

The Influence of Local Revenue, General Allocation Fund, Revenue Sharing Fund, Regional Investment, Special Allocation Fund on Regional Expenditure with Economic Growth as a Moderating Variable in Districts/Cities in North Sumatra Province During the Period 2016-2020

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ABSTRACT

This research aims to determine the influence of Regional Original Income (PAD), General Allocation Funds (DAU), Profit Sharing Funds (DBH), Regional Investment, and Special Allocation Funds (DAK) on Regional Expenditures with Economic Growth as a Moderating Variable in Regency/City in North Sumatra Province for the 2016 – 2020 period. This type of research is causal. The population of this research is all Regency/City Governments in North Sumatra Province, totaling 33 districts and cities consisting of 25 districts and eight cities. The sample in this study was saturated with an observation period of 5 years (2016 - 2020), so the total sample for this study was 165. The variables used are PAD, DAU, DBH, ID, and DAK as independent variables, regional expenditure as the dependent variable, and economic growth as a moderating variable. The type of data in this research is secondary data obtained from the website of the Director General of Financial Balance and the BPS website of North Sumatra Province. The data collection method used is in the form of literature, journals, and other sources related to research. The research analysis methods and

techniques are panel data regression and the Chow and Hausman tests. This research shows that PAD, DAU, DBH, and DAK positively and significantly affect local expenditure, while investment does not. The results of the moderating test (interaction test) show that DAU and DAK are proven to be moderating variables, while PAD, DBH, and ID are not proven.

Keywords: Original Local Government Revenue (PAD), General Allocation Fund (DAU), Profit Sharing Fund (DBH), Regional investment (ID), Special Allocation Fund (DAK), Regional Expenditure, Economic Growth

INTRODUCTION

Regional government financial management, at the provincial, district, and city levels, is entering a new era in line with the issuance of Law No. 22 of 1999 and Law No. 25 of 1999, which regulate regional autonomy and fiscal decentralization. In line with developments in the situation, state administration, and demands for regional autonomy, this law was updated with Law No. 32 of 2004 concerning Regional Government and Law No. 33 of 2004 concerning the financial balance between the

central government and regional governments. The issuance of this law automatically means that regional governments have broad authority. The balance of financial authority between the central and regional governments requires that each regional government has adequate funding sources to run the government independently. This policy is a challenge and opportunity for regional governments because they have greater authority to efficiently and effectively manage the resources owned by their regions, both from the financial and non-financial sectors.

Facing conditions of regional autonomy, Regency/City governments have readiness and stability in funding sources for development financing, which is necessary for realizing independent and resilient regional governments from dependence on the central government. The impact of implementing regional autonomy is the demand for the government to create good governance as a prerequisite by prioritizing accountability and transparency (Nugraini, 2011).

The main objective of regional autonomy is to create independence for each regional government to optimize regional revenues by paying more attention to revenues originating from Regional Original Income (PAD). Original Local Government Revenue consists of several components: regional taxes, regional levies, results from regional wealth management, and other legitimate income. Regional governments can utilize this PAD component per regional needs and interests. Regions are required to develop and optimize all potential explored from within. Apart from that, the development of PAD revenues in districts/cities has fluctuated yearly. The increase in PAD in each district and city is not comparable to the expenditure recorded in the regional government of each district/city in North Sumatra Province. It is felt that the development of PAD in each district/city in North Sumatra still depends heavily on the

central government, especially in terms of development, facilities, and infrastructure.

In order to create regional independence, the regional government must think more about what steps must be taken, especially in terms of the region's original revenue, so that dependence on the central government is not too high. Regional governments must adapt and strive to improve the quality of services and improvements in various sectors that have the potential to be developed into sources of regional revenue. This table shows the development of revenues and contributions to PAD, DBH, DAU, DAK, regional investment, regional expenditure, and economic growth from 2016 to 2020.

Table 1. Types of Revenues in North Sumatra Province 2016-2020 (in Millions)

No	Type of Reception	2016		2017		2018		2019		2020	
		Revenue (Rp.000)	Contribution (%)	Revenue (Rp.000)	Contribution (%)	Revenue (Rp.000)	Contribution (%)	Revenue (Rp.000)	Contribution (%)	Revenue (Rp.000)	Contribution (%)
1	Original Local Government Revenue	4.249.259.700	9,73	5.420.209.346	12,22	5.160.752.589	11,67	5.558.200.383	11,55	5.053.206.307	11,51
2	Profit Sharing Funds	1.955.002.321	69,79	1.101.388.952	2,48	1.318.670.741	2,98	539.156.601	1,12	1.258.502.645	2,87
3	General Allocation Fund	21.408.146.713	49,09	21.434.274.638	48,34	21.442.356.759	48,47	22.237.046.632	46,38	20.526.524.784	46,76
4	Special Allocation Fund	5.834.432.139	13,38	6.269.699.927	14,14	6.407.893.534	14,48	6.479.179.513	13,46	5.739.651.058	13,07
5	Regional Expenditure	40.302.267.216		41.737.879.338		41.385.161.516		44.470.137.954		41.183.324.504	
6	Regional Investment	491.804.747		162.194.942		170.095.977		228.735.755		239.756.504	
7	Economic Growth	487.187.109,71		491.923.900,09		518.300.959,98		8.766.284.360		8.855.690.660	
	Total Revenue	74.642.180.846		76.617.570.951		76.693.232.076		88.368.901.198		82.856.766.440	

