

## Current account determinants in ASEAN six countries

Novi Ariyani<sup>1</sup>, Fajar Wahyu Prianto<sup>2</sup>, Lilis Yuliati<sup>3\*</sup>.

<sup>1,2</sup> Department of Economics, Faculty of Economics and Business, University of Jember Jl. Kalimantan 37 Jember 68121- East Java, Indonesia.

### ARTICLE INFO

#### Article history:

Received 17 September 2018

Revised 17 November 2018

Accepted 17 November 2018

#### JEL Classification:

F32, O40, E430, F21, F310.

#### Key words:

Current Account, GDP, Interest Rate, FDI.

#### DOI:

10.14414/jebav.v21i2.1419

### ABSTRACT

This study aims to analyze the factors that influence the export activity in the ASEAN region countries such as Indonesia, Singapore, Thailand, Malaysia, Philippines and Vietnam during 2001 - 2016 by using annual data. The factors that influence gross domestic product (GDP), interest rate, foreign direct investment (FDI) and exchange rate. The method used in the research is panel Vector Error Correlation Model (PVECM). The results show that Gross Domestic Product (GDP) negatively affects the current account in the short term. The interest rate variable negatively affects the current account in the long term. The Foreign Direct Investment (FDI) variable negatively affects the current account in the long term. Furthermore, the exchange rate variable negatively affects the current account in the long term.

### ABSTRAK

Penelitian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi aktivitas ekspor di negara-negara kawasan ASEAN seperti Indonesia, Singapura, Thailand, Malaysia, Filipina dan Vietnam selama 2001 - 2016 dengan menggunakan data tahunan. Faktor-faktor yang mempengaruhi produk domestik bruto (PDB), suku bunga, investasi asing langsung (FDI) dan nilai tukar. Metode yang digunakan dalam penelitian adalah panel Vector Error Correlation Model (PVECM). Hasilnya menunjukkan bahwa Produk Domestik Bruto (PDB) berpengaruh negatif terhadap transaksi berjalan dalam jangka pendek. Variabel suku bunga berpengaruh negatif terhadap akun lancar dalam jangka panjang. Variabel Investasi Langsung Asing (FDI) berpengaruh negatif terhadap neraca berjalan dalam jangka panjang. Selanjutnya, variabel nilai tukar berpengaruh negatif terhadap akun lancar dalam jangka panjang.

### 1. INTRODUCTION

Trade is an important part of the real sector that encourages economic activity (Nawatmi, 2012: 42). According to Basri (1994) with the increasing role of the trade sector for the economy causes a country to seek to achieve a surplus in the international trade balance. The greater the surplus is achieved then the incoming foreign exchange will be greater so that it can be used to finance the development.

The existence of integration among countries in the world encourage the establishment of cooperation in the field of economic, social and politic. Based on the economic blueprint at the ASEAN Summit on November 20th 2007 in Singapore, ASEAN agreed to integrate economically in the form of ASEAN Economic Community (AEC). The

agreement aims to change the orientation of economic development from industrialization patterned by import substitution into an export orientation strategy which emphasizes on the importance of the role and function of exports in driving the national economy (Hakim, 2015).

The contribution of international trade that has been done by the country is reflected in a report called the balance of payments.

Current account is one of the most commonly used macroeconomic indicators to assess the external stability of a country. The current account balance is considered to reflect the strength of international competitiveness and the extent to which it can utilize its resources (Uneze and Ekor, 2016). The current account balance is the difference

\* Corresponding author, email address: <sup>3</sup>lilisyluliati.feb@unej.ac.id

between exports and imports. If export activity is greater than import activity then there is surplus of current account balance.

In line with the goal of trade integration to maximize exports. With the dominance of export activities which is greater than imports are expected to increase the current account surplus in ASEAN countries. The condition of a current account balance is influenced by various factors.

