IMPACT OF GOVERNMENT PUBLIC EXPENDITURE ON POVERTY LEVEL IN SOUTH SULAWESI PROVINCE
DOI: 10.31002/rep.v7i2.62

Sapriyadi 1,2
1Development Economics Study Program, Faculty of Social and Political Sciences, Universitas Sembilanbelas
November Kolaka
2sapriyadi.ansar@gmail.com

Abstract

Poverty is always a problem in the development of a country, especially in the economic field. Poverty from the economic side has an impact on the decline in people's purchasing power, while in the social aspect, poverty is seen as a problem when social stratification in society creates a dividing line where the upper class does not want to interact with the lower class society and vice versa. This study aims to determine the impact of government public spending on education and health functions on the level of poverty. The scope of the research covers 24 districts/cities in South Sulawesi Province from 2015-2019. The type of research used is quantitative, using secondary data. The data collection method was carried out through online searches on the official websites of DJPK and BPS. The data analysis technique used is path analysis. The results show that education spending directly has a positive impact on poverty levels, and health spending has a negative impact on poverty levels. Meanwhile, education spending indirectly has a negative impact on poverty levels through Gross Regional Domestic Product, and health spending has a positive impact on poverty levels through Gross Regional Domestic Product.

Keywords: Education Expenditure; Health Shopping; Gross Regional Domestic Product; Poverty level
INTRODUCTION
Poverty is always a country’s development problem, particularly in the economic field. Poverty, from an economic perspective, has an impact on reducing people’s purchasing power, while on the social aspect, poverty is seen as a problem when social stratification in society creates a dividing line in society. In addition, poverty has the potential to increase social security disturbances, such as increased crime rates, as a result of the inability of some people to fulfill life’s sufficiency. Therefore, poverty alleviation efforts are important to study to produce policies that impact the effectiveness of poverty reduction.

Source: BPS South Sulawesi Province, 2020

Figure 1. Poverty Rate in South Sulawesi Province 2010-2019

South Sulawesi Province still faces problems related to poverty. Based on published data from Statistics Indonesia of South Sulawesi Province, the poverty rate for the last five years (2015-2019) has experienced a slow decline. It has not shown a consistent decline every year.

Todaro and Smith (2011) revealed various poverty reduction programs that can be implemented, such as providing at least basic education and health services as a solid foundation for long-term progress. In addition, providing various kinds of goods and services for public consumption financed by taxes for the poorest population groups is another considerable potential instrument for poverty alleviation. Another strategy worth considering to eradicate poverty is to help the poor in developing their micro-enterprises. It is identified that funding (credit loans) is an obstacle to developing these small businesses. By increasing working capital, productivity and income will increase substantially.

The mainstream of handling poverty which is widely practiced in Indonesia is to reduce the costs of the poor in the short term; this pattern is actualized by carrying out social assistance, for example, free education and health programs. Meanwhile, in the long term, policies are more directed at increasing the productivity of the poor, one of which is carried out by providing micro-credit (Agussalim, 2012).

Government spending on education and health is believed to be a long-term effort to overcome the problem of poverty. Empirical findings reveal that education and public health spending positively impact education and health outcomes (Obi et al., 2016). Government spending on education and health is considered an investment in human capital because it helps in skills formation,
thereby increasing the ability to work and earn more income.

Impact of Government ... (Sapriyadi)

The realization of public spending for the education and health function is based on the Directorate General of Fiscal Balance report, which shows a significant increase from 2015 to 2019. Increasing public spending on education and health functions is expected to contribute to the population’s average length of schooling and life expectancy, which can eventually increase productivity and a good work ethic in the community. Later, it will provide long-term progress in the economy.

Public spending on education and health functions is believed to have a long-term impact on a country’s national income. A study conducted by Nantwi (2015) revealed a long-term impact between education spending and real GDP. These findings are supported by empirical findings, which reveal that health spending positively impacts GDP growth in Asia-Pacific Countries (Maitra and Mukhopadhyay, 2012).

