper export activities. Otherwise, the more container is available, the export volume and activities will run better.

c. Meanwhile. based on moderating regression analysis, it shows that exchange rate is able to moderate the effect of container availability on company performance. Merely, exchange rate have positive and significant influence by moderating the influence on export volume.

Recommendation

Based on this research, several recommendations are obtained in the form of suggestions to increase the company performance / export volume of PT. Samudera Indonesia Semarang Branch, which is as follows:

- **a.** PT. Samudera Indonesia Semarang Branch needs to pay attention to the number of container availability and the imbalance of their container. The company should know how many container they should provide to meet exporters demand to help them export their goods to other country. Companies must calculate the number of their container that they can offer so that export volume of the company meet higher number at maximum.
- **b.** Exchange rate is often perceived as a risk over which little control can be exercised, and is thus largely ignored in the operational aspects of the business. It is recommended that they need an effective strategy to allow them to benefit from advantageous rates, as well as deal with the downside risk. By monitoring exchange rates and taking advantage of favorable rates, gains can be made, or losses minimized.

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