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LOCAL INCOME AND ECONOMIC GROWTH

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ABSTRACT
The objective of this study is to identify the direct influence of local income components, i.e. regional tax, revenue sharing fund of tax from the central government, revenue sharing fund of tax from the provincial government, and General Allocation Grant, on economic growth and its indirect influence through the components of local expenditures, i.e. goods, services, and capital expenditure and personnel expenditure, as mediator variables. In addition, investment and labor are included as control variables. This study uses path analysis with six exogenous variables i.e. regional tax, revenue sharing fund from the provincial and central government, General Allocation Grant, and two control variables, i.e. labor and investment. Endogenous variables of this study are economic growth, goods, services, and capital expenditure, and personnel expenditure. Two of the components of local expenditures also serve as mediator variables. The results of this study indicate that the component of income such as regional tax has a direct influence on and has a positive and significant relationship only with goods, services, and capital expenditure, General Allocation Grant has a direct influence on and a positive and significant relationship with goods, services, and capital expenditure as well as personnel expenditure, but it has a negative and significant effect on economic growth. In addition, General Allocation Grant also has a significant indirect effect and a positive relationship with economic growth through personnel expenditure. Revenue sharing fund of tax from the central government has a direct and positive influence and a significant relationship with personnel expenditure and economic growth. In addition, revenue sharing fund of tax from the central government also has an indirect and significant influence and is positively related to economic growth if only it goes through personnel expenditure. Whereas, revenue sharing fund of tax from the provincial government has a direct influence on and a positive insignificant relationship with goods, services, and capital expenditure as well as personnel expenditure, and it has an insignificant negative relationship with economic growth. As for components of local expenditures, only personnel expenditure that has a positive and significant relationship with economic growth, while goods, services, and capital expenditure have a negative and insignificant relationship with economic growth. Regarding control variables, investment has a positive and significant relationship with economic growth, and labor has a negative and significant relationship with economic growth.

KEY WORDS
Economic growth, revenue sharing fund, central government, goods, services, capital expenditure, personnel expenditure, investment, labor.

Decentralization, both political decentralization and fiscal, affects the outcome of development (Kalirajan and Otsuka, 2012). In addition, it is more dominant in increasing economic growth than centralization (Chu and Yang, 2012). The spirit of decentralization is initiated by granting authority to local governments for self-management with fiscal readiness (Adi, 2005; Nanga, 2005). Local governments are expected to be able to provide optimal public services because local governments are the spearhead of public services (Khusaini,

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2014). Regional budget (APBD) is a reflection of government policy in providing public goods and services needed by the community. In the end, the availability of public goods and services is needed to encourage and stimulate the economic activity of the people. Therefore, the role of local governments in managing budgets is very important in improving development outcomes.

Management of local government budgets includes revenues and expenditures. Furthermore, the management is related to the allocation of government expenditure (income redistribution) in the provision of public goods and services in accordance with the income received (Hyman, 2010). The government needs to pay attention to the potential of local income in allocating resources. Local income sources based on Law No. 23 of 2014 concerning regional government comes from Local own-source revenue, Balancing funds, and other legal local income. Local own-source revenue (PAD) is all local incomes from the original economic potential of the region, including local taxes, regional levies, separated regional wealth management, and other local own-source revenues. Balancing fund comes from Revenue Sharing Fund (DBH), General Allocation Grant (DAU), and Special Allocation Fund (DAK). Furthermore, the local legal income includes grants, Revenue Sharing Fund of tax from the central and provincial government, Adjustment and Special Autonomy Funds, financial aid from the provincial government, and Village Funds. All revenues are sources of income redistributed to the community in the form of public goods and services.

Tax is the main source of government revenue. In economic terms tax is a compulsory payment for certain economic activities. Taxes received by the government will be used to finance various government activities. In developed countries taxes are the main source of government spending. Some of the government expenditure is for government administration, and the other part is for development activities. Government employee salaries, education and health, armed forces expenditure, and important infrastructure are funded by the government. Such expenditures will increase aggregate expenditure and the economic activities of the country (Sukirno, 2008).

Furthermore, local governments can use other sources of revenue derived from balancing funds such as revenue sharing fund of tax from the provincial and central government and General Allocation Grant. Revenue Sharing Fund is the income from the APBN (national budget) and Provincial APBD (provincial budget), which are allocated to regions based on percentages to finance regional needs for decentralization. Based on its source, revenue sharing fund is distinguished as Revenue Sharing Fund of tax and Revenue Sharing Fund of natural resources (DBH SDA) (Isti'anah, 2008).

