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Impacts of Export Development on Unemployment in Indonesia

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Abstract:

This study analyzes the effect of intrest rate (BI Rate), Foreign Direct Investments (FDI), inflation and Rupiah exchange rate on Indonesian export performance by using data from 1986-2016 with multiple linear regression analysis.

The impact of the export development is on unemployment. In the period 1986-2016 Indonesian exports in general showed a positive development despite a decline in the period 2012-2016. This study finds that BI rate has a negative and significant effect on export, positive and significant on Foreign Direct Investments, positive and significant on inflation and positive and significant influence on exchange rate toward Indonesian exports.

While the impact of export development on unemployment is positive and significant, it reflects that export activities do not absorb much labor. In addition to BI rate, FDI, inflation and exchange rates need to be policy-wise to trigger an increase in Indonesian exports.

Keywords *: Export, BI Rate, FDI, Inflation , Exchange rate , and unemployment.*

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1. Introduction

The main problem being faced by most developing countries like Indonesia is the greatly reduced of sources of development financing. This is caused by people's income, which is still low, so people's savings are also low compared to the investment needs. To overcome the problem of lack of funds for development financing, it can be done by inviting capital from abroad both long and short term. Long-term capital flows may be direct foreign investments or long-term loans. While short-term funds in the form of portfolio investment that intends to take advantage of the sale and purchase of securities (capital gains) capital market. Development financing by such means requires payment obligations in the future, let alone attributed to the weakening of the domestic currency against foreign currencies so that burden of the balance of payments and in orderto fulfill the obligations of foreign debt requires a large foreign exchange earnings.This foreign exchange revenue is very important, especially for developing countries like Indonesia. Foreign exchange is required to (1) pay imports now, (2) guarantee payment of imports for next three months, (3) repay foreign debt and interest, and (4) support the stability of Rupiah value.

Foreign exchange earnings are expected from foreign trade / exports, where exports are one of the main factors to increase GDP, and drive industrialization, transport advancement, globalization, expanding employment opportunities and the presence of multinational corporations. One of the things that can be a driving force for growth is international trade. Salvatore stated that trade could be a machine for growth (Trade as engine of Growth, Salvatore, 2004). International trade activity is export and import, either then one of these components or both can be the driving force for growth. Tambunan (2005) stated that in the early 1980s Indonesia established a policy in the form of export promotion. Thus, the policy makes export as the driving force for growth.

By viewing the magnitude of the exports' role, it is necessary to know the factors that affect it and its impact on unemployment. Exports / foreign trade activities are not as easy as imagined because of the provisions that must be met by the entry of an item to the boundaries of a particular country. Based on the growing phenomenon now many countries in the world form trade blocks, such as OPEC, AFTA, NAFTA, WTO, Asean-China Free Trade Agreement (ACFTA) and the last is MEA. Besides that coupled with the characteristics of the world economy into the 21st century which is a global competition or free market, resulting in the opening of a country's economic activities to the outside world or fellow trade blocks.

The Indonesian economy in 2010 showed a good performance with positive economic growth during the global financial crisis and Indonesia was increasingly gaining confidence in the international world. This is evident from the increasing of Indonesia's ranking on Global Competitiveness Index 2015-2016 issued by World Economic Forum. Indonesia managed to rank 37, down three ranks compared to the

previous year. Indonesia's investment grade rating by S & P also increased from BB in 2009 and 2013 to BB +, while in 2015 did not increase. Throughout the year 2011 the economy in the country can be regarded strong and stable, with economic growth reached 6.5 percent with inflation of 3.79 percent. This is in accordance with the data obtained from the IMF (International Monetary Financial).

In 2013 Indonesia's economy was expected to grow even higher (6.3-6.8% with inflation maintained in line with Bank of Indonesia's 4 1% target) in line with the improving global economy. The year 2014 was characterized by an unstable global economic growth not only experienced by developed countries such as the United States, Britain and Japan but also experienced by developing countries like Brazil, as well as some ASEAN member countries such as Indonesia. This global economic condition is the impact of various developments that occur both in the region and globally as the ongoing crisis between Russia - Ukraine which again weakened the economy in the Euro region after previously managed to rise after the economic crisis that hit in 2013. In addition, in the year 2015, President JokoWidodo targeted Indonesia's economic growth of 5.6% to 5.8% while in 2016 Indonesia's economic growth was 5.02%. The development of the economy above is caused by export development. Overall, Indonesia's non-oil and non-gas exports are as follows:

