The Effect of Local Revenue and Government Spending on Economic Growth : An Empirical Studies on North Sulawesi Indonesia with Dinamic Panel Data

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Abstract: This study aims to test and analyze the effect of local revenue dan government spending to economy growth. The study was conducted in the districts / cities located in North Sulawesi province with a total of 15 districts / cities. The data taken is after the year 2008, due to the district / city is the last bloomed in 2008. The data used is quantitative data is the data in the form of numbers. This study uses secondary data and the time series data from 2008 to 2015. In this study using panel data which is a combination of time series and cross section. For the time series data taken from 2008 to 2015. And for the cross section data taken from all districts / municipalities in North Sulawesi province, the total of its total 14 districts / cities (10 districts and 4 cities). A total of 90 observations obtained in this study, ie 15 districts / cities with the observation time time series from 2008 to 2015. The data used in this research is secondary data obtained from, the Central Statistics Agency (BPS) National. Inferential statistical methods used in the analysis of research data is Dynamic panel data (DPD). Reasons for using DPD, considering that the sample size is relatively small. This study examined the effect of exogenous variables is local revenue and government spending to economy growth. Finally, result shows that local revenue and government spending have a significant relation both of them.

Keywords: Economic Growth, Government Spending, Local Revenue

I. INTRODUCTION

Development is essentially a process of continuous change towards progress and improvement to be achieved, development must be viewed as a multi-dimensional process that encompasses fundamental changes to social structure, attitudes of society and national institutions while still pursuing accelerated economic growth, handling income inequality as well as poverty alleviation (Todaro, 2006). Kuznets (1965)

defines economic growth as a long-term capacity-building of a country to provide various goods and services to the population. Thus, the manifestation of economic growth is manifested in increasing long-term or sustainable output (Todaro, 2006).

Local Original Revenue (PAD) is revenue derived by regions from sources within its own territory levied according to local regulations in accordance with applicable laws and regulations (Halim, 2004: 94). Local revenue sector plays a very important role, because through this sector can be seen how far a region can finance the activities of the government and the development of its own region.

The government can boost PAD through levies that are levy and tax on infrastructure that has been built for public services sourced from funds that have been allocated in the form of capital expenditure budget in the APBD. So that local governments can continuously spur the growth of its financial performance. The amount and increase of PAD contribution will play a significant role in the independence of local government which can be said as the performance of local government (Florida, 2007).

Government expenditure is part of fiscal policy (Sadono Sukirno, 2000), a government action to regulate the economy by determining the amount of government revenues and expenditures annually, as reflected in the State Budget (APBN) document for national and Regional Revenue and Expenditure Budget (APBD) for the region. The objective of this fiscal policy is in order to stabilize prices, output levels and employment opportunities and spur or encourage economic growth.

The Indonesian economy in 2015 grew 4.80 percent, lower than previous government estimates. In fact, the achievement was the lowest in the last five years. One cause is the end of the commodity boom so that export performance slumped. However, amidst the declining income of the provinces of commodity producers, Sulawesi is still able to grow above the national economic growth rate.

However, not all islands feel the economic slowdown in 2015. Java, Bali, NTT, Sulawesi, Maluku and Papua have grown above the national economy. Java as the largest contributor to the economy recorded an economic growth of 5.85%, while Bali and Nusa Tenggara grew 10.29%. One thing that should be a concern, Sulawesi's economic growth reached 8.18%. In the case of a number of provinces on the island of Sulawesi rely solely on raw material commodities.

Tabel 1.1
Economic Growth in Indonesia and Sulawesi 2010-2016 (%)

Year	Indonesia	Sulawesi
2010	6.38	8.45
2011	6.17	8.86
2012	6.03	9.01
2013	5.58	7.61
2014	5.02	6.87
2015	4.88	8.39
2016	5.02	7.15

Source: BPS, 2016

Tabel 1.2
Economic Growth by Province in Sulawesi 2010-2016 (%)

Province	2010	2001	2012	2013	2014	2015	2016
North Sulawesi	5.84	6.17	6.86	6.38	6.31	6.12	6.17
Central Sulawesi	9.37	9.82	9.53	9.55	5.11	15.56	10.32
South Sulawesi	8.63	8.13	8.87	7.63	7.57	7.15	7.41
Southeast Sulawesi	8.10	10.63	11.65	7.51	6.26	6.88	6.51
Gorontalo	7.56	7.71	7.91	7.68	7.29	6.23	6.51
West Sulawesi	11.23	10.73	9.25	6.94	8.73	7.37	6.03
Indonesia	6.38	6.17	6.03	5.58	5.02	4.88	5.02