General Allocation Grant is the fund from APBN allocated for distribution of financial capacity among regions in funding their needs for decentralization. In fact, Indonesia has several regions with DAU proportion that is greater than other local income (Adi, 2005). This proportion shows high dependency on the supply from the central government in managing their finances. Theoretically, regions that have a high dependency on funds from the central government have a relatively low level of economic growth and independence. Conversely, regions with a high local own-source revenue or low level of dependency on funds from the central government tend to have a high economic growth rate and high regional independence.

In addition to income, government spending is also closely related to economic growth. Indonesia has a law that regulates the use of regional government expenditures, namely Regulation of the Directorate General of Treasury Number PER 33/ PB/2008 concerning guidelines for utilization of income, personnel expenditure, goods expenditure, and capital expenditure accounts. Personnel expenditure is a compensation in forms of salaries and benefits as well as other income given to civil servants determined according to statutory provisions. High personnel expenditure can improve employee welfare and performance. This increase in welfare increases purchasing power and increases economic activity, which in turn increases the welfare of the people and employees and increases economic growth. Rekanaharto (2014) in his research stated that the allocation of local expenditure budget, namely personnel expenditure, has a positive and significant effect on economic growth.

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Government expenditure in the form of capital expenditure by local governments is also used for infrastructure development and maintenance in education, health, and transportation, so that people can enjoy the benefits of regional development. Good infrastructure is expected to create efficiency and effectiveness in these sectors, so that community productivity and economic growth up (Adi & Harianto, 2007). Attari and Javed (2013) stated that government spending has a relationship with economic growth, where government spending affects economic growth but not vice versa. It is expected that community's economic activity will increase through government spending. In the end, the high economic activity of the community increases government revenues. The components of local income used in this study are regional tax, revenue sharing fund of tax from the central and provincial governments, and General Allocation Grant. The variables are thought to affect economic growth.

East Java as part of the Republic of Indonesia has a government based on Law No. 5 of 1974 concerning the main points of regional government which were later updated with Law No. 22 of 1999 concerning Regional Government and Law No. 25 of 1999 concerning the Financial Balance of Regional and Central Government. The law states that regions have autonomy. Thus, East Java is a legal community unit with a boundary that has the right, authority, and obligation to regulate and manage its own region in the bond of the Unitary State of Indonesia in accordance with the applicable law.

Some regions in East Java that have the highest economic growth rate in 2016 can be seen in Figure 1. The economic growth of Bojonegoro Regency, Batu City, and Sampang Regency is 21.95%, 6.61%, and 6.17%. In the case of local income, General Allocation Grant is the highest source for these regencies and cities, namely 0.95 trillion Rupiah, 0.48 trillion Rupiah, and 0.83 trillion Rupiah. The regional taxes of the three are 0.34 trillion Rupiah, 0.11 trillion Rupiah, and 0.14 trillion Rupiah. The city of Surabaya, despite having an economic growth of 6%, has a local income from tax that is the highest of all regencies and cities in East Java, allegedly emerging from a higher population and economy than other regions.

