

Indonesian Trade Balance Performance By GDP, Exports, Imports, BI Rate and Inflation as Intervening Variables

Riska Ektiarnanti*, Anis Rahmawati, Feni Krismawati Fauziah, Isma'iddatur Rofiqoh Magister Student, Pascasarjana Institut Agama Islam Negeri Tulungagung, Indonesia *Corresponding Author, Email: Varesca2395@gmail.com

ABSTRACT

The performance of international trade in Indonesia has fluctuated for several years, volatile inflation has a positive or negative impact on GDP results, imports and exports which are indicators of the trade balance and the BI Rate as an inflation controller affect the trade balance performance policy. The research approach is monthly data for a 5-year period, secondary data using path analysis techniques. The findings of this study indicate that GDP indirectly through inflation affects the trade balance, directly exports through inflation has no effect on the trade balance, directly imports through inflation has a significant effect on the trade balance, indirectly the BI Rate has a significant effect on the trade balance.

Keywords: GDP, Exports, Imports, BI Rate, Inflation, Trade Balance **JEL Codes:** B22; B23; B27; E01;

Received: 20 March 2021	Revised: 12 July 2021	Accepted: 11 October 2021

Suggested citation:

Ektiarnanti, R., Rahmawati, A., Fauziah, F. K., & Rofiqoh, I. (2021). Indonesian Trade Balance Performance By GDP, Exports, Imports, BI Rate and Inflation as Intervening Variables. *Indonesian Economic Review*, 2(1), 1-11.

INTRODUCTION

International trade is an economic activity that cannot be released by a country because no country is able to meet its needs independently (Rahmadi & Ichihasi, 2011). The instability of trade transactions through export and import, the number of imports exceeding exports resulted in a balance of payments deficit. A continuous deficit has resulted in the capital account being forced to close the deficit by borrowing or paying foreign debts to cover the trade balance. The instability of the trade balance in Indonesia which is experienced because it is still a developing country is usually caused by several factors such as inflation, interest rates, gross domestic product, and the consumer price index.

The trade balance is measured using several factors such as exports, imports, capital goods, consumption levels of oil prices and pressures of political uncertainty (Shafi et al., 2015). The main factor in the trade balance is exports and imports (Sukirno, 2000). In addition to exports and imports that affect the trade balance, Gross Domestic Product also affects the trade balance. Gross Domestic Product (GDP) is the total output value of the production of goods and services within a certain period of time (Mankiw, 2007). GDP has a significant effect on the trade balance, high imports are caused by increasing GDP, so that the trade balance decreases (Rahmawati, 2014).

The next factor influencing the trade balance is the Interest Rate (BI Rate). The interest rate is the price for borrowing money. Determination of the BI Rate by analyzing domestic and foreign economic developments. To create a stable exchange rate and balance of payments, an interest rate reference is needed (Permana, 2014). Inflation for the economy reduces stock

investment, raises interest rates, and trade balance deficits. Inflation has a significant negative relationship to the trade balance (Nopeline & Siahaan, 2020). Rising inflation weakens the capacity of producers to produce a good if the raw materials used are imported goods, imports continue to result in a trade deficit. Based on the preliminary explanation above, if it can be known to analyze the performance of the trade balance through factors that usually affect it such as GDP, Exports, Imports, BI Rate, and Inflation at that time.

LITERATURE REVIEW

The balance of trade (BoT) is the difference between the value of all goods and services exported and imported from a country in a certain period of time. The trade balance is the largest component in balance of payments because it is an indicator to measure all international transactions. In practice, the trade balance has two characteristics, positive and negative. A country is said to have a positive trade balance if the country does more export than import. Conversely, when a country receives more imports from other countries than exports, the country has a negative trade balance.