Source: BPS, 2016
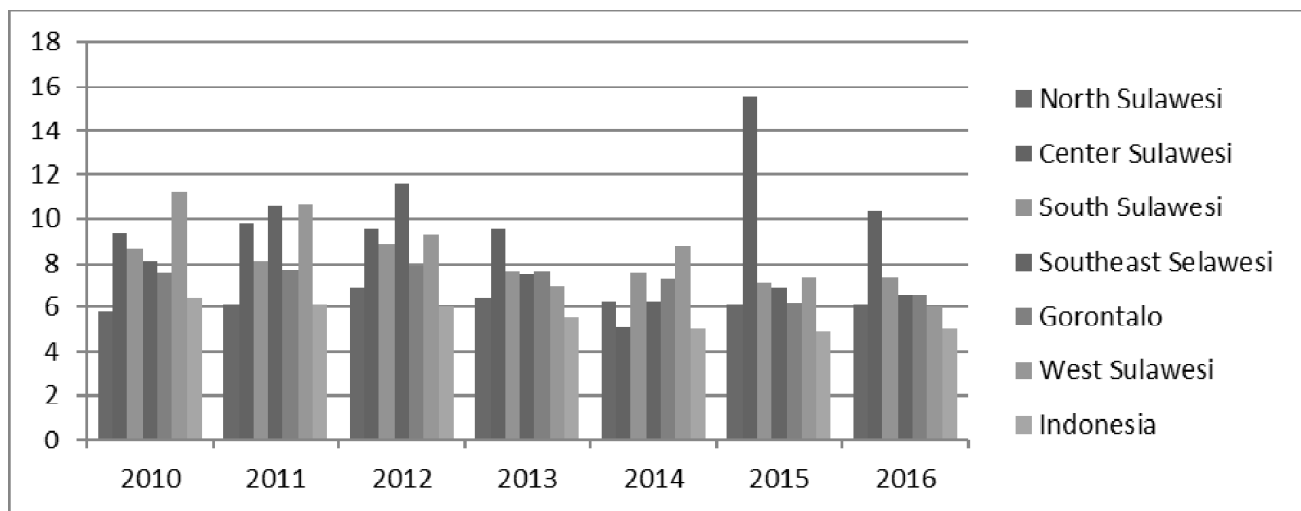
Gambar 1.2: Economic Growth by Province in Sulawesi 2010-2016

Financial performance may be affected by the components contained in the APBD realization report consisting of revenues and expenditures. Of the many components contained in the APBD realization report is believed that the financial performance can be affected by capital expenditures and local revenue (PAD), on the grounds that the more capital expenditure the higher the productivity of the economy in this case is the performance of local government. The government can increase revenue through taxes and taxes on infrastructure that has been built for public servants sourced from funds that have been allocated in the form of capital expenditure in APBD. So that local governments can continuously spur the growth of its financial performance.

Local Own Revenue (PAD) becomes the backbone of regional financing. The ability of an area to dig in PAD will affect the development and development of the area. In its contribution to APBD where the greater the contribution of PAD to APBD, it will be less dependence on central government aid. Source of finance derived from PAD member meaning is very important for local government because it can be used in accordance with the wishes of local governments in running the wheels of government to prosper the community.

Tabel 2
District Original Revenue (PAD) in North Sulawesi Province 2010-2015(million)

Regency / City	2010	2011	2012	2013	2014	2015
Bolaang Mongondow	5.135	5.535	10.525	20.412	32.332	36.757
Minahasa	24.660	23.809	22.716	31.964	58.778	62.245
Kep. Sagihe	23.768	28.506	28.470	32.165	52.202	52.121
Kep. Talaud	8.230.735	8.735	10.560	12.311	21.200	24.026
Minahasa Selatan	9.125.345	9.250	10.260	13.969	25.750.	31.965
Minahasa Utara	10.981	15.720	18.975	36.090	49.283	56.487
Bolaang Mongondow Utara	8.754	9.010	9.220	9.284	10.028	14.140
Minahasa Tenggara	4.430	4.939	4.844	8.920	14.633	17.776
Bolaang Mongondow Selatan	6.001	6.212	7.200	7.300	12.276	16.014
Bolaang Mongondow Timur	9.109	9.234	9.303	8.302	10.051	12.294.
Manado	90.828	134.721	178.178	215.871	263.392	282.525
Bitung	17.344	18.875	25.394	38.435	83.520	75.000
Tomohon	12.190	12.556	13.756	13.945	20.100.	24.657
Kotamobagu	13.577	13.876	14.105	14.517	24.664	31.288

Source: BPS, 2016

Tabel 3
District / City Government Expenditure in North Sulawesi Province Year 2010-2015 (million))

Regency / City	2010	2011	2012	2013	2014	2015
Bolaang Mongondow	445.320	477.691	575.120	650.430	668.160	743.734
Minahasa	845.430	821.430	850.345	897.090	915.309	991.709
Kep. Sagihe	472.329	494.026	539.847	598.076	726.757	712.812
Kep. Talaud	684.492	733.089	777.386	550.979	690.481	685.975
Minahasa Selatan	515.111	521.340	525.891	561.243	689.168	880.310
Minahasa Utara	195.870	501.041	586.148	591.135.	654.934	802.520
Bolaang Mongondow Utara	335.567	352.454	354.900	362.333	392.390	560.000
Minahasa Tenggara	282.996	430.853	406.754	442.697	514.588	585.459
Bolaang Mongondow Selatan	325.060	332.560	335.655	347.538.	382.508	511.813
Bolaang Mongondow Timur	313.890	315.454	325.650	346.331	388.794	495.216
Manado	678.486	876.626	929.713	1.087.436	1.283.771	1.478.996
Bitung	458.915.	458.915	1.077.291	716.727	876.988	2.545.656
Tomohon	293.870	357.139	374.925	451.402	514.569	555.223
Kotamobagu	375.345	401.908	415.323	430.758	485.033	527.531