The realization of public spending for the education and health function is based on the Directorate General of Fiscal Balance report, which shows a significant increase from 2015 to 2019. Increasing public spending on education and health functions is expected to contribute to the population’s average length of schooling and life expectancy, which can eventually increase productivity and a good work ethic in the community. Later, it will provide long-term progress in the economy.

Public spending on education and health functions is believed to have a long-term impact on a country’s national income. A study conducted by Nantwi (2015) revealed a long-term impact between education spending and real GDP. These findings are supported by empirical findings, which reveal that health spending positively impacts GDP growth in Asia-Pacific Countries (Maitra and Mukhopadhyay, 2012).

Source: Statistics Indonesia South Sulawesi Province, 2020

**Figure 2.** Realization of Government Expenditure in the Education and Health Sector (Rupiah) in South Sulawesi Province in 2015-2019

The realization of public spending for the education and health function is based on the Directorate General of Fiscal Balance report, which shows a significant increase from 2015 to 2019. Increasing public spending on education and health functions is expected to contribute to the population’s average length of schooling and life expectancy, which can eventually increase productivity and a good work ethic in the community. Later, it will provide long-term progress in the economy.

Public spending on education and health functions is believed to have a long-term impact on a country’s national income. A study conducted by Nantwi (2015) revealed a long-term impact between education spending and real GDP. These findings are supported by empirical findings, which reveal that health spending positively impacts GDP growth in Asia-Pacific Countries (Maitra and Mukhopadhyay, 2012).

Source: Statistics Indonesia South Sulawesi Province, 2020

**Figure 3.** Gross Regional Domestic Product at Constant Prices (Trillion Rupiah) in South Sulawesi Province in 2015-2019

Gross regional domestic product in South Sulawesi Province during 2015-2019 showed a consistent increase year by year. In 2015, the gross regional domestic product reached IDR 250.8 trillion; then, it increased to IDR 330.6 trillion in 2019. This increase is believed to be inseparable from local government policies that direct development to potential economic sectors that impact increasing output.

**THEORETICAL BACKGROUND**

Poverty Theory
According to Nurkse in Jhingan (2013), underdeveloped countries are generally trapped in what is called a vicious circle of poverty. A vicious circle implies a circular row of forces that act and react to one another in such a way as to place a poor country in a poverty state. For example, the poor, who always eat less, will have bad health. Due to weak physical conditions, their work capacity becomes low. Because of low work capacity, their income will also be low, and that means they remain poor with less to eat, and so it goes.

From a demand perspective, the vicious circle can be explained: low-income levels lead to low levels of demand and direct to low investment and investment returns, causing low productivity. Meanwhile, from a supply point of view, low productivity is reflected in low income; low income means a low saving rate. Low savings rates lead to low investment levels and less capital. Lack of capital eventually leads to low productivity.

Davis and Miguel (2015) revealed that the different poverty literature over time reflects a shift in thinking from monetary aspects to broader issues. The Classical and Neoclassical approaches emphasize the monetary aspect of the individual and the limited role of government; classical economics argues that individuals are ultimately responsible for poverty, thus providing the basis for laissez-faire policies, while the more mainstream Neoclassical is more diverse and provides an explanation of poverty that exists outside the individual's control (especially market failures). The Keynesian/Neoliberal view focuses on macroeconomic forces and emphasizes the role of government in providing economic stabilization and public goods. Poverty is largely considered to be accidental and caused by unemployment. The Marxian/radical view considers class and group discrimination as the center of poverty and provides a key role for the state in market intervention/regulation. Meanwhile, social exclusion and social capital theories recognize the role of social and economic factors and assist in understanding the persistence of poverty over time. Therefore, to maximize the relevance of insights about poverty alleviation, a selective approach is required that refers to social disciplines to understand human behavior more broadly beyond material and individual aspects.

