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**Factors Affecting Poverty Level In South Sumatra,
Indonesia**

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Abstract

The study aims to find out the direct and indirect effect of education, health, government investment and private investment on productivity as well as the poverty level in South Sumatera. The study used secondary data of 2004-2005 published by the Central Bureau of Statistics (BPS), Directorate General of Fiscal Balance (DJPK) and other institutions. It used Path Analysis. The Result of the study show that (1) education, health, and government investment did not directly influence the productivity in South Sumatera, while the private investment directly and positively influenced the productivity in South Sumatera, (2) education, government investment, and private investment did not directly influence the poverty level in South Sumatera, while the health and productivity directly and significantly but negatively influenced the poverty level in South Sumatera, (3) education, health, and government investment indirectly did not influence the poverty level through the productivity in South Sumatera, while the private investment indirectly have significant and negative impact on poverty level through productivity in South Sumatera.

Keywords: Education, Health, Government Investment, Private Investment, Income Per Capita, Poverty Level

INTRODUCTION

Development of a country can be said to succeed if the government can prosper its community. The level of welfare can be characterized by an adequate level of income to meet the needs of decent living. Residents who can meet the needs of decent living are often called non-poor population groups, while people who can't meet the needs of decent living are called poor people. The greater the number of people belongs to the poor, the lower the success rate of development of a country or a region is.

Based on the definition used by the Central Bureau of Statistics (*BPS*), the poor people are those who have monthly average per capita expenditure below the poverty line. With this approach, poverty is seen as an economic inability to meet basic food needs (grains, tubers, fish, meat, eggs, milk, nuts, fruits, vegetables, cooking oils, fats, etc.) and non-food needs (housing, clothing, education and health) measured from the expenditure matter. This measurement is conducted by looking at the amount of *rupiah* spent per capita per month to meet minimum food and non-food requirements. For food minimum standards, a benchmark of 2100 calories per day per person is used. As for the non-food minimum needs, it includes expenditures for home, clothing, and other various goods and services. Determining the calculation of the poverty line in the community is by way of calculating the number of people earning below IDR 7,057 per person per day. This calculation of the poverty line includes food and non-food needs.

The number and percentage of poor people in Indonesia from 2004 to 2013 tend to decrease. The decline of the number of the poor people indicated that the government's efforts to strive for the development in all areas relatively began to show results. Although the trend of the number and percentage of poor people in Indonesia decreased, the nominal figure was still relatively large that in 2013 there were 28.31 million people belonging to the poor, and in September 2016 the recorded number was as many as 27.76 million people in the poor category.

Figure 1. The Number of Indonesian Poor People from of 2004 to 2013



Source: *bps.go.id*

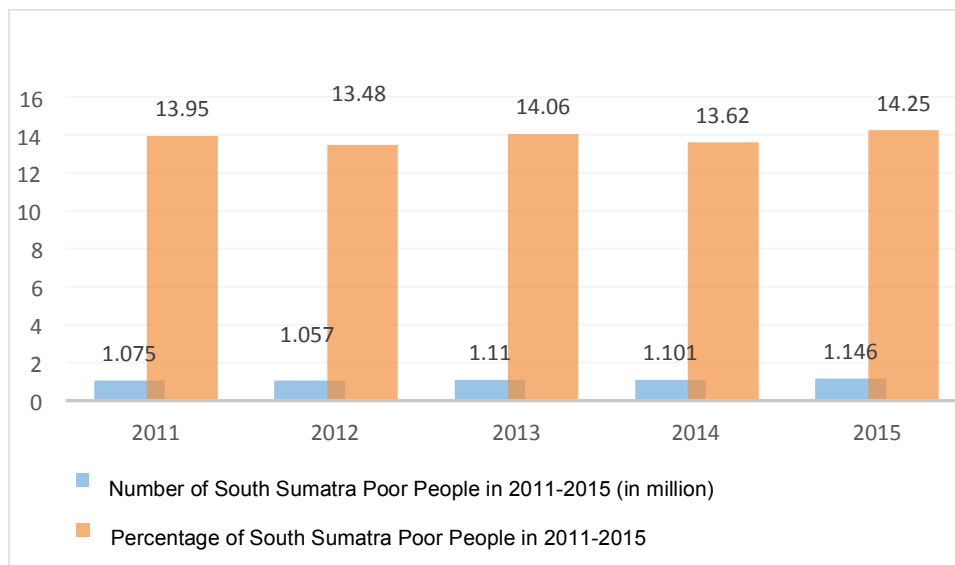
The problem of poverty becomes not only a national problem, but also a regional problem, including the South Sumatra Province. The percentage of