Source: BPS, 2016

Landau (2011) proves that military spending on education and education is negatively correlated with economic growth, while education is strongly correlated and government investment is positively correlated

but in significant. Lin (2007) said that government spending will boost economic growth (GDP) at a declining rate. Lin also stated that Wagner's Law applies only to developed countries. Government expenditures can contribute to economic movement through employment and capital goods in the field of social infrastructure development (health, education and public / public facilities) budgeted in development expenditures. Through routine budgets, especially the routine personnel expenditure in the form of salaries, the government can boost the economy. Alkadri (2006) in his research entitled: Sources of Indonesia's economic growth 1969-1996. The results of the research: (1) Variables that positively affect economic growth: foreign aid, FDI, PMDN, Taxes, Government Expenditures and labor force growth. (2) .Variable variables affecting economic growth: savings, exports and imports. Yuliarmi (2008) in his research entitled The Effect of Household Consumption, Investment and Government Expenditure on GRDP of Bali Province. The dependent variable used in this study is the economic growth of Bali Province (1994-2005), while the independent variables used are household consumption, investment and local government expenditure. The analysis used is simple linear regression using OLS method. The result of the research is independent variable which is household consumption, investment and government expenditure have positive effect to economic growth of Bali province.

Based on the facts, theories and empirical studies, in this study raised some substantial problems to be solved that is: Do Pendapatan Asli Daerah (Pendapatan Asli Daerah / Pendapatan Asli Daerah / Pendapatan Asli Daerah / PAD) affect the economic growth of regencies / cities in North Sulawesi Province, Does Government Expenditure affect the economic growth of regency / city in North Sulawesi province? The objectives of this study are to examine and analyze the effect of Pendapatan Asli Daerah (PAD) and Government Expenditure on economic growth of regencies / cities in North Sulawesi Province.

II. RESEARCH METHODOLOGY

Currently in North Sulawesi Province there are 11 districts of Minahasa, Sangihe Islands, Talaud Islands, South Minahasa, North Minahasa, North Bolaang Mongondow, South Minahasa, South Bolaang Mongondow, East Bolaang Mongondow, Sitaro and 4 cities of Manado, Bitung, Tomohon and Kotamobagu. Of the 15 districts / cities, one district did not participate in the population of Sitaro district, due to unavailability of data. Given the data used in this study is the data of Original Income Daearah (PAD), and data of Government Expenditure. Economic Growth in the form of time series 2008-2015, then the data taken starting from 2008, with the stipulated that the most recently expanded districts / cities is the year 2008 that is Tomohon city. The data used in this study is secondary data. The data used are cross section data from 13 districts and 4 cities and time series data from 2008 to 2015. Specifically, 2009 data is time lag data. Thus the data in this study is the data panel (pooled data) with the number of observations of 98 observations that is 7 (years) X 14 (District / City).

Classification of Variables

Original Revenue (PAD) or X1 Government Expenditures or X2, classified as Exogenous Variables and acts as Independent Variables, are variables whose diversity is not influenced by other independent variables within the model and no causal relationship is established. Exogenous variables are beginner effect to other variables. Economic Growth or Y1 is an endogen-dependent variable and acts as a variable whose diversity is explained by independent variables.

1. Local Original Revenue (PAD) is revenue derived by the region from sources within its own territory levied according to local regulations in accordance with applicable laws and regulations (Halim, 2004: 94). PAD is calculated based on Central Bureau of Statistics (BPS) of North Sulawesi Province.

2. Government expenditure is part of fiscal policy, which is a government action to regulate the economy by determining the amount of government revenues and expenditures annually, as reflected in the State Budget and Revenue Budget (APBN) and Regional Expenditure (APBD) for the region. The objective of this fiscal policy is in order to stabilize prices, output levels and employment opportunities and spur or encourage economic growth. (Sadono Sukirno, 2000). Government Expenditure is calculated based on Central Statistics Agency (BPS) data of North Sulawesi Province.

3. Economic growth (Y1) is the development of activities in the economy that cause goods and services produced in society increases and the prosperity of society increases (Sukirno, 2000).

Through GRDP at constant prices stated in the percentage of economic growth is calculated as follows:

$$\textbf{D PDRB (t)} = \frac{\text{PDRB}_t - \text{PDRB}_{(t-1)}}{\text{PDRB}_{(t-1)}} \text{ x } 100\%$$

Keterangan : PRDB t $\qquad$ = GRDP year t

$\qquad\qquad$ PDRB(t-1) $\qquad$ = GRDP year t-1

$$Y_{it} = \beta_0 + \beta_1 \text{ GPD } \beta_{it-1} + \beta_2\, PAD_{it} + \beta_2\, BP_{it} + \mu_{it}$$

Where :

$GPD\beta_{it-1}$ $\qquad$ = Economic growth for individual I and time (t) of previous year

PAD_{it} $\qquad$ = Local Original Revenue for individual I and time t

BP_{it} $\qquad$ = Government Expenditure for individual I and time t

μ_{it} $\qquad$ = *error term*

The next step is to find the estimated value of the equation above by using Dynamic Data Panel (DPD) method and data processing using Stata 13 program software.

Dynamic Panel Data (DPD)

Panel data (pooled data) is a data set containing individual sample data (household, company, district / city, etc.) at a certain time period. In this type of data we collect orbservasi happy according to the individual collected for some specified time in the sample. In other words, the data panel is a combination of time-series data and cross-section data. Panel data is very useful data because this type of data helps researchers to explore the activities of economic actors not only between individuals but economic behavior across time.