Based on some literature, poverty is classified as Absolute Poverty when the income level is below the poverty line, or the amount of income is insufficient to meet the minimum needs (clothing, food, housing, health, and education) for life and work. Absolute poverty indicators are not limited to income but also include a lack of basic infrastructure, social capital, and natural capital (Gordon and Nandy, 2012). Chronic poverty is defined as a situation where a person or household is in a state of poverty for a long period, sometimes intergenerationally. It can be concluded that
absolute and chronic poverty are the same in all aspects; the difference lies in the fact that absolute poverty is temporary, while chronic poverty occurs over a long period.

Relative poverty is a condition where income is in a position above the poverty line but relatively lower than the surrounding community. Relative poverty, in this case, is a perception in which a person should be seen based on his socioeconomic status compared to others. Poverty is a condition or situation of poverty due to the influence of development policies that have not yet reached the entire community, causing income inequality; and Cultural Poverty refers to the problem of a person's or society's attitude caused by cultural factors such as the unwillingness to improve the level of life, being lazy, wasteful, not creative even though there are efforts from outsiders to help them.

In addition, some classify poverty into persistent poverty (hereditary poverty), cyclical poverty (poverty that follows the pattern of the overall economic cycle), seasonal poverty (seasonal poverty as found in the case of fishermen and food crop farmers), and accidental poverty (poverty that caused by natural disasters or the impact of certain policies that cause a decrease in the level of welfare).

Theories that are rooted in the causes of poverty, Individual deficiencies (individual deficiencies-conservative), and social phenomena theories (social phenomena-liberal/progressive). Causes of poverty in 5 categories, namely poverty caused by individual deficiencies; cultural belief systems that support poverty sub-cultures; economic, social, and political distortion/discrimination; geographic disparity and; cyclical and cumulative interventions. Poverty is not only caused by natural disasters but also by dictatorship exists in a country's political system. Development is found as a way to end poverty while freedom is considered as a measure of development because: (a) Evaluative reason, an assessment of the success of development that is understood based on the extent to which human freedom has increased, who is able to express and try to meet their needs; (b) Effectiveness reason, the success of development depends entirely on human beings who are free, able to determine goals and ways of fulfilling their needs. Therefore, to actualize this, two points of view are needed: the primary end (constitutive, human development) and the principal means (instrumental, infrastructure for accessing community welfare). According to Sen, there are 5 attributes, which are political freedom; opportunities in the economic field; opportunities in the social sector, namely education and health; guarantee of
openness/transparency; and security guarantees.

The Relationship between Government Expenditure and Poverty

A supportive view of government spending with a focus on public spending has a significant impact on reducing poverty, starting from the general theory that states that the provision of a wide range of goods and services for public consumption financed by taxes for the most vulnerable groups of the population poor, is an important instrument that has the potential to alleviate poverty, (Todaro and Smith, 2011). It is supported by Dahmardeh's (2013) research findings on government expenditure and its impact on reducing poverty in Iran. The results of the study show that constructive spending has a significant impact on reducing poverty.

Government spending is essential for national development, and the availability of various types of public needs for poor population groups is a variable that can contribute to solving problems related to poverty. As with the empirical findings of Mehmood and Sadiq (2010), who investigated the relationship between government public spending and poverty in Romania, the result indicated that government public spending has an impact on reducing poverty. In addition, there is also a long-term impact, where poverty reduction is caused by an increase in government public spending, such as the construction of social facilities, public facilities, infrastructure, education, and health. Similar empirical findings by Awe (2013) which examined the impact of government spending on poverty in Nigeria, the results show that public spending on education, health, and agriculture functions has an impact on reducing poverty.

Not all research results support the statement that government spending with a focus on public spending has a significant impact on poverty reduction. Birowo (2011) research investigated the relationship between government spending and poverty levels in Indonesia. The study results show that government spending does not have a negative and significant relationship with poverty levels.

The Relationship between Government Expenditure and Gross Regional Domestic Product

The perspective that supports the statement that government spending on education has a significant impact on increasing gross domestic product is research conducted by Nantwi (2015), who investigated education spending and economic growth in Ghana. The results show a positive and significant long-term relationship between education spending and real GDP. Government spending on education contributes significantly to Ghana's long-term economic growth.