Economic growth is closely related to the current account. The economic growth depicted in gross domestic product (GDP) shows the ability of domestic consumers to engage in consumption activities. According to Santosa (2012) when the income increases, it will cause the ability (purchasing power) of society increases. The Increase of public purchasing power, which means higher levels of public consumption, including consumption of goods from abroad or increasing imports, which in turn further exacerbates the current account deficit.

A high interest rate policy can have a negative impact on economic activity. High interest rates can cause cost of money to be expensive. This will weaken the competitiveness of exports in the world market so as to make the business world is not enthusiastic to conduct a domestic investment, production will decline, and economic growth becomes stagnant (Delong, J.B. (1998): 1; PNC. (2016).

A study conducted by Fernandes and Campos (2008) found a positive FDI effect on its current research transactions using Brazil as the sample, it was stated that FDI stimulated acceleration and increased trade balance transactions.

Sukirno (2010: 412) states that the exchange rate is one that affects the current account. If the exchange rate of rupiah is depreciated (the decline in the value of domestic currency). It will cause the price of foreign goods rise that it will decrease the imports so the balance of trade could be in surplus. Here is the condition of progress of current account balance in ASEAN countries 6 in 2001 - 2016.

## 2. RESEARCH METHOD

### Types of Research

The research method used in this study is quantitative method. According to Sugiyono (2012: 8) the quantitative method is a method based on the phi-

losophy of positivism used to examine the population and certain samples, the data collection uses research instruments, quantitative and / or statistical data analysis, in order to test the hypothesis set.

### Place and Time of Research

This research is conducted in 6 ASEAN countries namely, Indonesia, Singapore, Thailand, Malaysia, Philippines, and Vietnam. The selection of the research object is based on the six ASEAN countries which have the highest export activity among ASEAN countries and due to integration. The research period used in 2001 until 2016 with the form of data in the form of data chauratalan.

### Types and Data Sources

The type of data used in this study is secondary data in the form of panel data. Data source obtained from World Bank by using internet media.

### Data Analysis Method

This analysis was done using Vector Error Correlation Model (VECM) Panel method. The VAR / VECM model was first developed by Sims in 1980 (Christiano, 2012; Sims, 1980; Bjornland, 2000), where the assumption is that if there is true simultaneity among a set of variables, those variables should be treated equally where there is no distinction between exogenous and endogenous variables (Gujarati, 2004: 871).

The analysis procedure in the VECM Panel method are with the best panel models selection step, data stationary test, cointegration test, optimum lag test, model stability test, granger causality, VECM model estimation, impulse response function (IRF) and the variance decomposition (VD).

The basic form of the VECM panel model according to Ekananda (2016: 367) is as follows:

$$\beta_t + \sum_{l=1}^{m-1} \beta_{it}y_{t-1} + \sum_{l=1}^{m+1} \alpha_{it}x_{it-1} + \epsilon_{it} \tag{01}$$

Then from VAR Panel model in equation (01) will be adapted with estimation equation of VAR Panel model for this research as follows in equation (02)

$$CA_t = \beta_0 + \sum_{l=1}^{m+1} \beta_1 CA_{t-1} + \sum_{l=1}^{m+1} \beta_2 GDP_{t-1} + \sum_{l=1}^{m+1} \beta_3 IR_{t-1} + \sum_{l=1}^{m+1} \beta_4 FDI_{t-1} + \sum_{l=1}^{m+1} \beta_5 ER_{t-1} + \epsilon_{t-1} \tag{02}$$

Where:

CA : Current Account

GDP

: Gross Domestic Product

IR

: Interest Rate

FDI : Foreign Direct Investment  
 ER : Exchange Rate  
 $B_0$  : Intercept  
 $\beta_1, \beta_2, \beta_3, \beta_4$  : Coefficient  
 $\varepsilon_t$  : Error terms

From the unit root tests, it indicates that to perform cointegration tests, it must first be believed that the related variables in this approach have the same degree of integration.