Islamic Macroeconomics

Macroeconomics is economics that discusses the economy in large or aggregate terms, such as the behavior of the state and a group of people including inflation, national income, unemployment, balance of payments deficits, etc. In macro and micro economics, Islamic economics has a model that is made on the basis of the Islamic paradigm as a way of life in which human economic behavior is bound by Islamic law (homo Islamicus) which not only fulfills the economy, but also worship and worship. compliance with Islamic law. Islamic macroeconomic policy aims to realize the economic life of the people who are blessed and in accordance with the Shari'a of Allah SWT, by creating a just, prosperous, and prosperous society that is blessed by Allah with the physical needs of clothing, shelter, food, health, education, and also the spiritual needs of security, fairness, happiness, etc. are met. In this way, Islamic macroeconomic policies aimed at realizing economic activities in the monetary sector and the real sector run according to Islamic law. Macroeconomic parameters are national income, inflation, then unemployment. National income is the total income received by all economic actors who take part in the economy. Meanwhile, national income is measured by gross domestic product (GDP), thus positive (developing) and negative (contraction) economic growth can be seen. Gross Domestic Product is the basis for determining whether the economy is experiencing inflation or recession problems. The concept of measuring national income and national product uses Gross Domestic Product (GDP) with all household consumption expenditures (C).

Balance of trade

The Trade Balance is a record of a country's import-export transactions. A record that shows a positive result or a surplus of a country's exports exceeding its imports. Meanwhile, a negative trade balance record or a deficit means that the value of imports exceeds exports. And in export-import transactions, it requires a currency exchange rate (Sukirno, 2000). The balance of trade only requires two things, namely exports and imports. Therefore, the formula for calculating the Trade Balance is NX = Y-(C+I+G). International trade according to Islam is an activity of buying and selling between countries, not individuals and countries. The purpose of international trade is to achieve the exchange of production needs and profits are met.

Relationship of Trade Balance with Gross Domestic Product

Gross domestic product is related to consumption, if GDP increases, people's consumption will automatically increase as well. Those imports increase, lowering the performance of the trade balance (Sari, 2017).

Relationship of Trade Balance with Inflation

Rising inflation causes production costs to rise, so that companies or producers suppress their output, so that exports of goods are minimal or not fulfilled which results in decreased exports so that the trade balance is in deficit. Low inflation does not increase production costs so that companies can maximize output so that exports are high, the trade balance is in surplus (Nopeline & Siahaan, 2020).

Relationship of Trade Balance with BI Rate

The impact of high interest rates, increasing inflation which has the effect of increasing goods prices, and increasing imports from other countries. Import's increase resulting in a deficit or reduce the performance of the trade balance (Ningsih & Kristiyanti, 2019)

Gross domestic product

Gross Domestic Product is goods or services produced in a country concerned with a certain period of time (Hasanah & Sunyoto, 2016). Gross Domestic Product (GDP) is defined as the value of goods and services produced by production factors belonging to citizens and foreign countries (Sukirno, 2000).

Export

According to the Regulation of the Minister of Finance of the Republic of Indonesia number 145/PMK.04/2007 concerning Customs Provisions in the Export Sector (Sasono, 2013). Export is the activity of removing goods from the customs area. The activity of selling goods and services from one country to another or global/world market.

Import

Import is the activity of bringing goods into the country (customs area) from abroad with the provisions of laws and regulations (Tandjung, 2011). The legal basis for the regulation of Import Management is regulated in the Decree of the Director General of Customs and Excise Nomro KEP-07/BC/2003. Implementation of Customs Management in the import sector and Decree of the Minister of Finance Number 453/KMK.04/2002 contains Customs Management in the import sector. Commodities that are imported as objects from outside the customs area (overseas) must be subject to import duties except those that are exempted. Thus, importers are required to pay import duties and taxes (Purnamawati, 2013)

BI Rate

Interest rate is the interest rate on loans and deposits expressed in percent, with a period of month or year (Marshall & Miranda, 2003). In general, Bank Indonesia raises the BI Rate if inflation is predicted to exceed the stipulated future rate, otherwise the BI Rate will be lowered if inflation does not exceed the limit. The Board of Governors of Bank Indonesia announces the BI Rate at each monthly Board of Governors Meeting and is applied to monetary operations through liquidity management for monetary policy.

