

Analysis of the Impact of Regional Fiscal Policy on Economic Growth in North Sumatra

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ABSTRACT

This study discusses the impact of regional fiscal policy on economic growth in North Sumatra. In this study also carried out the detection of fiscal illusion (flypaper effect) in fiscal policy undertaken by the local government districts/cities in North Sumatra. This study was conducted by analyzing quantitative data, that is, the data provide an overview of events using numbers, which then the results will be compared with theories and empirical evidence of relevant previous research results. The Data used in this study in the form of panel data (pool data). The results of this study showed that local revenue has a positive and significant effect on regional spending, general allocation funds have a positive and significant effect on regional spending, special allocation funds have a positive and significant effect on regional spending, simultaneously local revenue, general allocation funds, special allocation funds simultaneously have a positive and significant effect on regional spending districts / cities, directly local revenue has a positive and significant effect on economic growth proxied by Gross Regional Domestic Product, regional expenditure has a positive and significant effect on economic growth proxied by Gross Regional Domestic Product, Local revenue and local expenditure significantly affect economic growth proxied with Gross Regional Domestic Product and based on the results of research in relation to fiscal illusion from previous research can be mentioned that the fiscal illusion has occurred for a long time and in various regions in Indonesia and even in

various regions in other countries. Local governments make the balance funds as the main source of revenue.

Keywords: Local Revenue, Local Spending, Unconditional Grant, Growth, And Fiscal Illusion.

INTRODUCTION

The World Economic Community that comes from different economic conditions, rich and poor countries, from different economic systems, capitalist, socialist, and mixed, agree on one thing in measuring the success of a country's economic development, namely economic growth (Todaro, 2005). The success or failure of economic development programs in a country is often judged by national income and output growth. In fact, in general, development is equated with the speed of growth of national output produced.

Therefore, economic growth is a topic of study and research that is widely carried out by economists and researchers. Research to identify factors that affect economic growth is a theme that remains relevant to be examined in more depth, one of which is the role of government. One of the basic theories of economic growth, the Neo-classical theory initiated by Solow and Swan (1956) states that the government has no influence on economic growth both in terms of expenditure and tax revenue

(Kneller, 1999). According to Solow and Swan, the factors that influence economic growth are capital accumulation, labor force, and technological progress. The government only plays a role in providing population growth to provide labor but has no impact on economic growth.

Contrary to that opinion, Keynesian theory states that the role of government is crucial for a country's economy. John Maynard Keynes gave his opinion to respond to the condition of the world economy in the face of the Great Depression, where entrepreneurs and investors reduced their production levels when they saw uncertainty in demand, although the prices of production sources such as raw materials and labor were at very low levels. If these conditions are left unchecked, economic activity will cease, which in turn will have an impact on unemployment and low economic growth. Therefore, the market mechanism will not find a new equilibrium point by itself as stated by classical theory.

To overcome this, the role of the government is needed in order to increase demand through increased spending oriented to increasing people's purchasing power. With increasing demand, it will stimulate entrepreneurs or investors to return to production by using production sources in the form of raw materials to absorb labor. Furthermore, the role of the government by increasing its spending will drive economic activity which will have an impact on increasing economic growth.

The role of government by increasing demand (through increased spending) is a means of government in fiscal policy. Not only that, the fiscal policy instrument on the other hand is in the form of income (tax). By increasing or decreasing government spending (spending) or income in the form of taxes will affect the increase or decrease in demand or supply.

In Indonesia, the role of the government is carried out in the form of implementing fiscal policies to achieve the main goals of development, one of which is high economic growth. The main instrument of

fiscal policy implementation used by the government is in the form of taxation on the one hand and government spending on the other hand which is outlined comprehensively and in detail in the law on state budget (APBN). Therefore, the state budget law can be regarded as an instrument of government fiscal policy in order to carry out its role in the economy.

The APBN as a form of fiscal policy implementation prepared by the government has functions such as allocation, distribution, and stabilization. With this function, the government can reduce unemployment, reduce inequality by improving justice, and strive for fundamental economic balance. Budget allocation is carried out in order to create an efficient and non-distortive economy. For example, fiscal policy in the state budget is prepared taking into account the issue of climate change. Budget distribution is carried out with the aim of creating justice at all levels of society, such as solving problems of poverty, stunting, income gaps between residents or between regions. Furthermore, stabilization is carried out to deal with shocks either in the economic, socio-political, or others. The market mechanism will not be able to solve by itself those problems that are generally faced by every government of a country.

At a smaller level, namely provincial and district/city governments, fiscal policies are outlined in the regional budget (APBD) with the ultimate goal of increasing economic growth.

Economic progress of a region is essentially a series of deliberate and continuous activities that continue to be directed to improve the condition of the region as a whole.

Regional growth is an important component of national progress, and the two must be integrated harmoniously and seamlessly. The main purpose of regional growth is to realize economic progress and equitable development, which includes equitable distribution of income. Rapid economic growth and low income gap are both

achievable, but cannot be achieved simultaneously (Shin, 2012). Therefore, to achieve development goals, a well-structured economic development plan is needed. Basically, the economic potential and characteristics of each region are different, so the general plan of development must be tailored to the unique characteristics of each region. The Central Statistics Agency (BPS) released Indonesia's 2020 economic growth

figures, which experienced a growth contraction of 2.07% (c-to-c) compared to 2019. North Sumatra's economic growth contracted -1.07 percent (yoy) compared to 2019 at 5.22% (yoy) in 2020. The contraction occurred due to a decrease in demand due to limited purchasing power and also slowing exports. Below is a table of economic growth rate (growth) districts/cities in North Sumatra province.

Table 1 Economic Growth Rate Of Districts / Cities In North Sumatra Province In 2011-2020

Regency / City	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Asahan	5,37	5,51	5,79	5,88	5,57	5,62	5,48	5,61	5,64	0,21
Batu Bara	5,12	5,72	4,23	4,2	4,11	4,44	4,11	4,38	4,35	-0,31
Binjai	5,56	6,06	6,01	5,83	5,4	5,54	5,39	5,46	5,51	-1,83
Dairi	4,93	5,03	5,05	5,03	5,04	5,07	4,93	5,01	4,82	-0,94
Deli Serdang	5,15	4,99	9,22	7,67	5,25	5,32	5,1	5,15	5,18	-1,78
Gunungsitoli	6,29	6,18	6,22	6,11	5,39	6,03	6,01	6,03	6,05	0,38
Humbang Hasundutan	5,28	5,59	5,79	5,3	5,24	5	5,02	5,04	4,94	-0,13
Karo	5,74	5,09	4,98	5,18	5,01	5,17	5,21	4,55	4,6	-0,80
Labuanbatu Utara	6,57	6,36	6,29	5,4	5,18	5,21	5,11	5,2	5,15	0,27
Labuhan Batu	5,71	6,09	5,99	5,22	5,04	5,06	5	5,06	5,07	0,09
Labuhanbatu Selatan	6,02	6,33	6,05	5,33	5,13	5,19	5,09	5,27	5,35	0,80
Langkat	6,57	6,45	5,59	5,12	5,03	4,98	5,05	5,02	5,07	-0,86
Mandailing Natal	6,1	6,27	6,35	6,54	6,22	6,18	6,09	5,79	5,3	-0,94
Medan	7,79	7,66	5,36	6,05	5,74	6,27	5,81	5,92	5,93	-1,98
Nias	6,98	6,27	6,35	5,47	5,43	5,03	5,01	4,95	5,04	1,80
Nias Barat	5,94	6,55	5,17	5,12	4,87	4,83	4,81	4,77	4,82	1,66
Nias Selatan	4,29	5,18	4,66	4,32	4,46	4,41	4,56	5,02	5,03	0,61
Nias Utara	6,75	6,21	6,34	5,27	5,49	4,59	4,43	4,42	4,65	1,58
Padang Lawas	6,12	6,21	6,14	6,01	5,74	6,06	5,71	5,96	5,64	1,18
Padang Lawas Utara	6,88	6,38	6,15	6,12	5,94	5,96	5,54	5,58	5,61	1,14
Padangsidempuan	5,85	5,9	5,67	5,02	5,04	5,29	5,32	5,45	5,51	-0,73
Pakpak Bharat	6,03	6,01	5,91	5,91	5,93	5,97	5,94	5,85	5,87	-0,18
Pematangsiantar	6,8	6,64	5,75	6,37	5,24	4,86	4,41	4,8	4,82	-1,89
Samosir	5,18	6,05	6,08	5,95	5,77	5,27	5,35	5,58	5,7	-0,59
Serdang Bedagai	6,06	6,09	5,8	5,12	5,05	5,14	5,16	5,17	5,28	-0,44
Sibolga	5,62	5,75	5,93	5,89	5,65	5,15	5,27	5,25	5,2	-1,36
Simalungun	5,96	6,06	5,26	5,33	5,24	5,4	5,13	5,18	5,2	1,01
Tanjungbalai	6,02	6,22	5,94	5,78	5,58	5,76	5,51	5,77	5,79	
Tapanuli Selatan	6,33	9,09	17,4	4,41	5,02	5,12	5,21	5,19	5,23	0,39
Tapanuli Tengah	5,1	5,11	5,17	5,04	5,08	5,12	5,24	5,2	5,18	-0,76
Tapanuli Utara	4,45	4,9	5,28	5,12	4,81	4,12	4,15	4,35	4,62	1,50
Tebing Tinggi	6,18	5,75	6,01	5,44	4,86	5,11	5,14	5,17	5,15	-0,47
Toba Samosir	4,37	5,08	4,48	4,24	4,55	4,76	4,9	4,96	4,88	-0,27

