

## The Effect Of Regional Original Icome (Pad),General Allocation Fund (Dau) And Economic Growth On Capital Expenditure In District/City In North Sumatra Province

DwiPutri Sigalingging<sup>1</sup>;Dermantaris Halawa<sup>2</sup>;

Mely Octavia Siorus<sup>3</sup>;Ninta Katharina<sup>4</sup>

*Universitas Prima Indonesia,Medan<sup>1,2,3,4</sup>*

**ABSTRAK:**This research intent to amalyze the influence of Regional Original Income (PAD), Geral Allocation Funds (DAU) and Economic Growth on Capital Expenditures in district / cities in North Sumatera Province.The population used in this research was 33 convering 25 regencies and 8 urban areas out by the saturated sampling method.The approach taken to analyze the data is a quantitative approach ,namely the multiple linier regression analysis technique asa a calculation tool and using the spss version 22 program assistance. The research period of 4 years 2017 up to 2022.The result of this study are regional income (PAD), General Allocation Fund (DAU), and Economic Growth Partially affect capital Expenditures in regencies / cities in north Sumtera Province.

**KEYWORD:***Regional Original Income ( PAD), Geral Allocation Funds (DAU),Economic Growth*

### I. INTRODUCING

#### 1.1BACKGROUND

The regional expenditure plan is the reason for the monetary planning which in its implementation is completed for government affairs or the Regional Revenue and Expenditure Budget (APBD). The plan and use of regional expenditures become a breakdown of payments and territorial consumption in one year consisting of different parts such as Regional Original Revenue (PAD) and adjustment reserves consisting of the General Allocation Fund (DAU, etc. which combines different uses such as capital consumption.

Economic growth describes the state of the economy of an area which can be seen from the increase in the number of goods or services produced by the area. Economic growth includes the increase in people's income. One of the factors that influence economic growth in regional income. If regional income increases, the provincial government will increase regional spending to improve and complete the foundation and framework for realizing a leading economy in the district.

Considering PP No. 71 of 2010, it makes sense that use is felt when obligations arise, at times of use of resources, or when financial or administrative benefits may diminish. different consumption, etc. The large expenditure becomes the benchmark in determining how large the office and framework development will be. We see that in North Sumatra Province capital expenditure is large but the infrastructure is still lacking, especially roads and bridges. This results in less thanthe optimal movement of goods between regions, especially in remote areas where roads are limited.

Regional revenue and expenditure budgets or often abbreviated as APBD affect Regional Original Revenue. The APBD is the main source in the allocation of Regional Original Revenue, in 2017 this share contributed 79.9%. This shows that local governments still depend on funds from the center to fund development in the regions so that districts/cities in the province of Sumatra The North is expected to be able to manage the APBD well to improve facilities and infrastructure in the area. Meanwhile, in 2020 all regions in Indonesia experienced a decrease in APBD including districts/cities in North Sumatra Province. The regional budget was reduced by 40%. The reduction was sourced from the Central Government such as the General Allocation Fund (DAU) and regional transfers were also reduced. Meanwhile, capital expenditures increased. especially in the fields of health, social assistance, and small and medium enterprises, this happened due to the impact of Covid 19 which resulted in funds from the center such as the General Allocation Fund being diverted for handling covid 19.

To have the option to achieve the most extreme results in expanding Capital Expenditures, Local Governments

must have the option to distribute capital consumption expenditure plans appropriately considering that the use of capital is one of the means for Regional Governments to offer the best assistance to the general public. Based on the background of the researcher, the aim is to examine "The Influence of Regional Original Income (PAD), General Allocation Funds (DAU), and Economic Growth on Capital Expenditures in Regencies/Cities in North Sumatra Province".

## II. LITERATURE REVIEW

### Theory of the Effect of Regional Original Income (PAD) on Capital Expenditure

The exploration of Made Ari and Ni PutuSanti (2018) shows the influence of PAD on Capital Expenditures. The results of this study reveal that the higher the PAD, the higher the use of capital to be assigned by the nearest legislature. assemble the office and the framework, especially the foundation.

Research by Susi Susanti and HeruFahlevi (2016) shows that large PAD payments make local governments have the choice to cover regional needs, this shows that PAD affects capital consumption. can fund government exercises and local turnover events. Regions that can rely on PAD in building their infrastructure are called independent regions.