Source: BPS of North Sumatra sumut.go.id in numbers 2016-2020 (data processed)

Table 1 above shows the contribution to developing Original Local Government Revenue sources from 2016-2020 in each Regency/City in North Sumatra. During 2016-2017, the realization of the PAD regional budget increased from 9.73% to 12.22%, then from 2018 to 2020, PAD experienced a decreasing trend from 11.67% in 2018 to 11.55% in 2019, and it decreased further in 2020, amounting to 11.51%. The decline of the components of PAD itself may cause this decrease in PAD.

The contribution of regency/city government revenue sources, which shows the most significant component in the Regency/City

APBD Realization table above, is the General Allocation Fund (DAU). Based on primary allocations and fiscal gaps, general allocation funds for districts/cities are 10% and 90% of the national DAU amount.

The next source of APBN income is DBH. DBH aims to improve the fiscal balance between the center and the regions by paying attention to the potential of producing regions. The DBH allocation value for the school year is the smallest value obtained from a comparison between DBH calculations for planned APBN revenues and DBH projections for actual revenues for at least the previous three years and at least 75% of DBH calculations based on data from K/L. " DBH consists of taxation DBH and natural resources DBH" Wahyuni and Adi (2009). In principle, DBH is allocated to regions based on the realization of state revenues, with consideration for regional governments to be able to budget DBH in the APBD at 100% of what is stipulated in the Presidential Decree.

Apart from DAU and DBH, there is also DAK, where special allocation funds (DAK) are funds sourced from APBN revenues allocated to specific regions to help fund special activities that are regional affairs and under national priorities. DAK allocation is carried out through 2 (two) stages, namely determining certain regions that receive DAK and determining the amount of DAK allocation for each region. The amount of DAK allocation for each region is determined by calculating an index based on general, specific, and technical criteria. Regions that meet the general criteria are regions with a specific net fiscal index determined yearly. Specific criteria are based on the regional index by the Minister of Finance, considering input from the Stated Minister for National Development Planning and the Minister or head of the relevant institution.

Next are the technical criteria formulated through a technical index by the relevant technical Minister, which will be submitted to the Minister of Finance. The description of

DAK reflects that DAK aims to assist specific regional activities and help fund special activities, such as regional affairs, to finance community infrastructure facilities and infrastructure needs that have not yet reached minimum service standards and criteria to encourage accelerated regional development. Fund allocations in 2016 were used to fund activities in 15 (fifteen) fields, namely education, health, housing, agriculture, marine and fisheries, small and medium industry, tourism, roads, irrigation, drinking water, sanitation, markets, large-scale energy small business, environment and forestry, and transportation. In 2017, 5 sectors led to infrastructure: irrigation, roads, drinking water, sanitation, and the housing and settlement sector. 2018 covered 15 (fifteen) fields, the same as in 2016. In 2019, it covered 15 (fifteen) of the same fields in the previous year, and last year, in 2020, it included five fields: education, health and family planning, roads, sea transportation, and rural transportation. In 2020, DAK was given more priority to primary project targets and specific priorities to support the handling of Corona Virus Disease 2019, better known as COVID-19 and economic recovery. The percentage contribution of APBD realization of balancing funds in districts/cities in North Sumatra Province from 2016 to 2020 increased yearly, except in 2020, which experienced a decrease due to the COVID-19 outbreak. The percentage of balancing funds that make the largest contribution to local government is the general allocation fund or DAU. A researcher stated it stated that in balanced funds in Indonesia, DAU is categorized as a block grant (the number of funds is determined using a specific formulation), DAK as a special grant, and DBH as revenue sharing Kusumadewi and Rahman (2007).

The phenomenon that appears based on existing data shows the low level of Original Local Government Revenue generated by local and regional governments in the districts and cities of North Sumatra, which causes the level of dependence of regional

governments on financial assistance from the central government through the three balancing funds in financing development in their regions so that it has not been implemented independent autonomy policy without having to wait for funding assistance from the central government.

Based on data from www.djpk.depkeu.go.id illustrates the improvement in regional government financial conditions. Judging from the original regional revenue sources from districts and cities in North Sumatra Province, they have not been able to finance regional or regional expenditure sources. To optimize this further, the central government provides transfer assistance funds by balancing DAU, DBH, and DAK. These three funds can overcome each region's fiscal gap and differences in capabilities. However, among several forms of balancing funds, the General Allocation Fund is considered capable, flexible, and has greater use. When the DAU transfer funds are significant, the regional government tries to ensure that the DAU obtained remains prominent in the following period. PAD should be a characteristic of a region's independence, but many districts and cities still expect transfer funds, especially DAU.