**3. DATA ANALYSIS AND DISCUSSION**  
**Results of Data Analysis**

**Test of Stationarity**

Based on estimation result in Table 1, the data of ASEAN 6, shows that all research variables such as current account, gross domestic product, real interest rates, foreign direct investment, and stationary exchange value are at the level of the first difference. They are proved by seeing the probability value of Augmented Dickey Fuller (ADF) which is smaller than the level of significance ( $\alpha = 5\%$ ).

**Table 1**  
**Augmented Dickey Fuller (ADF) Stationer Stations Test Result 6**

Variables	Level Level		Level 1st		Level 2 <sup>nd</sup>	
	Prob ADF.	To t	Prob ADF.	To t	Prob ADF.	To t
CA	0.1259	X	0.0000	*	0.0000	*
LOGGDP	0.2241	X	0.0081	*	0.0000	*
IR	0.0000	*	0.0000	*	0.0000	*
FDI	0.0004	*	0.0000	*	0.0000	*
ER	0.5625	X	0.0000	*	0.0000	*

Description: X) not stationary \*) significant at  $\alpha = 1$  percent, \*\*)

**Cointegration Test**

The cointegration test results of the research data for ASEAN 6 on table 2 show the trace statistic that indicate the cointegration of the models tested.

**Table 2**  
**Cointegration Test Results of ASEAN 6**

$\alpha$	Critical Value	Trace Value	Results
1%	77.81884	167,1501	Integrated
5%	69.81889	167,1501	Integrated
10%	65,81970	167,1501	Integrated

**Optimum Lag Test**

In table 3 it can be seen that lag 2 has the smallest AIC value.

**Model Stability Test**

As a proof that each country has a stable model can be seen from its roots which has modulus value smaller than one as listed on Table 4.

**Estimation Result of VECM Model**

Long term VECM estimation results show that the variable interest rates (IR), foreign direct investment (FDI) and exchange rates (ER) have a significant negative effect on the Current Account (CA) in ASEAN 6. This is indicated by the magnitude of the coefficient value of the variables IR, FDI, and ER are smaller than t statistics as shown by Table 5.

Short term VECM estimation results in table 6, shows that only GDP variable which has significant and negative effect on Current Account (CA) in ASEAN 6.

**Discussion**

The result of VECM Panel estimation test found that the GDP variable in the short term has a negative and significant relation to current account. This is in line with Keynes's statement in the theory of consumption that the factor that influence consumption is income, if income is higher than the consumption level will also be higher. So does with national income. The higher the GDP or growth, which describes the purchasing power of the people, the higher the level of consumption, including consumption of goods from abroad or increase imports. The results of this estimation are in line with

the statement of Krugman (1999) in his research that GDP increases, followed by the increasing of per capita income, causing domestic consumers become consumptive so that the imports of foreign goods increases. It is also in accordance with research conducted by Santosa (2012) that the increase in people's income causes the ability (purchasing power) to increase so will also increase the consumption of goods or services. Based on the theory, it can be concluded that the increase of GDP will cause the increasing demand of imported goods or services, thus tending to decrease the trade balance surplus. These results are in line with research conducted Ramadhani (2014) in Indonesia

ASEAN 6 economic growth is driven by consumption and investment. The higher the two variables will be higher the level of economic growth in ASEAN 6 (assuming the goods are produced from within the country). But with the era of globalization closely related to international relations due to the higher level of consumption of ASEAN 6 led to the necessity of entering the product from abroad, causing the balance of trade deficit coupled with structural problems from within the country that oblige the country subsidize oil demand in which will lead to a widening trade balance deficit. The results of this study are similar to the research conducted by Adiningsih (2013) where this happens because with the increase in income it will increase the consumption so that the impact on increasing imports will ultimately worsen the trade balance. The estimation results indicate a negative relationship between economic growth and trade balance in accordance with Onafowora (2003) and Husman (2005). The negative relationship between GDP and Current Account in ASEAN 6 is also the result of all ASEAN countries 6 (Reinold, 2018). Generate GDP in ASEAN countries which is also a huge number for all activities needed for development.

