

Analysis of Regional Original Income Effects, Balance Funds, Consumption and Labor Force Participation Rate for Economic Growth in North Sumatera Province

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ABSTRACT

In the era of Regional Autonomy, good governance has become an inevitable existence and absolutely must be fulfilled, where the two most important variables of good governance are transparency and accountability at the level of budget administrative policies. The purpose of this study is to analyze and determine the effect of Local Revenue (PAD), Balance Fund (DP) and Community Consumption Level (KONS) and Labor Force Participation Rate (TPAK) on Economic Growth (PE) in the Regency/City of North Sumatera Province. By using secondary data from 2013-2017 as well as by combining times series data combined with cross section or better known (pooled data/panel data). The results showed that the cost of income and TPAK had a positive and significant effect on district/city PE in North Sumatra Province, Consumption has a negative and significant effect on district / city PE in North Sumatra Province, while the PAD and DP have a negative and not significant effect on the regency / city of North Sumatra Province. Estimation results also show that the Labor Force Participation Rate variable has the greatest influence on the Economic Growth model compared to the variable Local Revenue, Cost of Revenue and Consumption in the districts / cities of North Sumatra Province.

Keywords: PAD, DP, KONS, TPAK, PE, Time Series, Cross Section, Pooled, Panel.

INTRODUCTION

Regional autonomy is one of the policies carried out by the government in order to address regional problems in managing its regional resources, so that it will make local governments have full authority to mobilize regional potential independently and to achieve regional development goals. The regional autonomy policy will bring the government closer to the people in terms of public services so that excellent service will be created properly. This is certainly based on the assumption that the district / city government has a better understanding than the central government (Kuncoro, 2004).

In Indonesia, the implementation of fiscal decentralization began to be implemented since January 1, 2001. According to Robert A. Simanjuntak (2002) the implementation of fiscal decentralization basically has several general targets, namely: 1) to fulfill regional aspirations regarding the control of the sources of state finance; 2) encourage regional financial accountability and transparency; 3) increasing community participation in the regional development process; 4) reduce inequality between regions; 5) ensure the implementation of minimum public services in each region; 6) improve public welfare in general.

Through regional autonomy and fiscal decentralization, regional governments have the authority to explore revenue and carry out the role of allocation independently in setting development priorities. It is expected that with autonomy and fiscal decentralization can be more evenly distributed development in accordance with your wishes to develop regions according to their respective potential. In addition, fiscal decentralization also encourages people to participate more, initiate and be creative in development. In addition, fiscal decentralization can improve the allocation of productive resources through shifting roles in public decision making to the lowest level of government that has the most complete information.

In the era of Regional Autonomy as it is today, good governance is something that can not be negotiable and its existence must be fulfilled. Where the two most important variables of good governance are transparency and accountability at the level of budget administrative policies. The spirit of decentralization, democratization, transparency and accountability has become very dominant in coloring the process of government administration in general and the process of managing regional finances in particular. Local governments in managing their revenues are always demanded to be more capable of being independent so that the process of regional development restructuring can be carried out in a sustainable manner in accordance with the priorities and needs of each region with national development targets set through short-term and long-term development plans.

In the implementation of national development the role of local governments in utilizing the resources available in their respective regions is very much needed as an effort to optimize the capabilities of their regions. For this reason, the improvement must be supported by an integrated and planned development pattern so that effective and sustainable development will be realized. Regional economic

development is a process of integration between the regional government and the community in managing existing resources and forming a partnership pattern between the regional government and the private sector to create new jobs and stimulate the development of economic activities in the region (Arsyad, 1997; 108).

Seeing the high effectiveness of the implementation of regional autonomy and fiscal policy, the government issued Law No.32 of 2004 in lieu of Law No.22 of 1999 concerning Regional Government, and Law No.33 of 2004 superseded Law No.25 of 1999 concerning Fiscal Balance between the Central Government and the Regional Government. With the enactment of these two laws, it will give proportional and full authority or responsibility to the regional governments in carrying out regional development.

These laws and regulations are very much needed considering that so far the policy has a centralistic nature where the central government is more dominant in regulating regional development so that the increase in development is less significant, in addition to the increasingly complex problems faced by the central government making the government carry out regional fiscal and autonomy policies since January 2001. the existence of regional autonomy, the regional government will be easier and more effective in managing existing resources so that economic growth and the welfare of the people will always be the main goal of each region to be achieved properly.

In Law Number 33 of 2004 it is stated that the establishment of the Law on Financial Balance between the Central Government and Regional Governments is intended to support funding for the transfer of functions to the Regional Governments regulated in the Law on Regional Governments. The funding follows the principle of money follows function, which implies that funding follows the government function which becomes the obligation and responsibility of each level of government.