Table 1. Development of Indonesia Export (2012-2016)
(Nilai : Milyar US$)

NO	Uraian	2012	2013	2014	2015	2016
1	E X P O R T	190,02	182,55	176,29	150 ,37	144,43
2	- OIL & GAS	36,98	32,63	30.33	18,57	13,08
3	- NON OIL & GAS	153,04	149,92	145,96	131 ,79	131,35

Source: *BPS, Processed by Trade Data and Information Center, Ministry of Trade*

Based on Table 1 above it can be seen that the value of non oil and gas exports is greater than oil and gas, during the period of 2012 to 2016 in total exports decreased by 6.5%, and the largest decrease of 14.70% in 2015. According to Muslikhati and David (2010), non-oil and gas exports get more attention than oil and gas exports, because Indonesia has entered the ASEAN Free Trade Area (ACFTA), the era of free trade. Looking at the above conditions, please note the factors that affect the development of international exports / international trade above. Factors affecting the development of the value of international exports / trade are:

1. *Interst Rate (BI Rate):* The first quarter of 2016 Bank of Indonesia has 3 (three) times cut interest rate (BI Rate). In March 2016, Bank Indonesia lowered the benchmark interest rate (BI Rate) by 25 basis points to 6.75 percent. The purpose of the decline is to reduce the interest rates of bank credit and liquidity to spread to the real sector in order to encourage

economic growth. Meanwhile, if the BI-rate is too low it is feared that it will trigger a run of short-term funds that will disrupt the stability of economic growth. The BI rate relationship with exports is if the lending rate increases, it will make lazy for business actors to get working capital from banks. In addition, according to Boediono, (2000); If high interest rates will have a negative impact on economic activity. Moreover, high interest rates can cause cost of money to be expensive. This will weaken the competitiveness of exports in the world market and make the business world is not enthusiastic to invest in the country, production will fall, and economic growth becomes stagnant (Liapis *et al.*, 2013; Thalassinos and Liapis, 2014).

2. *Foreign Direct Investments (FDI):* World Investment Report (2002), FDI can increase exports through additional capital for export activities, technology transfer and new products for export, new market access and training to improve technical skills and skill management. Meanwhile, according to Hill (2000) Foreign Direct Investment (FDI) contributes positively to the host economy as well as providing capital, technology and management resources. The transfer of resources can stimulate economic growth. Meanwhile Balasubramanyam et al (1996); States that export-promoting countries (EP) enjoy greater efficiency than FDI, in which FDI as an additional input of capital and labor in the production process. Thus, FDI can contribute greatly to economic growth in developing countries through export growth and FDI can establish a niche for domestic firms to export (Markusen, Venables, 1999; Sambracos and Ramfou, 2014; Pociovalisteanu *et al.*, 2010; Thalassinos *et al.*, 2010).

3. *Inflation:* The rise in the prices of goods does not always have a negative impact, but there is an increase in prices that encourage companies to increase production. Meanwhile, price hikes that cause adverse effects on the trade, where the price increase causes the goods can not compete in the international market and as a result the value of exports will decrease (Thalassinos *et al.*, 2012).

4. *Exchange rate:* According to Sukirno (2006) the exchange rate in various transactions or the sale and purchase of foreign exchange, known there are four types: a) Selling Rate, b) Middle Rate, c) Buying Rate and d) Flat Rate. In addition, the exchange rate system can be distinguished over a floating exchange rate system, floating under control and fixed. A free-floating exchange rate system is a system of domestic currency exchange rates against foreign currencies whose value is determined through market mechanisms. With this system a currency can experience appreciation or depreciation. So the currency exchange system is floating freely, in the sense that its fluctuations are left free without being restricted or controlled directly. In addition the other form of exchange rate system is fixed and floating under control. According to some research results; (a) According to

Katarzyna Twarowska (2015) the depreciation of zloty caused the growth of Polish exports and exchange rate was an important adjustment mechanism preventing the decline in exports and GDP during the crisis (data period 2004 to 2013). (b) Taglioni (2002) and Ozturk (2006), stated that the inverse effect of exchange rate volatility on trade flows was not large. (c) Arize *et al* (2000) stated the impact of exchange rate volatility on exports (13 LDC countries) with cointegration and ECM methods (period 2003Q2 to 2011Q1) ie negative for first and positive lag in second lag. (d) Carmen S and Nicolae G analyzed the effect of exchange rate on export volume in Romania with autoregressive model vector. (e) Benjamin Adjei Danquah *et al* (2014) in his study stated that the elasticity of export demand for Ghana was inelastic with respect to exchange rates in both the short and long term. (f) Rose and Liew (in Mehmet E. Yaya and Xiaoxia Lu, 2012) stated that the exchange rate did not affect international trade.