Number of Indonesian Poor People (in million)

Percentage of Indonesian Poor People

poor people in South Sumatra has a higher percentage than that of national. The percentage of the number of poor people in South Sumatra in 2015 was 14.25 per cent and in a nominal figure it was as many as 1.15 million poor people. The high number and percentage of poor people in South Sumatra need to get the attention of all parties, particularly the government, because when viewed from the aspect of natural wealth, South Sumatra Province is relatively rich and potential. The South Sumatra Province is rich in natural resources such as oil, natural gas, coal, agriculture, fisheries and forestry sectors. The area of South Sumatra still relies on mining and quarrying, and the agricultural sector. The contribution of these two sectors to the Gross Regional Domestic Product (GRDP) is relatively dominant. However, the two sectors are still unable to address the poverty problem in South Sumatra due to the lack of employment in the local sector for the mining sector and the relatively low productivity for the agricultural sector. The description of the number and percentage of poor people in South Sumatra is shown in figure 2.

Figure 2. The Number of Poor People in South Sumatra from 2011 to 2015



Source: *bps.go.id*

The relatively high number and percentage of poor people in South Sumatra Province on one hand, and the relative potential of natural resources owned by South Sumatra Province on the other hand, it is necessary to identify what factors cause the sluggish decline in the number of poor people in South Sumatra. Based on the extreme theoretical aspects, both neo liberal theory and social democracy, the causes of poverty can be identified such as weak personality (lazy, resigned, stupid, etc.), the imbalance of economic and political structure and social injustice (Abukosim et al., 2010).

The above data and information show that the phenomena of relatively large number of poor people indicated that the efforts of decreasing the number of

poor people in South Sumatra Province was not yet successful. It needs to find out further in order that the policies of decreasing the number of poor people can be implemented appropriately and maximally. In identifying the dominant factors affecting the number of poor people in South Sumatra, especially the aspect of economic macro, this article aimed to answer the following questions:

1. What are the direct effects of education, health, government investment, and private investment on productivity in South Sumatra?
2. What are the direct effects of education, health, government investment, private investment and productivity on poverty levels in South Sumatra?
3. What are the indirect effects of education, health, government investment, and private investment on poverty in South Sumatra through productivity?

LITERATURE REVIEW

Theory of Poverty

According to Myrdal (Adisasmita, 2005), poverty is a development issue in many areas faced by developed, developing, or underdeveloped regions characterized by unemployment, underdevelopment and deterioration. Poverty is a situation where a person or individual is not able to meet the needs of a decent standard of living, i.e. being able to meet basic needs such as food, clothing, shelter and decent education and the recognition of the positions in the community.

The notion of poverty is very diverse, ranging from the inability to meet basic consumption needs to a wider understanding by including social, cultural, and political components.

Theory of Vicious Circle

According to Nurkse, (Jhingan, 2008) the underdeveloped countries are generally entangled into a vicious cycle of poverty. The vicious circle of poverty implies a series of circular forces that react to each other and react in such a way that placing a poor country remains in a state of impoverishment. The vicious cycle in essence comes from the fact that the productivity of underdeveloped countries is very low as a result of lack of capital, imperfect markets, and economic backwardness. Viewed from the point of view of demand, the low level of real income causes the low level of demand, so in turn the level of investment becomes low. The low level of return investment causes less capital and lower productivity.