Regional government financial management, which expects general allocation funds to continue to receive a significant proportion, results in underutilization of existing economic resources, even though regions are expected to be able to allocate these funding sources to productive sectors, which are expected to be able to encourage increased investment in the region which then has an impact on increasing sources of PAD revenue.

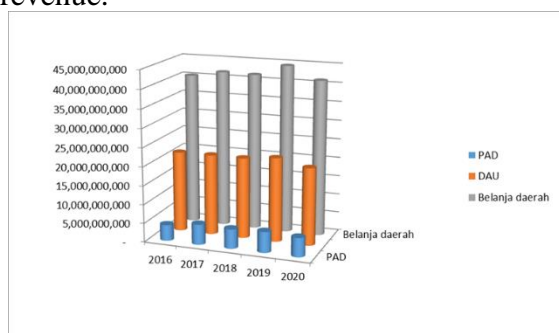


Figure 1. PAD, DAU And Regional Expenditure Graphs

Figure 1 above illustrates the financial capacity of districts/cities in North Sumatra Province. Overall, the graphic shows that local expenditure in 33 districts and cities in North Sumatra Province annually experiences budget realization, which tends to increase but still fluctuates due to increases and decreases in certain areas. Regional original income experiences less fluctuation than DAU transfer income from the central government.

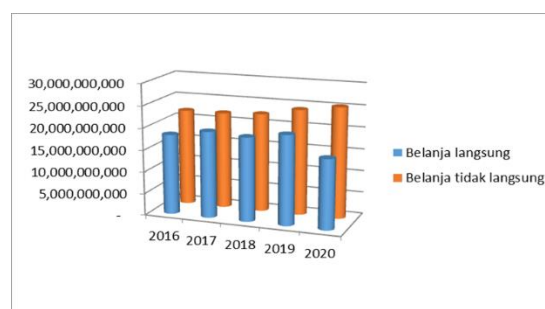


Figure 2. Graph of Regional Expenditure Use Based on Distribution.

Graph 2 above illustrates a more significant allocation of indirect regional expenditure than direct expenditure. It is a problem in increasing the growth and expansion of regional investment. The allocation of direct expenditure or capital expenditure should receive more special attention because the allocation of direct expenditure is used for the development of facilities/ infrastructure so that investors can invest their capital to produce high output and increase local revenue.

The condition of local expenditure, which has increased beyond the transfer of funds from the central government, especially DAU, has given rise to problems or other phenomena in regional financial management. According to Maimunah (2006), regional financial management occurs when the response of local expenditure is more significant to transfers, especially in general allocation funds, a flypaper effect. This condition is in line with the opinion of Mulya and Bustamam (2016: 191), who states that the Flypaper effect is a condition that occurs when local

Table 2. Investment Development in North Sumatra Province 2016-2020

Year	Domestic Investment		Foreign Investment	
	Project	Investment Value	Project	Investment Value
2016	145	4.954.829,29	301	1.057.989,14
2017	187	11.683.639,20	330	1.514.942,90
2018	309	8.371.820,30	380	1.227.609,40
2019	550	19.748.995,10	428	379.347,20
2020	1.377	18.189.528,40	401	974.762,72

Source: BPS of North Sumatra

Table 2 above depicts investment development in North Sumatra from 2016 to 2020, where domestic investment (PMDN) in North Sumatra Province fluctuates. In 2017, the investment value increased from 2016, but in 2018, the PMDN investment value decreased by 8,371,820.30 million rupiah. The development of investment value grew again in 2019, amounting to 19,748,995.10 million rupiahs, and decreased again in 2020. The data in this table shows that the development of foreign investment has fluctuated from year to year. The largest investment value occurred in 2017, amounting to 1,514,942.90 million rupiahs, and experienced a drastic decline in 2019, amounting to 379,347.20 million rupiahs, and gradually recovered in 2020. It shows that the North Sumatra Provincial Government has been unable to optimize its business, attracting investors to encourage investment by empowering economic potential in the region.

Apart from the above phenomena, previous research results are also related to independent variables on local expenditure. Ernayani (2017), Nur (2015), and Iqbal et al. (2020) show that local original income has a positive and significant effect on local expenditure. This result does not align with Darmayasa and Suandi's (2014) and Pratama's (2021) research, which shows that local original income does not affect local expenditure.

Ernayani (2017) and Devita et al. (2014) show that the general allocation of funds positively and significantly affects local expenditure. This is in contrast to the research of Ardanawati et al. (2019) and Rusmita (2016), who stated that general

allocation funds do not affect local expenditure.