The most effective way to overcome the problem of unemployment is through economic growth, where 1% economic growth increase can only absorb ± 702,000 workers and the problem every year there are 3 million new job seekers (Australian International Education Conference 2008). Unemployment in 2016 reached 5.5 percent or about 7.02 million people or lower than 2015 at 5.81 or equivalent to 7.45 million people. This condition still shows that the availability of employment is not proportional to job seekers and the outcome of unemployment has never decreased significantly.

The development of a country's exports has an impact on the unemployment rate, this can be seen from the results of research from; (a) Loganathan, Nanthakumar *et al.*, stated that the asymmetric integration between trade balance and the dynamics of unemployment for Malaysia (Granger causality test) shows the trade balance having a negative effect on unemployment in Malaysia. (b) Celine Carrere *et al* (2014) Trade liberalization statistically has a positive and negative impact on unemployment, (c). Ebeinstein *et al.* (2009) and Pierce and Schott (2013) for the United States showed that trade had no impact on unemployment. (d). According to James and Fujita (2000) research, manufacturing exports generated additional employment absorption, either directly or indirectly.

Based on the description, then the problem to be analyzed in this research is:

(1) What is the effect of BI rate, Foreign Direct Investment/FDI, inflation and the exchange rate of rupiah / US dollar (Rp / US $) on Indonesian exports simultaneously and partial?

(2) What is the effect of exports on the unemployment rate in Indonesia?

2. Literature Review

2.1 Export

Export is goods and services which are produced in the country and then sold overseas (Mankiw, 2006). The export activity of a country is motivated by excess supply and excess demand from a State with its other country. Excess supply occurs because the price level of an item is above the equilibrium price prevailing in the market, both domestic and foreign markets. While excess demand occurs due to the price level below the equilibrium price. The exports of a country depend heavily on the demand for imports of other countries to achieve a balanced international trade (Breckova, 2016; Duguleana and Duguleana, 2015; Fafaliou and Salamouris, 2014).

(a) Intrest Rate (BI rate)

The interest rate is one of the economic variables that has a direct impact on the economic condition, especially for decisions regarding consumption, saving, production and investment. Interest rates are borrowing costs or prices paid for the loan funds (usually stated as a percentage per year) (Mishkin, 2008). The interest rate consists of the nominal interest rate (the interest rate does not take into account the inflation rate) and the real interest rate (the interest rate that takes into account of inflation), so the interest rate calculation more reflects the actual cost of borrowing (Mishkin, 2007).

(b) Foreign Direct Investments (FDI)

FDI is expected to help drive sustainable investment growth in Indonesia. According to BjorvatnKjetil and Hans Jarle Kind (2002) FDI types are: (a) vertical FDI, concerning the geographical decentralization of the production flow of firms and the horizontal FDI of producing the same goods in some countries and this type has the motivation to search for new markets through cost Transportation (where existing production becomes closer to the consumer). While Knickerbocker, F.T (1973) stated FDI was based on the motivation behind the foreign investors were: (a) *Resource seeking:* Investments are made to look for more efficient production factors. (b) *Market seeking:* Investments in search of new markets or maintaining old markets by realizing them in the form of mergers and acquisitions. (c) *Efficiency seeking:* Investments in which companies seek to improve their efficiency by taking advantage of economic scale and scope, a model widely used in developing countries.

(c) Inflation

According to Sadono Sukirno (2004) inflation is a process of rising prices prevailing in an economy and from the causes of inflation, which can be distinguished: the pull of demand, the pressure of cost and imported. Besides, "badly", inflation according to Boediono (1994): (a) Mild inflation (below 10% per year) (b) Moderate inflation (between 10-30% a year) (c) Severe inflation (between 30-100% a year) (d) Hyperinflation (above 100% a year).