Figure 3. Vicious circle of demand (Vicious circle Nurkse)

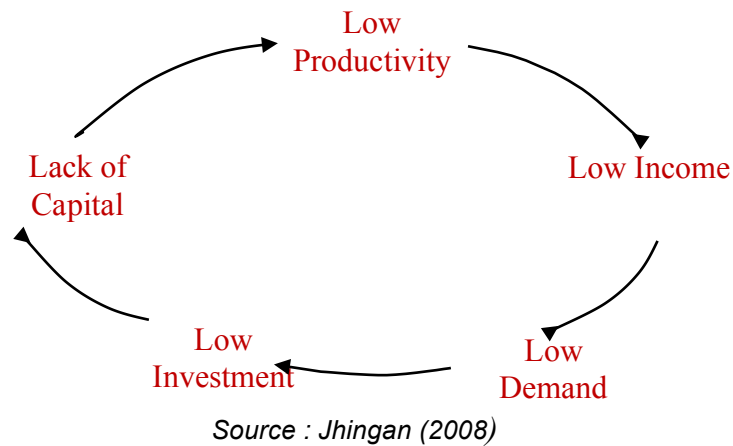


Figure 4. Vicious circle of offer (Vicious circle Nurkse)

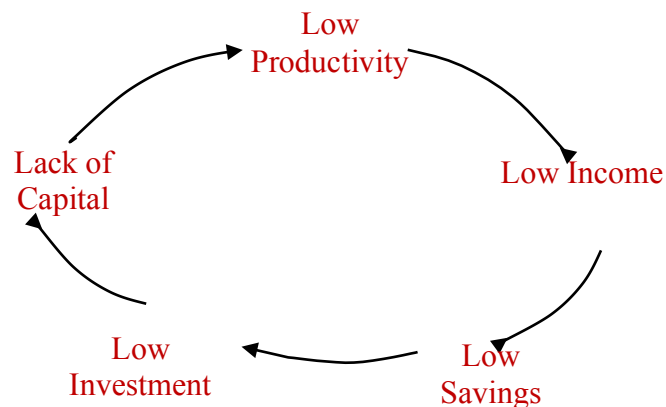


Figure 3 shows low productivity reflected in low real income. Low income means savings rates are also low. The low savings rates lead to lower investment rates and less capital. Lack of capital in turn affects to low productivity.

When viewed from the supply side illustrated in Figure 4, low income levels reflecting low investment and lack of capital are common features of both vicious circles.

METHODS

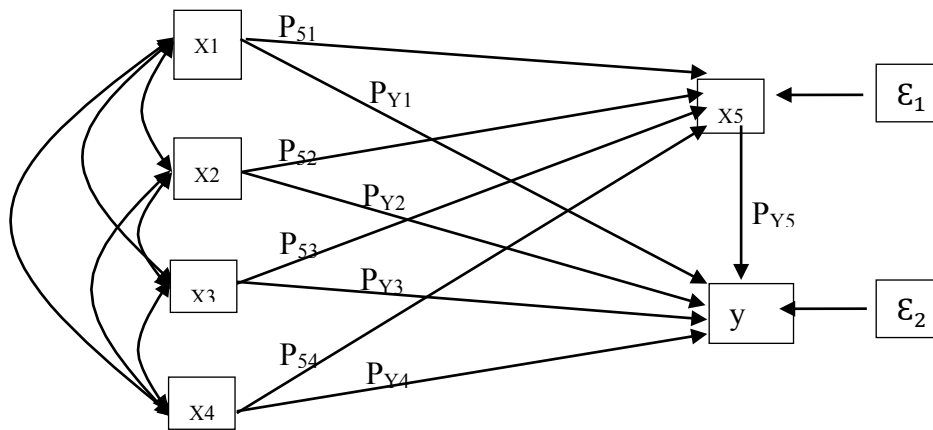
Types and Source of Data

The type of data used in this study was secondary data as follows: (1) Education, (2) health (3) Government investment (4) private investment (5) income per capita (6). Data sources derived from the Central Bureau of Statistics of South Sumatra, Regional Investment Board of South Sumatra, and Directorate General of Fiscal Balance.

Technique of Analysis

The analysis technique used in this study was path analysis technique. The path analysis diagram is shown in Figure 5.