Usri (2020) and Melchiare et al. (2021) state that DBH positively and significantly influences local expenditure. Meanwhile, Malau et al. (2021) and Ekawarna (2017) state that DBH does not influence local expenditure.

Noviani and Istifadah (2020) stated that Regional investments significantly affect local expenditure. Meanwhile, Lumbantobing (2017) stated that Regional investment does not affect regional expenditure.

Nailufar (2019) and Nur (2015) stated that DAK positively and significantly affects local expenditure. Meanwhile, research by Handayani and Nuraina (2012) states that DAK does not affect local expenditure.

Puspitasari (2021) and Sari (2018) show that economic growth significantly affects local expenditure. In contrast, Taher and Tuasela's (2019) and Rajagukguk et al. (2021) research shows that economic growth does not significantly affect local expenditure.

Based on the description and research that has been carried out previously, as well as phenomena that occur in areas that are not running optimally, this encourages researchers to carry out re-research on several of the same factors plus different factors, so researchers are interested in conducting research with the title "The Influence of Regional Original Income, General Allocation Funds, Profit Sharing Funds, Regional Investments, Special Allocation Funds for Regional Expenditures with Economic Growth as a Moderating Variable in City Districts in North Sumatra."

LITERATURE REVIEW

Local Expenditure

Regional expenditure includes all expenditures from the regional general treasury account that reduce current fund equity, a regional obligation in one budget year for which the region will not receive repayment—Government Regulation No. 58 of 2005. In calculating the regional

expenditure it can be measured using the formula:

$$\text{Local Expenditures} = \text{Operational Expenditures} + \text{Capital Expenditures} + \text{Unexpected Expenditures} + \text{Transfers}$$

Pambudi (2007) states that spending can be categorized according to its characteristics: general administration, operations, public infrastructure, transfer, and unexpected spending. According to Nordiawan (2007), all expenditures from regional general cash accounts that reduce fund equity are regional obligations in one budget year, and no repayment will be obtained, which is the definition of regional expenditure. Based on PP No. 12 of 2019, what is local expenditure? Is it spending aimed at funding the implementation of government affairs that fall under regional authority? Government affairs that fall under regional authority consist of mandatory and optional government affairs following the provisions of statutory regulations. Mandatory government affairs are divided into mandatory government affairs related to essential services and those not related to basic services. On the other hand, selected government affairs must be adjusted to the potential of each region. Mandatory government affairs unrelated to essential services are also allocated according to regional needs.

Economic Growth

Increasing economic growth is a top priority for regional governments. According to Samuelson and Nordhaus (2004), development is a series of change processes that lead to a better situation and improve society's welfare. One of the macro indicators of development success is seen in economic growth, which shows the goods and services produced in an area. According to Jaya and Dwirandra (2014), economic growth is the development of economic activities,

which, in this case, has an impact on the increase in the amount of production of goods and services so that the prosperity of society increases. Economic growth can be calculated using a formula:

$$\text{Economic Growth} = \frac{\text{PDRB}_t - \text{PDRB}_{t-1}}{\text{PDRB}_{t-1}}$$

In fiscal decentralization, economic growth plays a vital role in a region, reflecting developments in the economic condition of society from one period to the next. Meanwhile, the development of economic growth in a region can be seen from the measurement of regional economic growth, which is called GRDP or Gross Regional Domestic Product.

Locally-Generated Revenue

One source of income comes from regional income (PAD). Original Local Government Revenue consists of regional taxes, regional levies, management of separated regional assets, and other legal PADs. The components of local original income are regional taxes and regional levies, which significantly contribute to providing income for the region. Regional original income has a significant influence on local expenditure.

The amount of regional income (PAD) illustrates the region's ability to carry out regional autonomy and improve its financial performance. The theory of regional autonomy and Original Local Government Revenue explains that to create responsible regional autonomy, authority and ability are needed to explore existing natural resources and utilize human resources to create regional income. An increase in Original Local Government Revenue will affect local expenditure, which is part of regional income. Original Local Government Revenue is revenue obtained from the regional tax sector, regional levies, results from regionally owned companies, results from the management of separated

regional assets, and other legitimate regional original income (Mardiasno, 2022).

General Allocation Fund

To equalize the financial capacity of each region, the central government allocates a certain amount of funds to each autonomous region consisting of Provinces, Regencies, and Cities in Indonesia, which is held annually and used as development funds. The financial balance between central and regional governments is based on decentralization, deconcentration, and assistance. The central government implements decentralization by handing over authority to regional governments. This balancing fund aims to reduce the fiscal gap between central and regional governments (UU No. 33 of 2004). One of these balancing funds is the general allocation fund.

General allocation funds are transfer funds between levels of government that are not tied to specific expenditure programs, which function as equalization grants that neutralize financial inequality due to profit sharing received by regions Walidi (2009). According to Walidi (2009), regions with low Original Local Government Revenue will receive high general allocation funds, and vice versa, regions with high Original Local Government Revenue will receive low general allocation funds. Following this compliance theory, regional governments must comply with the rules set by the central government. The central government has determined that regional governments are DAU recipients. If the DAU increases from the previous year, it will encourage regional governments to spend more than the increase in DAU. In some areas, DAU is more dominant than PAD.