(d) Exchange Rate

Sukirno (2006), The exchange rate in various transactions or the sale and purchase of foreign exchange, known there are four types: a) Selling Rate, b) Middle Rate, c)

Buying Rate and d) Flat Rate. In addition, the exchange rate system can be distinguished over a floating exchange rate system, floating under control and fixed (Thalassinos and Politis 2012). Besides that the exchange rate of a country's currency is distinguished by the nominal exchange rate and the real exchange rate. The nominal exchange rate is the relative price of a currency of two countries while the real exchange rate is related to the relative price of goods between the two countries. Real exchange rate with export net in Mundell-Flemming idea can be negative (indirect term approach). However, if the exchange rate is expressed in the direct term (Rupiah per USD) is the positive (slope) positive coefficient can be described in an IS (Investment Saving) curve. According to Salvatore (2008) the Rupiah exchange rate is the comparison of the value or the price of the Rupiah currency with other currencies (Theriou, 2015; Tcvetkov *et al.*, 2015).

Kuncoro (1997) stated that the currency exchange system applicable in the international economy could be: (a) The floating exchange rate system. (b) The pegged exchange rate system. (c) Crawling currency system (Crawling pegs). (d) The system of basket of currencies. (e) Fixed exchange rate system. The foreign exchange rate may experience continuous and relatively unstable value changes and the change may be due to demand and supply of a foreign currency at each exchange market over time. While changes in demand and supply it is influenced by the relative increase in interest rates either jointly or individually to the state.

2.2 Unemployment

According to the classical theory, unemployed are those who are not willing to work at the prevailing wage rate (they are voluntary unemployed). Meanwhile, according to Keynesian unemployment occurs due to unfairness of the report and offer. Meanwhile, Sukirno (2010) states that unemployment is a condition in which a person belonging to the workforce wants to get a job but they can not get the job and according to Sumarsono (2009) unemployment occurs because of a mismatch between demand and supply in the labor market. Forms of labor market non-conformity. According to Sukirno (2010) unemployment is divided into 3 types: (a) Frictional unemployment (the worker leaves his job and seeks a better or more desirable job). (b) Structural unemployment (unemployment due to structural changes in the economy). (c) Conjuncture unemployment (unemployment due to reduction in aggregate demand).

3. Hypothesis Development

Based on the formulation of the problem contained in chapter above, it can be hypothesized as follows:

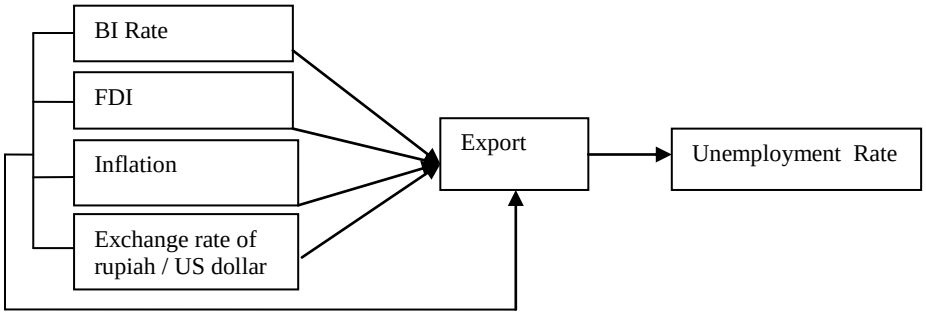
H1 : It would be likely that BI rate, Foreign Direct Investment/FDI, inflation and the exchange rate of rupiah / US dollar (Rp / US $) effect on export in Indonesia simultaneously and partial ?

H2 : It would be likely that exports effect on the unemployment rate in Indonesia?

3.1 Theoretical Framework

The theoretical framework which examines the effect of BI rate, Foreign Direct Investment/FDI, inflation and the exchange rate of rupiah / US dollar (Rp / US $) effect on export, export on the unemployment rate is represented by the following Figure 1:

Figure 1. *The proposed model*



4. Research Methodology

The method of analysis in this research is: Multiple Linear Regression Analysis, to know the effect of BI rate, Foreign Direct Investment, inflation and exchange rate of exchange rate to export, using equation as follows:

$$Y = f(\text{BI rate, FDI, Inf, dan Kurs}) \quad (1)$$

where equation 1 above is arranged in the form of a mathematical equation as shown in equation 2 below.

$$Y = \beta 0 + \beta 1 BIRate + \beta 2 FDI + \beta 3 inf + \beta 4 Kurs + \mu i \quad (2)$$

Furthermore, the export relationship with the unemployment rate is shown in the form of equation as follows:

$$Y1 = f(\text{Export}) \quad (3)$$

where equation 3 above is arranged in the form of a mathematical equation as shown in equation 4 below.

$$Y = \beta 0 + \beta 1 Export + \mu i \quad (4)$$

According to Gauss-Markov's theorem, a good linear estimator has a BLUE (Best Linear Unbiassed Estimator with a criterion: (a) Estimator ß1 is linear to dependent variables, (b) Estimator β1 is unbiased, mean value or value ß1 is expected or E (β1) is equal to the actual value of ß1, (c) Estimator ß1 has a minimum variance so that it is efficient.