Inflation

Inflation is a phenomenon of continuous price increase, which is widespread and has a significant impact which also has an impact on the price of other goods rising. The relationship of inflation to market mechanisms is very large, such as increased public consumption, scarcity or uneven distribution of goods, as well as liquidity and speculation in the market. The cause of inflation is the increase in the consumer price index (CPI). Inflation in the Islamic perspective the currency used in the Islamic economic system is the dinar and the dirham which are stable,

therefore the inflation problem is not considered an aggregate problem. But Islamic economists issued their opinion, inflation is a threat to the economy.

METHOD

Descriptive quantitative research with data used monthly time series data during the 2015-2019 period so there are 60 observations. The data analysis technique used is Multiple Linear Regression and Path Analysis. The object of research is documentation data from the Central Bureau of Statistics and International Trade Reports. The dependent variable is the Trade Balance, the independent variable is GDP, Exports, Imports, BI Rate, and the moderator variable is Inflation.

RESULTS AND DISCUSSION

Based on the results of multiple linear regression and path analysis, the performance of the trade balance in the 2015-2019 period decreased or was not good. This is evidenced by the results of the 2014-2019 Indonesian Export and Import Lokadata web. Indonesia's exports as of September 2019 reached US\$14.10 billion, a decrease of 1.29 percent compared to August 2019. The decline also occurred when compared to September 2018 which was 5.74 percent. Meanwhile, Indonesia's imports as of September 2019 were US\$14.26 billion. This value increased 0.63 percent compared to August 2019, but decreased compared to September of the previous year, 2.41 percent. Indonesia's high imports compared to the value of its exports caused Indonesia's trade balance to be in deficit at US\$0.165 billion or US\$160.5 million. During the last five years, the highest trade balance deficit was in April 2019 at US\$2.24 billion.

Multiple Linear Regression Analysis

Multiple linear regression analysis was used to examine the effect of GDP, Export, Import, BI Rate and Inflation variables on the Trade Balance, with the following equation:

$$\begin{split} & Z = a + b_1 Z X_1 + b_2 Z X_2 + b_3 Z X_3 + b_4 Z X_4 + \epsilon_1 \\ & Z = 4.157 - 3.813 E - 006 Z X_1 + 1.121 E - 010 Z X_2 - 3.832 E - 009 Z X_3 + 0.638 Z X_4 \end{split}$$

	1 0		
Independent Variable	Regression Coefficient	Std. Error	Sig.
Constant	4.157	2015	.044
GDP	-3.813E-006	.000	.037
Export	1.131E-010	.000	.780
Import	-3.832E-009	.000	.494
BI Rate	.638	.130	.000

Table 1. Results of Phase I Multiple Linear Regression Test

The second regression analysis examines the influence between variables of GDP, Exports, Imports, BI Rate, Inflation on the Trade Balance, with the following structural equation:

 $Y = a + b_1YX_1 + b_2YX_2 + b_3YX_3 + b_4YX_4 + b_5YZ + \epsilon_2$ Y = 106533.267 - 0.003YX_1 - 2.965E-006YX_2 + 0.000 - 7010.093 YX_3 + 3765.303

Independent Variable	Regression Coefficient	Std. Error	Sig.
Constant	10,653	2015	.044
GDP	-3.813E-006	.000	.037
Export	1.131E-010	.000	.780
Import	-3.832E-009	.000	.494
BI Rate	.638	.130	.000

Table 2. Results of Phase II Multiple Linear Regression Test

Hypothesis testing

 \mathbf{F}_{test}

 Table 2. Phase 1 and 2 F_{test} Results GDP, Exports, Imports, Trade Balance BI rate and BI Rate Against Inflation

Phase	F _{count}	F _{table}	Sig.
1	14,061	2.54	.000
2	30,784	2.39	.000

Based on the table above, it shows that the value of $F_{count} > F_{table}$ (14.061 > 2.54) then H_0 is accepted. So, the conclusion is that the variables of GDP, Exports, Imports, and the BI Rate together affect Inflation. Based on the table above, it shows that the value of $F_{count} > F_{table}$ (30,784 > 2,39) then H_0 is accepted. Thus, the conclusion is that the variables of GDP, Exports, Imports, BI Rate, and Inflation together affect the Trade Balance.

t_{test}

 t_{test} (partial) is used to test whether the independent variables (GDP, Exports, Imports, BI Rate, and Inflation) have an effect on the dependent variable (Trade Balance). By comparing t_{count} with t_{table} .

