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## **INFLUENCE OF INVESTMENT, LOCAL EXPENDITURE AND FISCAL AUTONOMY TOWARDS ECONOMIC GROWTH IN SOUTHERN SUMATERA OF INDONESIA**

**Hendri\***

Doctoral Degree Student, Faculty of Economics, University of Sriwijaya,  
Palembang, Indonesia

**Susetyo Didik, Kadir Syamsurijal Abdul, Yuliana Saadah**

Faculty of Economics, University of Sriwijaya, Palembang, Indonesia

\*E-mail: [hendripraja16@yahoo.com](mailto:hendripraja16@yahoo.com)

### **ABSTRACT**

Provinces in Southern Sumatra have different rate of economic growth. In 2016, Southern Sumatra provinces of which economic growth is higher than the national economic growth were Lampung and Bengkulu. Meanwhile the economic growth of South Sumatra, Jambi, and Bangka Belitung in the same year was lower than the national economic growth. The phenomena are the underlying reason for conducting this study in Southern Sumatra. Objective of this study was to analyze influence of investment, local expenditure and Fiscal autonomy towards economic growth in Southern Sumatra. The population was 5 provinces in Southern Sumatra. The data were panel data or time series data observed between 2012 and 2016. The finding showed that Foreign Investment, Staff Expenditure, Capital Expenditure and Local Retribution had positive influence towards economic growth, while Domestic Investment and Local tax had negative influence towards the economic growth in Southern Sumatra.

### **KEY WORDS**

Investment, local expenditure, fiscal autonomy, economic growth, Southern Sumatra.

Economic growth is a process to increase output from time to time and becomes an important indicator to measure how successful development is (Todaro & Smith, 2011; Septiatin, Mawardi & Rizki, 2016; Ma'ruf & Wihastuti 2012). Economic growth is a pivotal phenomenon a country or region has to pay close attention to. In general, local economic growth is an indicator to measure local economic growth. It is related to an increase in public economic activities. It is expected that the increase results in trickle-down effect. Therefore, economic growth should become one of the targets of both local and national development.

Economic growth in Indonesia between 2012 and 2016 was fluctuating. Between 2012 and 2015, the national economy showed negative trend but it was growing in 2016. An area in Indonesia that has various rate of economic growth is Southern Sumatra. Provinces in Southern Sumatra have a unique economic growth. Based on the data from the National Bureau of Statistics, in 2016, the Southern Sumatra provinces of which economic growth is higher than the national economic growth were Lampung and Bengkulu. On the other hand, the economic growth of South Sumatra, Jambi, and Bangka Belitung in the same year was lower than the national economic growth (National Bureau of Statistics, 2017).

Several factors that influence economic growth are investment (Afonso & Fuceri, 2010; Aminah, 2016; Hermes & Lensink, 2003; Suindyah, 2009), local expenditure (Hamsinah, Mursinto, Soekarnoto, 2014; Wu, Tang, Lin, 2010; Zahari, 2017), and Fiscal autonomy (Barimbing & Karmini, 2015; Priambodo, 2014; Tahar & Zakhiya, 2011).

The objective of this study was to analyze influence of investment, local expenditure, and Fiscal autonomy toward economic growth in Southern Sumatra, which consisted of Jambi, South Sumatra, Bangka Belitung, Bengkulu, and Lampung. There is not any study investigating the influence of investment, local expenditure, and Fiscal autonomy toward economic growth in all provinces in Southern Sumatra. It is expected that this study

can fill the gap but it also becomes originality of this study. Both the national and local (Southern Sumatra) government can use finding of this study as recommendation to increase economic growth in the area. In addition, the finding can also be used as reference for future researchers.

## LITERATURE REVIEW

*Economic growth.* Economic growth is process of increasing production capacity of an economic system; economic growth is represented in the form of an increase in national income. A country's economy is growing when its Gross Domestic Product (GDP) is increasing. Economic growth is one indicator of successful economic development (Jhingan, 2000).

According to Kuznets as cited in Dumairy (1997), economic growth is defined as a long-term increase in ability of a country to provide more economic goods to its citizens. This ability grows according to technological advances, and both institutional and ideological adjustments a country needs.

GDP is the most suitable indicator of economic growth (Mankiw, 2010), but Gross Regional Domestic Bruto (GRDB) is an indicator to measure local economic growth. Economic growth in general is closely related to increasing production of goods and service. It is measured using GRDP, an indicator to identify economic growth in an area.