Setyawan's research (2018) proves the influence of PAD on Capital Expenditure. The results of this research state that the increase in local government funds sourced from PAD has been used appropriately to fund regional development or for optimizing facilities by increasing the allocation of Capital Expenditures in providing services to the public.

Based on the opinions of the three experts, it can be concluded that the higher PAD will make the capital expenditure obtained also high. This shows that PAD affects Capital Expenditure.

### Theory of the Effect of the General Allocation Fund (DAU) on Capital Expenditure

EksplorasiRendy Armando (2018) merekomendasikanbahwa DAU berpengaruhsignifikanterhadapBelanja Modal.Hasileksplorasiinimenunjukkanbahwadaerah yang mendapat DAU tinggipastiakanmendapatkanBelanja Modal yang besarbegitu pula sebaliknya.

PenelitianPermatasaridanMildawati (2016) merekomendasikanbahwa DAU mempengaruhiBelanja Modal.Hasilpemeriksaaninimenunjukkanbahwasemakintinggi DAU yang diberikanolehkalanganmenengah, makasemakindiperhatikan pula penataanadministrasiperkantoranpublikmelaluiBelanja Modal.

RisetDwiAnggoro (2017)membuktikanadanyapengaruh DAU terhadapBelanja Modal. Hasilrisetini menyatakanjika DAU mengalami kenaikan maka Belanja Modal jugatinggisehinggaterciptanyakesejahteraan masyarakat lewat pembangun an akansaranadan prasarana dalam meningkatkan perekonomian daerah tersebut.

Berlandaskan pendapat ketiga ahli tersebut dapat disimpulkan DAU berpengaruh terhadap Belanja Modal guna untuk ke ngoptimalan dalam pelayanan untuk kesejahteraan masyarakat.

### Theory of the Effect of the General Allocation Fund (DAU) on Capital Expenditure

The term financial growth is applied to an economy experiencing an increase in per capita payments

In the book, Economic Development (2017) PattaRapanna et al, said that financial development is a cycle in which salary increases without relating it to the rate of population development despite the fact that the rate of population development is mostly related to monetary.

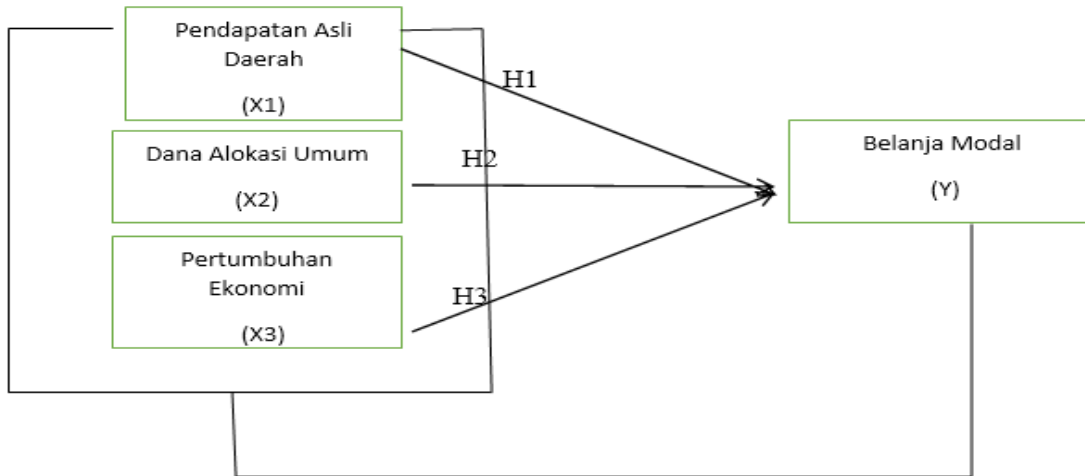
Another definition says that financial development is the expansion of public payments within a certain period, for example in the final year.

According to (Darwanto, 2017) states that economic growth has a positive effect on capital expenditures to improve the facilities and infrastructure of an area.

According to researchers, economic growth is very influential on capital expenditure in an area, if a region experienced significant economic growth, capital expenditure will increase to improve people's welfare.