The Dynamic Panel Data Model can be written as follows:

$$Y_{it} = \alpha_i + \beta' x_{it} + \varepsilon_{it}$$

Or for other formats can be written as:

$$Y_{it} = \alpha_i + \sum_{k=2}^{k} \beta x_{it} + \varepsilon_{it}$$

While the dynamic model is written as:

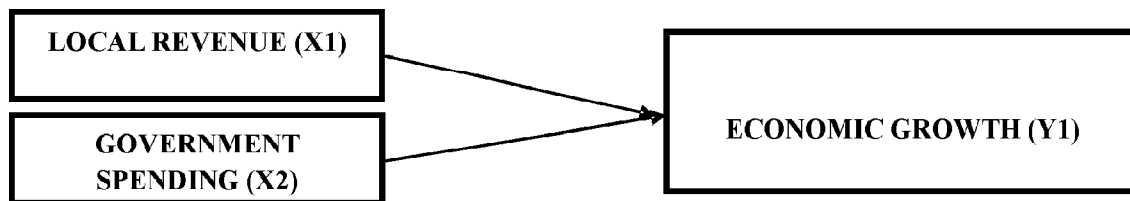$$Y_{it} = \alpha_i + \beta' x_{it} + \partial Y_{it-1} + \varepsilon_{it}$$

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┌─────────────────────────┐
│  LOCAL REVENUE (X1)      │─────┐          ┌──────────────────────────┐
└─────────────────────────┘     │          │                          │
┌─────────────────────────┐     ├─────────▶│  ECONOMIC GROWTH (Y1)    │
│     GOVERNMENT           │─────┘          │                          │
│    SPENDING (X2)         │                └──────────────────────────┘
└─────────────────────────┘
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Figure 1: Conceptual Framework

Hypothesis: Based on the description on the background, problem formulation, research objectives, theoretical study then the hypothesis that will be proven is: whether Pendapatan Asli Daerah (PAD) and Government Expenditure significantly influence the economic growth of regencies / cities in North Sulawesi Province.

Hypothesis testing: This study aims to determine the influence of local revenue (PAD), capital expenditures, government spending, educational facilities, health facilities, educational apparatus and health apparatus to economic growth in North Sulawesi. The analysis model used in this research is the GMM panel (Generalized Method of Moments). The estimation results can be seen in the table.

Table 7
Estimated GMM Panel Results

Variable	Coefficient	Std. Error	z-statistics	Prob.
$gpdrb_{t-1}$	-0.3501*	0.06137	-5.71	0.000
lnpad	1.5822*	0.31681	4.99	0.000
lnbp	-2.5301*	0.40275	-6.28	0.000
cons	21.2273	20.26486	1.05	0.295
Wald test	636.15			
	(0.000)			
Sargan test	4.488			
	(0.992)			
AR(1)	-2.256			
	(0.024)			
AR(2)	0.231			
	(0.818)			

information: *signifikan 1%
P-value ( )

Based on the result of GMM panel estimation, p-value of Sargan test 0.99 shows more than 10% significance level. The Sargan test results indicate that the model used is valid. The AR auto correlation test result (2) shows no auto correlation in the model. It can be seen p-value AR (2) 0.88 morethan10% significance level.

Test z (Partial): The z test on the GMM panel is performed to determine the partial effect of the independent variable on the dependent variable. From Table it can be seen that the variable lag of economic growth (gpdrbt-1) has a significant effect on the level of significance of 1% with coefficient value of -0.3501. Indigenous revenue variable (lnpad) had significant effect to economic growth at 1% level of significance with coefficient of 1.5822. This means that if local revenue (PAD) increases by 1% will increase economic growth by 1.58%. Government expenditure (INP) has a significant effect on economic growth at a significance level of 1% with a coefficient of -2.5301. This means that if government spending rises by 1%, then economic growth will fall by 2.53%.

Wald Test (Simultaneous): Wald test on GMM panel is done to know the effect simultaneously from independent variable to dependent variable. Based on the Wald test, p-value is below 1% significance level. This shows that the independent variables together influence the dependent variable.

III. EMPIRICAL FINDINGS

In the fourteen districts studied during the period of 2008 - 2015, the following findings were obtained:

1. Pendapatan Asli Daerah (PAD) has a positive and significant impact on economic growth. This positive and significant influence due to economic growth in North Sulawesi is largely sustained by household consumption expenditure. Increased revenue, easy access to credit (credit) from financial institutions, the sale of durable goods by means of credit resulted in increased public demand for durable goods. For example, the growth of motor vehicle demand in North Sulawesi averages 10% per year. The value of loans disbursed by commercial banks and rural banks in all districts increased from year to year.

2. Government spending has a negative and significant effect on economic growth. Utilization of government spending affects economic growth in the opposite direction (negative). It is seen that in North Sulawesi Province between Government Expenditure and economic growth there is an opposite negative relationship. Such facts may suggest that large government spending or increased government spending can trigger and lower the rate of economic growth. Bitung City for example, the average capital expenditure in the period 2011 to 2015 is very high (1.266 billion), with an average economic growth of 6.73% per year, but because of the impact of large government spending, the last in 2015 economic growth is the the lowest of all regencies / cities in northern Sulawesi (3.57%). Utilization of government spending triggered a decline in economic growth caused by several things for consumption such as: the purchase of goods and services to be consumed such as paying salaries, buying office equipment for use and buying gasoline for government operational vehicles, in addition to spending on infrastructure such as roads , schools, hospitals, and irrigation, providing subsidies, scholarships for victims of natural disasters.

