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## FDI ON ECONOMIC GROWTH: INDONESIA CASE STUDY

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### ABSTRACT

FDI is one of the factors that encourage the growth of the economy, especially for developing countries. Indonesia has prepared an economic policy package and a taxation policy for booting the investments, including FDI. This paper investigates whether the FDI is one of the essential instruments to improve the growth of Indonesia economy. Multiple regression with GDP as a dependent variable; and FDI, Trade, Government Expenditure, and Inflation as independent variables are employed. The data is from 1985 up to 2015 period. FDI does not have any impact on GDP, while others variables influence the growth of the economy. It suggests that the goals of FDI, namely technology transfer, development of human resources, are not achieved entirely. It implies that the package of economic policy and taxation are not enough for FDI to have the impact on GDP, but others factors, such as wage rate, labor skills, transport and infrastructure, and property rights, must be developed.

**KEYWORDS : FDI, Economic Growth, GDP**

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### INTRODUCTION

Many factors encourage economic growth, one of them is a foreign direct investment (FDI), especially in developing countries. Indonesia starts opening opportunities for FDI in 1958. Then, the FDI had proliferated until the 1998 global economic crisis. The investors began pulled capital out of Indonesia, consequently the deterioration of Indonesia's economy. After the disaster, however, Indonesia as the third world of economic growth after China and India, is one of the attractive countries for foreign investors. The question is whether the FDI boosts the growth of the economy. There are debates on this matter. Misra (2011) suggested that FDI provides a positive impact on economic growth through labor absorption. On the contrary, Saqib, Masnoon, & Rafique (2013) argued that FDI has a negative effect on economic growth in Pakistan. Thus, it is essential to investigate the impact of FDI on the growth of Indonesia economy, considering Indonesia is a developing country, similar to Pakistan.

### LITERATURE REVIEW

According to theory, foreign investment brings a positive impact towards economic growth in the long term through a transitional technology, improving the quality of human resources, modernization of management and Organization [4]. The foreign investment

provides a good quality of life from the aspect of income, education, and skills and also the availability of the product. In the long run, it will create aggregate supply and demand which has an impact on economic growth. However, there are debates whether the FDI has a positive effect on the economic growth.

Some research supports the notion of the positive impact of FDI on economic growth. Emmanuel (2013) argued that FDI has a positive influence on the economic growth in Nigeria. Nevertheless, the government has a vital role in creating a good investment climate to maximize the effect. The finding is supported by Mun, Lin, & Man (2009), the positive impact of FDI has to be encouraged by the government in establishing the conducive environment. Meanwhile, the strong correlation between FDI and economic growth in Romania because FDI is as an essential factor in developing and in adapting Romania's competitiveness and market conforming to the plan of the economy. With the same token, Abbas et al. (2011)(Abbas et al., 2011; Borensztein et al., 1998; Hong, (2014); Szkorupová, 2014) suggested that there is a positive effect of FDI on GDP. FDI boosts the growth of the economy through different channels. Hong (2014) argued the improvement of the economy through economies of scale, human capital, infrastructure level, wage levels, and regional differences in China. While Borensztein et al. (1998), and Chen & Zulkifli (2012) claimed that the FDI transfers technology; as a result, it creates efficiency and high productivity. Furthermore, FDI will have positive and significant effects on GDP in the long term in Malaysia.

The FDI is expected to increase the absorption of local workers in manufacturing sectors. Consequently, the public purchasing power will also increase, that leads the increase of goods and services and even the export-oriented goods and services. With the increasing the availability of goods and services, it is expected that the government can control the inflation. Furthermore, the government gets the benefits of increasing tax income, which leads to the increase in national spending. The ultimate result is an increase of GDP through the surplus of trade balances, rising of foreign exchange reserves, and inflation control.

In contrast, some research showed that FDI gives the negative impact on the economy. Carkovic & Levine (2002) studied that the FDI does not strive the economic growth, but the sound economic policies may encourage both growth and FDI. While Saqib et al. (2013) argued that FDI, debt, trade, and inflation give a negative impact on economic growth in developing countries such as Pakistan. The benefits of FDI, such as knowledge and technology transfers, might not be optimally absorbed. The advantages of foreign capital returned to the country of origin. Almfraji, Almsafir, & Yao (2014) and Dritsaki & Stiakakis (2014) obtain the same conclusion that there is no impact of FDI on the growth of the economy. However, Nunnenkamp & Spatz (2003) argued that the positive growth stimulation of FDI in developing countries empirically weak. The government in developing countries with unfavorable locational characteristics – such as GDP per capita, schooling, institutional development and openness to trade – become less succeed by offering fiscal incentives and subsidies to attract FDI into technologically advanced industries. Thus, the developing countries are suggested to focus on improving the local availability of qualified workforce, and on establishing sound institutions. Those are prerequisites of benefiting from both market-seeking and efficiency-seeking FDI.

### **Hypothesis**

*Hypothesis 1: A positive relationship exists between the GDP and FDI*

Developing countries need FDI to boost their economic growth since the nations cannot rely on their limited technology, human resources, and capital. FDI is expected to increase the quality of human resources, and the advance of technology rapidly. Consequently, it

will bring the process of production efficiency, and an increase of the GDP Nistor (2014).