### CONCEPTUAL FRAMEWORK

The Conceptual Framework according to Sugiyono (2017: 60) is one method of understanding the relationship between speculations concentrated in a review. The reasonable structure of this study is as follows:



**Figure 1. Conceptual Framework**

Based on the above ideas, it can be concluded that the research assumptions are as follows:

H1: PAD has a positive influence on Capital Spending in Districts/Cities in the Province of North Sumatra

H2:DAU has a positive influence on Capital Expenditure in Districts/Cities in North Sumatra Province

H3: Economic growth has a positive influence on Capital Expenditures in Regencies/Cities in the Province of North Sumatra

H4: Regional Original Income, General Allocation Funds, and Economic Growth have a simultaneous effect on Capital Spending in Regencies/Cities in the Province of North Sumatra

**III. BAB IIMETODOLOGIPENELITIAN**

**RESEARCH METHODS**

This exploration is a study that uses a quantitative strategy that is determined to find out how the influence of independent factors, especially Regional Original Income (PAD), General Allocation Funds (DAU), and Economic Growth on the dependent variable, especially Capital Expenditure. The type of information used in this study is optional information obtained from the 2017-2020 Regency/City APBD Realization Report in North Sumatra Province which can be obtained from the BPS application.

**II.1 Population, Sample, and Sampling Technique Population and Sample**

The population in this study is all urban areas/areas in North Sumatra Province from 2017-to 2020. The examples in this study are all registered/urban regulations in the Province of North Sumatra, to be precise above 25 regimes and 8 urban areas.

**Sampling technique**

The population in this study is the Reporting on the Realization of the Regional Revenue and Expenditure Budget (APBD) which consists of 25 regencies and 8 cities in the regencies/cities of North Sumatra Province. The sampling technique used in this study is the side-saturation method. Based on this method, there are 132 samples obtained from 33 districts/cities for the 4-year period 2017-2020.

**II.2 Identification and Operational Definition of Research Variables**

The operational definition is a clarification of the factors that have been selected. For added subtlety, proof of differentiation and functional meaning of each variable should be seen in the table below:

**Table II.2**

**Operational Definition and Measurement of Variable Variables**

Variable	Variable Definition	Indicator	Measurement
Locally-generated revenue (X1)	Provincial Original Revenue is regional payments that are taken from the district's ability to handle payments but have not been managed according to related regulations. Source: (Nurkholis and Moh.Khusaini,2019:24)	Regional Original Income=Regional Tax Revenue (PPD)+Regional Revenue and Levies (PRB)+Separated Regional Assets Management Revenue (HPKDD)+Others Legitimate Regional Original Income. Source:(Nurkholis and	Ratio

		Moh.Khusaini,2019:24	
General Allocation Fund(X2)	The General Allocation Fund is a number of funds that must be allocated by the Central Government to each Autonomous Region in Indoneof understand a balancing fund. Source:(Achmad Suryana,2018:13)	General Allocation Fund=Basic Allocation+Fiscal Gap Source:(Achmad Suryana,2018:13)	Ratio
Pertumbuhan Ekonomi(X3)	Economic growth is the fiscal development of the production of goods and services that applies in an area. Source:(Sadono Sukirno,2017:9)	Economic Growth=(GRDPT-GRDPT1)\(GDP-1)X100% Source:(Sadono Sukirno,2017:9)	Ratio
Capital Expenditure (Y)	Capital Expenditures are expenditures used to meet the needs of developing tangible assets with a period of more than one year used for government activities such as buildings, roads and other assets. Source: (Fadillah Amen,2019:23)	Economic Growth=Purchase for Land+Shopping for Equipment and Machinery+Shopping for Buildings and Buildings+Shopping for Roads, Irrigation and Networks+Shopping for Other Fixed Assets+Shopping for Other Assets. Source:(Fadillah Amin,2019:23)	Ratio

### II.3 Data analysis technique

#### Classic assumption test

##### Normality test

Ghozali (2018:161-163) Normality test is used to check whether the information is solid or not. Ordinary tests using realistic reports can go wrong if you're not careful from the start it can look mundane, but still not really ordinary. So it is necessary to use a statistical test with the provisions of the Kolmogorov-Smirnov test, namely with the standard  $H_0$  being accepted by the Kolmogorov-Smirnov significant score  $< 0.05$ ,  $H_0$  being rejected by the Kolmogorov-Smirnov significant score of 0.05.