Source: BPS, processed data, 2022

From Table 1 Above, it can be seen that in 2020 almost all districts/cities in North Sumatra experienced a decline in economic growth, the impact of covid-19 that hit the world including Indonesia, almost all regions experienced a drastic decline. Economic growth in 2020 experienced a slowdown during the covid 19 pandemic and this condition had more or less an impact on economic growth in North Sumatra. These impacts include: slowing economic growth; reduced labor absorption;

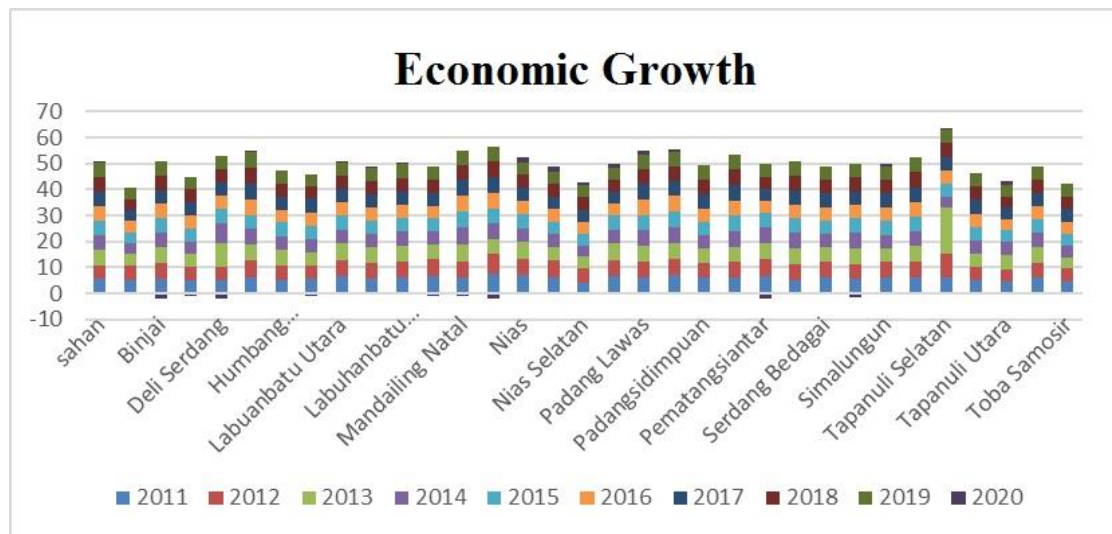
increased unemployment and poverty; tourism is declining which has an impact on the hotel, restaurant, retail, and transportation industries; the manufacturing sector is affected due to the inhibition of the supply chain of raw materials due to the scarcity of raw materials, especially from China and this delay can have an impact on rising product prices that trigger inflation (Nainggolan, 2020). To overcome these impacts, it certainly requires the right form of policy and good management in

managing local government budgets in order to generate revenue that can cover the economic decline of the region and the population in general and the success of development.

One indicator of the success of the implementation of development that can be used as a macro benchmark is economic growth reflected in changes in GRDP (Gross Regional Domestic Product) in a

region. The higher the economic growth of a region indicates the better the economic activity of the region. The economic growth of the region is shown from the GDP growth rate on the basis of constant prices (Romhadhoni et al, 2018: 116).

The following is a graph of economic growth districts / cities in North Sumatra province.



Source: BPS, processed data, 2022
 Figure 1 Economic Growth District / City In North Sumatra Province

A series of fiscal policies taken by the government of Indonesia in overcoming Covid-19: 1) the government issued three stimuli related to Covid-19. The first stimulus policy is tourism incentives, the second is manufacturing sector tax incentives of Rp 22.9 trillion, the third is social safety net of Rp 110 trillion, labor and health service incentives of Rp 75 trillion and industrial support of Rp 70.1 trillion. 2) regarding the second stimulus, the Ministry of Finance issued PMK 23/2020 on tax stimulus for employees and the business world. 3) related to the third stimulus, the president instructed all ministers/leaders/governors/regents/mayors to accelerate refocusing activities, budget reallocation and procurement of goods and services for handling Covid-19. This is stated in Presidential Instruction No.4/2020. 4) the president of the Republic of Indonesia also gave instructions for ministries/

institutions to prioritize the purchase of MSME products in the country and encourage SOEs to empower MSMEs (Priscilla, 2020).

In the face of the Covid-19 pandemic, the government implemented fiscal policies on state revenues and expenditures to maintain economic growth and economic stability. To reduce the budget deficit on government financing, it can refocusing / revising the existing budget in the APBN to optimize its use during the Covid-19 pandemic (Priscilla, 2020). There are currently five focus programs that the government is working on. Starting from structural reforms, infrastructure development, deregulation, debyrocratization and economic transformation (Mulyani, 2020).

The government continues to make maximum efforts to improve economic conditions through the National Economic Recovery Program (PEN). In general, the

PEN program contains six policies, namely Health Care, Social Protection, incentives for businesses, support for Micro, Small and medium enterprises, corporate financing, and sectoral programs of ministries of institutions and local governments. This Program was issued in order to respond to the decline in community activities and activities as a result of Covid-19. This Program is expected to protect, maintain, and improve the economic capacity of the community during the Covid-19 pandemic. When viewed from the other side by comparing the realization of economic growth with the targets set in the state budget, it is known that the achievement of Indonesia's economic growth has never reached the expected level.

Sources of funding receipts in the region include local revenue, balance funds, and other legitimate income, while in terms of expenditure is regional expenditure. Based on Law No. 33 of 2004, it is explained that the balance fund contains DAU, DAK, and DBH (Marinus & Badrudin, 2016). The central government provides balance funds as one way to reduce fiscal inequality (vertical) between the center and the regions and inequality (horizontal) between regions (Rusydi, 2015). The amount of balance funds provided should be an incentive to increase local revenue. However, with this transfer fund, the local government actually depends on its income from the balance fund compared to the increase in local tax revenue.