IV. THE EFFECT OF LOCAL ORIGINAL INCOME (PAD) ON ECONOMIC GROWTH

Based on partial test with dynamic data panel method, for variable of Original Regional Revenue (PAD) (X1) have positive and significant influence to Economic Growth (Y1). This indicates that the increase or decrease of Pendapatan Asli Daerah (PAD) gives evidence of a real effect on the increase or decrease in economic growth in the districts / cities studied. Based on the proof, it can be said that the Pendapatan Asli Daerah (PAD) has an important role to increase economic growth in the districts/citie studied. The value of coefficient of Original Regional Income (PAD) (X1) on Economic Growth (Y1) is with coefficient of 1.5822 at 1% significance level which means if local revenue (PAD) increase by 1% will increase economic growth by 1.58% , as presented in Table 7. The value indicates a non-contradictory direction, in which the increase of Pendapatan Asli Daerah (PAD) has an impact on the increase of economic growth in the districts studied. The positive and significant influence of the Local Original Income (PAD) (X1) on Economic Growth (Y1) in North Sulawesi Province can be explained by empirical facts as shown in Figure 6.1.

Table 8
Progress of PAD By regency / municipality in North Sulawesi Province
Year 2010 - 2015 (Rupiah)

Regency / City	2010	2011	2012	2013	2014	2015
Bolaang Mongondow	5.135	5.535	10.525	20.412	32.332	36.757
Minahasa	24.660	23.809	22.716	31.964	58.778	62.245
Kep. Sagihe	23.768	28.506	28.470	32.165	52.202	52.121
Kep. Talaud	8.230.735	8.735	10.560	12.311	21.200	24.026
Minahasa Selatan	9.125.345	9.250	10.260	13.969	25.750.	31.965
Minahasa Utara	10.981	15.720	18.975	36.090	49.283	56.487
Bolaang Mongondow Utara	8.754	9.010	9.220	9.284	10.028	14.140
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Tomohon	12.190	12.556	13.756	13.945	20.100.	24.657
Kotamobagu	13.577	13.876	14.105	14.517	24.664	31.288

Source: BPS, 2016

At the average of high economic growth (6.36% per annum in Manado City), the average PAD revenue is high (Rp 282 billion per year) and Kabupaten Minahasa 6.17% per year with PAD of Rp. 62 Billion. Referring to the facts in these two cities and districts, it can be stated that the higher the revenue of PAD, the higher the rate of economic growth. Correlation or positive influence does not necessarily occur. Furthermore, there are 4 districts / cities (North Minahasa Regency, South Bolaang Mongondow Regency, Kotamobagu and East Bolaang Mongondow Regency) whose average economic growth is higher than the
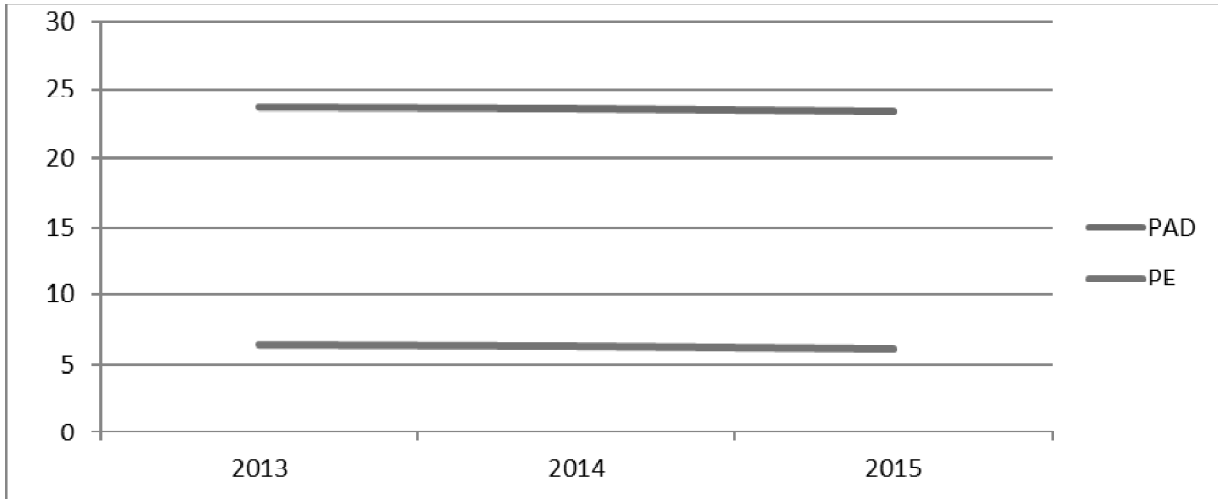
Figure 3: The Development of PAD and Economic Growth of North Sulawesi 2013-2015

average economic growth of Manado city, it turns out that the average acquisition PAD is lower than the acquisition of Manado City PAD.