*Investment.* Investment is commitment to certain amount of fund or other resources at the moment and its objective is to obtain benefit in the future (Tandelilin, 2001). According to Jogiyanto (2003), investment can be defined as delay of current consumption for efficient production in particular period of time. Ongoing investment by the community will increase economic activities and number of employment, increase national income and eventually the public welfare.

Investment is investing in one or more than one asset for long period of time in order to generate benefit in the future (Sunariyah, 2003). Samuelson (2004) stated that investment involves increasing capital or goods in a country, such as equipment for production and inventories in one year.

Investment is one of the important components of economic growth. Investment has vital role in aggregate demand. First, expenditure spent for investment is less stable than that for consumption and thus, investment fluctuation may result in recession. Secondly, investment is important for economic growth and improves worker productivity. Economic growth depends heavily upon capital stock (Setyowati and Fatimah, 2007).

Investment fund consists of two sources, domestic and foreign investment. Foreign investment is investment of which capital comes from foreign country while domestic investment is investment of which source of capital is from within the country (Salvatore, 1997).

*Local expenditure.* Local expenditure is a decline in economic benefits during one accounting period in the form of outflow, asset deflation, or debt that results in a decrease in equity; it is not related to distribution to equity participants (Halim, 2002). Based on the 2005 Decree number 58 on Regional Financial Management, local expenditure is a regional government liability recognized as a deduction of net worth. Local expenditure is all local government expenditure in a budget period.

Based on the 2005 Decree number 58 which is then elaborated to 2006 Decree of the Ministry of Domestic Affairs number 13, local expenditure is classified as indirect and direct expenditure. Indirect expenditure does not have any direct relationship to program or activities while direct expenditure is closely related to program and activities. Furthermore, expenditure can be classified into staff expenditure, capital expenditure, interest expenditure, subsidy expenditure, grant expenditure, social assistance expenditure, revenue-sharing and financial assistance and incidental expenditure.

Based on the 2010 Decree number 71, one sort/post-in accounting standard is capital expenditure. Capital expenditure is type of expenditure from public sector budget spent to obtain fixed asset or other assets that can provide benefit for government program/activities

more than twelve months. Most local government spends their budget on capital expenditure for things related to public development. Capital expenditure, according to Government Accounting Standard, includes Capital Expenditure for Land, Equipment and Machinery, Building, Road, Irrigation and Network and other physical objects. These are infrastructure local government needs. Capital expenditure is basically spent for building local infrastructure and public facilities, helping local government carrying out their tasks or for development. The higher Capital Expenditure Ratio to total local expenditure, the more impactful it is towards economic growth in an area.

*Fiscal autonomy.* Local financial independence or often referred to as fiscal autonomy shows ability of a region to finance their own government activities, development, and services to people who have paid taxes and levies as sources of income local government needs (Halim and Kusufi, 2014). Independence is ratio of regional finance indicated by comparison between Local Own-Source Revenue (PAD) and total local revenue. This ratio also illustrates local government dependence towards external funding sources. The higher the independence ratio is, the lower the level of regional dependence towards external funding source is lower; this results in local economic growth (Barimbing & Karmini, 2015; Priambodo, 2014; Tahar & Zakhiya, 2011).

Halim and Kusufi (2014) explained that Local Own-source Revenue refers to all local revenue derived from local economic sources. Mardiasmo (2002) stated that Local Own-source Revenue includes local tax, local retribution, revenue from separated local wealth management, profit of local government-owned companies and other legitimate revenue.

Based on the 2009 Decree number 28 on local tax, local tax is compulsory premium derived from an individual or institution without equal direct return that can be enforced out based on applicable regulations for local government programs/activities and local development. Furthermore, local retribution is local levies as payment for particular service/license granted by local government to an individual/institution.

Based on the literature review, the hypotheses are as follows:

- Foreign investment has positive influence towards economic growth of Southern Sumatera;
- Domestic investment has positive influence towards economic growth of Southern Sumatera;
- Staff expenditure has positive influence towards economic growth of Southern Sumatera;
- Capital expenditure has positive influence towards economic growth of Southern Sumatera;
- Local tax has positive influence towards economic growth of Southern Sumatera;
- Retribution has positive influence towards economic growth of Southern Sumatera.