Research conducted by Mukit (2012) analyzed the impact of education spending on
economic growth in Bangladesh; the findings revealed a positive impact, where an increase in education public spending would increase economic growth in the long term. Empirical findings by Lacheheb support the research findings, Nor and Baloch (2014), who analyzed the impact of health and education spending on economic growth in MENA (Middle East and North Africa) countries. The findings reveal that spending on health and education has an effect on increasing economic growth.

Research conducted by Maitra and Mukhopadhyay (2012) investigated public spending on education, health, and economic growth in Asia-Pacific. The results showed that health spending significantly positively affected GDP growth in Bangladesh, Nepal, the Philippines, Singapore, and Sri Lanka. This finding is supported by research conducted by Lacheheb, Nor, and Baloch (2014), who investigated spending on health, and education and their impact on economic growth in MENA (Middle East and North Africa) countries. The results of the study show that health and education expenditures have a positive and significant effect on economic growth and gross domestic product formation.

A small number of researchers believe that government spending on education and health does not have a significant impact on increasing gross domestic product; in fact, government spending actually has a negative impact on the gross domestic product, is research conducted by Reza and Valeecha (2012) who investigates the impact of education on economic growth in Pakistan. The results of the study demonstrated the absence relationship between education spending and economic growth in the short term.

At the same time, research conducted by Ali, Ullah, and Asghar (2017) investigated the effect of health spending on GDP in Pakistan, China, India, and Bangladesh. The results of the study show that health spending has no significant effect on GDP.

**RESEARCH METHOD**

The scope of the research covers 24 districts/cities in South Sulawesi Province during 2015-2019. This type of research is quantitative, using secondary data obtained from various official sources, including Statistics Indonesia (BPS) of South Sulawesi Province and DJPK of the Ministry of Finance of the Republic of Indonesia.

**Data Analysis Technique**

Path analysis is employed under the following model equations:

\[ Y_1 = f(X_1, X_2) \]

\[ \ln Y_{1it} = \alpha_0 + \alpha_1 \ln X_{1it} + \alpha_2 \ln X_{2it} + e_1 \]

\[ Y_2 = f(X_1, X_2, Y_1) \]

\[ Y_{2it} = \beta_0 + \beta_1 \ln X_{1it} + \beta_2 \ln X_{2it} + \beta_3 \ln Y_{1it} + e_2 \]

\[ Y_{2it} = \alpha_0 + \alpha_1 \ln X_{1it} + \alpha_2 \ln X_{2it} + \beta_3(\alpha_0 + \alpha_1 \ln X_{1it} + \alpha_2 \ln X_{2it} + e_1) + e_2 \]
\[ Y_{2it} = \alpha_0 + \alpha_1 \ln X_{1it} + \alpha_2 \ln X_{2it} + (\alpha_0 \beta_3 + \alpha_1 \beta_3 \ln X_{1it} + \alpha_2 \beta_3 \ln X_{2it} + \beta_3 e_1) + e_2 \]
\[ Y_{2it} = (\alpha_0 + \alpha_0 \beta_3) + (\alpha_1 + \alpha_1 \beta_3) \ln X_{1it} + (\alpha_2 + \alpha_2 \beta_3) \ln X_{2it} + e_3 \]

Description:

\( Y_2 \) = Level of Poverty
\( Y_1 \) = Gross Regional Domestic Product
\( X_1 \) = Education Expenditures
\( X_2 \) = Health Expenditures

RESULTS AND DISCUSSION

Results of Direct Influence Estimation

<table>
<thead>
<tr>
<th>Variable of Direct Influence</th>
<th>Estimate</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRDP ( \leftrightarrow ) Education Expenditure</td>
<td>0.272</td>
<td>***</td>
</tr>
<tr>
<td>GRDP ( \leftrightarrow ) Health Expenditure</td>
<td>-0.226</td>
<td>***</td>
</tr>
<tr>
<td>Poverty Level ( \leftrightarrow ) Education Expenditure</td>
<td>0.776</td>
<td>***</td>
</tr>
<tr>
<td>Poverty Level ( \leftrightarrow ) Health Expenditure</td>
<td>-0.915</td>
<td>***</td>
</tr>
<tr>
<td>Poverty Level ( \leftrightarrow ) GRDP</td>
<td>-1.551</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Secondary Data Processing Result

The estimation result of direct influence showcases that the regression coefficient value of education spending on a gross regional domestic product is 0.272, and the probability value is 0.000, meaning that education spending positively impacts the gross regional domestic product. Every 1% increase in education spending impacts an increase in the gross regional domestic product by 0.272%.