The sources of funding for the implementation of the Regional Government consist of Regional Original Revenues, Balancing Funds, Regional Loans, and Other Legitimate Revenues. The Balancing Fund is a regional funding sourced from the State Budget consisting of Revenue Sharing Funds, General Allocation Funds, and Special Allocation Funds. The Balancing Fund is not only intended to assist the region in funding its authority, it also aims to reduce the imbalance of government funding sources between the center and the regions and to reduce inter-regional government funding gaps. The three components of the Balancing Fund are a system of fund transfers from the government and are a unified whole.

The positive impact of the implementation of fiscal decentralization on the rate of economic growth, can be seen from the regional economic development in North Sumatra Province. Where North Sumatra Province consists of 25 districts and 8 cities previously only 17 districts / cities have a population based on BPS data in 2017 around 14,262,147 lives and has a fairly large number of regional expansion, namely 16 regencies / cities as a result of the division which results in high fiscal capacity obtained from the central government for regions which is expected to provide better public services.

According to Halim in Erlangga A. Landiyanto (2005), the main characteristics of an area capable of implementing an autonomy are (1) regional financial capability, which means the region has the ability and authority to explore financial resources, manage and use its own finances to manage the government; (2) dependence on central assistance must be as minimal as possible, therefore, Regional Original Revenue must be the largest financial source supported by central and regional financial balance policies. PAD reflects local taxing power as a necessary condition for the realization of broad regional autonomy. So the desire of the region to increase revenue from taxes and levies is legal by staying in

compliance with the principle of state finance (taxation) so that taxes and distribution areas are not distorting and cause economic inefficiencies (Robert A. Simanjuntak, 2005).

The balancing fund is the result of central government policy in the field of fiscal decentralization for the sake of fiscal balance between the center and the regions, which consists of Revenue Sharing (tax and natural resources), General Allocation Fund, Special Allocation Fund.

The financial balancing policy or emphasis on four main objectives, namely: (a) providing a source of funds for the autonomous region to carry out the functions assigned are its responsibility; (b) reducing the fiscal gap between the central government and regional governments, and between regional governments; (c) increasing welfare and public services and reducing disparities in welfare and public services between regions; and (d) increase efficiency, effectiveness and accountability in the management of regional resources, especially financial resources. Balancing Funds are funds sourced from APBN revenues allocated to the regions to fund regional needs in the context of decentralization, which consists of Revenue Sharing, General Allocation Funds, and Special Allocation Funds. The Balancing Fund is not only intended to assist the region in funding its authority, it also aims to reduce the imbalance of government funding sources between the center and the regions and to reduce the gap in government funding between regions.

Economic development, which is influenced by a number of macro and micro indicators, has the same goal, which is for the welfare of the community. One indicator used is the employment indicator that refers to employment data. The higher the workforce absorbed in an area shows that the area is more able to prosper the community.

The North Sumatra Provincial Government in implementing regional autonomy and fiscal decentralization

policies have sought to implement it based on the needs of each district / city area so as to create a prosperous society. Welfare achieved is not only reflected through high economic growth but is supported by meeting the consumption needs that can be realized and the abundant availability of reliable human resources.

The behavior of people spending a part of their income to buy something is called consumption expenditure. Consumption is a function of disposable income. In other words, the consumption function shows the relationship between the level of consumption expenditure and the level of income that is ready to be spent (Prasetyo, 2011). If a person receives income from his work, in large or small amounts, he will definitely make a plan to spend his income, after deducting all burden of liabilities (taxes and so on). Every income that is first issued is for the purposes of final consumption (consumption that is directly providing satisfaction, if there is left over to be saved, therefore income must be spent. So it can be said that consumption is very dependent on the income generated.

In the implementation of national development, manpower has a very important role and position as an agent and development goal. In accordance with the role and position of the workforce, employment development is needed to improve the quality of labor and its participation in development and to improve the protection of workers and their families in accordance with human dignity and dignity.

Manpower development must be regulated in such a way that basic rights and protections for workers and workers / laborers are fulfilled and at the same time can create conditions conducive to the development of the business world. Employment development has many dimensions and links. The linkage is not only with the interests of the workforce during, before and after the period of work but also the relationship with the interests of employers, government, and society. For

this reason, comprehensive and comprehensive arrangements are needed, including among others developing human resources, increasing the productivity and competitiveness of Indonesian workers, efforts to expand employment opportunities, employment placement services, and fostering industrial relations.