The accuracy of the sample regression function in estimating the actual value can be measured from its goodness of its fit. Statistically:

(1) Individual Parameter Significance Test (t - test) to know the influence of each independent variable individually to the dependent variable.
(2) Simultaneous Significant Test (F-test) to know the independent variables whether jointly affect the dependent variable.
where the value of F can be calculated as follows (Gujarati, 1995):

$$F\ hit = \frac{R^2 / (k - 1)}{(1 - R^2) / (N - k)}$$

If F hit> F tab with a certain level of significance (eg 5%) then Ho is rejected and Ha accepted. If Fhit <Ftab with a certain level of significance (eg 5%) then Ho accepted and Ha rejected.

(3) Testing Good ness of Fit (Test R^2) the level of regression precision is shown by the magnitude of the coefficient of determination (R^2) which is between zero and one ($0 < R^2 < 1$). The value of R2 close to 1 indicates that the existing model has a high enough forecasting power, in contrast to zero means that the model has no power in predicting (Gujarati, 1995).

An equation is expressed linearly when it meets the BLUE (Best Liniear un biased Estimation) assumption, the assumption to be met is: (a) Residual Ui is a random variable that is normally distributed with the mean of zero ie E (Ui) = 0; (b) Conditional variants of residual constant or homoskedatisitas; (c) There is no problem of autocorrelation between residuals; (d) There is no problem multicolonierity between explanatory variables.

5. Results and Discussions

5.1 Indonesia export growth

In 1986 there was a drastic reduction in world oil prices by 2/3 of the price. This condition causes the value of exports to decrease. The decline in world oil prices makes the government reduce dependence on oil revenues. According Roemer (1994) Indonesia's trade policy is inward-looking through import substitution, then after the oil boom ends, trade policy is outward-looking by promoting exports. The policy resulted in the increase of non-oil / gas export composition. Industrialization and export promotion made the total export value from 1987-1990 continue to increase. With the success of this policy, in 1990 Indonesia was dubbed the "East Asian miracle" (Rosser, 2004).

In 1990 the value of Indonesian exports amounted to US $ 25,673.3 million, up to 15.86% from 1989. The increase in export value did not continue in 1991, but in 1992 it increased again by 16.56% compared to 1991. The growth of export value of Indonesia has experienced a decline in 1998, when it was an economic crisis experienced by many countries in the world. In 2000 there was a rapid increase of exports, for non oil and gas and oil and gas, which was US $ 62,124.0 million

(27.66%). However, the increase did not continue in the following year. In 2001 the total export was only US $ 56,320.9 million (decreased 9.34%). In 2003 exports increased to US $ 61,058.2 million or increased by 6.82% compared to the 2002 export of US $ 57,158.8 million. In 2004 exports again increased to US $ 71,584.6 million (up 17.24%). In 2006, the export value exceeded US $ 100 million which was US $ 100,798.6 million or increased by 17.67%. However, in 2009 the largest export value decreased by 14.97% compared to 2008. The decline in the value of Indonesian export growth in 2009 occurred due to. the global financial crisis affecting the Indonesian economy through the financial sector and the export sector. The impact of the financial crisis on the financial sector was felt during 2008, with the drop in the Rupiah exchange rate, the decline in the stock price index due to the run of foreign investors, the capital flight from both the stock market and the government bond market. As a result, the liquidity of the financial sector is very tight, high inflation, high business risk, and the greater cost of money. Meanwhile, the real sector is facing the impact of the global financial crisis with the increasingly ebb and flow of developed export markets, especially the United States, Japan and the European Union, which is Indonesia's main export market.