Phase	Independent Variable	T-count	T-table	Sig
1	Constant	2.063	2.0040	0.044
	GDP	-2.135	2.0040	0.037
	export	0.281	2.0040	0.780
	Import	-0.688	2.0040	0.494
	BI Rate	4.912	2.0040	.000
	Dependent variable = Inflation	on		
2	Constant	6.685	2.0048	.000
	GDP	-0.233	2.0048	0.824
	export	-0.966	2.0048	0.339
	Import	-9.349	2.0048	.000
	BI Rate	-5.906	2.0048	.000
	Inflation	3.664	2.0048	.001
	Dependent variable = Trade	Balance		

Table 3. Phase 1 and 2 t_{test} Results GDP, Exports, Imports, and BI Rate against Inflation

Based on the Table 3, it can be concluded that the Gross Domestic Product variable has a significant effect on inflation, exports have no significant effect on inflation, imports have no significant effect on inflation, and the BI Rate has a significant effect on inflation. Based on the table above, it can be concluded that GDP does not have a significant effect on the Trade Balance, exports have no significant effect on the Trade Balance, and Imports have a significant effect on the Trade Balance. BI Rate has a significant effect on the Trade Balance.

The results of the first stage of the coefficient of determination in the table above, it is known that the R-square result is 0.506, this indicates that the variables of GDP, Exports, Imports, BI Rate, against inflation are 50.6%. The remaining 49.4% is a contribution from other variables not examined in this study. The results of the first stage of the coefficient of determination test in the table above, it is known that the R-square result is 0.740 this shows that the variables of GDP, Exports, Imports, BI Rate, inflation to the Trade Balance are 74.0% The remaining 26% is a contribution from other variables that are not examined in this research.

Path Analysis



Figure 1. Phase I: Effect of X1, X2, X3, X4 on Z

Based on the output of the regression model stage I in the Coefficients table, it is known that the significance value of the variable X1 = 0.037 (smaller than 0.05), X2 = 0.790 (greater than 0.05), X3 = 0.494 (smaller than 0.05), X4 = .000 (less than 0.05). From the output results between these variables, it can be seen that GDP (X1) has a significant effect on inflation, Exports (X2) has no significant effect on inflation, Imports (X3) has a significant effect on inflation, BI Rate (X4) has a significant effect on inflation. The value of R square in the Summary Model table is 0.506, this shows the contribution of the influence of GDP (X1), Exports (X2), Imports (X3), BI Rate (X4), on Inflation (Z), of 50.6% and the remaining 49 .4% contribution from other variables not examined in this study. While the value of e1 can be found with the formula e1 = (1-0.506) = 0.702.



Figure 2. Phase II: Effect of X1, X2, X3, X4, and Z on Y

Based on the output of the stage II regression model in the Coefficients table, it is known that the significance value of the variable X1 = 0.824 (greater than 0.05), X2 = 0.339 (greater than 0.05), X3 = .000 (smaller than 0.05), X4 = .000 (less than 0.05), Inflation (Z) = .001 (less than 0.05). from the output results between these variables, it can be seen that GDP (X1) has no significant effect on the Trade Balance, Exports (X2) has no significant effect on the Trade Balance, Imports (X3) has a significant effect on the Trade Balance, BI Rate (X4) has a significant effect on the Balance.

The value of R square in the Summary Model table is 0.740, this shows the contribution of the influence of GDP (X1), Exports (X2), Imports (X3), BI Rate (X4), Inflation (Z) on the Trade

Balance (Y), amounting to 74.0% and the remaining 26% contributed from other variables not examined in this study. While the value of e2 can be found with the formula $e_2 = (1-0.740) = 0.51$.