The problem of employment in Indonesia has now reached quite alarming conditions marked by the large number of unemployed and half unemployed, relatively low and uneven income. A country can never be separated from various problems related to its citizens. Especially in countries that have a high population such as Indonesia. The issue of labor, unemployment and poverty in Indonesia has become a major problem of this nation and requires immediate treatment so as not to further convolute and hinder Indonesia's steps to become a more developed country.

According to Parhah (2002) the greater the number of workers will increase the amount of output produced in the economy. Skills (skills), level of education, creative power possessed by workers are important indicators that must be owned by workers in the production process so that it can produce optimally. This means that the higher the ability of the workforce, whether it is skill, education level, etc. will increase its productivity so that it will encourage an increase in economic growth.

The level of Labor Force Participation (TPAK) in North Sumatera Province every year seems to increase. In 2013, TPAK in North Sumatera amounted to 70.67 percent, in 2014 it dropped to 67.07 percent, then in 2015 and 2016 it increased to 67.28 percent and in 2017 again decreased to 68.88 percent. The workforce in North Sumatera up to 2017 has a high school education. The percentage of the workforce of this group reaches 36.28 percent, the workforce who are educated at the level of junior and elementary schools are respectively 21.23 percent and 20.38 percent.

The total population of North Sumatra, which constitutes the workforce in August 2017, is 6.74 million people consisting of 6.36 million people categorized as working and as many as 377,288 people categorized as unemployed. Quality labor will produce output that increases with increasing labor income. An increase in labor income will affect consumption patterns that automatically increase household consumption.

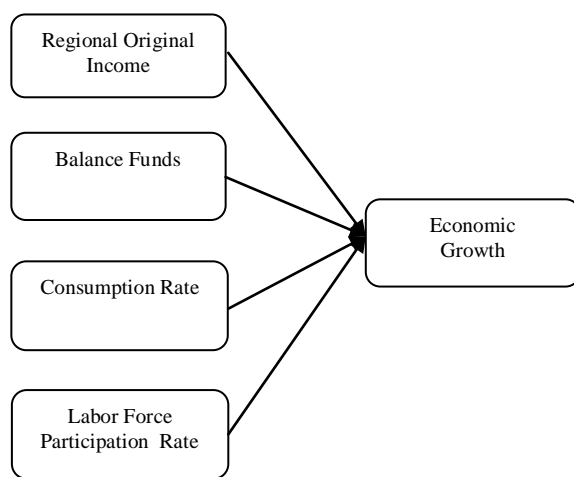


Figure 1: Conceptual Framework

Hypothesis

Based on the above research objectives, the hypotheses of this study are: Regional Original Income, Balance Funds and Consumption Rate and Labor Force Participation Rate have a positive and significant impact on Economic Growth in North Sumatra Province.

MATERIAL AND METHODS

This research focuses on the analysis of the effect of regional income, balance funds, consumption and employment for economic growth in North Sumatra Province. In this study, 4 (four) explanatory variables considered to influence economic growth in North Sumatra Province will be examined, namely Regional Original Income, Balancing Funds, Household Consumption and Labor Force Participation Rates.

This study uses secondary data released by BPS in several publications. Due to the limited serial data, this study uses pooled data (panel data), which is by combining data from 2013 to 2017 ($T = 5$) of 33 districts / cities in North Sumatra Province ($N = 33$). Then the amount of data in the study is $N \times T = 5 \times 33$ equal to 165.

The data used is only the last 5 years due to economic growth data changes in the calculation methodology, which since the base year of 2010 PDRB which contains elements of economic growth has changed from 9 sectors to 17 categories.

RESULTS AND DISCUSSION

Classic Assumption Test Results

Multicollinearity

One assumption used in the OLS method is that there is no linear relationship between the independent variables. The relationship between independent variables in a regression is called multicollinearity. If there are symptoms of multicollinearity, the estimation coefficient (estimator) is still BLUE (Best Linear Unexpected Estimator), but the estimator from OLS has large variance and covariance, making the estimation to be less accurate and sensitive to slight changes in data. One way to detect multicollinear symptoms, seen from high R^2 values, and more insignificant independent variables than significant independent variables or even none of the significant independent variables.

Table 1 Value of Correlation Matrix of Economic Growth Free Variables

VAR	PAD	DP	KONS	TPAK
PAD	1.000000	-0.200528	-0.051052	-0.814779
DP	-0.200528	1.000000	-0.514324	-0.182755
KONS	-0.051052	-0.514324	1.000000	0.014640
TPAK	-0.814779	-0.182755	0.014640	1.000000

Source: Data Processing Results

From Table 1 it can be seen that the correlation matrix values indicate that there is no multicollinearity of data. A variable is said to have multicollinearity if the correlation between the two variables is more than the value of R squared. Based on the results of the regression calculation, there are no variables that have a value

higher than 0.840110 for the function of economic growth.