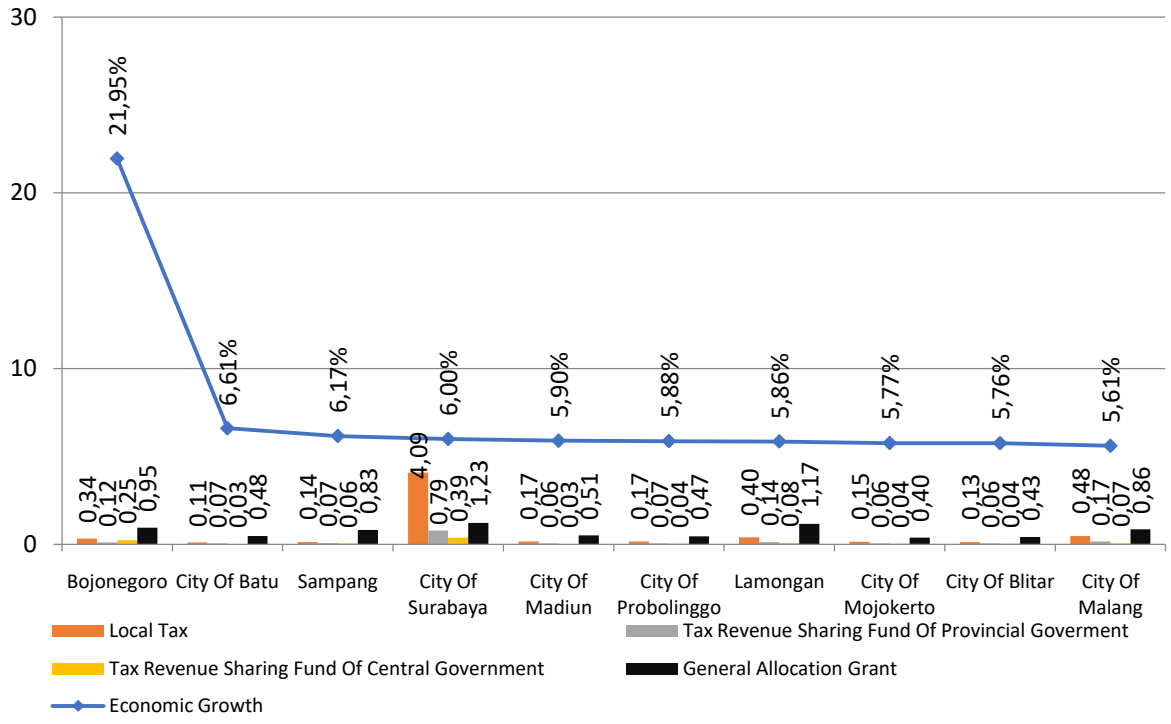

Figure 1 – Economic Growth Rate, Regional Tax, Revenue Sharing Fund from the Provincial Government, Revenue Sharing Fund from the central government, and General Allocation Grant in Several Regencies and cities in East Java in 2016 (in trillion Rupiah). Source: Financial and Asset Management Agency of East Java, 2017 (Data Processed).

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Local-source revenue and balancing funds certainly are used none other than to finance the realization of government program policy objectives through budget policies of government spending to meet people's needs and improve people's welfare which ultimately increase economic growth. Expenditures from local government go through the mechanism of government expenditure policies such as goods, services, and capital expenditure and personnel expenditure.

The components of local expenditures are goods and service expenditure, personnel expenditure, and capital expenditure. The data from BPKAD of East Java in 2016 (see Figure 2) show that expenditures for goods, services, and capital are not the main expenditures of local governments through their budget policies. However, there are several regions whose biggest budget is for personnel expenditure, such as Madiun City, Lamongan Regency, and Malang City. Although the budget is not much different, this shows that there are regions that have limited funds for goods, services, and capital expenditure.

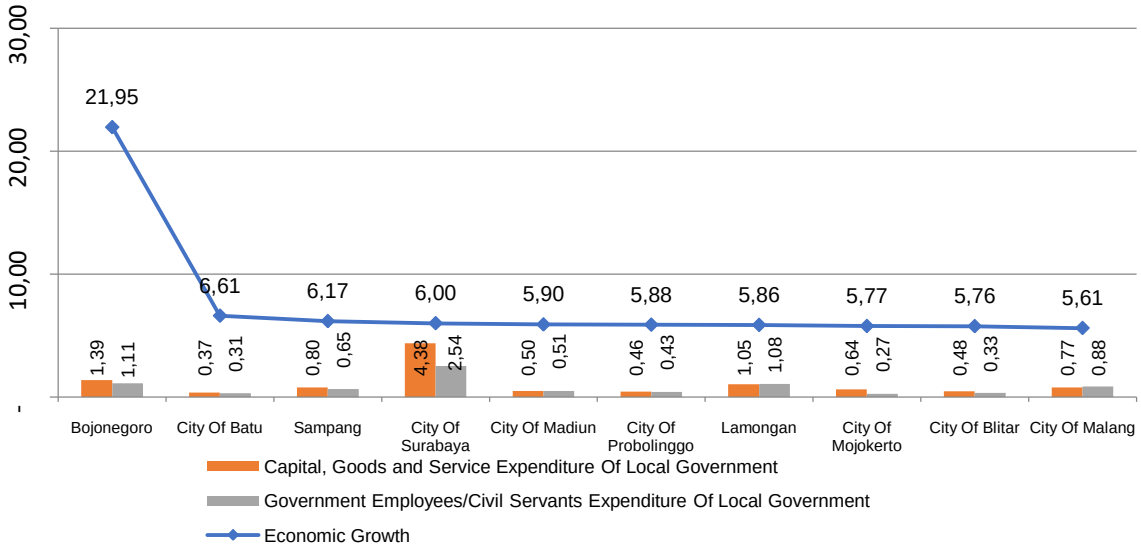

Figure 2 – Growth Rate, Goods, Services, and Capital Expenditures, and Personnel Expenditures in Several Regencies and Cities in East Java in 2016 (in trillion Rupiah). Source: Financial and Asset Management Agency of East Java, 2017 (Data Processed).

