

The Effect of Government Capital Expenditure on Banking Credit in KDT Regency (Lake Toba Region)

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Abstract

The beauty of Lake Toba in North Sumatera makes Lake Toba one of the five Super Priority Destinations (DSP) promoted by the government in tourism development. This stipulation is expected to be able to improve the economy of the Lake Toba (KDT) region which is geographically inhabited by 7 (seven) sub-districts, which are directly adjacent to North Tapanuli Regency, Toba Regency, Simalungun Regency, Dairi Regency, Karo Regency, Humbang. Hasundutan Regency and Samosir Regency. The purpose of this study was to find out and analyze the answers related to the effect of government capital expenditure on bank credit around KDT Regency. The data used is secondary data in the form of time series data in KDT for the period 2000–2019 regarding the economic sector GRDP, bank credit and government capital expenditures. Data processing uses the E-Views 10 application through panel data analysis using data on the ratio of government capital expenditure and bank credit to nominal GRDP in all KDT areas. Based on the results of the analysis, the results of the variable ratio of government capital expenditure to nominal GRDP have a positive and significant effect of 0.161587 on banking credit to nominal GRDP from 2005 to 2019 in the KDT area. This shows that there is a relationship and influence of capital expenditure on banking credit in the KDT area during 2005-2019, which means that capital expenditure and the banking sector will be able to become a driver of economic growth, including in the development of the KDT area.

Keywords

banking credit ratio; capital expenditure ratio; Lake Toba area; nominal GRDP



I. Introduction

Destinations promoted by the government in tourism development. The determination of this position certainly has an impact on the implementation of development programs in order to achieve development around the Lake Toba Area (KDT), which is geographically inhabited by 7 (seven) regencies that are directly adjacent, namely North Tapanuli Regency, Toba Regency, Simalungun Regency, Dairi Regency, Karo Regency, Humbang Hasundutan Regency and Samosir Regency.

The main goal in developing Lake Toba tourism is to improve the economy of the surrounding community. Because the economic growth of the KDT region tends to be lower than the economic growth of the North Sumatra Province, this shows that, there are things must to do to improve the economy of the KDT region. This can be seen from Table 1 which shows the real GRDP growth of North Sumatra Province and Districts in the Lake Toba Region.

Table 1. Real GDP growth (%) at constant prices in 2000 North Sumatra Province and Districts in the Lake Toba Region

Year	Real GDP growth (%) at constant prices in 2000 North Sumatra Province and Districts in the Lake Toba Region.							
	North Sumatera	North Tapanuli	Toba Samosir	Simalungun	Dairi	Karo	Humbang Hasundutan	Samosir
2001	3.72	4.39	5.12	4.81	5.47	4.06	-	-
2002	4.07	4.34	6.38	4.40	5.51	4.91	-	-
2003	4.42	4.34	6.54	4.94	5.09	5.66	4.72	-
2004	5.74	4.74	-16.04	2.72	5.83	3.32	5.71	6.57
2005	5.48	5.04	4.95	3.11	5.34	4.70	5.65	3.42
2006	6.20	5.44	5.14	4.76	4.28	4.96	5.77	3.64
2007	6.90	6.03	5.77	5.31	5.03	5.13	6.05	4.59
2008	6.39	5.74	5.61	4.69	4.52	5.21	5.84	5.00
2009	5.07	4.98	5.30	4.92	4.72	5.17	5.32	5.10
2010	6.42	5.56	5.50	5.12	5.02	6.03	5.45	5.59
2011	6.63	5.54	5.26	5.81	5.28	6.57	5.94	5.96
2012	6.22	5.95	5.52	6.06	5.44	6.35	5.99	6.07
2013	6.01	6.05	5.14	4.48	5.46	4.72	6.03	6.46
2014	5.23	5.04	4.23	5.33	5.03	5.09	5.54	5.95
2015	5.10	4.89	4.50	5.24	5.04	5.01	4.63	5.77
2016	5.18	4.12	4.78	5.40	5.07	5.17	5.02	5.27
2017	5.12	4.15	4.96	5.13	4.93	5.21	5.07	5.35

Source: www.bps.go.id, 2020

Based on Table 1 in the period 2001 – 2017, the average real economic growth of North Sumatra Province was 5.52%. Based on table 1.1, Humbang Hasundutan is the only area has economic growth equivalent with North Sumatra Province compared to other KDT areas. This shows, there is a significant disparity in economic growth. This disparity has a long-term negative impact on the economy because it will open up opportunities for population movement to areas with better economic growth. This agrees with Acemoglu & James A (2012) and Todaro & C. Smith (2012) which state, districts with high growth will create new poverty due to population migration from districts with low growth, and at the same time, districts with low economic growth will be increasingly lose its economic potential.