Figure 5. Path Diagram



The analysis model to construct in this study was as follows:

$$Y = P_{Y1} X_1 + P_{Y2} X_2 + P_{Y3} X_3 + P_{Y4} X_4 + P_{Y5} X_5 + \epsilon_2 \dots \dots \dots (1)$$

$$X_5 = P_{51} X_1 + P_{52} X_2 + P_{53} X_3 + P_{54} X_4 + \epsilon_1 \dots \dots \dots (2)$$

Remarks formula:

X₁ = education/literacy rate, X₂ = health/life expectancy, X₃ = government investment/capital expenditure, X₄ = private investment, X₅ = Productivity/income per capita, Y= poverty figure of South Sumatra, ε₁= error ε₂= error.

FINDINGS

The estimation results of direct influence of education, health, government investment, and private investment on productivity are briefly presented in the following table.

Table 1. The Estimation Results of Influence of Education, Health, Government Investment, and Private Investment on Productivity

Coefficients^a					
Variabel	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-5.154	11.199		-.460	.659
LN X1	3.976	2.164	.317	1.837	.109
LN X2	.537	1.634	.046	.329	.752
LN X3	.076	.052	.334	1.480	.182
LN X4	.041	.018	.360	2.316	.054
a. Dependent Variable: LN X5					
Model Summary			ANOVA^b		
R		.975 ^a	Sum of Squares	.168	.003
R-Squared		.951	Df	4	7
Adjusted R-squared		.924	Mean Square	.041	.001
S.E of the Estimate		.03446	F-statistik	34.280	
			Sig (F-statistik)	.000 ^a	

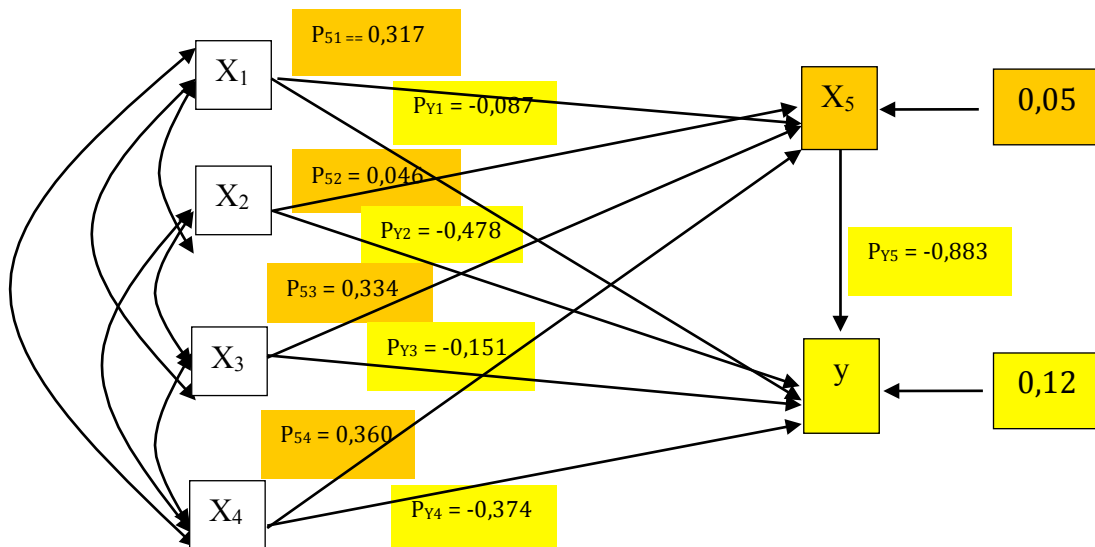
The estimation results of direct influence of education, health, government investment, private investment, and productivity on poverty are briefly presented in the following Table 2:

Table 2. The Estimation Results of Influence of Education, Health, Government Investment, Private Investment, and Productivity on Poverty