According to Law No. 33 of 2004 Article 1 Paragraph 18 concerning Financial Balance Between the Central Government and Regional Government Article 6 paragraph 1 states that the Regional Original Income (PAD) comes from (1) Local Taxes, (2) Regional Levies, (3) separated regional wealth management (regional business profit) and (4) other legitimate PAD. Among the 4 (four) sources, income from taxes is its largest contribution to PAD. The contribution of local taxes to the PAD of North Sulawesi Province during the period 2010 - 2015 averaged 80.57% (regional business profit). Contributions from other sources are 9.09% (retribution), 3.90% (regional business profit) and 6.44% (other legitimate PAD). Based on this contribution, local taxes become the main buffer in funding development sourced from PAD. By 2015, North Sulawesi's PAD revenue has reached 780 billion (see table 6.2)

Table 9
Local Income Tax Realization of North Sulawesi 2011-2014 (million)

Local Tax	*2011*	*2012*	*2013*	*2014*
Motor Vehicle BBN	*214 280*	239 613	300 225	282 997
Vehicle tax	155 247	178 907	209 315	234 627
Surface Water Tax	-	2 486	1 342	1 252
Vehicle Fuel Tax	105 246	129 052	156 602	196 938
Cigarette Tax	-	-	-	69 377

Source: BPS, 2016

Based on the characteristics of the region, in North Sulawesi Province which is identical with the nickname 'wing of waving nyiur', local taxes are differentiated into several types, including: Motor Vehicle Title (BBNKB), Motor Vehicle Tax (PKB), Surface Water Tax (PAP), Motor Vehicle Fuel Tax (PBBKB), Cigarette Tax. During the period of 2010-2015, from the taxes, the most dominant tax contribution to the

provincial PAD is BBNKB (Rp 282 M), PKB (Rp 234 M), and PBBKB (Rp 196 M). Increased local taxes from 3 types of taxes, is proportional to the increase of motor vehicle ownership from year to year. Increased ownership of consumer households to motor vehicles other than due to increased revenue, also due to the ease of access to credit for motor vehicles.

According to data from the Regional Revenue Service (DIPENDA) of North Sulawesi Province, until 2015 the number of motor vehicles is 643,246 units with an average increase of about 10% per year. The growth of motor vehicle consumption is relatively large parallel to the formation of North Sulawesi GDRP which mostly ditopag domestic demand in the form of consumption and investment. Consumption spending in GRDP formation during the period 2010 - 2015 is mostly (above 50% average) derived from household consumption expenditure. This situation confirms that the economic growth of North Sulawesi is largely sustained by household consumption expenditure. Increasing consumption due to increased income and ease of obtaining loans by itself will increase the revenue of PAD. Regional Economic and Financial Statistics North Sulawesi Province publishes loan developments granted by commercial banks and BPRs from 2010 to 2015 on loan value continues to increase, both for working capital and investment loans (see table 6.6) It is certain that these disbursed loans encourage lending to consume durable goods such as motor vehicles, etc.

Table 10
Realization of Government Commercial Bank Loans in North Sulawesi
Year 2010-2015 (million)

Types of Loans	2010	2011	2012	2013	2014	2015
Working capital	*2 999 878*	3 672 941	3 856 791	4 188 903	4 364 188	4 882 804,68
Investation	936 693	1 455 608	1 172 631	1 347 647	1 419 297	2 922 063,27
Consumption	5 070 691	7 039 389	9 251 983	11 692 264	12 806 476	14 617 032,99

Source: BPS, 2016

Table 11
Realization of Private Commercial Bank Loans in North Sulawesi
Year 2010-2015 (million)

Types of Loans	2010	2011	2012	2013	2014	2015
Working capital	2.036. 584	3.671.295	4.024.153	3.362.262	2.682.043	2.682.005
Investation	907.157	1.546.647	1.818.035	1.916.299	1.283.298	1.343.424
Consumption	1.828. 059	2.492.580	2.722.385	3.145.934	2.210.758	3.122.711

Sumber: BPS, 2016

Table 12
Realization of Rural Bank Loans (BPR) in North Sulawesi Year 2010-2015 (million)

Types of Loans	2010	2011	2012	2013	2014	2015
Working capital	81.155	97.016	93.168	143.961	7.173.048	175.942
Investation	10.898	12.500	17.420	41.575	2.723.492	42.814
Consumption	193.941	345.199	509.168	550.737	15.541.915	483.942

Sumber: BPS, 2016

Table 13
Total Realization of Community Loans in North Sulawesi
Year 2010-2015 (million)

Types of Loans	2010	2011	2012	2013	2014	2015
Working capital	5.117.617	7.441.251	7.974.111	7.695.127	7.173.048	7.740.752
Investation	1.854.749	3.014.755	3.008.086	3.305.522	2.723.492	4.308.302
Consumption	7.092.691	9.877.168	12.483.536	15.388.936	14.541.915	18.223.687

Sumber: BPS, 2016

Such consumer behavior will have an impact on the dynamics of economic activity (production, consumption and distribution) which in turn will increase economic growth along with an increase in PAD revenue. The linkage of PAD loans as presented in Figure 6.1 can support the findings of this study which states that PAD earnings have a positive effect on economic growth.

Table 14
Local Own Revenue Realization (PAD) of North Sulawesi
Year 2012-2014 (000)

Type of Income	2012	2013	2014
Local tax	554.846.120	667.921.445	785.193.172
Levy Area	14.790.120	25.269.649	34.475.693
Results of Regional-Owned Companies and Regional Wealth Management	24.433.970	33.010.612	29.410.022
Other legitimate PAD	39.580.321	63.430.045	90.919.996
Locally Revenue	633.650.532	789.631.753	939.998.888

Source: BPS, 2016

In addition to the demand side (demand side), the influence of economic growth on the PAD can be studied from the supply side (supply side). Economic growth followed by increased output from production activities and increased productivity of work has an impact on increasing earnings of firms and workers. Increased public revenues are one of the factors of attraction for new producers and the expansion of enterprises and in turn economic activity takes place in high intensity. The process of economic activity has an impact on the increase of PAD. The results of this study support the findings of Adi (2006: 11) which states that PAD revenue has a positive influence on economic growth. This finding is consistent with the Saragih (2003) study which concluded that the increase in PAD is an excess of economic growth and is also consistent with BAPPENAS (2004) which states that PAD growth should be sensitive to GDP growth (economy).