Heteroskedastisitas

The consequence of heteroscedasticity is that the estimation results no longer have minimum variants, and the estimators no longer produce BLUE estimators, because their standard error calculations are no

longer reliable and hypothesis testing based on the t or F distributions can no longer be trusted for evaluating the regression results .

One test that can be done to determine whether there is heteroscedasticity is to use the White method. The null hypothesis in this test is there is no heteroscedasticity.

Table 2 Heteroskedastisitas Test Results

Dependent Variable: LOG(PE?)				
Method: Pooled EGLS (Cross-section weights)				
Date: 12/12/19 Time: 20:25				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
Linear estimation after one-step weighting matrix				
White cross-section standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.889996	0.365137	10.65353	0.0000
LOG(PAD?)	-0.013312	0.016961	-0.784872	0.4340
LOG(DP?)	-0.052542	0.027661	-1.899508	0.0597
LOG(KONS?)	-0.185883	0.021147	-8.790169	0.0000
LOG(TPAK?)	0.442641	0.043204	10.24526	0.0000
Fixed Effects (Cross)				
_NIAS--C	-0.163649			
_MADINA--C	0.164286			
_TAPSEL--C	0.137639			
_TAPTENG--C	-0.286510			
_TAPUT--C	-0.205875			
_TOBASA--C	-0.139238			
_LBATU--C	0.079023			
_ASAHAN--C	0.155738			
_SIMALUNGUN--C	0.046134			
_DAIRI--C	-0.115456			
_KARO--C	-0.021192			
_DSERDANG--C	0.295459			
_LANGKAT--C	0.054852			
_NISEL--C	-0.321165			
_HUMBAHAS--C	-0.136906			
_PAKBAR--C	-0.025330			
_SAMOSIR--C	-0.043058			
_SERGAI--C	0.050759			
_BBARA--C	-0.148977			
_PALUTA--C	0.080424			
_PALAS--C	0.097798			
_LABUSEL--C	0.051127			
_LABURA--C	0.060198			
_NIASUT--C	-0.139984			
_NIASBAR--C	-0.241659			
_SIBOLGA--C	0.057661			
_TBALAI--C	0.083279			
_PSIANTAR--C	0.045505			
_TTINGGI--C	0.037249			
_MEDAN--C	0.258016			
_BINJAI--C	0.105330			
_PSIDEMPUN--C	0.037768			
_GUSIT--C	0.090753			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.840110	Mean dependent var	3.846359	
Adjusted R-squared	0.795141	S.D. dependent var	2.269982	
S.E. of regression	0.102643	Sum squared resid	1.348551	
F-statistic	18.68198	Durbin-Watson stat	1.865543	
Prob(F-statistic)	0.000000			

After testing, the results of the usual R^2 are relatively the same as 0.840110 and the white R^2 is the same as 0.840110. So there is no heteroscedacity problem. Full regression results are available in appendix 9. The estimated results of this research model are good and can be analyzed.

Autocorrelation

Autocorrelation problems are caused by the existence of a residual correlation relationship from an observation with

residuals from other observations. Detection of the autocorrelation problem is carried out by the Durbin-Watson (DW) method.

Based on the estimation results of the model it is known, that the Durbin-Watson (DW) value is 1.865543. The Durbin-Watson calculated value is compared with the Durbin-Watson Table value ($\alpha = 5\%$, the number of observations (n) is 165 and the number of independent variables (k) is 4), then the values obtained in the following figure are obtained:

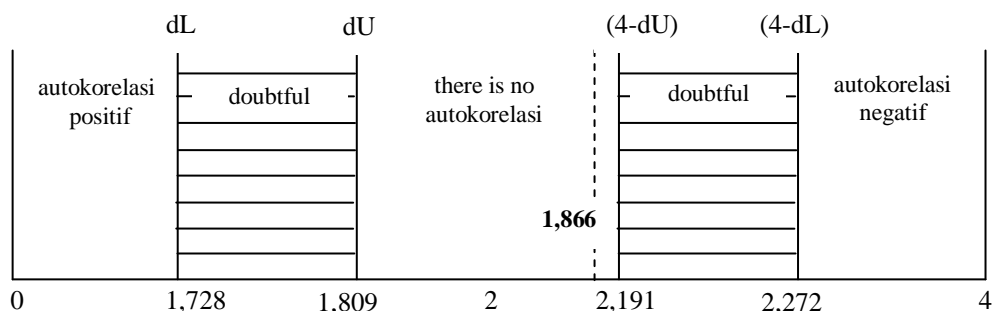


Figure 2 Autocorrelation Test with the Durbin-Watson Method

According to the Durbin-Watson criteria, the calculated DW value is in the "no autocorrelation" region. Thus, at the level of $\alpha = 5\%$, the estimated model does not experience autocorrelation problems.