Figure 2 shows that the highest regional government expenditure is Surabaya, where the needs of goods, services, and capital expenditure in 2016 are 4.38 trillion Rupiah and personnel expenditure is 2.54 trillion Rupiah. Although government spending is the highest, the economic growth of Surabaya City is relatively lower than Bojonegoro Regency, Batu City, and Sampang Regency. Whereas Bojonegoro Regency, which has the highest economic growth in 2016, spent 1.39 trillion Rupiah for services and capital goods and 1.11 trillion Rupiah for personnel expenditure.

The economic growth of regions in East Java tends to be equal. However, differences are seen in the realization of local own-source revenue, both from local taxes and balancing funds, and the realization of regional government expenditures for goods, services, and capital and personnel. Thus, based on the phenomenon in the regencies and cities, studies that can see the strongest factor for the acceleration of economic growth, either from local own-source revenue (local taxes, Revenue Sharing Fund from the provincial and central government, and General Allocation Grant), or from Budget policies for goods, services, and capital expenditure and personnel expenditure are needed. Furthermore, this study included non-financial factors, i.e. investment and labor, which are used as control factors, so that regional non-financial factors that are thought to influence economic growth can be identified. Based on the background above, the problems of this study are as follows.

- What are the direct effects of components of local income, such as local taxes, Revenue Sharing Fund of taxes from provincial and central government, and General

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Allocation Grant, on local expenditures, such as goods and service spending, capital expenditure, and personnel expenditure, and on economic growth?

- What is the effect of goods and service expenditure, capital expenditure, and personnel expenditure on economic growth?
- What are the indirect effects of the components of local income, such as local taxes, Revenue Sharing Fund of taxes from provincial and central government, and General Allocation Grant, on economic growth through the components of local expenditures, such as goods and service expenditure, capital expenditure, and personnel expenditure?

LITERATURE REVIEW

Economic growth is an increase in economic activities that increase the number of goods and services produced by the community (Djojohadikusumo, 1994; and Sukirno, 2008). Regional economic growth is a process carried out by local governments and communities to manage the existing resources to create new jobs and stimulate economic activity in the region (Arsyad, 1999).

The role of government can be one of the factors that influence economic growth. The theory that addresses the relationship between government expenditure and economic growth is outlined in the General Theory of Keynes. This theory explains that the total short-term income of the economy is mostly determined by the desire of households, companies, and the government to spend their income. The magnitude of the increase in output as a result of the increase in government expenditure is called the government purchases multiplier, which is measured by the ratio ΔY/G. The implication of the Keynesian intersection is that the increase in output (ΔY) is greater than the increase in government expenditure (ΔG) due to the chain effect of government expenditure increase. This process starts from the initial change of government expenditure by ΔG which increases the output of ΔY by ΔG. An increase in the output or income increases public consumption by MPC x ΔG, where MPC is Marginal Propensity to Consume. This second increase in income, again, increases current consumption by MPC x (MPC x ΔG), and so on, so that the multiplier number is an infinite series of geometries (Mankiw, 2007). Wijaya said that government expenditures and multiplier effects stimulate an increase in national income that is greater than payment, and, in the same amount, government expenditure will increase income and production multiple times, as long as the economy has not reached full employment (Suparmoko, 2002).

According to Musgrave (1980) there are three government roles in the modern economy, namely:

- Allocation, which is to utilize all goods and services in the community as well as possible to achieve the predetermined goals so as to avoid all kinds of waste including unemployment and idle capacity. The failure of the market system causes a sub-optimal allocation of economic resources, so the role of the government is needed.
- Distribution, which is to make community's income even. Factors that influence the success of income distribution are the ownership of production factors, production factor demand and supply, which depend on the level of technological satisfaction, inheritance system, and ability to obtain income depending on education, talent, and ability.
- Stabilization, namely aligning the existing policies because government policies are frequently contradicting each other due to complex conditions.