Based on the data of the regional fiscal capacity map in North Sumatra, it is known that all districts/cities that have just been established since the reform or the entry into force of regional autonomy (fiscal decentralization) have a low or very low Regional fiscal capacity Index.

In order for regional autonomy to achieve its goals, the implementation of autonomy must be accompanied by the granting of authority to the regions to be able to explore the financial resources in the region, manage, and use their own finances to meet government activities both development and administrative activities of the government. Thus, local governments must be able to minimize dependence on funds from the central government and make local revenue (PAD) as the main financial source.

According to Hara (2012) the opposite is true. Where, funding by the central government for regional development has increased from year to year. Financing provided by the central government as stipulated in Law No. 33 of 2004 on balance funds consisting of general allocation funds (DAU), special allocation funds (Dak), and revenue sharing funds (DBH) which should aim to minimize the existence of fiscal gaps both vertically (between Central and local governments) and horizontal gaps (between local governments) and also to assist local governments in the framework of regional development, thus bringing the effect of regional dependence on the central government.

The receipt of balance funds in the form of DAU, DAK, and DBH is functioned to reduce the inequality of government funding sources between the central and regional levels and to reduce the government funding gap between regions. The transfer income has a relationship with capital expenditure and has a long influence and if there is a reduction, it will cause a decrease in capital expenditure (Lubis & Hafni, 2019).

The following data shows several sources of regional revenues, including PAD, DAU, DAK, and regional expenditures that have been realized by district/city governments in North Sumatra province 2011-2020.

Table 2 amount of local revenue, General Allocation Fund, Special Allocation Fund, and regional expenditure of districts / cities in North Sumatra 2011-2020 (in thousands)

Year	PAD	DAU	DAK	DBH	Shopping Area
2011	5.511,86	13.490,54	1.484,25	1.764,97	25.941,90
2012	6.436,85	16.408,69	1.535,92	1.871,59	31.837,72
2013	6.753,06	18.711,22	1.787,38	1.777,08	34.883,56
2014	7.890,52	20.499,62	1.867,78	1.587,87	37.810,88

2015	8.749,67	20.747,96	2.791,53	1.402,17	43.420,14
2016	9.136,81	16.045,05	3.103,68	5.110,83	49.817,05
2017	10.732,00	26.292,24	3.838,53	4.608,57	54.296,78
2018	10.800,05	26.292,24	3.838,53	4.608,57	54.147,82
2019	11.312,41	27.137,50	4.205,59	3.813,04	57.910,33
2020	10.608,31	27.137,50	4.471,71	5.505,87	53.948,87

Source: BPS, processed data, 2022

From the graph and table above shows the amount of balance funds received by the region from the center in comparison with local revenue. PAD becomes a mirror of regional independence in resource management through regional spending, but the inability of local governments in the fulfillment of local revenue raises funds balance. This led to the emergence of a false sense of the regional response to the balance of funds, especially DAU. If this happens flypaper effect phenomenon is evident from the impact of DAU on regional shopping is greater than the impact of PAD in regional shopping. So, the government's attitude has deviated in the allocation of regional spending without a return on PAD.

The Data shows that the revenue of districts / cities in North Sumatra in general is still dominated by balance funds rather than local revenue. In addition, the pattern of development of regional spending districts/cities in North Sumatra tend to have a pattern that is almost the same as the pattern of development of the balance of funds provided by the central government to the regions. This condition is an indication that regional spending still depends on the amount of balance funds obtained from the central government. In fact, North Sumatra is a province with a high regional fiscal capacity Index.

The following is a graph of economic growth districts / cities in North Sumatra province.

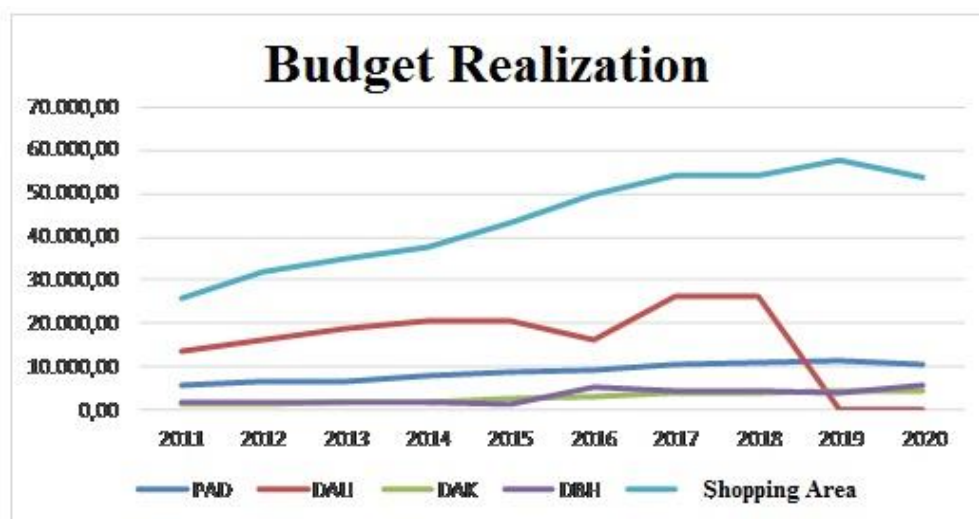


Figure 2 Realization of District/City Budget in North Sumatra province

The condition of dependence of local governments on the balance funds led to information asymmetry between the central government as a provider of balance funds and local governments as recipients of balance funds. Local governments react irrationally to the balancing funds from the central government. This phenomenon of difference in perception is then referred to as fiscal illusion (Sanandaji and Wallace,

2010). Dependence on the offset fund to increase government spending more than an equivalent increase in revenue from local revenue, this is called the fiscal illusion hypothesis Flypaper Effect. According to research Darwanto and Yustikasari Yulia (2007) states that there is a very close relationship between transfers from the central government (Dana perimbangan) and local government spending.

The most appropriate type of fiscal illusion to explain the response of local governments to the balance and PAD funds in meeting the APBD is the flypaper effect (Kusuma, 2017). Flypaper effect is a local government response to grants or transfers from the central government that are used to increase spending on public goods and services that exceed PAD in certain areas (Nugroho, 2017).

According to Reksohadiprodjo (2001:153-158), Mardiasmo (2002:1-7), Saragih (2003: 40), and Priyarsono et al (2010), the implementation of regional autonomy and fiscal decentralization will be optimally beneficial if the autonomous region has sufficient financial capacity. This is a trigger for autonomous regions to improve the economic capacity of their regions through the collection of local government capital for investment so that they can interact and compete with other regions.

Research on regional autonomy and fiscal decentralization covering a wide range of issues has been conducted both in Indonesia and abroad. In relation to macroeconomics, the most prominent key issues are the influence of fiscal decentralization on economic growth, equity, inflation, and public services.

Some economists argue that fiscal decentralization can promote economic growth, create equity, and improve people's welfare and the quality of public services.

On the other hand, some argue that fiscal decentralization allows for increased efficiency and accountability, although the process may complicate macroeconomic management, slow economic growth, increase inequality, and worsen public welfare and public services.

The idea of fiscal decentralization as an avenue to increase economic growth has attracted the attention of scholars, such as Bahl and Linh (1992); Oates (1993); Bird (1993); Gramlich (1993); Bird, Ebel, and Wallich (1995); WorldBank (1997); and Martnez and McNab (2001). They argue that by handing over authority to local governments, it is expected to improve the efficiency of community services so as to encourage economic growth.