The second variable is the interest rate variable in ASEAN 6 in the long term has a negative and significant relationship to current account. Persistence is in line with the theory. A high interest rate policy can have a negative impact on economic activity. High interest rates can cause cost of money to be expensive. This will weaken the competitiveness of exports in the world market so as to make the business world is not enthusiastic to conduct a domestic investment, production will decline, and economic growth becomes stagnant (DeLong, J.B. (1998): 1; PNC. (2016). The results of this study is in

line with research conducted by Laksono (2016) states that an increase in interest rates will encourage a decrease in current account surplus. The results of this study are in line with research conducted Haryanti (2013) which states that interest rates negatively and significantly affect the export of Indonesia. In line with what Samuelson (1985) has said that the country tightening its monetary policy tends to raise its domestic interest rate, with the flow of capital into the country, which will cause appreciation to the country's currency with the decline of net exports. Sahoo (2014) also stated that interest rate increase strengthen the domestic currency and attract more capital inflows. The effect of shifting the current account to the deficit, resulting in government budgets and trade imbalances.

The foreign direct investment (FDI) variable also has a negative and significant relation to current account (CA). Similar to research conducted by Sahoo, et al (2014) which states that the results show that the net FDI flow has a consistently negative and significant influence on the current account balance. These discoveries are in line with research conducted by Hobza and Zeugner (2014); Cecen& Xiao (2014) where they argue that an increase in capital inflows leads to the appreciation of the domestic currency, which makes imports cheaper and exports more expensive. This resulted in imports increasing and exports reducing of goods and services, and thus worsened the current account balance of the countries economic. From the calculation of national income, we can find that the current account is the difference between saving and investment. So an increase in investment, keeping the remainder the same, reducing the current account surplus. Therefore, an increase in FDI inflows can encourage more investment in the domestic economy and thus aggravate the current account.

Furthermore, in the context of a developing economy, greater openness to external currents allows the import of technology to achieve faster accumulation of knowledge and higher total factor productivity due to the allocation of resources from lower to the higher productive activities (Amighini and Sanfilippo (2014); Schiff and Wang (2006); Grossman and Helpman (1991)). This suggests that increasing inflows of FDI lead to increased imports of technology, capital goods and raw materials, which could worsen the balance of a country's current account transactions.

**Table 3**  
**Optimum Lag Test Results of ASEAN 6**

<i>Lag</i>	<i>AIC</i>
0	19,86943
1	19,00375
2	18,13596 *
3	18,19156
4	18,18261

Description: \*) Optimum Lag

**Table 4**  
**Stability Test Results of ASEAN Model 6**

<i>Root</i>	<i>Modulus</i>
-0.204427 - 0.755789i	0.782948
-0.204427 + 0.755789i	0.782948
-0.411517 - 0.513,720i	0.658221
-0.411517 + 0.513720i	0.658221
0.019544 - 0.571616i	0.571950
0.019544 + 0.571616i	0.571950
0.516638 - 0.100107i	0.526248
0.516638 + 0.100107i	0.526248
-0.153158 - 0.136309i	0.205030
-0.153158 + 0.136309i	0.205030

**Table 5**  
**Estimation Results of Long Term VECM**

<i>Variables</i>	<i>Coefficient</i>	<i>t-Statistics</i>
GDP (-1)	-20,78499	-1.07569
IR (-1)	-6,352914	-8,63744 *
FDI (-1)	-1,280874	-1,66622 *
ER (-1)	-0,719517	-2,08997 *

Description: \*) significant at  $\alpha = 1$  percent

**Table 6**  
**Estimation Results of Sort Term VECM**

<i>variable</i>	<i>coefficient</i>	<i>t-statistics</i>
CointEq1	0.048597	0.81922
CA (-1)	-0,682551	-5,12908 *
CA (-2)	-0.335398	-2,57494 *
GDP (-1)	-3,930992	-0.34592
GDP (-2)	-19.78935	-2,08920 *
IR (-1)	0.016443	0.05954
IR (-2)	-0,114660	-0.77492
FDI (-1)	0.009033	0.06921
FDI (-2)	-0,114839	-0.98845
ER (-1)	0.041719	0.32564
ER (-2)	0.125462	1.02873
C	-0.066022	-0.12891