Table 4. The Value	e of the First to the	Ninth Hypothesis

	Hypothesis	Beta Value
H1	Effect of GDP on Inflation	-0.233
H2	Effect of Exports on Inflation	0.030
H3	Effect of Imports on Inflation	-0.082
H4	The effect of the BI Rate on inflation	0.541
H5	Effect of GDP on the Trade Balance	-0.019
H6	Effect of Exports on the Trade Balance	-0.074
H7	Effect of Imports on the Trade Balance	-0.817
H8	The Effect of the BI Rate on the Trade Balance	-0.571
H9	Effect of Inflation on the Trade Balance	0.361

Direct Effect (Direct Effect or DE)

- 1. Effect of GDP variable on inflation = -0.233
- 2. Effect of Export variable on Inflation = 0.030
- 3. The Effect of Import Variables on Inflation = -0.082
- 4. Effect of BI Rate variable on Inflation = 0.541
- 5. The effect of the GDP variable on the Trade Balance = -0.019
- 6. Effect of Export variable on the Trade Balance = -0.074
- 7. The effect of the Import variable on the Trade Balance = -0.817
- 8. The effect of the BI Rate variable on the Trade Balance = -0.571
- 9. Effect of Inflation variable on the Trade Balance = 0.361

Indirect Effect (Indirect Effect or IE)

- 1. The effect of the GDP variable on the Trade Balance through Inflation = -0.233 x 0.361 = 0.084
- 2. Effect of Export variable on Trade Balance through Inflation = 0.030 x 0.361 = 0.010
- 3. Effect of Import variable on Trade Balance through Inflation = -0.820 x 0.361 = -0.296
- The effect of the BI Rate variable on the Trade Balance through Inflation = 0.541 x 0.361 = 0.195

Total Effect (Total Effect)

- 1. Effect of GDP variable on the Trade Balance through Inflation = -0.233 + 0.361 = 0.128
- 2. Effect of Export variable on Trade Balance through Inflation = 0.030 + 0.361 = 0.391
- 3. Effect of Import variable on Trade Balance through Inflation = -0.820 + 0.361 = -0.459
- The effect of the BI Rate variable on the Trade Balance through Inflation = 0.541 + 0.361 = 0.902

Discussion

Gross Domestic Product on Inflation has a significant effect. This result is relevant to Darmayanti (2014) who found that GDP is influenced by inflation. Then reinforced by research by Larasati and Sulasmiyati (2018) that inflation has a negative and significant effect on gross domestic product. In contrast to the results of research by Tirta and Kembar (2013) which found that partially GDP has no significant effect on inflation. The results of the study of GDP having an effect on inflation strengthen the theory that uncontrolled or excessive spending causes inflation. Public spending that continues to cause aggregate demand to rise, and to meet aggregate demand to produce goods and services increases as well, so that real income (GDP) increases.

Exports to Inflation have no significant effect. The results of this study are strengthened by Abdullah's research (2018) which finds that exports have a negative and insignificant effect on inflation directly. This study contrasts with researchers Putri and Arka (2017) who found that jointly and partially inflation and exchange rates have a significant effect on exports. Then the research of Jumhur et al. (2018) which also found that inflation had a significant effect on exports. From the results of this study, it can be used as a reference for the government in making policies. Regarding exports to inflation, namely exports that have no effect on inflation means that exports have a positive sign or a surplus which is able to increase the country's economy. Therefore, the government must continue to increase exports so that inflation is suppressed.

Imports on Inflation have no significant effect. The results of this study contradict the findings of previous researchers, such as by Jumhur et al. (2018) who found that imports had a positive and insignificant effect on inflation. Inflation is also influenced by two factors, namely external in the form of imports and exports and internal in the form of money supply. Then research Purwanti et al. (2014) that high imports affect inflation decline. The results of this study also contradict the theory that imports that continue or increase will affect domestic inflation through import prices and competition for domestic goods (Dexter et al, 2005). From the results of this study, it can be used as a reference for the government in making policies. Regarding imports, it has no effect on inflation, which means that imports have not been able to suppress inflation, so the policy that can be taken is to facilitate the entry of imports. So that productivity can be stable in the producer sector so that product prices are under control.