Profit Sharing Fund

Profit-sharing funds are a balancing fund sourced from APBN revenues, allocated to regions based on percentage figures to

fund regional needs originating from tax revenue-sharing funds and natural resources. Profit Sharing Funds are funds originating from the APBN, distributed to regions based on a certain percentage to fund regional needs in implementing decentralization Putra (2015). In its distribution, the Profit-Sharing Fund is divided into two parts. Namely, tax revenue-sharing funds and non-tax revenue funds.

The relationship between compliance theory and applicable laws and regulations involves the central government providing transfer funds, namely profit-sharing funds, to regional governments, where the distribution of DBH funds originating from the central government, which are channeled to regional governments, is regulated based on the respective Minister of Home Affairs Regulations. Areas are distributed based on percentage. Adding revenue-sharing funds from the central government can increase local expenditure allocations so that people can prosper with regional development from tax collection, which will be returned to producing regions as revenue-sharing funds.

Meanwhile, non-tax profit-sharing funds influence regional revenues, with the revenue source coming from regions with significant natural resources in forestry, general mining, fisheries, petroleum mining, and other sectors. These sectors are received back from the central government for the construction of facilities, infrastructure, and various other facilities so that the desired development can be realized.

Regional Investment

Regional investment means purchasing capital goods not consumed but used for future production in a particular area. Investment is an essential factor for long-term economic growth. Investment is also commonly called capital investment. According to Suherman, investment must mean the addition of new capital goods.

The size of income determines investment. Regional investment in this research uses assets to obtain economic benefits such as interest, dividends, royalties, social benefits, and others to increase the government's ability to provide services to the community. Increased investment is believed to contribute to the macroeconomy and is a component of national income, Gross Domestic Product (GDP). Investment has a positive relationship with GDP; if investment rises, then GDP will rise; conversely, when investment falls, then GDP will also fall. One of the investments that considerably influence development in a region is autonomous investment (autonomous investment). This autonomous investment can be spent on government spending through local expenditure for the construction of new facilities or repairs to damaged or old facilities, which requires enormous capital, and the community can feel the benefits directly. Local expenditure, part of government spending, is one of the fiscal policy instruments and an element of aggregate demand.

Special Allocation Fund

Special Allocation Funds are allocations from the State Revenue and Expenditure Budget to specific regions to fund special activities that are regional government affairs under national priorities. According to Nailufar and Safitrayati (2019), in several regions, the role of DAK is very significant because regional expenditure policies are dominated by the amount of DAK rather than PAD. Government regulation no. 55 of 2005 concerning balancing funds states that special allocation funds are used to fund special activities that are regional affairs and become a national priority, following the function which is the embodiment of governmental duties in specific fields, especially in efforts to fulfill the needs for basic community service facilities and infrastructure.

The greater the DAK, the greater the regional expenditure must be spent, thus indicating that the region is still dependent on the central government. Conversely, if the Special Allocation Fund is low, the region is independent because it can provide development funds with original regional income.

Framework

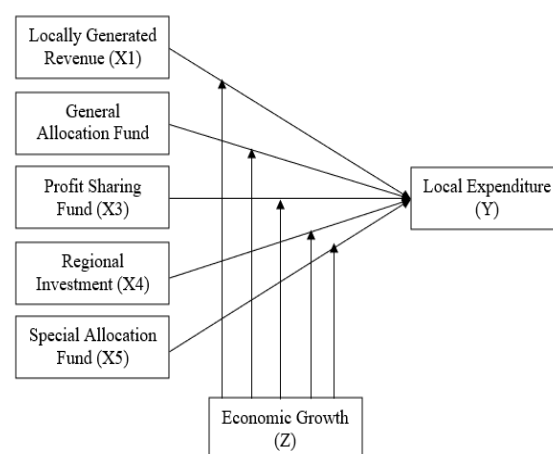


Figure 3. Conceptual Framework

- H1: Locally Regional Income (PAD) positively affects local expenditure.
- H2: General Allocation Funds (DAU) positively affect local expenditure.
- H3: Profit Sharing Funds (DBH) positively affects local expenditure.
- H4: Regional investment has a positive effect on local expenditure.
- H5: Special Allocation Funds (DAK) positively affect local expenditure.
- H6: Economic growth can moderate the influence of Locally Regional Income (PAD) on local expenditure.
- H7: Economic growth can moderate the influence of the General Allocation Fund (DAU) on local expenditure.
- H8: Economic growth can moderate the influence of Profit-Sharing Funds (DBH) on local expenditure.
- H9: Economic growth can moderate the influence of regional investment on local expenditure.