Research conducted by Prud'homme (1995), Peterson (1996), Zang and Zao (1995) in the United States, Phillips and Woller (1997) and Davodi and Zao (1998) for the case in developed countries, and Zang and Zao (2001) in India, concluded that fiscal decentralization has a positive effect on regional economic growth. The results of research conducted in Indonesia by Wibowo (2008) show the same thing, that there is a positive influence of fiscal decentralization on economic growth.

This research is also motivated by the differences in research results (research gap) of some previous researchers are as follows:

Table 3 Differences in Research Results (Research Gap)

Research Variables	Researchers	Research Results
Local Revenue	Harahap dkk (2019)	positive effect
	Adyatma (2015)	negatively affect
General Allocation Fund	Rahmah & Basri (2016)	positive effect
	Putri (2015)	negatively affect
Special Allocation Fund	Rotinsulu dkk (2020)	positive effect
	Anwar (2016)	negatively affect
Profit Sharing Fund	Nisa(2017)	positive effect
	arina dkk (2019)	berpengaruh negatif
flypaper effect	salawti dkk (2016)	terdapat adanya gejala flypaper effect
	Afiat dkk (2017)	tidak terdapat adanya gejala flypaper effect

Source: summary of some studies, data processed by researchers, 2022

From Table 3, it can be seen that there are inconsistencies in the research results of each independent variable to the dependent variable, so therefore it needs to be re-examined.

The things mentioned above, raises the interest of the author to examine, whether there is a fiscal illusion in the fiscal policy made by the local government and whether

the fiscal policy affects the economic growth of districts/cities in North Sumatra.

LITERATURE REVIEW

Fiscal Decentralization

Based on Law No. 32 of 2004 on Local Government, it is defined that decentralization is the transfer of government authority by the government to autonomous regions to regulate and manage government affairs in the Unitary State System Of The Republic of Indonesia. Furthermore, Law No. 33 of 2004 on financial balance between Central and regional governments was established as a consequence of the delegation of authority, duties, and responsibilities handed over to local governments.

Fiscal Policy

Fiscal policy is a government action in the field of expenditure and taxation aimed at influencing the aggregate expenditure of the economy. Fiscal policy is determined by the government based on economic conditions, whether under normal circumstances, inflation, or deflation so that economic stability is still achieved. In a sense, it still strives for decent economic growth with a low unemployment rate and general price stability.

Local Revenue

Local Natural income (PAD) is a receipt from sources within the territory of a particular locality, which is levied on the basis of applicable law. PAD aims to provide authority to local governments to fund the implementation of regional autonomy in accordance with the potential of the region as the embodiment of decentralization. PAD consists of the results of taxes, local levies, revenues from agencies, SOEs and others, which are calculated in the form of thousands of dollars each year. PAD as one of the sources of regional revenue reflects the level of regional independence. The greater the PAD, indicating that a region is able to implement fiscal decentralization and

dependence on the central government is reduced.

General Allocation Fund

General Allocation Fund (DAU) is a sum of funds sourced from the state budget revenues allocated to each Autonomous Region (province/Regency/city) in Indonesia each year as a development fund. DAU aims to equitable distribution of financial capacity between regions which is intended to reduce inequality in financial capacity between regions through the application of formulas that consider the needs and potential of the region

Special Allocation Fund

Special allocation fund (Dak) is a fund sourced from the state budget allocated to certain regions with the aim of helping to fund special activities that are regional affairs and in accordance with national priorities (Law No. 33 of 2004 Article 1 paragraph 23). The government determines the DAK for a region by observing certain criteria.

Shopping Area

According to law No. 32 of 2004 on Local Government, Local Expenditures are all local liabilities recognized as a deduction from the value of net assets in the period of the fiscal year in question

Economic Growth

Economic growth has been widely used around the world as a benchmark for assessing the success or failure of development programs. The pursuit of economic growth has become a major topic of economic conversation in all countries. Countries in the world believe that their governments can soon fall or wake up according to the high and low levels of economic growth they have achieved. One of the great economists, Professor Simon Kuznets gave the definition of economic growth, that is, the increase in the ability of the economy of a country in the long term to provide its people with economic goods

determined by the necessary technological, institutional and ideological advances.

Fiscal Illusion

The main objective of the implementation of fiscal decentralization policy is to improve the quality and quantity of public services and the welfare of the people, the creation of effectiveness and efficiency of regional resource management and create space for the community to participate in the development process (Mardiasmo, 2001). One of the instruments used by the

government in the implementation of fiscal decentralization policy is the transfer of Finance from the central government to the regions. Practically, in Indonesia, it is included in state expenditures, namely transfers to regional and village funds (TKDD). On the local government side, in the APBD structure, receipts from the central government are included in the local revenue, namely The Balance Fund. Such a mechanism is a form of financial relations between Central and local governments.

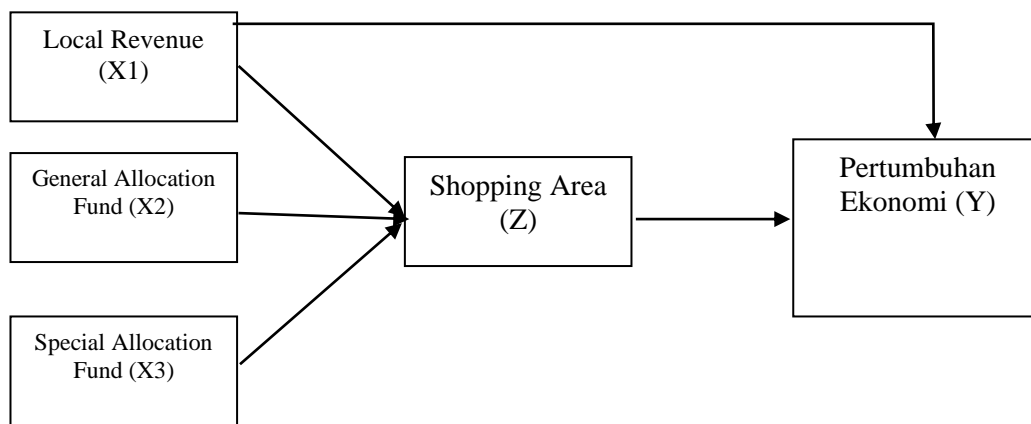


Figure 3. Conceptual Framework

Hypothesis

Based on background research and the relationship between variables, the research hypothesis:

1. The original revenue of the Regency / city in North Sumatra has a positive effect on the expenditure of the Regency/city in North Sumatra.
2. General Allocation Fund district / city in North Sumatra has a positive effect on regional spending District/City in North Sumatra.
3. Special allocation funds districts / cities in North Sumatra have a positive effect on regional spending districts/cities in North Sumatra.
4. Local revenue, general allocation funds, and special allocation funds together have a positive effect on regional spending districts/cities in North Sumatra.
5. The original revenue of districts / cities in North Sumatra has a positive effect on

the economic growth of districts/cities in North Sumatra.

6. District/city spending in North Sumatra has a positive effect on economic growth in North Sumatra.
7. Local revenue and local expenditure districts / cities in North Sumatra have a positive effect on economic growth in North Sumatra.
8. District/city revenue in North Sumatra has a positive effect on economic growth in North Sumatra through regional spending.
9. There is a fiscal illusion in the fiscal policy of the Regency/city government in North Sumatra.

MATERIAL AND METHODS

This study discusses the impact of regional fiscal policy on economic growth in North Sumatra. In this study also carried out the detection of fiscal illusion (flypaper effect) in fiscal policy undertaken by the local

government districts/cities in North Sumatra.

The Data used in this study are secondary data obtained from the Central Bureau of Statistics, journals, websites, research results, and other reading sources that are relevant to the variables used for the purposes of this study. Data used in the analysis of panel data (pool data). Panel Data is a combination of time series and cross section data. The data collected covers a period of ten years, namely 2011-2020 covering 33 districts/cities in North Sumatra.