The economic condition of the population is a condition that describes human life that has economic score (Shah *et al.*, 2020). Economic growth is still an important goal in a country's economy, especially for developing countries like Indonesia (Magdalena and Suhatman, 2020).

In order to produce convergent economic growth, equitable distribution of economic growth in each bordering district is necessary to avoid leakage of economic resources from one district to another, On the other hand, negative externalities in high districts economic can also be avoided (Sipahutar, 2018). Therefore, economic development must be systematically and directed (Sipahutar, 2019; Sipahutar *et al.*, 2016; Sipahutar *et al.*, 2017; Acemoglu & James A, 2012) at the convergence of economic growth in the Region, to create economic balance and political stability and have the ability to prevent negative externalities of the implemented development.

In the context of the magnitude economy, although the economic growth of Humbang Hasundutan Regency was highest in KDT and even equal to the average economic growth of North Sumatra Province, the average Gross Regional Domestic Product (GRDP) of Humbang Hasundutan Regency in 2000 - 2013 was the lowest IDR 880.4 billion, while the highest GRDP is Simalungun Regency, which is IDR.4,381.51

billion (bps.go.id, 2020). This means that the ability of the Simalungun area to utilize and manage existing resources is higher than that of Humbang Hasundutan Regency.

Regardless of who has great growth and good resource management from each KDT area, the most important thing is the effort to develop Lake Toba tourism to improve the economy of the KDT area community. Therefore, economic development is needed for all sectors in the KDT area.

The development of economic sectors is a real economic activity to encourage economic growth, which in turn through the growth of a quality economic sector, unemployment and poverty rates can be reduced (Sipahutar, 2019). One of the things that is considered a government stimulus in the regional economy (including KDT) is through government spending or government spending. Where, one of them can be seen from how much government spending is issued by each KDT area to improve its economy. Government spending, which is state expenditure in the APBN, is used for the purpose of carrying out the tasks of the central government and implementing financial balance between the central government and regional governments (jdih.bpk.go.id, 2021) which is expected to be able to improve the economy which can be felt directly by the community. Also government capital expenditure which is used for spending on goods and services whose benefits can be felt directly by the community.

As is generally understood, the effect of government spending on economic growth can provide 3 patterns of relationship. This is in line with Terminanto & Rama (2017) which is summarized from various sources and concludes that there are 2 patterns of relationship in economic growth, firstly, is a positive relationship, which means the government spending can increase economic growth and reduce poverty. Secondly, it has a negative effect, which means that government spending actually has a negative impact on economic growth and shows inefficiency. Barro (1990) found, the share of government investment GDP has a statistically insignificant effect on economic growth, even though the point estimate is positive, which holds true when the ratio of private investment to GDP is held constant.

Capital expenditure in the KDT area is one of the government's investments which is expected to be able to encourage production activities through development to increase economic growth. Basically, capital expenditure refers to the policies carried out in achieving all the development goals that have been planned by each local government in the KDT area. Therefore, it is often concluded, the local governments are not able to use their budgets properly and have poor budget absorption can be categorized as regions are not planning well. Figure 1 shows the ratio of government capital expenditure to GRDP in 2005-2019. where the highest capital expenditure ratio was occupied by Samosir Regency of 49.44 to 37.00, its peak in 2011 was 65.22. This means, The Samosir Regency is a district category which has a variety of programs to be achieved, considering the absorption of working capital issued is the largest than other KDT areas.