Coefficients						
Variabel	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
(Constant)	42.543	16.685		2.550	.038	
LN X ₁	-1.044	3.224	-.087	-.324	.755	
LN X ₂	-5.343	2.343	-.478	-2.195	.064	
LN X ₃	-.033	.077	-.151	-.432	.679	
LN X ₄	-.041	.027	-.374	-1.547	.166	
LN X ₅	-.848	.143	-.883	-5.944	.000	
Dependent Variable: LN Y						
Model Summary			ANOVA ^b			
R	.940 ^a		Sum of Squares	.140	.038	
R Square	.883		Df	4	7	
Adjusted R Square	.816		Mean Square	.035	.003	
Std. Error of the Estimate	.05135		F	13.229		
			Sig.	.002 ^a		

The estimation results of indirect influence of health education, government investment, and private investment through productivity on poverty in South Sumatra are presented in the following Figure 6:

Figure 6. Empirical Causal Model Among X₁, X₂, X₃, X₄, X₅, and Y



Discussion

Influence of Education on Productivity

The result of the estimation showed that the education level does not significantly affect productivity in South Sumatera. It was due to the fact that the nature of education in affecting the productivity takes time. In addition, most of South Sumatera residents work in the agriculture sector whose productivity is relatively not determined by the level of education.

Influence of Health on Productivity

The estimation result showed that the health did not significantly affect the productivity in South Sumatra. This resulted from the lack of response of output increase generated by the South Sumatra workers when health conditions improve. Another cause was the relatively large number of people who were under the unemployment status, so that although their health status on average increased, it did not affect significantly on the productivity improvement.

Influence of Government Investment on Productivity

The estimation result showed that the government investment did not significantly affect the productivity in South Sumatra Province. It resulted from the fact that the nature of government investment was relatively directed to economically-less potential sectors that did not greatly affect the increased productivity in South Sumatra. Mostly the government investment was capital expenditure allocated to provide infrastructure/public facilities such as those of education, health, transportation and so on which were a long-term effect. This investment in general cannot affect in a short time.

Influence of Private Investment on Productivity

The estimation result showed that private investment significantly and positively affected the productivity in South Sumatra, meaning that if the private investment increased then the productivity would also increase. It was due to the nature of the investments made by the private sectors was largely for the productive and capital-intensive sectors. It is obvious that the private investment is oriented to the benefits that greatly emphasize the achievement of optimization of productivity and efficiency.

Influence of Education on Poverty

The estimation result showed that the education level did not significantly affect poverty in South Sumatra. It results from the fact that the education level usually affects the poverty indirectly and it takes time. In addition, most South Sumatran residents work in the informal sectors that do not require certain education so that, although the education level increases, the income level relatively does not

change much. This condition indicates that people who are below the poverty line will be hard to get out of poverty.

Influence Health on Poverty

The estimation results showed that the significant level of health negatively affected the poverty in South Sumatra, meaning that if the level of health increased then the poverty rate would decrease. It was obvious that the better the level of health became the more opportunities the productive activities would be, and in turn, the income would be greater. Given this, there were more chances to break away from the poverty line.

Influence of Government Investment on Poverty

The estimation result showed that government investment did not significantly affect the poverty level in South Sumatera Province. It was due to the nature of government investment which was relatively directed to less-potential economical sectors that did not largely affect the income of the community to significantly decrease the existing poverty level. The government investment in general is government expenditure for capital expenditure allocated to provide infrastructure facilities/public facilities such as those of education, health, transportation and so on which have a long-term effect. Mostly, this government investment cannot reduce the level of poverty in a short time.

Influence of Private Investment on Poverty

The estimation results showed that private investment did not significantly affect poverty level in South Sumatera Province. It is due to the fact that the nature of investment made by the private parties was the one invested into the productive and capital-intensive sectors that they did not provide a lot of jobs. The nature of a relatively capital-intensive private investment and largely absorbing skilled labour resulted in a barrier for the vast majority of the South Sumatran inhabitants who were relatively poor and lacked the required competencies.

Influence of Productivity on Poverty

The estimation results showed that the productivity significantly and negatively affected the poverty rate in South Sumatra, meaning that if productivity increased then the level of poverty would decline. The significant influence of the productivity toward the poverty in South Sumatera is obvious because the increased productivity paves the way the opportunity of increasing greater income which in turn it will have more chance to break away from the poverty line.