This study was conducted by analyzing quantitative data, that is, the data provide an overview of events using numbers, which then the results will be compared with theories and empirical evidence of relevant previous research results. This approach is done in order to prevent the results of this study from the subjective thinking of researchers.

RESULTS

Panel Data Regression Analysis

To determine the most appropriate model used in this study, the authors conducted

several tests of model specifications. There are two stages in choosing the panel data model in this study. First, perform a Chow test to compare the PLS (Common Effect Model) model with the Fixed Effect Model (FEM) to be used. If the results show the accepted PLS model, the PLS model will be analyzed. However, if the FEM model is accepted, then the second step must be done, by performing the Hausman test to compare the Fixed Effect Model (FEM) with the Random Effect Model (REM) to be used.

1. Uji Chow

Chow test is done to determine the panel data model between Common effect Model or Fixed Effect Model that will be used, then first performed F-restricted test or CHOW Test by comparing the probability (P-Value) F-statistics with the significance level @ = 5% or 0.05. Before testing, first made hypothesanya, namely:

H0: model PLS / Common Effect

H1: Fixed Effect Model

The following are the results of the Chow test using Redundant Fixed Effect-Likelihood Ratio for equations I and II.

Table 4 Chow Test Structural Equation I

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.580385	(32,294)	0.0000
Cross-section Chi-square	299.477353	32	0.0000

Source: results of Data processing with Eviews 12

Table 5 Chow Structural Equation test II

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	33.321445	(32,295)	0.0000
Cross-section Chi-square	504.639282	32	0.0000

Source: results of Data processing with Eviews 12

The results of the Chow Test as presented in the table above show that the probability value of the Cross Section F is smaller than @ = 5% or 0.05 which is 0.0000, so that H1 is accepted and the best panel data model used for structural equations I and II is the Fixed Effect Model. Next, tests were conducted to determine the Fixed Effect

Model or Random Effect Model used with the Hausman test.

2. Uji Hausman

Hausman test is done by comparing the value of random cross-section probability with significance level @ = 5% or 0.05. If the random cross-sectional probability value

is lower than the significance level of 0.05, then H1 is accepted. If, however, the random cross-section probability value is higher than the significance level of 0.05 then, H0 is accepted. Before testing, first made hypothesanya, namely:

H0: Fixed Effect Model

H1: Random Effect Model

Here are the results of the Hausman test using the Correlated Random Effect-Hausman Test.

Table 6 The Hausman Equation I

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	130.262563	3	0.0000

Source: results of Data processing with Eviews 12

Table 7 Hausman's test of structural equations II

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.629386	2	0.0000

Source: results of Data processing with Eviews 12

The results of Hausman test above, both for structural equation I and structural equation II showed that the value of probability at Random Cross-Section is smaller than @ = 5% or 0.05, IE 0.0000 and 0.0000, so that H1 is accepted and the best panel data model to be used is the Fixed Effect Model.

Hypothesis Test

Hypothesis test is used to determine whether the regression coefficient produced in this study significant or not. Hypothesis testing there are three tests conducted in this study, namely, determination coefficient test, F test (simultaneous Test), t test (partial test), and path analysis (Path Analysis).

Coefficient Of Determination (R2)

Coefficient of determination test (R2) was conducted to determine how much the independent variable in describing the dependent variable used in this study. The following test results determination coefficient (R2) on the equation of structure I and structure II.

Table 8 Test Coefficient Of Determination (R2) Structural Equation I

Dependent Variable: LOG(BD)	
R-squared	0.964618
Adjusted R-squared	0.960406

Source: results of Data processing with Eviews 12

Table 9 Test Coefficient Of Determination (R2) Structural Equation II

Dependent Variable: LOG(PDRB)	
R-squared	0.944434
Adjusted R-squared	0.938030

Source: results of Data processing with Eviews 12

Based on the test results of the coefficient of determination (R2) above shows the value of Adjusted R-squared in each equation using the fixed effect model as follows:

- In the structural equation I test results coefficient of determination (R2) shows the amount of variable ability of local revenue, general allocation funds, special allocation funds explain the dependent variable, regional expenditure, amounting to 0.9646 or 96.46%. While the remaining 3.54% variable regional spending is explained by other variables that are not included in this study.
- In the structural equation II test results coefficient of determination (R2) shows the ability of the variable Regional original income and regional expenditure explain the dependent variable, Gross Regional Domestic Product, amounting to 0.944434 or 94.44%. While the remaining 5.56% of GRDP variables are explained by other variables that are not included in this study.

F Test (Simultaneous Test)

F test is done in order to determine whether the independent variable as a whole simultaneously affect the dependent variable. The test was conducted by comparing the probability of F-statistics with the significance level of @ =5% or 0.05. If the probability of F-statistic is lower than @=5% or 0.05 then H0 is rejected and H1 is accepted, meaning that all independent variables used have a simultaneous and significant effect on the dependent variable. The following F-statistic values in structure I and structure II equations by using Fixed Effect Model in regression model estimation.

Table 10 F Test (Simultaneous Test) Structural Equation I

Dependent Variable: LOG(BD)	
F-statistic	229.0115
Prob(F-statistic)	0.000000

Source: results of Data processing with Eviews 12

Table 11 F Test (Simultaneous Test) Structural Equation II

Dependent Variable: LOG(PDRB)	
F-statistic	147.4700
Prob(F-statistic)	0.000000

Source: results of Data processing with Eviews 12

Based on the simultaneous test results as presented in the table above shows that the

value of Prob (F-Statistic) in the structural equations I and II is lower than @ = 5% or 0.05, IE 0.0000, then H1 is accepted. This means that the structural equation I variables of local revenue, general allocation funds, and special allocation funds simultaneously significantly affect regional spending.

Likewise with structural equation II, that local revenue and local expenditure simultaneously significantly affect the Gross Regional Domestic Product.

Statistical t-test (Partial Test)

Statistical t-test is performed in order to determine whether the independent variable partially affect the dependent variable. The test is done by comparing the value of probability with the significance level @ =5% or 0.05. If the probability value is lower than @ =5% or 0.05 then H0 is rejected and H1 is accepted, meaning that the independent variable tested is partially influential and significant to the dependent variable. The following are the probability values in structure I and structure II equations using Fixed Effect models in panel data model estimates.

Table 12 Results Of Panel Data Estimation Structure Equation I

Dependent Variable: LOG(BD)				
Method: Panel Least Squares				
Sample: 2011 2020				
Periods included: 10				
Cross-sections included: 33				
Total panel (balanced) observations: 330				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(PAD)	0.205113	0.017023	12.04898	0.0000
LOG(DAU)	0.204788	0.034715	5.899067	0.0000
LOG(DAK)	0.174410	0.014232	12.25449	0.0000
C	9.639108	0.572755	16.82938	0.0000

Source: results of Data processing with Eviews 12

Table 13 Results of Panel Data estimation structure equation II

Dependent Variable: LOG(PDRB)				
Method: Panel Least Squares				
Date: 05/17/23 Time: 22:06				
Sample: 2011 2020				
Periods included: 10				
Cross-sections included: 33				
Total panel (balanced) observations: 330				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(PAD)	0.140060	0.055910	2.505078	0.0128
LOG(BD)	0.923003	0.117854	7.831744	0.0000
C	1.031419	1.641650	0.628282	0.5303
Sumber: Hasil Pengolahan Data dengan Eviews 12				

Source: results of Data processing with Eviews 12

Based on the table above shows the results of model estimates on the equation of structure I and structure II, so that it is known the effect of each independent variable partially on the dependent variable as follows:

- The variable of local revenue to local expenditure has a probability value of T-statistic smaller than $\alpha = 5\%$ or 0.05, which is equal to 0.0000 so that H1 is accepted. This means that PAD significantly affects regional shopping.
- Variable of General Allocation Fund to regional expenditure has a probability value of T-statistic is smaller than $\alpha = 5\%$ or 0.05, which is equal to 0.0000 so that H1 is accepted. This means that DAU significantly affects regional shopping.
- Variable special allocation funds to regional expenditure have a probability value of T-statistics is smaller than $\alpha = 5\%$ or 0.05, which is equal to 0.0000 so that H1 is accepted. This means that DAK significantly affects regional shopping.
- The variable of regional original income to Gross Regional Domestic Product has a probability value of T-statistic smaller

than $\alpha = 5\%$ or 0.05, which is equal to 0.0128 so that H1 is accepted. This means that PAD significantly affects GRDP.