Hereinafter is exchange rate variable having significant and negative relation to current account in ASEAN 6 in long term. This is in line with Marshall-Lerner's elasticity theory which states that the depreciation of domestic currency causes domestic

relative price is lower than foreign price. Currency depreciation can help improving the current account balance through increased exports and import reductions. This is in accordance with the theory proposed by Sukirno (2010: 412) that the ex-

change rate is one that influences the current account in Indonesia. If the exchange rate of rupiah (exchange rate) depreciates (the decline in the value of the domestic currency) causes the price of foreign goods rise that it tends to decrease imports so the trade balance in surplus. These results are in line with research conducted by Wulansari (2014), Ekananda (2004) and Sugema (2005), said the depreciation of the rupiah has increased the competitiveness of Indonesian products, thereby increasing exports which ultimately improve Indonesia's trade balance. It is also in line with the research Santoso (2012) said the depreciation of the rupiah in the theory of international trade, impacts on declining prices of goods / services produced by Indonesia. The decline caused the demand for goods / services by foreign countries increased, so the value of exports of goods / services increased. This condition encourages the surplus of the trade balance.

The exchange rate relationship with the current account balance is in line with Ginting's research (2014) where any depreciation will result in an increase in export competitiveness for goods from Indonesia which will ultimately increase Indonesia's trade balance. The increase in current account balance against exchange rate depreciation is usually caused by the reduction of imports. The exchange rate relationship with the current account balance in the Ginting research (2013) where based on the results of long-term regression analysis turns out the exchange rate has a negative and significant effect on Indonesian exports. This shows that the strengthening of the exchange rate (appreciation) will cause the decline of Indonesian exports. Although the rate of exchange rate in ASEAN 6 is relatively volatile from 2000-2016 but the exchange rate variable in ASEAN 6 has a long-term negative relationship to current account, this is due to the careful steps undertaken by each country in ASEAN 6. Step the things that each government does because of the monetary crisis of 1998/1999 mostly spread in the Asian treasury, in this case many in ASEAN 6 big economies Relations like Singapore, Thailand and Malaysia (Tang, 2011; Bank Negara Malaysia 2009, Bank of Thailand, 2010).

The results by using the VECM panel show that the main variables are GDP, interest rate, FDI, and significant negative exchange rates against Current Accounts in ASEAN 6. This indicates that GDP increases in ASEAN 6 may increase Current Account deficit in ASEAN 6. This owing to a better increase in Current Accounts in the trade sector that is more influenced by demand for goods in

overseas markets and high prices of goods in key markets, the economic conditions in the destination country also have a big role to play in the trade performance Shopping activities that can improve the Current Account in ASEAN 6 (Rahmaddi and Ichihashi, 2012; Schembri, 1988; Robert at al., 2012). In addition, the total cost of transportation services in international trade activities may also reduce the Current Account in ASEAN 6. This is caused by inadequate trade infrastructure such as technology, shipping, packing can also adversely affect trade activities due to the high cost of trade services, it will have an impact on the recording of Demand Deposit Account in ASEAN 6 (Rahmaddi and Ichihashi, 2012). Therefore, the parties who need to work with the private sector will help to build the infrastructure with a purpose. Services that enable to operate in ASEAN 6.

#### 4. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Based on the results of tests that have been done using autoregressive vector panel method to determine the effect of gross domestic product (GDP), interest rate, foreign direct investment (FDI) and exchange rate against current account in ASEAN-6, then the final conclusion is as follows:

- a. GDP variable as proxy of economy growth has negative and significant effect in the long term on current account in ASEAN-6.
- b. Interest rate variable has negative and significant effect in the long term period on the current account in ASEAN-6.
- c. Foreign direct investment (FDI) variable as proxy of economy growth has a negative and significant effect in long term period on the current account in ASEAN-6.