*Hypothesis 2 A negative relationship exists between the GDP and Trade*

If domestic consumers consume more on imported (foreign) products than local producers sell abroad; as a result, the GDP decreases. In other words, the balance of trade's deficit gives a negative impact on the growth of the economy Saqib et al. (2013).

*Hypothesis 3 A positive relationship exists between the GDP and Government Expenditure*

The government expenditure influences the growth through total factor productivity, investment and aggregate demand [Mo, 2007]. Government spending often brings up the fiscal multiplier as a way to fuel growth. In the economic literature, economic growth has three steps relates to the government spending. The first step, government spending is more massive than the government investment due to infrastructure building, education development, and others spendings. The second step, the government includes the private sector to build the country. The last phase, the government spending focuses on increasing the human resources quality through education and health sector. Keynesian view suggests that the government spending increase the GDP.

*Hypothesis 4 A negative relationship exists between the GDP and inflation*

In the economic theory, uncontrolled inflation gives a negative impact on the economic growth Saqib et al. (2013).

**METHODS**

Data were obtained from the World Bank World Development Indicators from 1985 to 2015. The table below describes the data.

Table 1. Data

Variable	Proxy
Economic Growth	Gross National Product (GDP) in US\$
Foreign Direct Investment	Net FDI (Inflows-outflows) in US\$
Trade	The net value of trade balance in US\$
Government Expenditure	Gross national expenditure in US\$
Inflation	Year on year inflation (%)

Multiple regression methodology is employed. The model is as follows:

$$GDP = \alpha + \beta_1 FDI + \beta_2 TR + \beta_3 GE + \beta_4 I + e$$

where:

GDP = Ln GDP per capita in US \$

FDI = Ln FDI

TR = Ln Trade

GE = Ln Government Expenditure

I = Ln inflation

**RESULTS**

After checking the classical assumption, we obtain the all the estimators are BLUE. The fit of the model is shown below.

Table 2. Fit of Model

Model	R-square	Adjusted R-square	F change	Sig. F
1	.974	.967	138.975	0.000

From the table above, it is shown that the model is fit. The adjusted R-square is 96.7%, which means 96.7% of the economic growth (GDP) is determined by the independent variables, i.e., FDI, Trade, Government expenditure, and Inflation. Moreover, the F statistic is significant.

Let's move to the individual independent variables. The table 3 below describes the result of multiple regression.

Table 3. Estimates of Regression

Variable	Predicted relations	Coefficients ( $\beta$ )	T	Sig.
Constant		-2.352	-3.812	0.002
FDI	+	-0.016	-0.821	0.425
Trade	-	-0.029	-1.778	0.096
GE	+	0.415	9.155	0.000
Inflation	-	0.103	2.425	0.028

From the table above, it is shown that only FDI does not have any impact on GDP. The finding is supported by Umeora, (2013); Carkovic & Levine, 2002); Ramadhan, Jian, & Thales Pacific (2016).

The insignificant result of FDI is because FDI does not include transferring the technology and advancing the skill of workers. Consequently, the production is not efficient, and it does not have an impact on GDP. Furthermore, the FDI does not stay for very long in Indonesia. It is shown from the net negative figure of FDI, i.e., the outflow of FDI is more than the inflow, from period 1995 to 2000.

Moreover, trade has a significant negative influence on GDP. It is consistent with the theory which explains that deficit of trade balance will give a negative impact on GDP [3]. The real exchange rate also has a role in the trade of balance [20]. The largest imported goods and services of Indonesia is from the USA. The situation is also worsened by the depreciation of Indonesia Rupiah against US\$.

Government expenditure has a significant positive impact on GDP. The sign of relations following the theory which is supposed to be positive. The finding is supported by press release Worldbank (2016). The positive relationship is because most of the government expenditure is not for consumption, but it is for education and public health (25%), infrastructure (18,6%), and the increase of food sovereignty 9,1 % per year since the year 2012 (Kemenkeu, 2015).

Lastly, inflation has a significant positive influence on GDP. Again, the sign is not consistent with the theory. It is supported by Ayyoub, Chaudhry, & Farooq (2011) and Ghosh & Phillips (1998). It is because the level of inflation in Indonesia is below 7%, which is categorized as low. According to the literature, the low inflation (below 7%) has a positive correlation on the economic growth.

## CONCLUSION

FDI in Indonesia does not give any impact on GDP. It is due to a short-term FDI. The world bank data shows that there was more capital flight than FDI from the year 1995 to 2000. Moreover, the objective of FDI for transferring of technology is not achieved. The balance of trade shows a negative influence on the growth of Indonesia economy. It means Indonesia still relies on imported goods and services heavily. Again, the world bank data shows the Indonesia import is more substantial than its export. Both inflation and government expenditure have a positive impact on GDP. The positive effect of inflation is due to controllable Indonesia inflation, i.e., the level of inflation is below 7%. While the positive impact of government expenditure is because the massive amount of spending is for infrastructure, education, public health, poverty lifting projects. The projects will stimulate the growth of Indonesia economy.

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