- Variable regional expenditure on Gross Regional Domestic Product (GRDP) has a probability value of T-statistic is smaller than $\alpha = 5\%$ or 0.05, which is equal to 0.0000, so H1 is accepted. This means that regional spending variables have a significant effect on GRDP.

Path Analysis

This study uses the intervening variable that is regional shopping, so to test the effect of the intervening variable then use the path analysis method. Path analysis is an extension of multiple linear regression analysis (Ghozali, 2011). So that the path analysis is the use of regression analysis to determine the direct relationship between the independent variables to the dependent variable and determine the indirect relationship between the independent variable to the dependent variable through the intervening variables.

The form of the path diagram of the structural equation I is as follows:



Figure 4 Path Diagram Structural Equation I

The e1 value is calculated by the formula:

$$\begin{aligned}
 e1 &= (1 - R^2)^{1/2} \\
 e1 &= (1 - 0.9646) \\
 e1 &= 0.1881
 \end{aligned}$$

Based on the figure, the structural equation I is as follows:

$$\text{BD} = 9,639 + 0.2051\text{PAD} + 0.2048\text{DAU} + 0.1744\text{DAK} + e1$$

Nilai e2 dihitung dengan formula:
 $e2 = (1 - R^2)^{1/2}$
 $e2 = (1 - 0.944434)^{1/2}$
 $e2 = 0.2357$

Based on the figure, the structural equation II is as follows:
 $GDP = 1.03149 + 0.1401PAD + 0.9230BD + e2$

Based on the above path analysis, it can be seen the influence of local natural income on economic growth. Local revenue has direct and indirect influence through regional expenditure on GRDP. Directly, PAD has a significant effect on GRDP with

a coefficient of 0.1401. While the indirect effect of PAD on GRDP through regional expenditure should be calculated by multiplying the coefficient of PAD-BD with the coefficient of BD-GRDP, which is $0.2051 \times 0.9230 = 0.1893$.

Furthermore, sobel test was conducted to determine the significance or not of the indirect influence of PAD on GRDP through regional shopping. If the p-value of the sobel test is less than the significance value of @ =5% or 0.05, the hypothesis is accepted, so that the intervening variable has an influence. The following results of the calculation of coefficients and sobel test (Sobel Test) indirect influence.

Table 14 Sobel Test

Input:	Test statistic:	Std. Error:	p-value:
a 0.2051	Sobel test: 6.54900313	0.02890628	0
b 0.9230	Aroian test: 6.53298694	0.02897714	0
sa 0.017193	Goodman test: 6.5651377	0.02883524	0
sb 0.1178	Reset all	Calculate	

Source: data processing results

Based on these calculations, it is known that the value of the p-value of the sobel test is smaller than =5% or 0.05, IE 0.000 or T-statistical value is greater than t-table 1.69, so that the hypothesis is accepted or variable regional spending as intervening effect.

Analysis Of Fiscal Illusions.

Based on the explanation described above, the condition for the occurrence of fiscal illusion through the measurement of revenue (revenue enhancement) is that there

are income variables that are negatively related to regional expenditure variables. In other words, the fiscal illusion is identified with a greater (coefficient) of unconditional grant influence than the influence of PAD and both significant, or the effect of PAD response to regional spending is not significant.

The following is presented the results of regression analysis of panel data with Fixed Effect Model.

Table 15 Individual Effect Structural Equation I

Dependent Variable: LOG(BD)		
Method: Panel Least Squares		
Date: 05/02/23 Time: 13:30		
Sample: 2011 2020		
Periods included: 10		
Cross-sections included: 33		
Total panel (balanced) observations: 330		
Variable	Coefficient Individual Effect	Prob.
LOG(PAD)	0.205113	0.0000
LOG(DAU)	0.204788	0.0000
LOG(DAK)	0.174410	0.0000
C	9.639108	0.0000

Individual Effect	
Medan--C	0.57783110.21694
langkat--C	0.36464910.00376
Simalungun--C	0.36234810.00146
DeliSerdang--C	0.357142 9.99625
Asahan--C	0.2260109.865118
MandailingNatal--C	0.1892169.828324
NiasSelatan--C	0.1519609.791068
Karo--C	0.1056009.744708
SerdangBedagai--C	0.1026879.741795
PadangLawasUtara--C	0.0870569.726164
TobaSamosir--C	0.0644899.703597
LabuhanBatuUtara--C	0.0487899.687897
BatuBara--C	0.0462049.685312
TapanuliUtara--C	0.0422819.681389
PadangLawas--C	0.0078819.646989
TapanuliTengah--C	0.007772 9.64688
Dairi--C	-0.0146159.624493
TapanuliSelatan--C	-0.0173719.621737
Labuhanbatu--C	-0.042508 9.5966
HumbangHasundutan--C	-0.0632809.575828
LabuhanBatuSelatan--C	-0.0852329.553876
Binjai--C	-0.0912659.547843
GunungSitoli--C	-0.1273069.511802
PematangSiantar--C	-0.1315159.507593
Samosir--C	-0.1409109.498198
Padangsidempuan--C	-0.1648529.474256
NiasUtara--C	-0.1894579.449651
NiasBarat--C	-0.2312849.407824
TanjungBalai--C	-0.2534709.385638
TebingTinggi--C	-0.2696779.369431
Pakpakbarat--C	-0.2701459.368963
Nias--C	-0.3068799.332229
Sibolga--C	-0.3421509.296958

Source: results of Data processing with Eviews 12

Based on the regression analysis of the panel data above, structural equation I can be made as follows:

$$BD = 9,639 + 0.2051PAD + 0.2048DAU + 0.1744DAK + e1$$

Based on the regression analysis of the panel data above, it is known the effect of independent variables, namely PAD, DAU, and DAK on regional spending as the dependent variable. PAD, DAU, and DAK have a positive influence on regional shopping. The value of the balance fund coefficient consisting of DAU and DAK obtained in this study is 0.3795 greater than the PAD coefficient with a value of 0.2051. As explained in the theory that the fiscal illusion occurs if the effect (coefficient) of the balance of funds on regional spending is greater than the effect of PAD and both are significant, or the effect of PAD on regional spending is not significant. Based on this theory, the results showed that there is a fiscal illusion in the regional fiscal policy districts/cities in North Sumatra.

Furthermore, based on the regression results of the panel data in Table 15 above, it can be seen that the regional shopping equation of each Regency/city in North Sumatra with the coefficient value is equal to the number of coefficients in the structural equation I (9.639) with the individual effect value of each Regency/city.

Medan city has the highest coefficient with a value of 11.349321. That is, assuming all variables are fixed, Medan city becomes the most influential District/City on regional spending in North Sumatra province. In contrast, Sibolga became the district / city that had the least effect on regional spending in North Sumatra province with a coefficient value of 10.429340.