Statistical Test Results

Test t

Testing is done by comparing the t-probability value obtained from the regression results with $\alpha = 5\%$. From the estimation results of the model for Economic Growth (PE), the calculated t value for each variable is as follows

1. PAD in PE t value = -0.524233 with a probability level of 0.6010 as well as a coefficient value of -0.013312, This shows that the probability value is greater than $\alpha = 0.05$, so the PAD variable is not significant at a 95% level of confidence affecting Economic Growth (PE), ceteris paribus.
2. DP in the calculated value = -1.491982 with a probability level of 0.1382 and a coefficient value of -

0.052542. This shows that the probability value is greater than $\alpha = 0.05$, so that the DP variable is not significant at the 95% degree of confidence affecting Economic Growth (PE), ceteris paribus.

3. KONS in the value of t-count = -4.163201 with a probability level of 0.0001 and a coefficient value of -0.1855883. This shows that the probability value is smaller than $\alpha = 0.05$, so that the KONS variable at a 95% degree of confidence negatively significantly affects Economic Growth (PE), which means that if there is an increase in KONS by 1 percent there will be a decrease in Economic Growth (PE) by 0.19 percent, ceteris paribus.
4. TPAK in the calculated value = 5.141827 with a probability level of 0.0000 and a coefficient value of 0.442641. This shows that the probability value is smaller than $\alpha = 0.05$, so that the TPAK variable is significant at the 95% confidence

level and has a positive influence on Economic Growth (PE). This means that if there is an increase in the variable TPAK by 1% it will increase Economic Growth (PE) by 0.44 percent and vice versa if there is a decrease in the TPAK variable by 1% it will reduce Economic Growth (PE) by 0.44 percent.

Test F

F test or a series of tests is done to see the effect of the independent variables simultaneously or together on the dependent variable. From the estimation results of the model for Economic Growth (PE) obtained the calculated F value of 18.68198 with a probability level of 0.0000. This shows that the independent variables for Economic Growth (PE), namely PAD, DP, KONS and TPAK simultaneously and significantly together influence the dependent variable namely Economic Growth (PE) at a degree of confidence of 95%.

Coefficient of Determination (R2)

The coefficient of determination reflects the magnitude of the effect of changes in independent variables together in explaining changes in the dependent variable. The coefficient of determination is

useful for measuring the closeness of relationships between variables in the model. The value of R2 ranges from 0 to 1. If the value of R2 is getting closer to one, then the proposed model can be said to be good, because the variation of the dependent variable that can be explained by the independent variable is higher.

The estimation results show the coefficient of determination (R2) is 0.840110. This means, that 84.01% changes in the economic growth of regencies / cities in North Sumatra Province in the period 2013-2017 can be explained by changes in Regional Original Revenue, Cost of Income and Consumption as well as Labor Force Participation Rate; while the remaining 15.99% is explained by other variables outside the model.

Analysis of Estimated Results

As explained in the previous chapter, the object of this study uses a combination of time series and cross section data, known as data pool or panel data. There are two methods in the data pool, namely the Common Effect and Fixed Effect Model (FEM) methods. To determine the use of the Common Effect and Fixed Effect Model (FEM) methods to be selected, a Chow test can be used (Gujarati, 2003).

Table 3 Common Effect Test Results

Dependent Variable: LOG(PE?)				
Method: Pooled EGLS (Cross-section weights)				
Date: 12/12/19 Time: 03:20				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.832634	0.679623	5.639353	0.0000
LOG(PAD?)	-0.032499	0.013198	-2.462362	0.0149
LOG(DP?)	0.010017	0.002347	4.267112	0.0000
LOG(KONS?)	-0.093635	0.032496	-2.881411	0.0045
LOG(TPAK?)	-0.126226	0.024995	-5.050077	0.0000
Weighted Statistics				
R-squared	0.237766	Mean dependent var		3.402973
Adjusted R-squared	0.218710	S.D. dependent var		2.076065
S.E. of regression	0.141432	Sum squared resid		3.200476
F-statistic	12.47732	Durbin-Watson stat		0.751755
Prob(F-statistic)	0.000000			