The concept of fiscal policy that is associated with economic growth can be explained using a concept proposed by Barro. In this concept Barro explained the relationship between government expenditure and economic growth, private investment, and taxes in a balanced budget condition using the endogenous growth model. This model emphasizes the choice of government policy related to the relationship between size of government, level of savings, and economic growth. The size of the government is based on government spending on national production, which has a two-way impact on economic growth. An increase in tax

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decreases economic growth, while an increase in government spending increases economic growth. The final impact of changes in tax rates and government expenditure in the balanced budget condition depends on the more dominant influence. In a small-sized government, the impact of government spending will be greater than contraction due to increased taxes. Conversely, if the role of the government in the economy is relatively high, the impact of increasing growth due to an increase in government expenditure is a relatively smaller than the contraction due to increase in taxes (Sumedi et al., 2013).

Adam Smith stated that the role of government in managing its institutions is very important to realize an efficient market, for example in public works, i.e. nonrival and nonexcludable public goods such as street lights provided by the government that are enjoyed by citizens for free without exception or privilege. Services provided by the government are national defense, such as police protection, fire-fighting department, and weather information services (Widmalm, 2001).

Taxes are the main source of government revenue. In economics taxes are defined as compulsory payments for certain economic activities. Regional tax is a mandatory contribution from an individual or entity to a regional government without direct and balanced compensation, which can be forced based on legislation, used to finance the implementation of regional government and regional development (Khusaini, 2018). The tax received by the regional government is used to finance various activities of the regional government. In developed countries taxes are the main source of government spending. A part of government expenditure is used to finance government administration, and the other part is used to finance development activities, including salaries of government employees, education, health, armed forces, and infrastructure. Such expenditure increases aggregate expenditure and the country's economic activities (Sukirno, 2008). According to Peacock and Wiseman, the government will always try to increase spending, but the public does not like paying high taxes. The community has tax tolerance, which is an obstacle for the government to raise taxes. With a fixed rate, taxes can increase due to economic growth, which then increases government spending. Under normal conditions, GDP increases, government revenues increase, and government spending also increases (Mangkoesoebroto, 2010). The application of the budget by increasing tax revenues reduces economic growth (Engen and Skinner, 1992; Bartik, 1992; Walker and Greenstreet, 1991).

Revenue Sharing Fund is allocated from the APBN and the Provincial APBD for regional governments based on the percentage used to fund the activities of local governments in decentralization. Based on its source, Revenue Sharing Fund may come from tax and natural resources (Isti'anah, 2008). Revenue sharing fund has a positive and significant influence on economic growth (Santosa, 2013; Hasan, 2015; Pujiati, 2008)

General Allocation Grant is funds from the APBN allocated for equitable financial capacity in funding regional government activities for decentralization. In fact, there are several regions in Indonesia whose General Allocation Grant is greater than its other local income (Adi, 2005). This proportion shows a large dependence on the supply of funds from the central government in finance. General Allocation Grant has a positive and significant influence on economic growth (Gunantara and Dwirandra, 2014; Muis, 2012; Sugiarthi and Supadmi, 2014).

According to Khusaini (2018), local expenditures are obligations of the region in a fiscal year that are not recoverable. Local expenditures are used for provincial, regency, and city government affairs, which consist of mandatory matters, optional matters, and matters of handling in certain parts or fields carried out jointly by the central government and regional governments stipulated by legislation.

The regulation of the Directorate General of Treasury Number PER 33/PB/2008 provides guidelines for the use of income, personnel expenditure, goods expenditure, and capital expenditure accounts. Personnel expenditure is a compensation expenditure in the form of salaries and benefits as well as other income given to civil servants determined by statutory provisions.

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Government expenditures in the form of capital expenditures made by local governments are also used for infrastructure development and improvements in education, health, and transportation, so that people also enjoy the benefits of regional development.

METHODS OF RESEARCH

This quantitative study was conducted in 38 regencies and cities in East Java using secondary data from the Central Statistics Agency (BPS) and the Financial and Asset Management Agency (BPKAD) of East Java from 2012 to 2016. The path analysis in this study involves six exogenous variables; i.e. Regional taxes, Revenue Sharing Fund from the province and the central government, General Allocation Grant, two control variables namely labor and investment, and three endogenous variables namely economic growth, goods, services, and capital expenditure, and personnel expenditure. In addition, two of the components of local expenditures serve as mediator variables. To analyze the effect of local income on economic growth through local expenditures. Path Analysis was used because it helps illustrate the pattern of causal relationships between a number of variables. This analysis is also useful in testing the theorized causal relationships but does not derive any causal theory. Path analysis contains direct effects and indirect effects, in which the former does not go through other variables, while the latter must go through other variables.