V. THE EFFECT OF GOVERNMENT EXPENDITURE ON ECONOMIC GROWTH

Based on partial test with dynamic data panel method, for Government Expenditure Variable (X3) has a negative and significant effect on Economic Growth (Y1). This indicates that the increase or decrease in Government Expenditure provides evidence of a real effect on the increase or decrease in economic

growth in the districts / cities studied. Based on the proof it can be said that Government Expenditure has an important role to increase economic growth in districts / cities studied.

The coefficient value of Government Expenditure (X3) on Economic Growth (Y1) is with a coefficient of -2.5301 at 1% significance level which means if government spending increases by 1%, then economic growth will decrease by 2.53%, as presented in Table 5.7. This value indicates the opposite direction, where the increase of Government Expenditure has an impact on the increase of Economic Growth in the districts / cities studied. The positive and significant influence of Government Expenditure (X3) on Economic Growth (Y1) in North Sulawesi Province can be explained by empirical facts as shown in Figure 6.3.

Table 15
Central / District Government Expenditure of North Sulawesi Province
Year 2010-2015

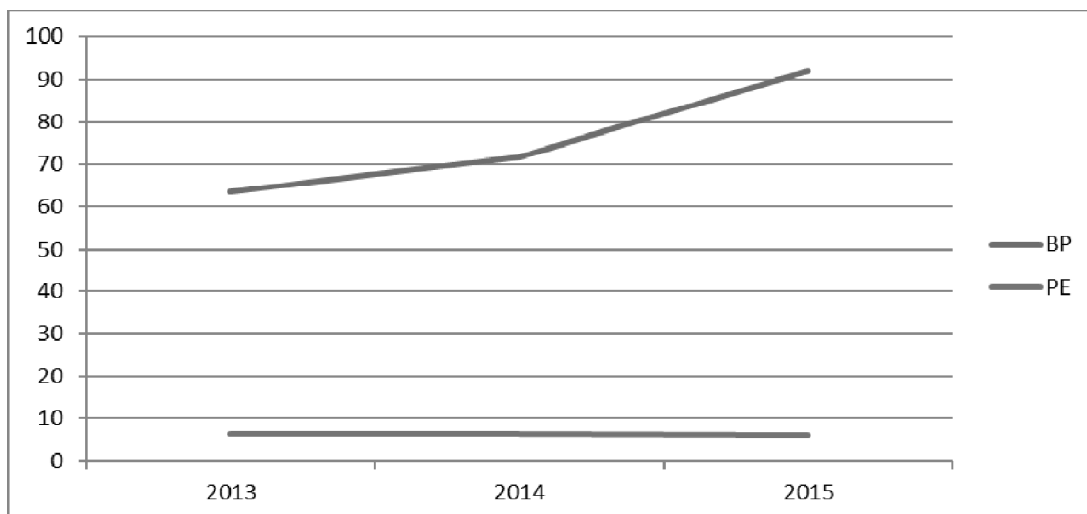| Regency / City	2010	2011	2012	2013	2014	2015
Bolaang Mongondow	445.320	477.691	575.120	650.430	668.160	743.734
Minahasa	845.430	821.430	850.345	897.090	915.309	991.709
Kep. Sagihe	472.329	494.026	539.847	598.076	726.757	712.812
Kep. Talaud	684.492	733.089	777.386	550.979	690.481	685.975
Minahasa Selatan	515.111	521.340	525.891	561.243	689.168	880.310
Minahasa Utara	195.870	501.041	586.148	591.135.	654.934	802.520
Bolaang Mongondow Utara	335.567	352.454	354.900	362.333	392.390	560.000
Minahasa Tenggara	282.996	430.853	406.754	442.697	514.588	585.459
Bolaang Mongondow Selatan	325.060	332.560	335.655	347.538.	382.508	511.813
Bolaang Mongondow Timur	313.890	315.454	325.650	346.331	388.794	495.216
Manado	678.486	876.626	929.713	1.087.436	1.283.771	1.478.996
Bitung	458.915.	458.915	1.077.291	716.727	876.988	2.545.656
Tomohon	293.870	357.139	374.925	451.402	514.569	555.223
Kotamobagu	375.345	401.908	415.323	430.758	485.033	527.531

Source: BPS, 2016

Figure 4: Government Expenditure and Economic Growth of North Sulawesi, 2013-2015