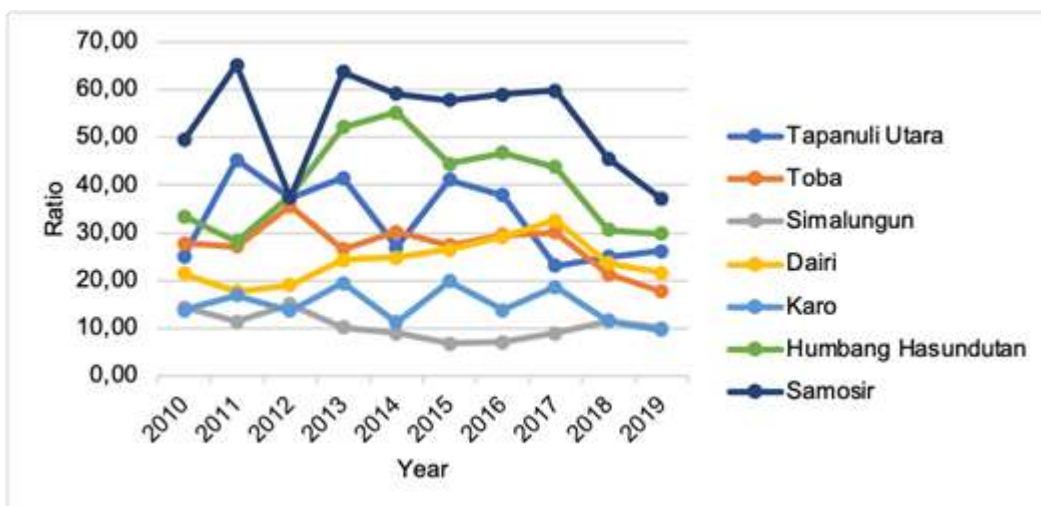


Figure 1. Ratio of Government Capital Expenditure to Nominal GRDP 2005-2019

On the other hand, economic growth is also influenced by the banking sector. According to Terminanto & Rama (2017) the positive performance of the banking sector will have a positive correlation with the economic performance of a country. The financial and banking sectors can be the main sources of growth real sector economy. This means, government capital spending and the banking sector will be the drivers of economic growth.

Based on BPS data (2021), the highest ratio of government credit to nominal GRDP in the 2005-2019 range is Toba Regency at 0.44 in 2012 (Figure 2). The high level of bank credit absorbed in KDT areas is expected to have an impact on their economic activity. Bank credit is able to accelerate government spending in the real sector. Thus, the transmission mechanism for economic growth will be clearly seen. because economic growth has a significant effect on investment credit and working capital, a stimulus or encouragement from the government is needed for the circulation of money in the community.

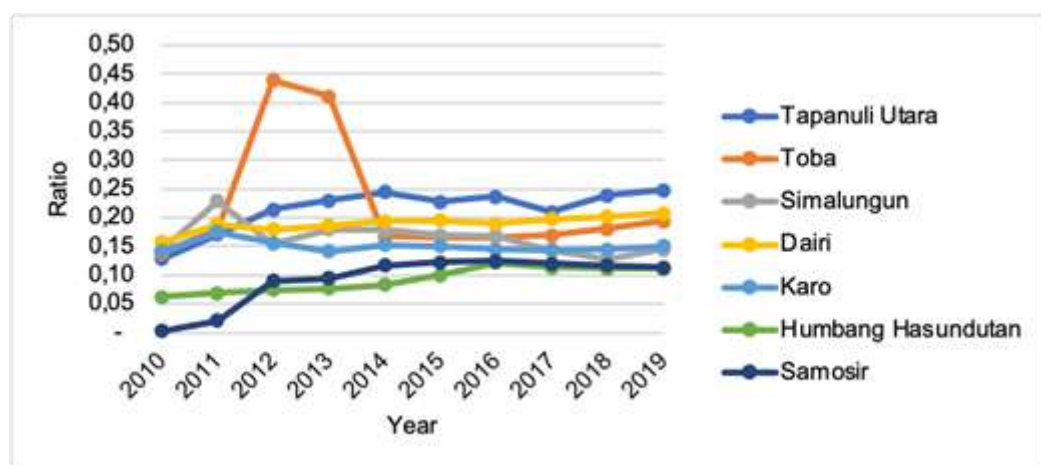


Figure 2. Ratio of Banking Credit to Nominal GRDP in 2005-2019

This study, analyzed in depth and comprehensively about the development of KDT by prioritizing economic growth through government capital expenditures between districts that are geographically directly adjacent. In addition, it also analyzes basic problems related to the influence of government capital expenditure on bank credit in each

KDT Regency. This needs to be done, because one source of government capital expenditure that can be used by the government other than PAD is financing through bank credit, so later it can be concluded to what extent the relationship between capital expenditures and the banking sector is able to spur economic growth in the KDT area.

II. Research Method

The data used is secondary data in the form of time series data in KDT for the period 2000–2019 regarding the economic sector GRDP, bank credit and government capital expenditures. In addition, the primary data explored is about the public's response to policies and their expectations for the economy and development.