Based on the results of the calculation of the individual effect above, the following is presented the equation of district/city spending for six districts/cities with the highest coefficient and six districts / cities with the lowest coefficient.

a. Field Equation Model

$$\text{Log (BD)} = 10.21694 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Medan City has an individual influence on regional spending of 10.21694.

b. Langkat Regency Equation Model

$$\text{Log (BD)} = 10.00376 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, Langkat regency has an individual effect on regional expenditure of 10.00376.

c. Simalungun Regency Equation Model

$$\text{Log (BD)} = 10.00146 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Simalungun Regency has an individual effect on regional expenditure of 10.00146.

d. Deli Serdang Equation Model

$$\text{Log (BD)} = 9.99625 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Deli Serdang regency has an individual effect on regional expenditure of 9.99625.

e. A Model Of The Equation Of Expectation

$$\text{Log (BD)} = 9.865118 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the above equation, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, Asahan Regency has an individual influence on regional expenditure of 9.865118.

f. Mandailing Natal Regency Equation Model

$$\text{Log (BD)} = 9.828324 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Mandailing Natal Regency has an individual effect on regional spending of 9.828324.

g. West Nias Regency Equation Model

$$\text{Log (BD)} = 9.407824 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the above equation, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then West Nias Regency has an individual influence on regional expenditure of 9.407824.

h. Equation Model Of Tanjung Balai Municipality

$$\text{Log (BD)} = 9.385638 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then the municipality of Tanjung Balai has an individual effect on regional expenditure of 9.385638.

i. Equation Model Of High Cliff Municipality

$$\text{Log (BD)} = 9.369431 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the equation above, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then the city of Tebing Tinggi has an individual effect on regional spending of 9.369431.

j. The Western Model Of The Equation

$$\text{Log (BD)} = 9.368963 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the above equation, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then West Pakpak Regency has an individual influence on regional expenditure of 9.368963.

k. Nias Regency Equation Model

$$\text{Log (BD)} = 9.332229 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the above equation, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Nias Regency has an individual effect on regional expenditure of 9.332229.

1. Sibolga Regency Equation Model

$$\text{Log (BD)} = 9.296958 + 0.2051 \text{ Log (PAD)} + 0.2048 \text{ Log (DAU)} + 0.1744 \text{ Log (DAK)} + e$$

Based on the above equation, it can be explained that if there is a change of 1 unit in PAD, DAU, and DAK, then Sibolga Regency has an individual influence on regional expenditure of 9.296958.

DISCUSSION

Effect Of Local Revenue On Local Spending

The value of standardized coefficient beta is 0.2051 with a significant probability value of $0.0000 < 0.05$ which means that local revenue has a positive and significant effect on regional expenditure. Local revenue has a positive relationship to local spending means that every increase of 1 billion Rupiah in PAD will increase local spending by Rp205.100. 000,- in districts/cities in North Sumatra. The results showed that the higher the PAD received by the local government, the greater the funds owned by the government to conduct local spending in the framework of public services.

The results of the analysis are in line with the results of research conducted by Siregar (2012), Pratami and Dwirandra (2017), and Ginting (2019) that local revenue in North Sumatra has a positive and significant effect on regional spending in North Sumatra. PAD is a source of local revenue which is then used to fund government administration and regional development so that if there is an increase in PAD, the government has greater funds to be used in spending. The higher the PAD obtained by the local government, the higher the level of independence of the region.

Based on the results of the analysis, it is appropriate that local governments seek to optimize the potential in each region to increase local revenue which ultimately has an impact on economic growth or community welfare. The optimization can be done either from the local tax Sector, Levies, management of separated regional wealth, or from other legitimate regional revenues through public services provided by local governments to the community.

However, there are results of previous studies that show different results, where local revenue does not have a significant effect on local spending (Rusydi, 2009). According to him, this is due to the low contribution of PAD to local government expenditure compared to the balance of funds from the central government.

General Allocation Fund For Regional Expenditure

The value of standardized coefficient beta is 0.2048 with a significant probability value of $0.0000 < 0.05$ which means that the General Allocation Fund has a positive and significant effect on regional spending. The General Allocation Fund has a positive relationship with regional expenditure meaning that every increase of 1 billion Rupiah in DAU will increase regional expenditure by Rp204, 800, 000, - in districts/cities in North Sumatra. The high influence of DAU on regional spending is caused by the amount of revenue from the central government in the form of DAU in the component of local government revenue. The results of the analysis are in line with Ginting (2019), Yushkov (2016), Sjahrir (2017), Pratami and Dwirandra (2017) that an increase in the Balance Fund, one of which is the General Allocation Fund, will increase regional spending. The balance fund is allocated to the regional governments of districts/cities in North Sumatra in the framework of the implementation of decentralization. General allocation funds are funds distributed by the central government to the regions to reduce the fiscal gap between local governments so

that people between regions can enjoy relatively equal public services (Simanjuntak, in Sidik et. Al 2002).

Practically DAU can be used for direct shopping or indirect shopping. Therefore, DAU can provide certainty for local governments to obtain sources of income which are then used to finance expenditure needs according to their responsibilities in the framework of fiscal decentralization. The greater the DAU obtained by the region, the greater the spending that can be done by the region.

Effect Of Special Allocation Funds On Regional Spending

The value of standardized coefficient beta is 0.1744 with a significant probability value of $0.0000 < 0.05$ which means that special allocation funds have a positive and significant effect on regional spending. The special allocation fund has a positive relationship to regional expenditure meaning that every increase of 1 billion Rupiah in DAU will increase regional expenditure by Rp174, 400, 000, - in districts/cities in North Sumatra.

As the results of research Ginting (2019), Yushkov (2016), and Sjahrir (2017) which states that the increase in balance funds where one of them is a special allocation fund, the results of this study also show the same results, namely special allocation funds have a positive and significant effect on regional spending.

Special allocation funds are funds from the central government given to regions to finance special activities in regions that are the authority of local governments and in accordance with national priorities. Dak is practically used in order to accelerate regional development through funding to meet the needs of basic public service facilities and infrastructure, such as health, education, roads, water, and others. The greater the special allocation funds obtained by local governments, the greater the regional expenditure in the form of basic public service infrastructure that can be realized.

Effect Of Local Revenue, General Allocation Fund, And Special Allocation Fund Simultaneously On Regional Expenditure

The results of the above analysis also show that local revenue, general allocation funds, special allocation funds simultaneously have a positive and significant effect on regional spending districts/cities throughout North Sumatra. The simultaneous influence of the three independent variables on regional spending reached 95.85%.

The structure of the APBD shows that the regional revenues used to finance regional expenditures are sourced from local revenue, balance funds, and other legitimate regional revenues. Based on these provisions, it can be said that the three independent variables in the form of PAD, DAU, and DAK are the largest components in regional expenditure financing.

The results of this study are in line with research conducted by Siregar (2012) and pratami (2017), where the three independent variables simultaneously have a positive and significant effect on regional spending.

The Effect Of Local Revenue On Economic Growth Directly And Indirectly Through Regional Spending

The influence of local revenue on economic growth can be seen both directly and indirectly. The value of standardized coefficient beta is 0.1400 with a significant probability value of $0.0128 < 0.05$ which means that directly local revenue has a positive and significant effect on economic growth which is proxied by Gross Regional Domestic Product. Local revenue has a positive relationship to GDP means that every increase of 1 billion Rupiah in PAD will increase GDP by Rp140.000.000,- in districts/cities in North Sumatra.

The results of this study are in line with research conducted by Harianto (2007) which states that one of the sources of financing regional spending is PAD, therefore, if PAD increases, local governments have more funds and the area is getting closer to independence, thereby

increasing economic growth. Research conducted by Khamdana (2016) with the object of research is the provinces throughout Indonesia also shows that in line with the results of this study, namely the increase in revenue obtained by local governments will increase regional economic growth. Likewise, the results of previous research conducted by Ambarita (2018) show that local original income has a positive and significant effect on economic growth in North Sumatra.