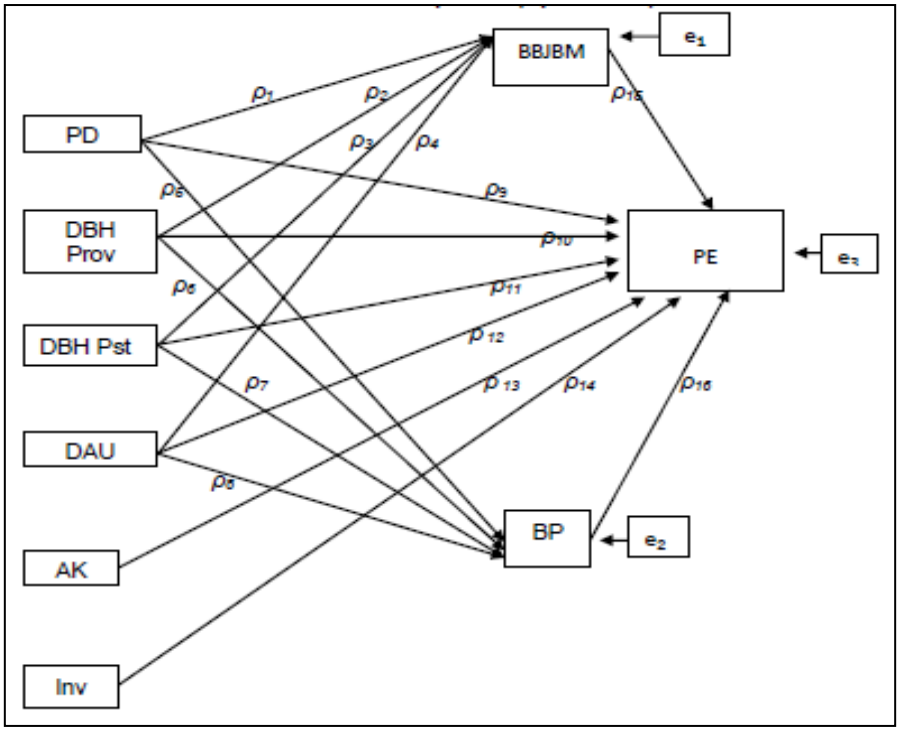

Figure 3 – Equation Model Using Path Analysis (Source: Analysis result)

The path equation above is analyzed through three endogenous variables, namely Goods, Services, and Capital Expenditure (BBJM), Personnel Expenditure (BP), and Economic Growth (PE). And six exogenous variables, namely Local Tax (PD), Revenue Sharing Fund from Provincial Government (DBH Prov), Revenue Sharing Fund from Central Government (DBH Pst), General Allocation Grant (DAU), Investment (Inv), and Labor (AK). The path model above uses two mediator or intervening variables, namely BBJM and BP. The above equation is formed through three equations as follows.

$$BBJ\ BM = \rho_1\ PD + \rho_2\ DBH\ Prov + \rho_3\ DBH\ Pst + \rho_4\ DAU + e_1 \quad (1)$$

$$BP = \rho_5\ PD + \rho_6\ DBH\ Prov + \rho_7\ DBH\ Pst + \rho_8\ DAU + e_2. \quad (2)$$

$$PE = \rho_9\ PD + \rho_{10}\ DBH\ Prov + \rho_{11}\ DBH\ Pst + \rho_{12}\ DAU + + \rho_{13}\ AK + \rho_{14}\ Inv + \rho_{15}\ BBJM + \rho_{16}\ BP + + e_3 \quad (3)$$

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The assessment of the influence of the mediation path such as BBJM and BP is carried out through a procedure developed by Sobel (1982), known as the Sobel Test, which is conducted to test the strength of the indirect effects of exogenous variables on endogenous variables whenever competing through mediation factors. The first stage of the calculation is multiplying the path coefficient between each exogenous variable (ρa) to the mediator or intervening variable with the path coefficient of mediation or intervening variable (ρb) on the endogenous variable. From the results of the first stage, the standard error of the indirect effect coefficient (SρaρB) is calculated using the Sobel test formula as follow (Ghozali, 2013).

$$S\rho_a\rho_b = \sqrt{(\rho_b)^2\,(S\rho_a)^2 + (\rho_a)^2(S\rho_b)^2 + (S\rho_a)^2(S\rho_b)^2} \qquad (4)$$

Where: $S\rho_a\rho_b$ = standard error of the coefficient of Indirect Effect; $S\rho_a$ = standard error of the influence of exogenous variables on mediator or intervening variables; $S\rho_b$ = standard error of the influence of mediator or intervening variables on endogenous variables.