Table 4 Fixed Effect Model Test Results

Dependent Variable: LOG(PE?)				
Method: Pooled EGLS (Cross-section weights)				
Date: 12/12/19 Time: 20:25				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
Linear estimation after one-step weighting matrix				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.889996	0.696728	5.583235	0.0000
LOG(PAD?)	-0.013312	0.025394	-0.524233	0.6010
LOG(DP?)	-0.052542	0.035216	-1.491982	0.1382
LOG(KONS?)	-0.185883	0.044649	-4.163201	0.0001
LOG(TPAK?)	0.442641	0.086086	5.141827	0.0000
Fixed Effects (Cross)				
_NIAS--C	-0.163649			
_MADINA--C	0.164286			
_TAPSEL--C	0.137639			
_TAPTENG--C	-0.286510			
_TAPUT--C	-0.205875			
_TOBASA--C	-0.139238			
_LBATU--C	0.079023			
_ASAHAN--C	0.155738			
_SIMALUNGUN--C	0.046134			
_DAIRI--C	-0.115456			
_KARO--C	-0.021192			
_DSERDANG--C	0.295459			
_LANGKAT--C	0.054852			
_NISEL--C	-0.321165			
_HUMBAHAS--C	-0.136906			
_PAKBAR--C	-0.025330			
_SAMOSIR--C	-0.043058			
_SERGAI--C	0.050759			
_BBARA--C	-0.148977			
_PALUTA--C	0.080424			
_PALAS--C	0.097798			
_LABUSEL--C	0.051127			
_LABURA--C	0.060198			
_NIASUT--C	-0.139984			
_NIASBAR--C	-0.241659			
_SIBOLGA--C	0.057661			
_TBALAI--C	0.083279			
_PSIANTAR--C	0.045505			
_TTINGGI--C	0.037249			
_MEDAN--C	0.258016			
_BINJAI--C	0.105330			
_PSIDEMPUAN--C	0.037768			
_GUSIT--C	0.090753			
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.840110	Mean dependent var		3.846359
Adjusted R-squared	0.795141	S.D. dependent var		2.269982
S.E. of regression	0.102643	Sum squared resid		1.348551
F-statistic	18.68198	Durbin-Watson stat		1.865543
Prob(F-statistic)	0.000000			

Chow test results show that the right model is used with the Fixed Effect Model (FEM) where the value of the cross section probability $F > \alpha = 0.05$. it means that the Fixed Effect Model (FEM) model is better used than the Common Effect. Next will be tested between the Fixed Effect Model (FEM) and the Random Effect Model (REM) method. To determine the use of the FEM method or REM to be selected, the Hausman test can be used (Gujarati, 2003).

Table 5 Chow Test Results

Redundant Fixed Effects Tests				
Pool: Untitled				
Test cross-section fixed effects				
Effects Test	Statistic	d.f.	Prob.	
Cross-section F	18.735831	(32,128)	0.0000	
Cross-section fixed effects test equation:				
Dependent Variable: LOG(PE?)				
Method: Panel EGLS (Cross-section weights)				
Date: 12/12/19 Time: 03:20				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
Use pre-specified GLS weights				
White cross-section standard errors & covariance (d.f. corrected)				
	Coefficient	Std. Error	t-Statistic	Prob.
C	3.324841	0.417668	7.960487	0.0000
LOG(PAD?)	-0.058744	0.009171	-6.405245	0.0000
LOG(DP?)	0.004329	0.003093	1.399772	0.1635
LOG(KONS?)	-0.023186	0.016036	-1.445902	0.1502
LOG(TPAK?)	-0.055007	0.043434	-1.266451	0.2072
	Weighted Statistics			
R-squared	0.091193	Mean dependent var		3.846359
Adjusted R-squared	0.068473	S.D. dependent var		2.269982
S.E. of regression	0.218876	Akaike info criterion		2.908522
Sum squared resid	7.665106	Schwarz criterion		3.002642
Log likelihood	-234.9531	Hannan-Quinn criter.		2.946729
F-statistic	4.013749	Durbin-Watson stat		0.421991
Prob(F-statistic)	0.003950			

Table 6 Random Effect Model (REM) Test Results

Dependent Variable: LOG(PE?)				
Method: Pooled EGLS (Cross-section random effects)				
Date: 12/12/19 Time: 03:21				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.587510	0.365701	9.809940	0.0000
LOG(PAD?)	-0.012859	0.013577	-0.947114	0.3450
LOG(DP?)	0.001459	0.009666	0.150933	0.8802
LOG(KONS?)	-0.165268	0.064388	-2.566763	0.0112
LOG(TPAK?)	0.106798	0.165459	0.645466	0.5195
Random Effects (Cross)				
_NIAS--C	-0.062495			
_MADINA--C	0.116898			
_TAPSEL--C	0.114444			
_TAPTENG--C	-0.035378			
_TAPUT--C	-0.121848			
_TOBASA--C	-0.086069			
_LBATU--C	0.000681			
_ASAHAN--C	0.050409			
_SIMALUNGUN--C	-0.006465			
_DAIRI--C	-0.051236			
_KARO--C	-0.003581			
_DSERDANG--C	0.141327			
_LANGKAT--C	-0.020671			
_NISEL--C	-0.202651			
_HUMBAHAS--C	-0.051976			
_PAKBAR--C	0.049179			
_SAMOSIR--C	0.019850			
_SERGAI--C	-0.000982			
_BBARA--C	-0.163366			
_PALUTA--C	0.077812			
_PALAS--C	0.071193			
_LABUSEL--C	0.014960			
_LABURA--C	0.015055			
_NIASUT--C	-0.071023			