##### Autocorrelation Test

According to Ghozali (2018: 111), the emergence of autocorrelation due to ordered and interrelated reviews. The autocorrelation test was carried out to determine the suitability of the factors in the assessment model at various times.

##### Multicollinearity Test

Ghozali (2018:107) recommends that the multicollinearity test is very helpful in seeing the relationship between the relapse models, whether there is a match between the independent factors. This test can be detailed from how big the resistance and the difference in the expansion factor (VIF).

##### Heteroscedasticity Test

Ghozali (2018:137) states that the heteroscedasticity test is used to understand whether or not the variance of the residuals occurs in each observation. It is said to be homoscedastic if the residuals from one study to the following study are the same, if they are different it is said to be heteroscedasticity.

### II.4 Hypothesis Test

#### Partially Significant Test (T-Test)

The T-test basically shows the impact of one autonomous logical variable separately in understanding the diversity of the dependent variable. The test is carried out by utilizing the 0.05 level of importance.

#### Simultaneous Significant Test (F-Test)

The F test basically shows whether all the independent or independent factors that are remembered for the model influence the dependent variable. Invalid speculation ( $H_0$ ) should be tried whether all limits in the model are equivalent to zero.

**Research Model**

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_n X_n + e$$

**Keterangan**

Y = Variabel terikat atau variabel reponse

X = Variabel bebas atau variabel predictor

a= konstanta

$\beta$  = Slope atau Koefisien estimate

**HASIL DAN PEMBAHASAN****Statistik Deskriptif**

Descriptive statistics describe the dependent variable and independent factors in a measurable manner. In the expressive measured test, it is indicated by complete information, normal value, standard deviation, smallest value, and the largest value of the exploration factor. The factors in question are PAD, DAU, and Economic Growth. The consequences of the graphical investigation are combined as follows:

**Descriptive Analysis Results**

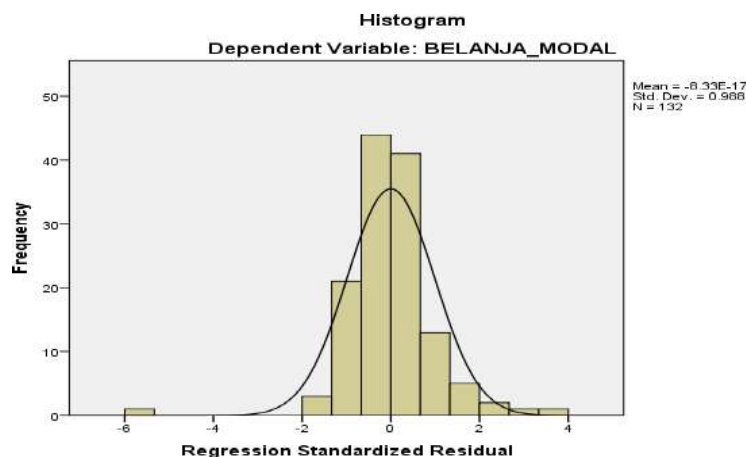
	N	Minimum	Maximum	Mean	Std. Deviation
PAD	132	8459902	2338282166	1.4388	3.32678
DAU	132	7870476	1686885959	6.2658	3.16158
PERTUMBUHAN_EKONOMI	132	.09	6.09	4.1143	1.94319
BELANJA_MODAL	132	992661	997475993	2.3848	1.44198
Valid N (listwise)	132				

The table above shows an expressive factual description of each exploration variable. PAD has a base value of 8459902 in the South Nias Regency, the largest value is 2338282166 in Medan City, a typical value of 1.4388 and a standard deviation of 3.32678.

The DAU has a base value of 7870476 in West Pakpak Regency, the most extreme value of 1686885959 in Deli Serdang Regency, a typical value of 6.2658, and a standard deviation of 3.16158. Financial development has a baseline value of 0.09 in Humbang Hasundutan Regency, the most extreme value of 6.09 in Medan City, a typical value of 2.3848, and a standard deviation of 1.44198.