The regression coefficient value for health spending on a gross regional domestic product is -0.226 and a probability value of 0.000, meaning that health spending has a negative impact on the gross regional domestic product. Every 1% increase in health spending will reduce gross regional domestic product by 0.226%.

The regression coefficient value of education spending on the poverty level is 0.776, and the probability is 0.000, meaning that education spending positively impacts poverty. Every 1% increase in education spending will increase poverty by 0.776%.

The regression coefficient value for health spending on the poverty rate is -0.915, and the probability value is 0.000, meaning that health spending significantly negatively impacts the poverty level. Every 1% increase in health spending will reduce poverty by 0.915%.

The regression coefficient value of the gross regional domestic product on the poverty level is -1.551, and the probability value is 0.000, meaning that the gross regional domestic product has a negative impact on poverty. Every 1% increase in the gross regional domestic product will reduce poverty by 1.551%.

Table 2. Estimating Results of Indirect Influences Variables

<table>
<thead>
<tr>
<th>Variable of Indirect Influence</th>
<th>Estimate</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty Level through GRDP</td>
<td>-0.422</td>
<td>***</td>
</tr>
<tr>
<td>Poverty Level ( \leftrightarrow ) Health Expenditures</td>
<td>0.350</td>
<td>***</td>
</tr>
</tbody>
</table>
Impact of Government … (Sapriyadi)

Source: Secondary Data Processing Result

The results of the estimation of the indirect effect indicate the regression coefficient value of education spending on the poverty rate through gross regional domestic product, which is - 0.422, and a probability value of 0.000, which means that education spending indirectly has a negative impact on the poverty rate. Every 1% increase in education spending will reduce poverty indirectly by 0.422%.

The regression coefficient value of health spending on the poverty rate through the gross regional domestic product is 0.350, and the probability value is 0.000, which means that indirectly health spending has a positive impact on the poverty rate. Every 1% increase in health spending will increase poverty indirectly by 0.350%.

Discussion

Education spending has a positive impact on the gross regional domestic product. This research has consistently supported Mukit (2010) findings, which revealed that public spending on education positively impacts economic growth. A 1% increase in education spending will contribute to a 0.34% increase in GDP. The results of this study are inseparable from several policies implemented by the local government in building and developing human resources, including increasing the participation of school-age children in early childhood education, nine-year compulsory education for school-age children, and increasing the participation of school-age children in secondary education, which is believed to have contributed positively to increasing school participation, this increase will eventually increase the knowledge or skills mastered by the community, thus having an impact on increasing community productivity.

For education spending to have a major impact on GRDP, policies need to be directed to support increasing the quantity of education and improving the quality of education. The implementation of education spending needs to be continuously increased in order to finance a number of programs aimed at overcoming the existing problems related to improving the quality of education services in the Province of South Sulawesi, which in turn has an impact on the high level of knowledge and skills owned by the community that leads to high productivity and community income.

Health spending has a negative impact on the gross regional domestic product. This research is consistent with the findings of Kurt (2015), which revealed that government health spending has a negative impact on economic growth. Investment in health in South Sulawesi Province needs to be increased. In addition, the budget allocation for improving the quality of health also needs
to be increased every year to finance improving the quality of health services through policies and programs that are a priority for the local government. The policy strategy pursued could be in the form of increasing the number of equal distribution of health facilities, providing quality health facilities and infrastructure, intensive medical treatment, handling malnutrition at the household level (post-hospitalization), as well as improving the quality of health services for infants through the availability of facilities and infrastructure. It is believed that this will positively contribute to improving the community’s health status, which will impact people’s productivity and income.