The decline in Indonesia's export value growth was followed in 2012, 2013 and 2014 (Table 1). This is due to the fact that in 2012, the Indonesian economy is overshadowed by the increasing pressure of world crude oil prices and the sluggish export market especially for destinations to Europe's sluggish economy, which is caused by global problems such as the European debt crisis, natural disasters in various countries , Such as the tsunami in Japan, Thailand's floods and disasters in China, as well as political and security instability in Libya, Egypt and Tunisia that disrupted world oil supplies.

Viewing Indonesia's growing export growth, the government needs to develop export-based industries, eliminate infrastructure bottlenecks and regional barriers in internal and inter-regional trade, promote and diversify Indonesia's export production and export base to new export destinations and enhance competitiveness export products. In the field of trade the government has made efforts, especially to increase the export of trade facilitation improvement, National and ASEAN Single Window (a window of export and import document processing services), port procedures must be integrated with trade management procedures and the use of on-line documents and electronics.

Besides, the seriousness of the Government of Indonesia (other current government) to encourage exports is to provide tax relief to labor intensive industries, capital-intensive, and 30% export-oriented products, to keep the interest rate fluctuations, inflation, exchange rate and increase foreign direct investment (FDI) By providing incentives. Given the increase in exports is very important as a source of funding of national development and can reduce the unemployment rate, it is imperative for Indonesia to develop it in order to obtain export results as much as possible.

In obtaining maximum export results, it is necessary to know and analyze the factors that influence the export development as conducted in this study. Exports are influenced by BI rate variables, Foreign Direct Investments (FDI), Inflation and Exchange rate (exchange rate). Meanwhile, export growth can affect the Unemployment Rate in Indonesia.

To know statistically, it is necessary to test against violations of Classical Assumptions including; autocorrelation test, multicollinearity test, normality test and heterokedastisity test (Gujarati, 1995). From the test can be known whether the model used is relevant or not. The test of deviations of these classical assumptions can be explained as follows:

5.2 The effect of BI rate, Foreign Direct Investment/FDI, inflation and the exchange rate of rupiah / US dollar (Rp / US $) on Indonesian exports.

Multicollinearity test results; Relationship between variables (BI rate, FDI, Inflation and Exchange rate), with coefficient value is spanned from 0.0885 to 0.6597. The number indicates that the test value is smaller than 0, 8, the meaning of the relationship between variables does not contain multicollinearity. And for heteroskedasticity test, Obs * R-square value of 9.023663 and prob .Chi-Square is 0,0605> α = 0,05, so heteroskedasity symptom does not exist. And for the autocorrelation test, Obs * R-square value of 3.354652 and Prob. Chi-Square (2) is 0.1869> α = 0.05 so the result states that autocorrelation symptoms do not exist. Besides, for normality test, Jarque-Bera value is 1.073944 and its probability is 0, 6597> α = 0,05, it shows normal distributed data. T test statistics are basically how far the influence of independent variables individually affect the dependent variable. The results of the test can be seen as follows:

Table 2. *Results of Multiple Regression*
Dependent Variable: Ln_EKSPOR
Sample: 1986 2016

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.197591	0.781176	5.373426	0.0000
Ln_BIRATE	-0.474371	0.157022	-3.021039	0.0056
Ln_FDI	0.265413	0.040420	6.566427	0.0000
Ln_INFLASI	0.310575	0.117235	2.649167	0.0135
Ln_KURS	0.574446	0.072950	7.874475	0.0000
R-squared	0.946179	F-statistic		114.2700
Adjusted R-squared	0.937898	Prob(F-statistic)		0.000000

From Table 2 above, from the results of t test obtained the discussion of hypotheses which is proposed as follows:

1) The effect of BI rate variable on exports, partially BI rate has a significant level of 0, 0056 <α = 0.05 with t-count of -3.021039. It shows that BI rate variable has significant and negative effect to export. The same thing from the research result I. G. Y. Mahendra and I. W. Wita Kesumajaya, loan interest rate has negative and significant effect to export.
2) The influence of Foreign Direct Investments (FDI) variables on exports, partially Foreign Direct Investments (FDI) has a significant level of 0, 0000 <α = 0.05 with a t-count value of 6.566427, where the Foreign Direct Investments (FDI) has a significant and positive effect on exports. The results of this study are in line with the results of the study; (a). Nádia C P. And C L Leal Calegario namely FDI stimulates both short-term and long-term exports (positively affect). (b). Zenegnaw Abiy Hailu, stated that FDI has a positive and significant effect on exports.
3) Influence of Inflation Variables on Export, partially inflation has a significant level of 0, 0135 <α = 0.05 with a t-count value of 2.649167, which means that the inflation variable has a significant effect on exports. Different things are shown by the results of research I. G. Y. Mahendra and I. W. Wita Kesumajaya, where the inflation has no significant effect (Export Indonesia Year 1992-2012).
4) The effect of exchange rate variable on exports shows that partially exchange rate has a significant level of 0.0000 <α = 0.05 with t-count value of 7.874475 which means variable exchange rate variable has a significant and positive effect on Export. The same thing from the research is; (a). Adnan Kasman (2005), his research shows that exchange rate volatility has a positive and significant effect on export volume in the long run. (b) Bredin et al. (2003) suggest a positive relationship between exchange rate volatility and trade (c) Nodir Bakhromov (2011); The results of his research states Exchange Rate Volatility has a positive effect on exports in Uzbekistan.