**Classic Assumption Test Results****Classical Normality Test**

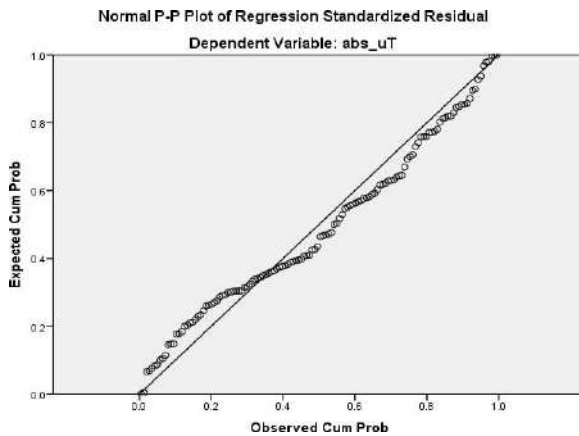
## 1. Histogram Graph Analysis



**Data Histogram Image**

Displays a histogram graph illustrating the information design which is usually adjusted because it is a modified bell and the bends are flat, so the usual assumptions are met.

2. P-Plot Image Analysis



**Gambar Grafik Data P-Plot**

The P-plot above shows that the focus spreads out and touches the long slash, then the information has met the usual requirements.

**Table of Normality Test Results**

**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		132
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.05013686E8
Most Extreme Differences	Absolute	.109
	Positive	.109
	Negative	-.099
Kolmogorov-Smirnov Z		1.256
Asymp. Sig. (2-tailed)		.085

Based on the table above, the significance value of the Kolmogorov-Smirnov Test is 0.08 where the value is > 0.05, so it corresponds to the P-Plot histogram graph and is normally distributed.

**Multicollinearity Test**

**Table of Multicollinearity Test Results**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
PAD	.609	1.642
DAU	.607	1.649
PERTUMBUHAN_EKONOMI	.959	1.043

Based on the table above, it can be seen that the tolerance values for PAD, DAU, and Economic Growth are 0.609; 0.607; 0.959 where the value is > 0.10. Likewise with the value of VIF on PAD, DAU, and Economic Growth, respectively, namely 1.642; 1.649; 1.043 where the value is < 10.00. So it can be concluded that the independent variable does not occur multicollinearity.

Autocorrelation Test

**Autocorrelation Test Results**

**Model Summary<sup>b</sup>**

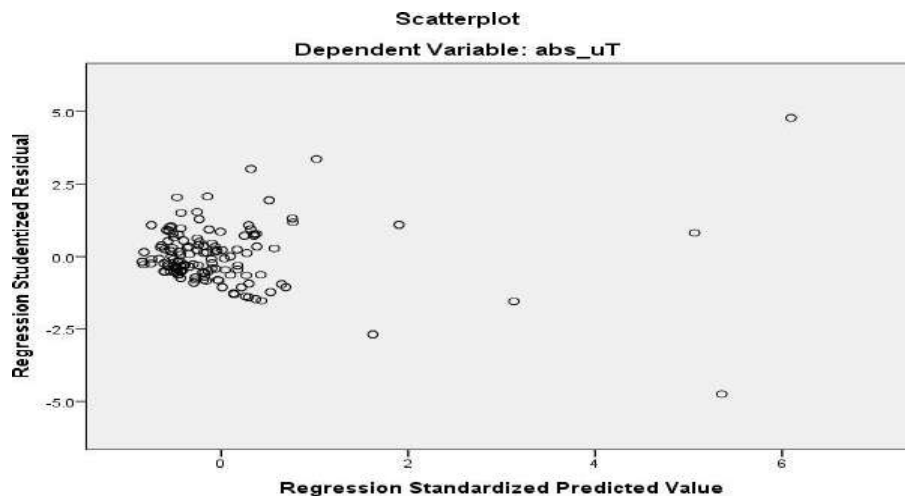
Model	Durbin-Watson
1	1.852

- a. Predictors:(Constant),PERTUMBUHAN\_EKONOMI,PAD,DAU
- b. DependentVariable:abs\_uT

Based on the table above, the Dw value is 1,852, and the DU value is 1.7364 and the 4-du value is 2.148. From these results, it shows that  $du < DW < 4-DU$  so that it can be concluded that there is no autocorrelation.