BI Rate on Inflation has a significant effect. The results of this study are reinforced by the results of research by Yodiatmaja (2012) which results in the results of the BI Rate lag test resulting in changes in the inflation rate. The results of this study are contrary to Fauziah's (2016) research which results based on the Garger causality test that the BI Rate has no effect on inflation. And research by Ningsih and Kristiyanti (2018) that the benchmark interest rate has no effect on inflation. From the results of this study, it can be used as a reference for the government in making policies. Regarding the BI Rate, it has a significant effect on inflation, which means that the BI Rate is able to suppress inflation, therefore the government continues to increase interest rates so that the money supply decreases and inflation decreases.

Gross Domestic Product on the Trade Balance has no effect. The results of this study are in line with the results of research by Asnawi and Hasniati (2018) that GDP does not affect the Trade Balance and Puti and Arka (2017) who find GDP has a positive effect on foreign direct investment, the exchange rate has no effect on foreign direct investment, GDP has a negative effect on the trade balance. This is inversely proportional to the research found by Kusuma & Hakim (2012) which states that in the long-term GDP, exchange rate and inflation affect fluctuations in Indonesia's trade balance. Meanwhile, in the short term, only GDP and inflation affect Indonesia's trade balance. From the results of this study, it can be used as a reference for the government in making policies. Regarding GDP, it does not affect the trade balance, meaning that the ability to produce domestic goods and services is increased so that there is no need to import, if more, you can export so that the performance of the trade balance is positive.

Exports to the Trade Balance have no effect. The results of this study support the research of Wiryati (2015) in which the correlation between exports to the trade balance is very weak and positive. From the results of this study, it can be used as a reference for the government in making policies. Exports have no effect on the trade balance, which means it weakens, so the government must increase exports so that the trade balance does not weaken.

Imports on the Trade Balance have a significant effect. The results of this study are in accordance with the theory that imports affect the trade balance, high imports can reduce the

performance of the trade balance. This is reinforced by the opinion of Manurung and Pratama (2008) that the number of imports exceeds the country's exports experiencing a deficit. And it is reinforced by the results of the Bagaskoro and Imansyah (2019) research which shows that imports have a negative effect on Indonesia's current account. From the results of this study, it can be used as a reference for the government in making policies, to increase exports rather than imports so that the trade balance experiences a surplus.

BI Rate on the Trade Balance has a significant effect. The results of this study contradict the research of Saputra and Maryatmo (2016) that interest rates in the short and long term have no effect on Indonesia's current account balance. and Fitriana's research (2020) found that the inflation variable and the BI Rate had no significant effect on the trade balance. Meanwhile, in theory, the impact of high interest rates increases inflation which has the effect of increasing goods prices, and increasing imports from other countries. Import's increase resulting in a deficit or decrease the performance of the trade balance, so it means from the results of research that have a significant effect that the trade balance for the 2015-2019 period experienced high imports so that the performance of the trade balance was in deficit. This is reinforced by the negative effect of the import test results. From the results of this study, it can be used as a reference for the government in making policies, to suppress inflation by increasing the reference interest rate, so that the trade balance is surplus with small production costs so that a lot of output can be exported.

Inflation on the Trade Balance has a significant effect. The results of this study are reinforced by research by Nopeline and Siahaan (2020) which found that inflation and the exchange rate index had a significant impact on changes in the trade balance in 2008-2018. Silviana's research (2016) found that the exchange rate and inflation had a negative and significant effect on the trade balance. the trade balance weakened. From the results of this study, it can be used as a reference for the government in making policies, emphasizing inflation by increasing interest rates so that production can increase and produce a lot of goods and services for export.

CONCLUSION

Indirectly Gross Domestic Product through Inflation has no significant effect on the Trade Balance, Directly Exports through Inflation have no significant effect on the Trade Balance, Directly Imports through Inflation have a significant effect on the Trade Balance. Indirectly, the BI Rate through Inflation has a significant effect on the Trade Balance.