H10: Economic growth can moderate the influence of Special Allocation Funds (DAK) on local expenditure.

MATERIALS & METHODS

This research uses causal research to measure the relationship between variables or analyze how one variable influences another (Umar, 2013). The population in this study is the APBD realization report for all regencies and cities in North Sumatra Province, totaling 33 regencies/cities using time series data for 5 (five) years from 2016 to 2020. Thus, the number of population observations is $33 \times 5 = 165$ samples taken as objects in an observation or research that can represent the population. The sampling technique in this research is a saturated sample. Saturated sampling is a sampling technique using all population members as samples. Thus, the sample is 165 observations. The data analysis method used in this research is multiple linear regression analysis with regression using panel data or pooled data, a combination of time series and cross-section data. The analytical methods used in this research are descriptive statistics, panel data, and multiple regression tests.

RESULT

Selection of Panel Data Regression Models Chow Test

Table 3. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.321944	(32, 110)	0.0000
Cross-section Chi-square	201.975195	32	0.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.104541	0.093136	1.655801	0.1000
X2	0.295487	0.252941	1.168208	0.2447
X3	0.113738	0.085797	1.728631	0.0890
X4	-0.012765	0.032136	-0.397231	0.6918
X5	0.488272	0.127617	3.810391	0.0002
Z	-71.49093	48.22901	-1.462414	0.1404
Z*X1	-0.412565	1.320204	-0.312501	0.7551
Z*X2	8.752591	5.370135	1.628964	0.1053
Z*X3	-0.818148	1.343640	-0.608546	0.5431
Z*X4	0.123330	0.688989	0.179522	0.8578
Z*X5	-4.593913	2.787148	-1.648249	0.1015
C	2.038341	2.280434	0.892902	0.3734

R-squared	0.936537	Mean dependent var	20.83570
Adjusted R-squared	0.931729	S.D. dependent var	0.488276
S.E. of regression	0.127581	Akaike info criterion	-1.205419
Sum squared resid	2.311205	Schwarz criterion	-0.968773
Log likelihood	104.8173	Hannan-Quinn criter.	-1.109294
F-statistic	190.8238	Durbin-Watson stat	0.958820
Prob(F-statistic)	0.000000		

Source: Results of data processing with EViews, 2023

The Chow test helps determine whether the common or fixed effect model is most appropriate to use in panel data. Based on Table 3, the Cross Section Chi-square Prob value is $0.0000 < \alpha 0.05$, so the estimation model chosen is the fixed effect model.

Hausman Test

Table 4. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.872372	11	0.0634

Variable	Fixed	Random	Var(Diff.)	Prob.
X1	0.185571	0.146780	0.000637	0.1448
X2	0.673222	0.444862	0.032491	0.4266
X3	0.083582	0.056137	0.000230	0.4074
X4	0.004801	0.004911	0.000027	0.5832
X5	0.268468	0.325063	0.000653	0.0161
Z	-53.791363	-57.163570	25.995203	0.5084
Z*X1	-1.065010	-0.830027	0.104853	0.4690
Z*X2	6.277389	6.714203	0.345316	0.4599
Z*X3	-0.846285	-0.917101	0.013872	0.5548
Z*X4	0.175601	0.056422	0.006122	0.3055
Z*X5	-2.262484	-2.647906	0.048442	0.0799

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.712105	6.231405	-0.435232	0.6642
X1	0.185571	0.050775	3.654786	0.0004
X2	0.673222	0.337442	1.995078	0.0485
X3	0.083582	0.046977	1.775208	0.0780
X4	0.004801	0.022024	0.218009	0.8278
X5	0.268468	0.088762	3.024576	0.0031
Z	-53.79136	30.00562	-1.792709	0.0758
Z*X1	-1.065010	0.866246	-1.199628	0.2368
Z*X2	6.277389	3.379111	1.857704	0.0699
Z*X3	-0.846285	0.831327	-1.021602	0.3082
Z*X4	0.175601	0.436896	0.401826	0.6885
Z*X5	-2.262484	1.737203	-1.302378	0.1955

R-squared	0.982930	Mean dependent var	20.83570
Adjusted R-squared	0.976257	S.D. dependent var	0.488276
S.E. of regression	0.075238	Akaike info criterion	-2.101362
Sum squared resid	0.622695	Schwarz criterion	-1.233661
Log likelihood	205.2049	Hannan-Quinn criter.	-1.746504
F-statistic	147.2995	Durbin-Watson stat	1.897147
Prob(F-statistic)	0.000000		

Source: Results of data processing with EViews, 2023

Based on Table 4 above, the results obtained are the Fixed asset model, so the next step is to carry out the Hausman test. Table 4 shows that the Random cross-section value has a significant value of $0.0634 > 0.05$, so the estimation model used is the Random Effect model. The Random Effect estimation model has General Least Square characteristics, so if the estimation model has General Least Square characteristics, then there is no need to test the classic assumptions of Normality, Heteroscedasticity, Multicollinearity, and Autocorrelation (Gujarati & Porter, 2012).