Education spending has a positive impact on poverty. This research has shown consistency with findings by Birowo (2011), which suggests that education spending actually impacts increasing poverty in Indonesia. Education spending is designated to finance several programs to improve the quality of education services that are believed to contribute to the community. Still, policies directly related to poverty reduction have not reached the poor as a whole. For example, a business capital scheme, which only a small portion of the poor can access due to various problems, such as the absence of collateral, and the provision of interest, is still considered quite high.

In addition, another factor is that spending on education does not seem to have an impact on increasing enrollment in both primary and secondary schools. The implementation of education spending at the district/city level is considered to be saturated to finance a number of programs aimed at increasing enrollment rates and the average number of years of schooling in urban districts. It is considered a result of education spending at the district/city level earmarked for financing basic education, while the average length of schooling in South Sulawesi Province is in the range of secondary education and tertiary education so that whatever the education budget allocation at the district/city level does not affect the increase the seven-years-average length of schooling. Therefore, the challenge faced by the regional government of South Sulawesi Province is to focus on increasing the average length of schooling by increasing the realization of education spending each year. In addition, an increase in spending on education needs to be accompanied by an efficient and effective allocation pattern so that the budget works properly in increasing the average length of schooling, which will increase knowledge and skills and will be followed by an increase in people’s income.

Health spending has a negative impact on poverty, and this study has shown consistency with research findings by Kim and Lane (2013), which reveal that government health spending can reduce poverty. Higher government spending on medical goods and services can lead to better overall health
outcomes for individuals, leading to higher productivity and incomes and reducing poverty in the community.

Development of health facilities and infrastructure in South Sulawesi Province, which is allocated to remote areas, as well as free health services, will accommodate the community with access to health which later impacts the improvement of the community's health status. Government spending on health seems to impact health improvements, such as reducing infant mortality. The local government has made efforts by prioritizing improving health service quality as a regional development priority. To overcome various existing health problems, the annual budget allocation to finance the enhancement of health services quality continues to be increased through policies and programs that are a priority for the local government. Policy strategies pursued by the local government in South Sulawesi Province to improve the quality of health services include increasing the distribution of health facilities, providing quality health facilities and infrastructure, intensive medical treatment, handling malnutrition at the household level (post-hospitalization), and increasing quality of health services for infants through the availability of facilities and infrastructure. All of these conditions will have an impact on improving the quality of public health that will increase people's productivity and income.

Gross regional domestic product negatively impacts poverty; this study has consistently supported research findings by Agrawal (2008), which revealed that regions with high levels of economic growth would result in accelerated poverty reduction since economic growth increases employment and increases income, thereby contributing significantly to poverty reduction.

Based on the publication of analysis on development in South Sulawesi Province, most policies are directed at prioritizing the development of sectors with a high level of employment. In other words, the existing development can encourage the reduction of the poverty level rapidly. Therefore, the challenge dealt with by the government is to maintain the growth momentum and lessen the poverty level.

CONCLUSION AND SUGGESTION

Conclusion

Education Expenditures show a direct and positive influence on the poverty level. Each increase in education expenditures impacts the increase in poverty level. At the same time, health expenditures indirectly and negatively influence poverty. Later, it is found that each increase in health expenditures impacts the decrease in poverty. Indirectly, education expenditures negatively influence poverty. Therefore, each increase in spending will alleviate the poverty level through the increase of gross regional domestic product.
Health expenditure positively impacts poverty through gross regional domestic product, as the increase in spending will indirectly increase the poverty level through the gross regional domestic product.

**Suggestion**

The realization of education and health expenditures in South Sulawesi Province must be escalated every year. Besides, its enhancement must be followed by the efficient and effective allocation pattern to ensure that the allocated budget is solely addressed to recover the education and health indicator for the long term that eventually can decline poverty.

**BIBLIOGRAPHY**


Mehmood R. & Sadiq S. (2010). The Relationship Between Government Expenditure And Poverty, a