## **METHODS OF RESEARCH**

*Population and Sample.* The population was 5 provinces in Southern Sumatera, namely Jambi, South Sumatera, Bangka Belitung, Bengkulu, and Lampung. The sampling technique was non-probability sampling, in which all members of the population became the sample.

*Measurement.* The data were secondary data in the form of panel data. The data were obtained from the National Bureau of Statistics and Directorate General of Fiscal Balance and Ministry of Finance between 2012 and 2016. The instruments were as follows:

- Economic growth: economic growth (*Pertumbuhan Ekonomi/PE*) is increase of output continuously in a long time. It is an indicator of development in a region. Economic growth is represented in percentage. Economic growth was projected with increasing percentage of GRDP of constant price in an on-going year compared to GRDP in the previous year in Southern Sumatera between 2012 and 2016.
- Investment: investment was measured using domestic investment (*Penanaman Modal Asing/PMA*) and domestic investment (*Penanaman Modal Dalam Negeri/PMDN*) in

Southern Sumatera from 2012 to 2016. PMA and PMDN were some amount of money invested in the region.

- Local expenditure: local expenditure was measured using staff expenditure (*Belanja Pegawai/ BP*) and capital expenditure (*Belanja Modal/ BM*) in Southern Sumatera between 2012 and 2016. Staff expenditure referred to local expenditure, of which source was the Local Budgets, for staffs. Capital expenditure was some money spent for assets or infrastructure; it was categorized as local capital in the Local Budgets.
- Fiscal autonomy: fiscal autonomy was measured with local tax (*Pajak Daerah/ PD*) and local retribution (*Retribusi Daerah/ RB*) in Southern Sumatera between 2012 and 2016. local tax is compulsory premium derived from an individual or institution without equal direct return that can be enforced out based on applicable regulations for local government programs/activities and local development. Local retribution is local levies as payment for particular service/ license granted by local government to an individual/institution.

## RESULTS AND DISCUSSION

The first stage was to conduct classic assumption testing towards the model. Objective of the test was to identify whether or not the research model had met requirements of BLUE (Best Linear Unbiased Estimator). Classic assumption testing consisted of normality testing, multicollinearity testing and heteroscedasticity testing.

Kolmogorov–Smirnov test was the method of analysis used to evaluate normality of the data. Data was normally distributed when Asymp. Sig (2-tailed) score was higher than 0.05. Table 1 showed result of the Kolmogorov-Smirnov test towards the research model.

Table 1 – Result of Kolmogorov-Smirnov Test towards the Model

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		25
Normal Parameters <sup>a,b</sup>	Mean	.0E-7
	Std. Deviation	.81152075
	Absolute	.079
Most Extreme Differences	Positive	.079
	Negative	-.064
Kolmogorov-Smirnov Z		.397
Asymp. Sig. (2-tailed)		.997

a. Test distribution is Normal.

b. Calculated from data.

Source: *Data Analysis, 2018.*

Based on the normality testing towards how much influence the independent variable had towards the dependent variable. The Asymp. Sig (2-tailed) score was higher than 0.05 which indicated that the data were normally distributed.

Table 2 – Collinearity Regression Model

No	Variable	Collinearity Statistics	
		Tolerance	VIF
1	PMA	0.315	3.172
2	PMDN	0.314	3.188
3	BP	0.269	3.722
4	BM	0.238	4.202
5	PD	0.122	3.225
6	RD	0.525	1.905

a. Dependent Variable: PE

Source: *Data Analysis, 2018.*

The following procedure was multicollinearity test. The objective was to identify correlation between the independent variables. Ideally, regression model did not have multicollinearity. Multicollinearity test was conducted by identification of Tolerance and VIF scores. When tolerance score was higher than 0.1 and VIF score was lower than 10, multicollinearity occurred. Table 2 showed result of the multicollinearity test.

Table 2 showed that Tolerance scores of the independent variables were higher than 0.10 and their VIF scores were lower than 10. It meant that the research model did not have multicollinearity issue.

The next procedure was heteroscedasticity testing using Glejser test. Ideally, a regression model did not have heteroscedasticity. When significance of the independent variables towards their residue was higher than 0.05, heteroscedasticity did not occur. Table 3 showed result of the heteroscedasticity testing.

Table 3 – Heteroscedasticity Testing of the Regression Model

No	Variable	Significance
1	PMA	0.198
2	PMDN	0.401
3	BP	0.576
4	BM	0.364
5	PD	0.718
6	RD	0.100

a. Dependent Variable: RES\_2

Source: *Data Analysis, 2018.*

Table 3 showed that the significance of the independent variables towards their residue was higher than 0.05. These are evidence that the research model did not have heteroscedasticity issue.