Value exchange variable has a negative and significant effect in the long term period on the current account in ASEAN-6.

Based on the results obtained from research on the effect of economic growth, interest rates, foreign direct investment and exchange rate on the net exports using the autoregressive panel vector method are given suggestions for related government as well as society in general and also for other researchers intending to conduct relevant research. Some of these suggestions include:

- a. Government role in restricting the import to decrease import-oriented consumptive behavior of the society as the effect enhancement income percapita. Strike g I import with create substitution the import to

be fix condition balance sheet transaction walking. Foreexample with determination taxes big for importer general and more low for importer manufacturers. Amenities liberation customs duty sign addressed for reduction dependency import for goods so.

- b. It is known that high interest rate determination could worsen the deficit condition of current account transaction. So that any policy taken by the monetary authority in determining the interest rates level not only consider from financial side but also the condition in real sector so the balance could be achieved and boosts the trade balance surplus.
- c. Government has to make the right policy for channeling FDI to the productive sector and the export-oriented sector rather than the consumption sector for example from taxation side holiday tax optimization policy directed to impose investments that can produce capital goods for reducing the dependency on import.

Monetary authorities are required to strengthen the monetary operation to support the value exchange stabilization and liquidity control, and improve the foreign currency review to control the current account balance deficit.

## REFERENCES

- Adiningsih, H., H. Siregar dan Hasanah, H. 2013. Does the J-Curve Phenomenon Exist in The Indonesia's Bilateral Trade Balances With Major Trading Countries? ASEAN Journal of Economics, Management and Accounting. Vol: 1(1). Hal: 13-22.
- Amighini, A. dan Sanfilippo, M. 2014. Impact of South-South FDI and Trade on the Export Upgrading of African Economies. World Development. No:64. Hal: 1-17.
- Apridar (2009) *Ekonomi Internasional: Sejarah, Teori, Konsep dan Permasalahan dalam Aplikasinya*, Edisi pertama, Yogyakarta: Graha Ilmu.
- Bank Negara Malaysia. (2009). *Bank Negara Malaysia Annual Report 2009*. Bank Negara Malaysia. [http://www.bnm.gov.my/index.php?tpl=2016\\_search\\_result&cx=009618718582741626374%3Aq1v0lvdsg&cof=FORID%3A11&q=economic+report](http://www.bnm.gov.my/index.php?tpl=2016_search_result&cx=009618718582741626374%3Aq1v0lvdsg&cof=FORID%3A11&q=economic+report)