The data shows that regions with high government expenditures are high, always followed by high economic growth. The city of Manado for example, the average capital expenditure in the period 2011 to 2015 is very high (1.266 billion), with an average economic growth of 6.73% per year, and even the last in 2015 is the lowest of all regencies / cities in northern Sulawesi (3.57%). Meanwhile, in South Minasaha District with average capital expenditure (738 billion rupiahs), the economy grew an average of 6.50% per year. So also with North Minahasa District, the average of its capital expenditure is used high (665 billion rupiahs) and the economic rate of the region can grow fast and high by an average of 7.16% per year. It is seen that in North Sulawesi Province between Government Expenditure and economic growth there is an opposite negative relationship. Such facts may suggest that large government spending or increased government spending can trigger and lower the rate of economic growth. Government expenditure is part of fiscal policy (Sadono Sukirno, 2000), a government action to regulate the economy by determining the amount of government revenues and expenditures annually, as reflected in the State Budget (APBN) document for national and Regional Revenue and Expenditure Budget (APBD) for the region. The objective of this fiscal policy is in order to stabilize prices, output levels and employment opportunities and spur or encourage economic growth. According to Rostow and Musgrave in Guritno (1999), government spending reflects government policy. If the government has established a policy to purchase goods and services, government expenditures indicate the cost to be incurred by the government to implement the policy. The developmental model of the development of government spending was developed by Rostow and Musgrave Theory, which links the development of government spending to the stages of economic development that distinguishes between early, middle, and advanced stages. In the early stages of economic development, the percentage of government investment to total investment is enormous because at this stage the government must provide infrastructure such as mislanya, education, health, transportation infrastructure and so forth.

a) Musgrave also added that government spending can be assessed in various ways so that it can be divided into four classifications as follows:

   Government spending is an investment to add strength and economic resilience in the future.

b) Direct government spending provides welfare for the community.

c) Government spending is an upcoming expense.

d) Government spending is a means of providing more employment opportunities and wider purchasing power.

Government purchases of goods and services can be classified into two main categories: government spending on government consumption and government investment (Sadono Sukirno, 2004). Government consumption is the purchase of goods and services to be consumed such as paying salaries, buying office equipment for use and buying gasoline for government operational vehicles. Government investments include spending on infrastructure such as roads, schools, hospitals, and irrigation, subsidizing, scholarships for victims of natural disasters are not classified as government expenditures on national products because they are purchased for goods and services. Government consumption expenditure in Indonesia is reflected in routine expenditure while government investment expenditures are reflected in development expenditures.

Government expenditures consist of routine expenditures and development expenditures. Routine expenditures are expenditures used for maintenance and administration of government covering personnel

expenditures, goods expenditures, interest payments on debt, subsidies and other routine expenditures. While expenditure development is expenditure that is used to finance development in economic, social and general and that is to increase public capital in the form of development of both physical and non physical infrastructure which is executed in certain period. In this case for education and development expenditure included in the government expenditure for development.

- Some causes of an increase in government spending (Suparmoko, 2003):
  Expenditures on goods and services due to technological (technical) changes, population changes, per capita income growth and urbanization.

- Changes in the scope of transfers, transfer payments aim to balance the magnitude of income distribution resulting in increased government spending.

- Social and political factors result in individual consideration in choosing government and political decisions leading to an increase in government spending.

- The availability of tax bases, with taxation, revenues will increase which will affect the increase in government spending.

- Initial influence and war financing, in case of war, government spending will increase.

The effect of government spending on economic growth is one of the important phenomena in the economy. Government activities directly or indirectly allow for increased output through interaction with the private sector (private). The effect of public spending on economic growth depends on the type of expenditure. Total government expenditure is the total sum of budget decisions at each level of government (central-provincial-regional). At each level within the government it can have a final decision-a different manufacturing process and only a few things the government under it can be influenced by higher government (Lee Robert *et al.,* 2011).

The results of this study are consistent with the findings of Lin (1994), in which he concluded that high growth rates can be achieved through high levels of government spending.

The findings in this study also support Barro's (1990) opinion, he argues that government spending on investment and other productive activities can positively affect economic growth. But in some ways government spending actually hampers economic growth. According Barro, that the contribution of productive spending will have a positive effect on economic growth and vice versa for unproductive spending will negatively affect economic growth.

The results of this study also support and in line with Harrod-Domar's opinion, which, according to Harrod-Domom, that various government spending will have a positive impact on economic growth. The main aspect developed in this theory is the role of investment that has a positive impact through multiplier effect on aggregate demand and aggregate supply through influence in production capacity.

VI. CONCLUSION

Based on the analysis of the results and discussions on the effects of Local Own Revenues (PAD), Government Expenditures the following conclusions can be drawn:

1. Simultaneously (simultaneous), Local Original Income (PAD), Government Expenditure, have a significant effect on economic growth. These results are as expected and support the hypothesis

2. Local Original Income (PAD) has a significant effect on economic growth. This result supports the first hypothesis. This means the changes in the Local Revenue (PAD) both from the demand side and supply side have a big effect on economic growth. A growing economy with a surge in most household consumption, increased incomes, high consumption of durable imported goods and ease of access to loans, could explain why the effects of Pendapatan Asli Daerah (PAD) significantly on economic growth.

3. Government spending has a negative and significant impact on economic growth. This result supports the third hypothesis. It is seen that in North Sulawesi Province between Government Expenditure and economic growth there is an opposite negative relationship. Such facts may suggest that large government spending or increased government spending can trigger and lower the rate of economic growth. Utilization of government spending triggered a decline in economic growth caused by several things such as: the purchase of goods and services to be consumed such as paying salaries, buying office equipment for use and buying gasoline for government operational vehicles, in addition to spending on infrastructure such as roads, schools, hospitals, and irrigation, providing subsidies, scholarships for victims of natural disasters.

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