_NIASBAR--C	-0.113613			
_SIBOLGA--C	0.041043			
_TBALAI--C	0.043967			
_PSIANTAR--C	0.003959			
_TTINGGI--C	0.001759			
_MEDAN--C	0.109727			
_BINJAI--C	0.044643			
_PSIDEMPUAN--C	0.014959			
_GUSIT--C	0.059492			
Effects Specification				
			S.D.	Rho
Cross-section random			0.086335	0.3655
Idiosyncratic random			0.113760	0.6345
Weighted Statistics				
R-squared	0.062652	Mean dependent var	0.855368	
Adjusted R-squared	0.039218	S.D. dependent var	0.123552	
S.E. of regression	0.121105	Sum squared resid	2.346610	
F-statistic	2.673583	Durbin-Watson stat	1.283194	
Prob(F-statistic)	0.033970			

Table 7 Hausman Test Results

Table 7 Hausman Test Results

Correlated Random Effects - Hausman Test				
Pool: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		0.000000	4	1.0000
* Cross-section test variance is invalid. Hausman statistic set to zero.				
** Warning: robust standard errors may not be consistent with assumptions of Hausman test variance calculation.				
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(PAD?)	-0.025620	-0.012859	0.000272	0.4389
LOG(DP?)	-0.088996	0.001459	0.006526	0.2628
LOG(KONS?)	-0.206675	-0.165268	0.001916	0.3442
LOG(TPAK?)	0.762687	0.106798	0.043347	0.0016
Cross-section random effects test equation:				
Dependent Variable: LOG(PE?)				
Method: Panel Least Squares				
Date: 12/12/19 Time: 03:26				
Sample: 2013 2017				
Included observations: 5				
Cross-sections included: 33				
Total pool (balanced) observations: 165				
White cross-section standard errors & covariance (d.f. corrected)				
	Coefficient	Std. Error	t-Statistic	Prob.
C	4.030675	0.604465	6.668169	0.0000
LOG(PAD?)	-0.025620	0.021357	-1.199615	0.2325
LOG(DP?)	-0.088996	0.081358	-1.093881	0.2761
LOG(KONS?)	-0.206675	0.077857	-2.654556	0.0089
LOG(TPAK?)	0.762687	0.265939	2.867903	0.0048
	Effects Specification			

From Table 7 Obtained a statistic probability Hausman Test of 1,0000. According to the Hausman criteria:

- If the Hausman Test Probability receives H1 or p value <0.05 then the method we choose is fixed effect.
- If the Hausman Test accepts H0 or p value > 0.05 then the method we choose is random effect.

because the Hausman Test statistic is smaller than the p value, then the estimation method used is fixed effect.

In this study, the cross section included in the estimation of the model is all districts / cities in North Sumatera Province. That is, cross sections are not randomly selected, but rather involve all members of the population.

With the Fixed Effect (FEM) method, differences in characteristics between cross sections can be seen. Assuming that the concept is different between individuals, while the slope is the same between individuals.

Estimation of the model using the Fixed Effect method regarding the effect of PAD, DP and Kons and TPAK, shows the following results:

$$\begin{aligned} PE &= 3.889996 - 0.013312PAD - 0.052542DP - 0.185883KONS + 0.442641TPAK \end{aligned}$$

The constant value (intercept) for each cross section shows that assuming there is no change in economic growth variables, in the period 2013-2017 the highest economic growth was in Deli Serdang Regency, while the lowest economic growth was in Nias Regency South. Furthermore, economic analysis of the estimation results will be described in the following sub-chapters.

DISCUSSION

Regional Original Income

The PAD regression coefficient is equal to -0.013312. This means that if the region's original income increased by 1 percent, then economic growth would decrease by 0.01 percent. Conversely, if the region's original income decreases by 1 percent then economic growth will increase by 0.01 percent. The influence of this PAD variable is negative but not significant at the 95 percent confidence level.

These results are not in accordance with the hypothesis and previous research which states that PAD has a positive and significant effect on economic growth. This condition can be explained that the estimation results of the data show that PAD, which is actually a source of regional income, is mostly used for routine expenditures such as ASN salary expenditure and office operations. This happened in several districts / cities in North Sumatera province which incidentally natural resources and human resources were inadequate.