- Bank of Thailand. (2010). *Annual Economic Report 2009*. Bank of Thailand. [https://cse.google.com/cse?cx=000678341823061791766:fhtqc0mt06q&q=yearly%20report%20on%20economic%20and%20monetary%20conditions%20&oq=economic%20rep&gs\\_l=partner](https://cse.google.com/cse?cx=000678341823061791766:fhtqc0mt06q&q=yearly%20report%20on%20economic%20and%20monetary%20conditions%20&oq=economic%20rep&gs_l=partner)
- ic.1.0.0.231184.233334.0.237914.12.12.0.0.0.0.229.1679.3j8j1.12.0.gsnos%2Cn%3D13...0.2217j478105j12..1ac.1.25.partner-generic..1.11.1443.CGD4\_vz9btc.
- Basri, F. H. (1994). *Manufacturing Industry in the National Economy: Position of Small Business in the Indonesian Economy*, Ministry of Cooperatives and Small Enterprise of the Republic of Indonesia, Jakarta, 165-177.
- Bjornland, H.C. VAR (2000) *Models in Macroeconomic Research*. Statistics Norway Research Department. October 2000. Page 1-31.
- Cecen, A., & Xiao, L. (2014). *Capital flows and current account dynamics in Turkey: A nonlinear time series analysis*. *Economic Modelling*. Vol: 39. Hal: 240-246.
- Christiano, L.J. (2012). *Christopher A. Sims and Vector Autoregressions*. *The Scandinavian Journal of Economics*. 144(4). Page 1082-1104.
- DeLong, J.B. (1998). *Lecture Note: Chapter 10: Investment, Net Exports, and Interest Rate*. Chapter 10.
- Ekananda, M. 2004. *Analisis Pengaruh Volatilitas Nilai Tukar pada Ekspor Komoditi Manufaktur di Indonesia Penerapan Estimasi dengan Menggunakan Distribusi Lag Possion pada Persamaan Non Linear Seemingly Unrelated Regression*. *Buletin Ekonomi Moneter dan Perbankan*. Jakarta: Bank Indonesia.
- Fernandes, E. A., & Campos, A. C. (2008). *Investimento direto eo desempenho dan exportacoes brasileiras*. *Brazilian Journal of Political Economy/Revista de Economia Politica*, 28(3).
- Ginting, A. M. 2013. *Pengaruh Nilai Tukar Rupiah terhadap Ekspor Indonesia*. *Buletin Ilmiah Litbang Perdagangan*. Vol:7. No:1.
- Ginting, A. M. 2014. *Perkembangan Neraca Perdagangan dan Faktor-Faktor yang Mempengaruhinya*. *Buletin Ilmiah Litbang Perdagangan*. Vol: 8. No: 1.
- Grossman, G. M., & Helpman, E. (1991). *Quality ladders in the theory of growth*. *The Review of economic studies*, 58(1), 43-61.
- Gujarati, D. N., & Porter, D. 2004. *Basic Econometric Fifth Edition*. New York: Mc. Graw Hill.
- Hakim. 2015. *Studi Empiris Terhadap Kerjasama Perdagangan Internasional Antara Lima Negara Asean*. *Jurnal Dinamika Ekonomi*. Vol: 2. Hal: 36-50.
- Haryanti, Y. (2013). *Pengaruh Tingkat Suku Bunga Dan Nilai Tukar Rupiah Terhadap Tingkat Ekspor di Indonesia Periode 1997-2011*. *ETD Unsiyah*.
- Hobza, A., & Zeugner, S. (2014). *Current Accounts and Financial flows in the euro area*. *Journal of International Money and Finance* Vol: 48. Hal: 291-313.
- Husman, J.A. 2005. *Pengaruh Nilai Tukar Riil*