**Heteroscedasticity Test**

- 1. Graph Test



**Gambar Scatterplot**

Judging from the scatterplot diagram, it tends to be seen that the spread of focus looks irregular, does not form a clear line design and the spread is above or below the number 0, the y-axis. This information shows that there is no heteroscedasticity. To find out these side effects, Park's test was completed.

**Heteroscedasticity Test Results**

**Coefficients<sup>a</sup>**

Model	T	Sig.
1 (Constant)	2.264	.025
PAD	1.273	.205
DAU	7.506	.000
PERTUMBUHAN_EKONOMI		
HAN_EKONOMI	-.518	.605
OMI		

- a. DependentVariable:BELANJA\_MODAL



The Park test value in the table above shows a sig value > 0.05 so there is no heteroscedasticity.

#### MODEL PENELITIAN

#### Hasil Regresi Berganda

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	17,837	4,077		3.646	.000
PAD	.141	.018	.589	7.649	.000
DAU	.054	.019	.215	2.788	.006
PERTUMBUHAN_EKONOMI	-,070	,127	-.231	-3.764	.000

a. Dependent Variable: abs\_Ut

Capital Expenditure = 17,837 + 0,511 PAD + 0,054 DAK - 0,070 Economic Growth

1. The constant value is 17.837 units, so PAD, DAU, Economic Growth will increase by 17.83 one unit in Capital Expenditures
2. The constant value is 17.837 units, so PAD, DAU, Economic Growth will increase by 17.83 one unit in Capital Expenditures. Nilai koefisien regresi PAD adalah 0,141 satu satuan maka PAD akan meningkat sebesar 0,141 satu satuan pada Belanja Modal berasumsi variabel lainnya konstan atau nol
3. The value of the DAU coefficient is 0.054 one unit and then the DAU will increase by 0.054 one unit in Capital Expenditure assuming the other variables are constant or zero. Nilai koefisien
4. Economic Growth is -0.070 then Economic Growth will increase and Capital Expenditure will decrease by 0.070 one unit in Capital Expenditure assume other variables constant or zero.

#### Coefficient of Determination Test

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685 <sup>a</sup>	.469	.457	1.062E8

a. Predictors: (Constant), PERTUMBUHAN\_EKONOMI, PAD, DAU

b. Dependent Variable: BELANJA\_MODAL

Based on the table above, the value of Adjusted R Square is 0.457, so it can be seen that 45.3% of changes in Capital Expenditures can be explained by the PAD, DAU, and Economic Growth variables, while the remaining 54.3% is influenced by other variables not studied.

#### Uji Hipotesis

#### 1) Uji (Parsial)

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	53418686.876	14651538.405		3.646	.000
PAD	.141	.018	.589	7.649	.000
DAU	.054	.019	.215	2.788	.006
PERTUMBUHAN_EKONOMI	9437891.638	2507578.635	.231	3.764	.000

a. Dependent Variable: abs\_Ut



1. The PAD variable partially has a dtcount of 7.649 and a ttable value of 1.9567, then tcount>ttable a significant value of 0.000 <0.05d, indicating that H0 is rejected and Ha is partially accepted. PAD has a positive and significant impact on d Capital Spending.
  2. Variabel DAU secara parsial thitungsebesar 2,788danniilai ttabelsebesar 1,9567maka thitung<ttabelnilai signifikan 0,006>0,05 menunjukkanH0 diterima danHaditolak secaraparsialDAUt berdampaksecarapositifdansignifikanterhadapBelanjaModal.
  3. Partially Economic Growth Variable dtcount is 3.764 and dttable value is 1.9567, then tcount<ttable significant value 0.000 > 0.05 indicates dH0 is accepted and Ha is partially rejected. Economic growth has a negative and significant impact onCapital Expenditure.
- 2) ) F Test (Simultaneous)

## ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.277E18	3	4.257E17	37.722	.000 <sup>a</sup>
Residual	1.445E18	128	1.129E16		
Total	2.722E18	131			

- a. Predictors:(Constant),PERTUMBUHAN\_EKONOMI,PAD,DAU
- b. DependentVariable:BELANJA\_MODAL

Based on the table above, simultaneously PAD, DAU, and Economic Growth have an effect on Capital Expenditure with a significance value of 0.00 where the value is <0.05.