Hypothesis Testing

Table 5. Random Effect Model Estimation Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.148780	0.044063	3.376534	0.0009
X2	0.444862	0.177132	2.511469	0.0131
X3	0.096137	0.044466	2.162025	0.0323
X4	0.004911	0.021405	0.229414	0.8189
X5	0.325063	0.085590	3.797906	0.0002
Z	-57.16357	29.56928	-1.933208	0.0552
Z*X1	-0.830027	0.834633	-0.994482	0.3217
Z*X2	6.714203	3.327022	2.018082	0.0455
Z*X3	-0.917101	0.822942	-1.114418	0.2670
Z*X4	0.095422	0.429832	0.221998	0.8246
Z*X5	-2.647906	1.723204	-1.536618	0.1266
C	1.287500	1.747504	0.736765	0.4625
Effects Specification				
			S.D.	Rho
Cross-section random			0.096922	0.6240
Idiosyncratic random			0.075238	0.3760
Weighted Statistics				
R-squared	0.835361	Mean dependent var		6.987630
Adjusted R-squared	0.822608	S.D. dependent var		0.659257
S.E. of regression	0.077406	Sum squared resid		0.850812
F-statistic	65.49957	Durbin-Watson stat		1.576553
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.931021	Mean dependent var		20.83570
Sum squared resid	2.516180	Durbin-Watson stat		0.775329

Source: Results of data processing with EViews, 2023

Based on Table 5 of the panel data estimation model in the coefficient column, the following regression equation model is obtained:

$$Y = 1.2875 + 0.1487X_1 + 0.4448 X_2 + 0.0961X_3 + 0.0049X_4 + 0.3250X_5 - 57.1635Z$$

Partial Test (t Statistical Test)

The t-statistical test shows how much influence an independent variable has in explaining the dependent variable. This partial test was carried out to determine the influence of PAD, DAU, DBH, regional investment, and DAK on local expenditure in districts/cities in North Sumatra Province partially or individually. The t-test was conducted using the Random Effect Model as recommended in the Chow and Hausman test. Based on Table 5, acceptance or rejection of a hypothesis in a study can be done using the following criteria:

1. If the t statistical significance value is > 0.05 , then H_0 is accepted. It means an individual's independent variable does not influence the dependent variable.
2. If the t statistical significance value is < 0.05 , then H_0 is rejected. It means that an independent variable individually

influences the dependent variable.

Based on Table 5 above, the results of the partial test carried out state that PAD (X1), DAU (X2), DBH (X3), and DAK (X5) are partially proven to have a significant influence on regional expenditure in Regencies/Cities in North Sumatra Province. Meanwhile, regional investment(X4) has been proven to have no significant influence on local expenditure. For further clarity, the following is an explanation of the results of the t-statistical tests that have been carried out:

1. The regression coefficient value of PAD (β_1) = 0.1487 > 0 , with t-count (3.3765) $>$ ttable (1.974) and significance (0.0009) $<$ α (0.05). It shows that the PAD variable has a positive and significant effect on regional expenditure, meaning that if PAD increases, regional expenditure will increase significantly by 14.87 percent.
2. The DAU (β_2) regression coefficient value = 0.4448 > 0 . It shows that the DAU variable has a positive and significant effect on local expenditure, meaning that if the general allocation fund (DAU) increases, it will increase by 44.48.
3. Profit Sharing Funds (β_3) regression coefficient value = 0.0961 > 0 . It shows that the Profit Sharing Fund variable has a positive and significant effect on local expenditure, meaning that if it increases, it will increase by 9.61 percent.
4. The regression coefficient value of Regional investment(β_4) = 0.0049 < 0 . It shows that the Regional investment variable has a positive but insignificant effect on local expenditure. If regional investment increases, local expenditure will not significantly increase, decreasing by 0.49 percent.
5. The regression coefficient value of DAK (β_5) = 0.3250 > 0 . It shows that the DAK variable has a positive and significant effect on local expenditure, meaning that if the special allocation fund (DAK) increases, it will increase

by 32.5 percent.

Based on the results above, the interaction between the moderating variable, namely economic growth, and each independent variable, namely PAD, DAU, DBH, regional investment, and DAK, can be seen. So, it is concluded that the interaction of the moderating variables significantly influences local expenditure, which is the Z* interaction. Meanwhile, the interactions Z*X1, Z*X3, Z*X4, and Z*X5 are insignificant at the 5% level.