Having finished the classic assumption testing, the following step was multiple regression testing to identify relationship between the independent variables towards the dependent variable. Table 4 showed result of the regression testing towards the independent variables, namely foreign investment (PMA), domestic investment (PMDN), staff expenditure (BP), capital expenditure (BM), local tax (PD) and local retribution (RD) towards economic growth (PE), the dependent variable.

Table 4 – Result of Multiple Regression Test

Model	B	Sig.
(Constant)	4.592	.000
PMA	0.049	0.254
PMDN	-0.286	0.028
BP	1.653	0.482
BM	1.208	0.012
PD	-0.328	0.671
RD	1.983	0.013

a. Dependent Variable: PE

Source: *Data Analysis, 2018.*

Based on Table 4, structural equation of the research model was as follows:

$$PE = 4.592 + 0.049 PMA - 0.286 PMDN + 1.653 BP + 1.208 BM - 0.328 PD + 1.983 RD + \varepsilon$$

Where:

PE: Economic growth;

PMA: *Penanaman Modal Asing* (Foreign Investment);

PMDN: *Penanaman Modal Dalam Negeri* (Domestic Investment);

BP: *Belanja Pegawai* (Staff Revenue);

BM: *Belanja Modal* (Capital Revenue);

PD: *Pajak Daerah* (Local Tax);

RD: *Retribusi Daerah* (Local Retribution);  
 $\varepsilon$ : *Error term*.

## DISCUSSION OF RESULTS

Hypothesis 1 is partially accepted. Foreign investment (PMA) has positive but non-significant influence towards the economic growth in Southern Sumatera. The beta score is 0.049 (positive) and the significance is 0.254 or higher than 0.05. Fluctuating foreign investment in Southern Sumatera contributes to the non-significant influence because it has not been able to encourage economic growth significantly. This finding is in line to Afonso & Fuceri (2010); Aminah (2016); Hermes & Lensink (2003) and Suindyah (2009). The positive but non-significance influence is an aspect that distinguishes the finding of this study and that of the previous ones;

Hypothesis 2 is rejected. Domestic investment (PMDN) has negative and significant influence towards the economic growth in Southern Sumatera. The beta score is -0.286 (negative) and the significance is 0.028 or lower than 0.05. It happens due to the fluctuating PMA in the region between 2012 and 2016. Inability to meet the targeted PMDN is another reason that resulting in negative influence between PMDN and the economic growth.

Hypothesis 3 is partially accepted. Staff expenditure (BP) has positive but non-significant influence towards the economic growth in Southern Sumatera. The beta score is 1.653 (positive) and the significance is 0.482 or higher than 0.05. Staff expenditure has not been able to encourage the economic growth in Southern Sumatera and that is the reason why the influence of BP is not significant.

Hypothesis 4 is accepted. Capital expenditure (BM) has positive and significant influence towards the economic growth in Southern Sumatera. The beta score is 1.208 (positive) and the significance is 0.012 or lower than 0.05. The significant influence is the result of effective allocation of capital expenditure so that it supports the economic growth in Southern Sumatera. The finding supports previous studies conducted by Hamsinah, Mursinto, Soekarnoto (2014); Wu, Tang, Lin (2010) and Zahari (2017).

Hypothesis 5 is rejected. Local tax (PD) has negative and non-significant influence towards the economic growth in Southern Sumatera. The beta score is -0.328 (negative) and the significance is 0.671 or higher than 0.05. The local government inability to meet the targeted PD is the reason why the influence of PD is not significant.

Hypothesis 6 is accepted. Local retribution (RD) has positive and significant influence towards the economic growth in Southern Sumatera. The beta score is 1.983 (positive) and the significance is 0.013 or lower than 0.05. The significant influence means that the local retribution has met the target and is able to support the economic growth in Southern Sumatera. It is in line with previous studies conducted by Barimbing & Karmini (2015); Priambodo (2014) and Tahar & Zakhiya (2011).

## CONCLUSION

Future researchers interested in investigating factors that influence economic growth can use the finding of this study as reference. Limitation of this study is the number of variables and provinces that become analysis units. It is expected that future researchers involve more independent variables and more regions as the analysis unit.

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