## IV. DISCUSSION

**Effect of PAD on Capital Expenditure**

The research shows that PAD partially affects Regency/City Capital Expenditures in North Sumatra with an importance value of 0.00 where the value is <0.05, and this indicates that speculation 1 (H1) is recognized.

The results of this study are in sync with the results of Baldrick's research (2017) and Made Ari Ni PutuSanti's research (2018) which states that where PAD affects Capital Expenditures.

This study shows that the development of facilities and infrastructure in each district/city in North Sumatra Province depends on PAD, because facilities and infrastructure are spent through Capital Expenditures.

**The Effect of DAU on Capital Expenditure**

The research shows that the DAU partially affects the Capital Expenditures of Districts/Cities in North Sumatra with an importance value of 0.00 where the value is <0.05, and this indicates that speculation 1 (H1) is recognized.

The results of this study are in sync with the results of Rendy Armando's research (2018) which states that PAD affects Capital Expenditures.

This study shows that the DAU is obtained from the transfer of the central government's APBN which is obtained to support the finances of districts/cities in North Sumatra for capital expenditures. This happens because local governments still need high funds to improve the development of facilities and infrastructure in the regions, so it can be concluded that the higher the DAU, the higher the allocation of Capital Expenditures.

**PengaruhPertumbuhanEkonomiTerhadapBelanjaModal**

The research shows that Economic Growth partially significantly affects Regency/City Capital Expenditures in North Sumatra with an importance value of 0.00 where the value is <0.05, and it means that speculation 1 (H1) is recognized.

The results of this study are in sync with the results of research by PattaRapanna et al. (2017) and Darwanto (2017) which state that Economic Growth affects Capital Expenditure.

This study shows that economic growth in an area has a very strong effect on capital expenditure. If an area experiences significant economic growth, capital expenditure will increase to improve people's welfare.

## REFERENCE

- [1]. M Rahmawati,CMFajar.(2017). The Effect of Regional Original Income and Balancing Funds Againts Bandung City Capital Expenditure.*Journal of Accounting Studies*.
- [2]. Central Bureau of Statistic.(2017).*North Sumatra Province in Figures2017*. Provincial North Sumatra/BPS-Statistic of North Sumatra Province.

- [3]. Central Bureau of Statistic.(2018).*North Sumatra Province in Figures2018*.Provincial North Sumatra/BPS-Statistic of North Sumatra Province.
- [4]. Central Bureau of Statistic.(2019).*North Sumatra Province in Figures2019*.Provincial North Sumatra/BPS-Statistic of North Sumatra Province.
- [5]. Central Bureau of Statistic.(2020).*North Sumatra Province in Figures2020*.Provincial North Sumatra/BPS-Statistic of North Sumatra Province.
- [6]. Indonesia. (2010).*Minister of Home Affairs Regulation Number 71 of 2010 concerning Guidelines Regional Financial Management*.
- [7]. Ghozali,I. (2017). *Multivariaten Analysis Application with IBM SPSS 22 program*.Semarang:Dipenegoro University.
- [8]. FitriD.Jayanti (2020). The Effect of Regional Original Revenue,General Allocation Funds,and Allocation Funds specifically for Capital Expenditures in districts/cities of Central Java province.*Jurnalemba:journal of economic research,management,business and accounting*.
- [9]. VtVanesha, S Rahmadi. (2019). The Influence of Regional Original Income,General Allocation Funds on Capital Expenditures in districts/cities in Jambi province.*JournalParadigma Economy*.
- [10]. Montolalu,J. (2017). Analysis of Regional Original Revenue and Contribution to the Minahasa Regency Regional Revenue and Expenditure Budget South.*Journal of Business Administration (JAB)*.
- [11]. Mawarni,DarwanisSyukryAbdullah.The Effect of Regional Original Income and Allocation Funds General on Capital Expenditure and Its Impact on Economic Growth Regions (Studies in Regencies and Cities in Aceh) ISSN Accounting Journal 2302-0164.Volume 2,No 2.
- [12]. Indonesia. (2019).*Domestic Regulation of the Republic of Indonesia Number 38 of 2018 Concering Guidelines ForPrepaaration of Regional Revenue and Expenditure Budgets for the Fiscal Year 2019*.