BI data sources [<http://www.bi.go.id/id/statistik/seki>] are on bank credit, and BPS [<http://www.bps.go.id/linkTabelStatis/view/id>] on GRDP and government capital expenditure. Primary data was obtained from community responses to policies and their expectations for the economy and development through FGD activities by inviting stakeholders related to development in 3 KDT locations, namely Toba Samosir, Humbang Hasundutan and Samosir.

Data processing uses the E-Views 10 application through panel data analysis using data on the ratio of government capital expenditure and bank credit to nominal GRDP in all KDT areas.

The method used refers to the model developed by Sipahutar et al., (2016) through a modification of the model based on Beck and Levine (2004); Levine, Loayza and Beck (2000) and King and Levine (1993 a, b) with a linear relationship model between bank credit (ratio of bank credit to nominal GDP/credit depth) and economic growth. This study looks at the effect of the ratio of government capital expenditure on nominal GRDP to the ratio of bank credit to nominal GRDP in all KDT areas.

The effect is analyzed using a panel data model that has been logged naturally with the following formulation:

$$\ln Cre_{it} = \sigma_1 + \sigma_2 \ln Gov_{it} + \epsilon_t \dots \dots \dots (1)$$

$\ln Gov_{it}$ is the ratio of government capital expenditure in district i in period t to nominal GRDP which has been logged in natural;

$\ln Cre_{it}$ is the ratio of total credit to nominal GRDP in district i in period t that has been logged in natural;

σ_1 is the intercept;

σ_2 is the coefficient of the independent variable and

ϵ_t is the residual.

III. Results and Discussion

This study intends to determine the effect of government capital expenditure on bank credit in each KDT district. From the results of data processing, the output results are obtained in Table 2.

Table 2. Effect of Capital Expenditure on Bank Credit

Dependent Variable: lnCre
Method: Panel EGLS (Cross-section random effects)
Sample: 2015 2019
Periods included: 5
Cross-sections included: 7
Total panel (balanced) observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.279222	0.198579	-11.47765	0.0000
lnGov	0.161587	0.055490	2.912000	0.0064

Based on the model specification test, the regression model used in estimating the effect of capital expenditure on bank credit in the KDT area is a random effect model. The regression results for random effects are as follows:

$$\ln Cre_{i(t)} = -2.279222 + 0.161587 \ln Gov_{i(t)}$$

Based on the results of the analysis, it can be explained, the variable ratio of government capital expenditure to nominal GRDP has a positive and significant effect with a positive elasticity of 0.161587 on banking credit to nominal GRDP from 2005 to 2019 in the KDT area. It showed if the capital expenditure ratio is issued at 1% it will increase bank credit by 0.16. This is in accordance with the alleged research hypothesis which states that there is a relationship and influence of capital expenditure on bank credit in the KDT area during 2005-2019.

The relationship between government capital expenditure and bank credit is based on the function of capital expenditure allocated for the acquisition of fixed assets used as a means of regional development. Where, the capital expenditures can also be interpreted as budget expenditures used in order to obtain fixed assets and other assets that provide long-term benefits. To support this development, funding from the General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue Sharing Fund and Regional Allocation Revenue (PAD) is needed.

In the management and allocation of government capital expenditures, each region is highly dependent on the allocation of central funds, both DAU and DAK, and PAD and GRDP. The results of Tuasikal (2008) simultaneously state, the management of local government expenditures, especially for the allocation of government capital expenditures, is very dependent on the allocation of central funds, both DAU and DAK, and PAD and GRDP although partially GRDP does not affect capital expenditures (Rahman and Chamelia, 2015).

Based on the Regulation of the Minister of Finance Number 101/Pmk.02/2011 concerning Budget Classification, Capital Expenditures are defined as expenditures to pay for the acquisition of assets and/or add value to fixed assets/other assets that provide benefits for more than one accounting period and exceed the minimum limit for capitalization of fixed assets / other assets determined by the government. The use for capital expenditures for land, equipment and machinery, buildings and buildings, roads, irrigation and networks, other capital expenditures and capital expenditures for public service agencies. The use of increasingly large capital expenditures in the regions shows a good absorption in its use.