6. Z*X1, the interaction between economic growth and PAD (X1), has a significance value of $0.3217 > 0.05$. So, it can be seen that economic growth cannot moderate the influence of PAD on local expenditure. So, based on these results, it can be concluded that economic growth is said to be a moderating predictor, namely a variable that significantly influences local expenditure but cannot moderate the influence of PAD on local expenditure.
7. Z*X2, the interaction between economic growth and DAU (X2), has a significance value of $0.0455 < 0.05$. So, it can be seen that economic growth has proven to moderate the influence of DAU on local expenditure. So, based on these results, it can be concluded that economic growth is said to be quasi-moderated, namely a variable that has a significant influence on local expenditure and can also moderate the influence of DAU on local expenditure.
8. Z*X3, the interaction between economic growth and DBH (X3), has a significance value of $0.2670 > 0.05$. So, it can be concluded that economic growth cannot moderate DBH's influence on local expenditure. So, based on these results, it can be concluded that economic growth is said to be a moderating predictor, namely a variable that significantly influences local expenditure but cannot moderate the influence of DBH on local expenditure.

9. Z*X4, the interaction between economic growth and Regional investment(X4), has a significance value of $0.824 > 0.05$. So, it can be seen that economic growth cannot moderate the influence of Regional investment on local expenditure. So, based on these results, it can be concluded that economic growth is said to be a moderating predictor, namely a variable that significantly influences local expenditure but cannot moderate the influence of Regional investment on local expenditure.
10. Z*X5, the interaction between economic growth and DAK (X5), has a significance value of $0.126 > 0.05$. So, it can be seen that economic growth cannot moderate the influence of DAK on local expenditure. So, based on these results, it can be concluded that economic growth is said to be a moderating predictor, namely a variable that significantly influences local expenditure but cannot moderate the influence of PAD on local expenditure.

CONCLUSION

Based on the results of the research and discussion in the previous chapter, several conclusions can be drawn as follows:

1. Original Local Government Revenue (PAD) positively influences local expenditure in Regencies/Cities in North Sumatra Province.
2. General Allocation Funds (DAU) positively influence local expenditure in Regencies/Cities in North Sumatra Province.
3. Profit Sharing Funds (DBH) positively influence local expenditure in Regencies/Cities in North Sumatra Province.
4. Regional investment does not affect regional expenditure in districts/cities in North Sumatra Province.
5. Special Allocation Funds (DAK) positively influence local expenditure in Regencies/Cities in North Sumatra

- Province.
6. Economic growth cannot moderate the influence of PAD on local expenditure in Regencies/Cities in North Sumatra Province.
 7. Economic growth can moderate the influence of DAU on local expenditure in Regencies/Cities in North Sumatra Province.
 8. Economic growth cannot moderate DBH's influence on local expenditure in Regencies/Cities in North Sumatra Province.
 9. Economic growth cannot moderate the influence of regional investment on local expenditure in regions/cities in North Sumatra Province.
 10. Economic growth cannot moderate the influence of DAK on local expenditure in Regencies/Cities in North Sumatra Province.

LIMITATIONS

Limitations of this research are:

1. The results of this research depend on the data on the Central Statistics Agency and the Directorate General of Financial Balance websites.
2. Researchers only use data at the Regency/City level of North Sumatra Province and only analyze the influence of Regional Original Income (PAD), General Allocation Funds (DAU), Profit Sharing Funds (DBH), Regional Investment, Special Allocation Funds (DAK) and expenditure regions, for further research it would be best to add other variables related to factors that influence local expenditure.
3. The researcher used a research period of 5 (five) years. During that period, an epidemic occurred, which resulted in a decline in the Indonesian economy and investment, which also impacted the regional economy and investment in the Regency/City of North Sumatra Province, so the data presented, especially on investment, was not appropriate, which is expected.

SUGGESTIONS

Based on the conclusions of this research, several suggestions can be made, namely as follows:

1. The research results show that PAD, DAU, DBH, and DAK are proven to influence local expenditure significantly. So, districts/cities in North Sumatra Province are advised to consider strategies to increase PAD, such as increasing tax collection, closely monitoring other sources of income, or developing potential local economic sectors. In terms of DAU, it is recommended that districts/cities in North Sumatra Province manage DAU more efficiently, namely by having wiser budget planning, monitoring the use of funds, and prioritizing programs that support economic development and community welfare. In DBH, districts/cities in North Sumatra Province are advised to use these funds more wisely by ensuring that DBH is used for sustainable purposes and the long-term benefits of regional communities, including infrastructure development and social programs. Finally, for DAK, regencies/cities in North Sumatra Province are advised to make more use of DAK for sustainable activities or projects, which will provide long-term benefits for the community.
2. It is hoped that future research will again test the influence of other variables that can influence local expenditure in districts/cities in North Sumatra Province. Several variables that can be studied include regional debt, social conditions, regional demography, SiLPA, tax policy, and inflation rate.
3. From the results of this research, economic growth cannot be used as a

moderating variable in the influence of PAD, DBH, and regional investment on local expenditure in districts/cities in North Sumatra Province. So, in future research, it is hoped that economic growth will be re-examined in other regional governments in Indonesia to find out whether both have a significant influence and can be used as moderating variables on local expenditure.

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