- Terhadap Neraca Perdagangan Bilateral Indonesia: Kondisi Marshall-Lerner dan Fenomena J-Curve.* Buletin Ekonomi Moneter dan Perbankan. Vol: 8 (3). Hal: 401 – 422.
- Krugman P, and Obstfeld M. 1999. *Ekonomi Internasional: Teori dan Kebijakan edisi kedua (terjemahan).* Jakarta (ID): PAU-FE-UII.
- Laksono, R. R. (2016). *The Effects of Fluctuation Real Exchange Rates on The Bilateral Trade Balance Between Indonesia-China: Observation Condition of Marshall-Lerner and The J-Curve Phenomeon Approach.* 8<sup>th</sup> Widyatama International Seminar on Sustainability (WISS 2016), Widyatama University, 5-8.
- Nawatmi, S. 2012. *Volatilitas Nilai Tukar Dan Perdagangan Internasional (The Exchange Rate Volatikity And International Trade).* Dinamika Akuntansi, Keuangan dan Perbankan. Vol: 1 No: 1. Hal: 41 – 56.
- Onafowora, O. 2003. *Exchange Rate and Trade Balance in East Asia: Is There a J-Curve?.* Economics Bulletin. Vol:5(18). Hal: 1–3.
- PNC.com. (2016). *How Rising Interest Rates Can Affect Global Trade.* [https://www.pnc.com/content/dam/pnc-ideas/articles/CIB\\_ENT\\_PDF\\_0116-072-211504-CIB\\_DecArticles\\_GlobalTrade\\_rev1.pdf](https://www.pnc.com/content/dam/pnc-ideas/articles/CIB_ENT_PDF_0116-072-211504-CIB_DecArticles_GlobalTrade_rev1.pdf).
- Ramadhani dan Daulany, M. 2014. *Analisis Faktor-Faktor yang Mempengaruhi Transaksi Berjalan Indonesia Periode 2006 – 2013.* Jurnal Ekonomi dan Keuangan. Vol:2. Hal: 634–644.
- Rahmadi, Rudi and Ichihashi, Masaru. (2012). *How Do Foreign and Domestic Demand Affect Exports Performance? An Econometric Investigation of Indonesia's Exports.* Modern Economy, 2012,3,32-42.
- Reynold, Oliver. (2018). *Economic Snapshot For ASEAN.* Focus Economics. <https://www.focus-economics.com/regions/asean>.
- Roberts, M.J., Xu. D.Y., Fan, X., Zhang, Shengxi. (2012). *A Structural Model od Demand, Cost, And Export Market Selection For Chinese Footwear Producers.* NBER Working Paper Series, 17725.
- Sahoo, M., M. S. Babu. dan Dash. U. 2014. *Effects of FDI flows on Current Account Balances: Do Globalisation and Institutional Quality Matter?* Department of Humanities and Social Sciences, Indian Institute of Technology Madras. Hal 1 – 21.
- Samuelson, P. dan W. Nordhaus. 1985. *Macroeconomi, edisi ketiga.* Jakarta: Erlangga Santosa, A. B. 2010. *Pengaruh Fluktuasi Nilai Tukar Rupiah Terhadap Neraca Transaksi Berjalan.* Vol: 2. No: 2p. Hal: 169–181. ISSN: 1979-4878. Universitas Stikubank Semarang.
- Santoso, Rokhedi Priyo. 2012. *Ekonomi Sumber Daya Manusia Dan Ketenagakerjaan.* Yogyakarta: UPP STIM YKPN.
- Schemberi, Lawrence. (1988). *Export Price and Exchange Rate: An Indutry Approach.* Trade for International Competitiveness. 1-33.
- Schiff, M. dan Wang, Y. 2006. *North-South and South-South Trade-Related Technology Diffusion: an Industry-Level Analysis of Direct and Indirect Effects.* Canadian Journal of Economics. No:39. Vol: 3. Hal: 831 – 844.
- Sims, C.A. (1980). *Macroeconomics and Reality.* Econometrica. Vol.48, No.1. (Jan 1980). Page 1-48.
- Sugema, I. (2005). *The Determinants of Trade Balance and Adjustment to the Crisis in Indonsia.* CIES Discussion Paper. No. 0508. Vol: 8 (3). Hal: 401 – 422.
- Sugiyono. 2012. *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Bandung: Alfabeta.
- Sukirno, S. 2010. *Makroekonomi: Teori Pengantar.* Jakarta: Rajawali Pers.
- Tang, H.C. (2011). *Intra-Asia Exchange Rate Volatility and Intra-Asia Trade: Evidence by Type of Goods.* ADB Working Paper Series on Regional Economic Integration. No.90 December 2011.
- Uneze, E. dan Ekor, M. 2012. *Re-examining the Determinants of Current Account Balance in An Oil-Rich Exporting Countries: A Cace of Nigeria.* CSEA Working Paper WPS. Vol:12. No: 01.
- Wulansarim E., Yulianto, E., & Pangestuti, E. (2016). *Pengaruh Jumlah Produksi, Harga Internasional, Nilai Tukar dan Tingkat Suku Bunga terhadap Tingkat Daya Saing Ekspor Kelapa Sawit Indonesia (Studi pada Tahun 2009-2019).* Jurnal Administrasi Bisnis, 39(2), 176-184.