The result of F-statistic test shows that the value of F arithmetic is 114.2700 with probability (sig-F) equal to 0,0000 this means that the variable of BI rate, FDI, Inflation and Exchange rate have significant effect simultaneously to Export. And the result of coefficient of determination equal to 93,79%, which mean 93,79% change from export value caused by variation of change of variable of BI rate, FDI, Inflation and Exchange rate.

Considering the above result, we get the following regression equation:
Y = 4, 1976 - 0.47 LnBI rate + 0.27 LnFDI + 0.31 Ln Inflation + 0.57 Ln Exchange rate + e
Based on the results of multiple regression above can be interpreted that:

1) The Influence of FDI, Inflation and Exchange rate variables on exports is positive, in this case the ups and downs of variables result in the rise / fall of the inflation rate.

2) The effect of BI Rate Variables on Exports is negative, this means that an increase from BI rate / interest rate will result in lower export value, where BI rate is the benchmark to determine loan interest rate. If lending rates rise, entrepreneurs' passion for lending decreases and production activity will also decline and result in exports.

5.3 The effect of exports on the unemployment rate in Indonesia

From the test results of heterokedasticity; Obs * R-square value of 1.082361 and prob .Chi-Square 0.2982> α = 0.05, it states the symptoms of heteroskedasticity does not exist. For autocorrelation test, Obs * R-square 0,8126 and Prob. Chi-Square (2) 0.6661> α = 0.05 and the result states that autocorrelation symptoms are not a problem. In addition to the normality test; The value of Jarque-Bera 2.0357 and its probability is 0.3614, it states that the data is normally distributed. Based on the statistical t test, the effect of independent variables on the dependent variable is obtained. And the statistical test results are as follows:

Table 3. *Regression Result*
Dependent Variable: Ln_TPT
Sample: 1986 2016

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14.96455	5.588348	-2.677814	0.0121
Ln_EKSPOR	1.977897	0.517863	3.819342	**0.0007**
R-squared	0.334670	F-statistic		14.58737
Adjusted R-squared	0.311727	Prob(F-statistic)		0.000652

Based on the above table, shows that non-oil and gas exports have a significant and positive impact on the Open Unemployment Rate (TPT). This shows that the rise / fall of exports will result in the rise / fall of Open Unemployment Rate. Theoretically, the increase in export value will decrease unemployment, but in this study shows that the increase of exports resulted in open unemployment rate increased. This is certainly due to the goods exported in production not with the intensive profit-taking approach, but capital intensive (use of more machines).In addition, the results of this study also explain the effect of non-oil export variables on open unemployment rate is 31.17%, while 68.83% is influenced by other variables.

6. Conclusion

This paper discusses two regression models, where model 1describes the relationship between BI Rate, FDI, Inflation and exchange rate on exports, on the other hand the export relationship with open unemployment rate in Indonesia. The findings reveal that the FDI, Inflation and exchange rate variables on exports are positive and significant. While the BI Rate variable to export is significant and negative. Model

2, describes that export has a significant and positive effect on Open Unemployment Rate. These findings indicate that Export is one source of development financing. If from a number of research results states that the variables studied significantly affect the level of Export, meaning that these studies can be used by the government in determining the policy of increasing the value of exports which is one of the State revenues. The forms of policy needed to increase the value of exports are one of them is issued Indonesian bank regulation number 16/10 / pbi / 2014 which one of them states that: (a) That export earnings can be a sustainable source of funds for national economic development; (b) That export earnings are beneficial to support the creation of healthier financial markets and efforts to maintain rupiah stability.

Reference

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