Indirect influence of health education, government investment, and private investment on poverty through productivity

Only the variable of private investment had an indirectly significant effect on poverty through productivity; but the indirect effect was negative. In other words, it implied that private investment could encourage the increase of productivity, and in turn, the productivity could encourage the decline of the number of poor people.

CONCLUSION

In conclusion, (1) the variables of education, health, and government investment directly did not affect the productivity in South Sumatra. While the variable of private investment directly affected the productivity in South Sumatra positively, (2) the variables of education, government investment, and private investment did not directly affect the level of poverty in South Sumatra. While those of health and productivity directly affected the level of poverty in South Sumatra negatively, and (3) the variables of education, health, and government investment indirectly did not affect the poverty rate in South Sumatra through productivity. While the variable of private investment indirectly affected significantly and negatively against the poverty in South Sumatra through the productivity.

REFERENCES

- Abukosim, Syirod.S., Taufiq. 2010. Analisis Kualitas Sumberdaya Manusia dan Tingkat Kemiskinan di Kabupaten Ogan Komering Ilir (Analysis of Human Resources Quality and Poverty Level in Ogan Komering Ilir District). *Journal of Economic Development* 8 (1).
- Adisasmita. 2005. *Dasar-Dasar Ekonomi Wilayah (Basics of Regional Economics)*. Yogyakarta: Graha Ilmu.
- Cameron, A. Lisa., 2000. Poverty and Inequality in Java, Examining The Impact of The Changing Age, Educational, and Industrial Structure. *Journal of Development economics*, vol. 62, (149-180)
- Central Bureau of Statistics (BPS). 2009. *Indikator Sosial (Social Indicators)*. South Sumatra.
- Central Bureau of Statistics (BPS). 2014. *(Series 2010) GDRP on the Basic of Constant Price*. BPS Sumsel.go.id.
- Central Bureau of Statistics (BPS). 2015. *Data Jumlah Penduduk Miskin Indonesia (Number of Indonesian Poor People Data)*. BPS Indonesia.go.id.
- Central Bureau of Statistics (BPS). 2015. *Data Jumlah Penduduk Miskin Sumatera Selatan (Number of South Sumatra Poor People Data)*. BPS Sumsel.go.id.
- Central Bureau of Statistics (BPS). 2015. *Sumsel Dalam Angka (South Sumatra in Number)*. Sumatera Selatan.

- DJPK.Kemenkeu.go.id (accessed and retrieved on 20 November 2016)
- Jhingan. M. L. 2008. *Ekonomi Pembangunan dan Perencanaan* (Economics of Development and Planning). Jakarta: PT Raja Grafindo Persada.
- Salim, Agus. 2009. Analisis Pengaruh Pengeluaran Pemerintah di Sektor Pendidikan, dan kesehatan Terhadap Pengentasan Kemiskinan Melalui Peningkatan Pembangunan Manusia di Provinsi Jawa Tengah (Analysis The Effect of Government Expenditures in Education and Health Sector on Poverty Reduction through Increasing Human Development in Central Java Province). *Jurnal Dinamika Ekonomi Pembangunan* 1 (1).
- Sunusi. D. K, Kumenaung. A, Rotinsulu. D. 2014. Analisi Pengaruh Jumlah Tenaga Kerja, Tingkat Pendidikan, Pengeluaran Pemerintah Pada Pertumbuhan Ekonomi, dan Dampaknya Terhadap Kemiskinan di Sulawesi Utara Tahun 2001-2010 (Analysis The Effect of Number of Labor, Education Level, Government Expenditures on Economic Growth, and Its Impact on Poverty in North Sulawesi 2001-2010). *Jurnal Berkala Ilmiah Efisiensi Universitas Sam Ratulangi Manado* 14 (2).
- Tarmizi. H. B. 2014. An Analysis Of Influencing Factors On Poverty In Sustainability Development Frame Work : A Case In Deli Serdang Regency, Indonesia. *Journal Of Economics And Behavioral Studies* 6 (7): 581-590.
- Wahyudi. D, Rejekingsih. T. W. 2013. Analisis Kemiskinan di Jawa Tengah (Analysis of Poverty in Central Jawa). *Diponegoro Journal of Economics* 2 (1).