The regency / city which has very limited resources, besides relying on assistance from the central government in driving the regional economy, also uses regional revenues. As a result the primary sectors which are the drivers of the

economy become undeveloped and tend to be "stagnant".

This study shows how much funding assistance from the central government is needed by the regions, especially districts / cities in North Sumatra province.

Balance Funds

The DP regression coefficient is equal to -0.052542. This means that if the cost of income increases by 1 percent, then economic growth will decrease by 0.05 percent. Conversely, if the balance of funds decreases by 1 percent then economic growth will increase by 0.05 percent. The effect of this DP variable is negative and not significant at the 95 percent confidence level.

These results are not in accordance with previous hypotheses and research, this shows that the cost of income which is one of the components sourced from the central government, in addition to the DAU, DAK, DBH, in this study generally shows that it is still very dependent on local governments in the districts / cities of Sumatra Province North towards development assistance from the central government. Balancing funds transferred by the central government varies between districts / cities in North Sumatra province. The size of the transfer of the central government is very dependent on many factors, including population, area and contribution made by the region to the central government. So that regions that have significant potential will also receive greater transfers and vice versa.

Districts / cities that receive larger transfers will be more flexible in their use so that it will encourage better economic growth, but instead districts / cities that receive relatively smaller transfers will use to cover their regional budget deficits, especially to cover routine expenditure and employee expenditure so Indirectly, central government transfers are only used for routine needs. This condition will have an impact on the regional economy which will tend to be "stagnant" and experience slow growth.

Consumption

Estimation results show the KONS variable regression coefficient of -0.185883. Means each increase in KONS by 1 percent then economic growth will decrease by 0.18 percent and vice versa. The effect of the KONS variable on PE was negative and significant at a 95 percent confidence level.

The results of this study can be explained that the effect of the variable level of consumption on economic growth is indirect, that is, when consumption will increase due to people's income also increasing. An increase in people's income will be in line with economic growth, where an economy that has increased will automatically increase people's income and the level of consumption will also increase.

Keynes's theory says that the ratio of consumption to income, called the average propensity to consume, decreases when income rises. This means that when income increases the tendency to consume both food and non-food in the long run will fall, as the difference from income will be saved as an investment, so people who have greater income at a certain point will not spend their income on consumption but instead make it an investment.

This condition can also be explained that when people's consumption increases does not mean due to increased income, this is also influenced by the increased level of needs such as high tuition fees, expensive medical expenses, lifestyle and others, and to cover it not from income that also but increased from loans or debt and credit.

Labor Force Participation Rate

The estimation results showed a regression coefficient of the TPAK variable of 0.442641. Means that each increase in TPAK by 1 percent, economic growth will increase by 0.44 percent and vice versa. The effect of the TPAK variable on PE was significant at the 95 percent confidence level.

The results of previous studies and Adam Smith's classical theory that the effective allocation of human resources is

economic growth. In other words, effective allocation of human resources is a necessary condition for economic growth.

Whereas from previous research by Amin Pujiati the result is that labor as an important factor in accelerating economic growth has a positive and significant impact on economic growth.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

From the results of the study and estimation it can be concluded:

1. The Labor Force Participation Rate has a positive and significant effect on the economic growth of regencies / cities in North Sumatra Province, while the Balancing Fund has a negative and significant effect on the economic growth of regencies / cities in North Sumatra Province.
2. Estimation results show that the Labor Force Participation Rate variable has the greatest influence on the Economic Growth model compared to the Consumption, Balancing Funds and Regional Original Revenue variables in the regencies / cities of North Sumatra Province.
3. The magnitude of each variable in the Economic Growth model in accordance with the largest is the variable Labor Force Participation Rate, Consumption of Balanced Funds and Regional Original Income.

Recommendations

Based on the results of the study can be suggested several things as follows:

1. The role of the government, especially local governments as regulators, is expected to be further enhanced in overseeing and making policies that support the creation of an investment climate that creates broad employment for the community. With the maximum absorption of the workforce will have a multiplier effect on the regional economy which in turn will increase

economic growth as a benchmark for the success of regional development.

2. Central government regulations and policies in disbursing assistance in the form of costs to help the regional economy are very supportive and should be increased in accordance with regional needs. This will have a crucial and important impact considering that some regions lack PAD and resources will be greatly helped in moving the regional economy.
3. For further research, it is expected to provide other variables that affect economic performance with a greater number of variables and different models so that they can better represent the economy of districts / cities in North Sumatra province in particular and the national economy in general.

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