The positive effect of capital expenditure on credit is of course expected to have an impact in the form of increasing the economy of the KDT region. As is commonly understood, the influence of government spending on economic growth can provide 3 patterns of relationship. This is in accordance with the research of Terminanto & Rama (2017) which has summarized from various sources and concluded, there are 3 patterns of relationship in economic growth, firstly, it is positively related, which means, the government spending can increase economic growth and reduce poverty. Secondly, it has a negative effect, which means the government spending actually has a negative impact on economic growth and shows inefficiency and thirdly, the relationship between the two is not significant, meaning that government spending does not have an impact on economic growth.

In order for government growth to have a positive impact on increasing economic growth, it is necessary to pay attention to the use of capital expenditure in sectors can stimulate the economy. One of them can be considered is the use of capital expenditures for physical capital expenditures that are able to intersect with other economic sectors. Utilization of capital expenditure from the public sector is expected to have a better impact on the development of the KDT area. For the sake of increasing faster economic growth, it is hoped also capital expenditure movements will be carried out according to allocations posts. One of them is by utilizing absorption supporting tourism potential. Given the high tourism potential and becoming one of the national priorities, the selection of capital expenditure allocations and planning is important. One of them is by utilizing absorption supporting tourism potential. Given the high tourism potential and becoming one of the national priorities, the selection of capital expenditure allocations and planning is important, so the results of research from empirical facts found and analyzed by Darma (2014) become lessons for the development of the KDT area in the future.

Although there are various considerations in government spending such as the amount of tax to be received, the economic goals to be achieved and political and stability considerations. However, based on the results of research Nangarumba (2015) in capital expenditure, the largest government expenditure is used for infrastructure. This is because the use of the capital expenditure budget is mostly used to increase the amount and quality of infrastructure. Meanwhile, investment comes from the private sector. An increasing capital spending and infrastructure investment will increase the quality and quantity of infrastructure, which will increase the productivity of the sector which in the end is expected to reduce income inequality. Even based on research (Lantemona et al., 2020; Terminanto & Rama, 2017) shows the capital expenditure is able to have a positive-significant influence on economic growth. Thus, local governments can encourage regional economic growth through targeted and planned fiscal policies (Terminanto and Rama, 2017).

The banking credit sector provides a productive investment impact. One of them is to support the economy which can improve the economy. In the KDT area, the use of credit to increase tourism supporting assets can be a good alternative. Financing used for investment capital, working capital and investment is able to provide a boost in the stretching of the economy. Moreover, by providing financing (credit) to the productive business sector. Therefore, the government's fiscal policy through the spending and financing of the banking sector is empirically a driving force for increasing the government sector in the economy which in turn increases national income (output) and economic growth (Lantemona et al., 2020; Terminanto & Rama, 2017). This is in accordance with research (Sipahutar et al., 2017) which found a boost in economic growth due to bank

credit which is in line with government spending on capital and government capital spending has the ability to achieve higher banking performance, especially in credit depth.

According to Terminanto & Rama (2017) the positive performance of the banking sector will be positively correlated to the economic performance of a country. The financial and banking sectors can be the main sources of growth in the real sector of the economy. This means that capital expenditures and the banking sector will be able to become drivers of economic growth, including in the development of the KDT area.

To encourage economic growth of KDT region, which tends to be lower than the economic growth of North Sumatra Province, recommendations for improvements that are expected to stimulate the economy of the KDT region can be carried out by increasing the absorption of bank credit for the development of productive economic sectors. Where the productive economic sector must be directly related to tourism in order to align the development of the KDT area with the position of Lake Toba as one of the five Super Priority Destinations (DSP) promoted by the government. On the other hand, the demands for planning that are organized and in accordance with the designation are very necessary, in order to the local governments are not considered of the poor budget absorption government, because they are not able to utilize their budget properly. Thus, the structuring and planning of the use of the budget and the high absorption of bank credit in the KDT area are able to have an impact on the economic stretch of the KDT area.

IV. Conclusion

Based on the results of the analysis, it can be concluded that the variable ratio of government capital expenditure to nominal GRDP has a positive and significant effect with a positive elasticity of 0.161587 on banking credit to nominal GRDP from 2005 to 2019 in the KDT area. This shows, if the capital expenditure ratio is issued at 1% it will increase bank credit by 0.16. This shows, there is a relationship and influence of capital expenditure on bank credit in the KDT area during 2005-2019. This means the capital spending and the banking sector will be able to encourage economic growth, including the development of the KDT area.

Utilization of the public expending capital sector is expected to have a better impact on the development of the KDT area. Given the high tourism potential and becoming one of the national priorities, the selection of capital expenditure allocations and planning is important.

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