REFERENCES

- Abdullah, M. K., Rotinsulu, T. O., Mandeij, D. (2018). Analisis Pengaruh Ekspor dan Penanaman Modal Asing Terhadap Tingkat Inflasi di Indonesia Melalui Tingkat Kurs Periode 1997-2016. Jurnal Berkala Ilmiah Efisiensi. Vol 18. No.1. 79-90.
- Asnawi & Hasniati. (2018). Pengaruh Produk Domestik Bruto, Suku Bunga, Kurs Terhadap Neraca Perdagangan di Indonesia. *Jurnal Ekonomi Regional Unimal.* 1(1). 1-7.
- Bagaskoro, M. N. & Imansyah, M. H. (2019). Pengaruh Ekspor Impor Terhadap Transaksi Berjalan Indonesia Sebelum dan Sesudah Subprime Mortgage. JIEP: Jurnal Ilmu Ekonomi dan Pembangunan. 2(2). 331-345. DOI: https://doi.org/10.20527/jiep.v2i2.1176
- Damayanti, N. (2014). Pengaruh GDP Terhadap Inflasi di Indonesia Tahun 2000-2012. Jurnal Manajemen dan Akutansi. 3(1). 80-90.
- Dexter, A. S., Levi M. D., Nault, B. R. (2005). International Trade and the Connection Between Excess Demand and Inflation. *Review of International Economics.* 13(4). 699-708. DOI:10.1111/j.1467-9396.2005.00532.x

- Fauziyah, W. E. N. (2016). Pengaruh Bi Rate Dan Jumlah Uang Yang Beredar Terhadap Tingkat Inflasi di Indonesia. Jurnal Pendidikan Ekonomi (JUPE), 4(3). https://doi.org/10.26740/jupe.v4n3.p%p
- Fitriana, R. D. Analisis Perkembangan Neraca Perdagangan Indonesia dan Faktor-faktor yang Mempengaruhinya Tahum 1990-2018. Surakarta: Universitas Muhammadiyah.
- Hasanah, E. U. & Sunyoto, D. (2016). *Pengantar Ilmu Ekonomi Makro (Teori & Soal)*. Yogyakarta: CAPS.
- Jumhur, Nasrun, M. A., Agustiar, M., Wahyudi. (2018). Pengaruh Jumlah Uang Beredar, Ekspor, dan Impor Terhadap Inflasi (Studi Empiris Pada Perekonomian indonesi). Jurnal Ekonomi Bisnis dan Kewirausahaan. Vol 7 No. 3. 186-201.
- Kusuma, R. I., Hakim, A. (2012). Kajian Empiris Fluktuasi Neraca Perdagangan Indonesia. UNISIA, [S.I.], n. 77, p. 135-148, doi:<u>https://doi.org/10.20885/unisia.vol34.iss77.art2</u>.
- Larasati, I. S. & Sulasmiyati, S. (2018). Pengaruh Inflasi, Ekspor, dan Tenaga Kerja Terhadap Produk Domestik Bruto (Pada indonesia, Malaysia, Singapura, dan Thailand). Jurnal Adminitrasi Bisnis (JAB). 63(1). 8-16.
- Mankiw, N. G. (2007). *Makroekonomi Arus Modal Internasional dan Neraca Perdagangan*. Havard University.
- Manurung, T. & Pratama, R. (2008). *Pengantar Ilmu Ekonomi (Mikroekonomi dan makroekonomi)*. Jakarta: FE-UI.
- Marshall, R. & Miranda. (2003). Kamus Populer Uang dan Bank. Jakarta: Ladang Pustaka.
- Ningsih, S. & Kristiyanti, L. M. S. (2018). Analisis pengaruh jumlah uang beredar, suku bunga dan Nilai Tukar terhadap Inflasi di Indonesa Periode 2014-2016. DAYA SAING: Jurnal Ekonomi Manajemen Sumber Daya. 20(2). 96-103.
- Nopeline, N. & Siahaan, M. F. (2020). Analisis Pengaruh Nilai Tukar dan Inflasi Terhadap Neraca Perdagangan di Indonesia. Jurnal Visi Ilmu Sosial dan Humaniora (VISH). 1(1). 65-72.
- Permana, S. H. (2014). Dampak Kenaikan Suku Bunga Acuan (BI Rate). Info Singkat Pusat Pengkajian, Pengolahan Data dan Infromasi (P3DI) Sekretariat Jenderal DPR RI. Vol. VI, No.22/II/P3DI/November 2014.
- Purnamawati, A. (2013). Dasar-Dasar Ekspor Impor. Yogyakarta: Sinar Grafindo.
- Purwanti, E. S., Arsinta, Y., Arifiyah, Arisanti, N. F. D., Azizah, I. N. (2014). Dampak Impor Terhadap Inflasi Indonesia Triwulan I Tahun 2014. *Economics Development Analysis Journal.* 3(2). 381-392. <u>https://doi.org/10.15294/edaj.v3i2.3846</u>
- Putri, N. H. & Arka, S. (2017). Analisis Pengaruh PDB dan Kurs Dollar Amerika Terhadap Neraca Perdagangan Melalui Foreign Direct Investmen di Indonesia Tahun 1996-2015. *E-Jurnal EP Unud. 6*(9). 1802-1835.
- Putri, R. F. A., Suhadak, Sulasmiyati, S. (2016). Pengaruh Inflasi dan Nilai Tukar Terhadap Ekspor Indonesia Komoditi Tekstil dan Elektronika Ke Korea Selatan (Studi Sebelum dan Setelah ASEAN Korean Free Trade Agreement Tahun 2011). Jurnal Adminitrasi Bisnis (JAB). 35(1). 127-136.
- Rahmadi, R. & Ichihasi, M. (2011). Export and Economics Growth in Indonesia: A Causality Approach Base on Multivariate-Error Correction Model. *Journal of International Development and Cooperation*, 17(2), 53-73.
- Rahmawati, D. M. (2014). Pengaruh Kurs dan GDP terhadap Neraca Perdagangan Indonesia Tahun 1980-2012. *Economics Development Analysis Journal*, 3(1). https://doi.org/10.15294/edaj.v3i1.3512.
- Saputra, T. & R. Maryatmo. (2016). Pengaruh Nilai Tukar dan Suku Bunga Acuan Terhadap Neraca Transaksi Berjalan di Indonesia Periode 2005-2015", Modus Vol. 28(I): 101-116. DOI: https://doi.org/10.24002/modus.v28i1.668