The higher the PAD obtained by the local government will have an impact on reducing the level of regional dependence on balance funds from the center. With the increasing amount of funds owned by local governments, various economic agendas can be planned and realized to improve existing economic activities and create new economic activities in the community. In the end, the increase in PAD will have an impact on improving the welfare of the community and the GRDP of the area.

Based on the p-value or T-statistic of the sobel test, it is known that local revenue has an effect on economic growth through regional spending as an intervening variable. This result indicates that the increase in local revenue is used for local spending which is a stimulus for increased economic growth.

These results are in line with and contradict previous research conducted by Lisa (2017). The results of his research show that PAD has a positive and significant effect on economic growth through indirect spending. According to him, this happens because the local government uses PAD dominantly for indirect spending, namely in the form of employee spending, assistance, social, and others. On the other hand, PAD negatively affects economic growth through direct spending. According to him, this happens because the local government uses PAD dominantly for indirect spending, namely in the form of employee spending, assistance, social, and others.

The results of this study are also in line with the results of research conducted by

Sukmawati (2020) which states that regional spending can moderate local original income and have a positive effect on economic growth. The results of the study indicate that local governments use PAD for regional spending oriented to economic growth.

Influence Of Regional Spending On Economic Growth

The value of standardized coefficient beta is 0.9230 with a significant probability value of $0.0000 < 0.05$ which means that regional spending has a positive and significant effect on economic growth proxied by Gross Regional Domestic Product. Regional expenditure has a positive relationship with GDP means that every increase of 1 billion Rupiah in regional spending will increase GDP by Rp923.000.000,- in districts/cities in North Sumatra.

The results are in accordance with previous research conducted by Akai and Sakata (2002), Limi (2005), Wibowo (2008), and Faridi (2011). However, the results of the study are contrary to research conducted by Zhang and Zou (1998), Davoodi and Zou (1998), Pose and Ezcurra (2010) which states that local government spending within the framework of fiscal decentralization actually inhibits economic growth. This is possible if the implementation of regional fiscal policy in the form of regional spending is not oriented to the improvement and improvement of the economy. Fiscal policy is not directed at programs that are able to move people's economic activities and the influx of investment.

The Effect Of Local Revenue And Local Expenditure Simultaneously On Economic Growth

The results of simultaneous test of variables of local original income and regional expenditure on economic growth proxied with Gross Regional Domestic Product also showed the value of Prob (F-Statistic) 0.0000 is smaller than 0.05, which means that the two independent variables

simultaneously have a significant effect on economic growth.

Fiscal Illusion

Based on the results of the analysis can be made structural equation for regional shopping is as follows:

$$BD = 9.639 + 0.2051 PAD + 0.2048 DAU + 0.1744 DAK + e1$$

Based on the above equation, it can be seen whether there is a phenomenon of flypaper effect (fiscal illusion) in fiscal policy made by the district/city government in North Sumatra where fiscal illusion occurs if the condition is met that the coefficient of influence of balance funds is greater than the coefficient of influence of PAD and both are significant, or the effect of PAD response to regional expenditure is not significant.

The equation shows that there is a fiscal illusion in the fiscal policy of the Regency/city government in North Sumatra which is proxied with regional spending, because the coefficient of influence of the balance fund consisting of general allocation funds and special allocation funds of 0.3795 is greater than the coefficient of influence of local revenue of 0.2051.

The results of the analysis are in line with previous research conducted by Kusumadewi and Rahman (2007), Ndadari and Adi (2008), Adi and Eucharist (2009), Siregar (2012), Rusydi (2015), Rimawan and Badaruddin (2017), Pratami and Dwirandra (2017), and Ginting (2019), that the coefficient of influence of balance funds on regional expenditure is greater than the coefficient of influence of there is a fiscal illusion.

Based on the results of these tests can be interpreted that the district/city government in North Sumatra more use of receipts from the central government in the form of general allocation funds or special allocation funds to carry out its functions as an autonomous region. In other words, that the district/city government in North Sumatra is still very dependent on the balance of funds from the central

government. The thing that needs to be considered by local governments is the use of balance funds that are more dominant in carrying out their roles and functions can reduce the regional original income base (Oates, 2008). The decrease in PAD resources will then result in decreased revenue in the future. While on the other hand, people's needs for public goods and services will increase.

Based on the results of previous research can be mentioned that the fiscal illusion has occurred for a long time and in various regions in Indonesia and even in various regions in other countries. Local governments make the balance of funds as the main source of revenue. Sidik (2002) and Mardiasmo (2002) stated that the balance funds received by local governments from the central government should not be used as the main source of regional revenue, because the transfer of the central government to the region should be a stimulus for local governments to increase local revenue. Efforts to increase local revenue through the use of balance funds should be done optimally so that in the end it can reduce the dependence of local governments on the central government (Kuncoro, 2014).

The results of this study are different from the research conducted by Triyanto (2017). The difference in question is caused by the interpretation of the fiscal illusion used by Triyanto using positive-negative contributions to classify his findings. Meanwhile, in this study used a comparison of the influence of PAD and Balance Fund (DAU + DAK) on regional spending.

Based on the RAPBD data of districts / cities in North Sumatra as a whole, it shows that the value of budgeted regional expenditures is greater than regional revenues. The preparation of the budget thus shows that the Regency/city government in North Sumatra plans to implement an expansionary fiscal policy (deficit) which will then have an impact on maintaining or increasing the purchasing power of the

community so that the industrial sector continues to produce.

However, when viewed from the budget realization is known that the overall government district/city in North Sumatra showed that the realization of revenue is greater than the realization of expenditure (spending). In this case, the Regency/city government in North Sumatra tends to conduct a contraction or surplus fiscal policy. The realization of smaller expenditures than income can be caused, among other things, by low budget absorption.

From these data, it can be mentioned that the Regency/city government in North Sumatra does not optimize its role as an economic actor to spend with the maximum budget value that will have an impact on economic growth as mentioned by Keynesian theory. Even in 2020, when economic conditions were weakened due to the Covid-19 pandemic, the government still did not maximize its spending realization for the purpose of increasing aggregate demand which then became a stimulus for increased production and employment.

On the other hand, where the realization of income is greater than the realization of expenditure indicates that the fiscal policy taken is a budget surplus, it could be that the fiscal policy undertaken by the district/city government in North Sumatra is more focused on controlling prices (inflation).

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based on the results of the study it can conclude as follows:

1. Local revenue has a positive and significant effect on regional spending districts/cities in North Sumatra.
2. General allocation funds have a positive and significant effect on regional spending districts/cities in North Sumatra.
3. Special allocation funds have a positive and significant effect on district/city spending in North Sumatra.

4. Local revenue, general allocation funds, special allocation funds simultaneously have a positive and significant effect on regional spending districts/cities in North Sumatra.
5. Local revenue has a positive and significant effect on the economic growth of districts/cities in North Sumatra.
6. Regional shopping has a positive and significant effect on the economic growth of districts/cities in North Sumatra.
7. Local revenue does not affect the economic growth of districts / cities in North Sumatra through variable regional spending.
8. There is a fiscal illusion in the fiscal policy that is proxied with district/city spending in North Sumatra

Recommendations

Suggestions researchers from research that has been done are as follows:

1. Further research can be done to find a new type of revenue for the district/city government in North Sumatra so that the contribution of local revenue becomes dominant to finance regional spending in the framework of regional autonomy. In terms of spending, research can be done to analyze the types of spending that most affect economic growth.
2. District/city governments are expected to optimize revenue from the central government for regional spending which will then have an impact on increasing revenue from the district/city.
3. Fiscal policy made by the Regency/city government in North Sumatra is expected to provide a stimulus for economic growth in the region. Programs created in the framework of regional spending should be oriented to the development of the business world and have a positive impact on regional economic growth.

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