- Sari, D. N. (2017). Analisis Hubungan Indikator Fundamental Makro Ekonomi Amerika Serikat Terhadap Neraca Perdagangan Indonesia. Jurnal Ilmiah Mahasiswa FEB UB. 5(2). https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/3674/3257.
- Sasono, H. B. (2013). *Manajemen Ekspor dan Perdagangan Internasional*. Yogyakarta: Andi Offset.
- Shafi, K., Hua, L., Idrees, Z., & Nazeer, A. (2015). Impact of Exchange Rate, Inflation Rate and Interest Rate on Balance of Payment: A Study from India and Pakistan. *American Journal* of Business, Economics and Management, 3(9).
- Silviana, H. (2016). Analisis pengaruh Kurs dan Inflasi Terhadap Neraca perdagangan di Negaranegara Anggota Organisasi Kerja Sama Islam (OKI). Yogyakarta: Universitas Islam Sunan Kalijaga.
- Sukirno, S. (2000). *Makro Ekonomi: Teori Pengantar.* Edisi Ketiga, Jakarta: PT. Raja Grafindo Persada.
- Tandjung, M. (2011). Aspek dan Prosedur Ekspor-Impor. Jakarta: Salemba Empat.
- Tirta, P & Kembar, M. (2013). Pengaruh PDB, Nilai Tukar, dan Jumlah Uang Beredar Terhadap Inflasi di Indonesia Terhadap Periode 1993-2012. *E- Jurnal EP Unud*, *2*. ISSN : 2303-0178.
- Wiryanti, T. (2015). Korelasi Ekspor dan Impor Terhadap Neraca Perdagangan dan Neraca Pembayaran di Indonesia Tahun 2003-2013. Jurnal Ilmiah Prodi Manajemen Universitas Pamulang. 2(2). 111-128. DOI: http://dx.doi.org/10.32493/jk.v2i2.y2014.p%25p
- Yodiatmaja, B. (2012). Hubungan antara BI Rate dan Inflasi Pendekatan Kausalitas Toda-Yamamoto. *Journal of Economics and Policy.* 5(2). 117-229. DOI: https://doi.org/10.15294/jejak.v5i2.3902.