The final stage tests the significance of the indirect influence. Then, the value of t count of the coefficient ab ($\rho_a\rho_b$) needs to be calculated using the following formula.

$$t = \frac{\rho a \rho b}{S\rho a \rho b} \qquad (5)$$

The value of t count from equation 5 is compared with the value of t table. If the value of t count> t table value, it can be concluded that the mediation effect arises.

RESULTS AND DISCUSSION

This study was conducted to determine the effect of regional financial factors as the main factors and regional non-financial factors as the control factor on economic growth, which is used as a measure for the success of the economy in an area using path analysis. Therefore, this study can identify factors that influence the rate of economic growth in East Java through these two factors. After cleaning the data from their outlier, the latest normality test shows that the data is normally distributed, i.e. the value of c.r. (critical ratio) is -2.58 <c.r. <2.58. The results can be seen from the results of the normality test in Table 1, in which the value of critical ratio from the multivariate test is 1.873, and partially the variable is between -1.373 and 2.019.

Table 1 – Normality Test Results

Variable	min	max	skew	c.r.	kurtosis	c.r.
TK	4,779	6,099	-1,239	-6,480	,764	1,997
Inv	11,827	13,581	,238	1,242	-,525	-1,373
DAU	11,490	12,229	-,826	-4,321	,384	1,003
DBH_Pst	10,223	11,211	,317	1,655	-,418	-1,094
DBH_Prov	10,437	11,539	,116	,606	-,302	-,790
PD	10,627	12,126	,437	2,285	,002	,005
BP	11,353	12,212	-1,065	-5,570	,772	2,019
BBJM	11,176	12,240	,005	,027	-,391	-1,023
PE	4,130	7,682	,225	1,179	-,182	-,475
Multivariate					4,116	1,873

Source: Path Analysis.

The results of the modified model conformity test indicate that the planned model is fit. The values of Chi Square, Probability, CMIIN / DF, GFI, RMSEA, AGFI, TLI, and CFI have fulfilled the Goodness of Fit criteria, or have met the reference values of the specified model equation (see table 2).

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Table 2 – Results of the Goodness of Fit Model

Result (Default Model)			
Chi-square = ,511 Degrees of freedom = 1 Probability level = ,474			
Model	Result (Default Model)	Criteria	Remark
CMIIN/DF	0,511	< 2,00	Good
GFI	0,999	Approaching 1	Good
RMSEA	0,000	Approaching 1	Good
AGFI	0,969	< 0,08	Good
TLI	1,008	Approaching 1	Good
CFI	1,000	Approaching 1	Good

Source: Path Analysis.

For the results of path analysis that has a value of indirect effects from the interrelationships between variables, only Revenue Sharing Fund from the central government and General Allocation Grant has an indirect and significant effect if both local incomes go through personnel expenditure (see table 3). This shows that personnel expenditure provides an indirect role in economic growth. Thus, revenue sharing fund from the central government and General Allocation Grant that is used for personnel expenditure needs can increase economic growth.

Table 3 – Indirect Effect Value

No.	Variable	Intervening	Indirect Effect (ρa X ρb)	P-value
1	Local Tax → Economic Growth	BBJM	-0.217257	0.374
2	Revenue Sharing Fund from Provincial Government → Economic Growth	BBJM	-0.038033	0.603
3	Revenue Sharing Fund from Central Government→ Economic Growth	BBJM	0.041159	0.421
4	General Allocation Grant → Economic Growth	BBJM	-0.24643	0.370
5	Local Tax → Economic Growth	BP	0.005043	0.979
6	Revenue Sharing Fund from Provincial Government → Economic Growth	BP	0.211806	0.422
7	Revenue Sharing Fund from Central Government→ Economic Growth	BP	0.342924	0.012
8	General Allocation Grant → Economic Growth	BP	5.315322	0.000

Source: Path Analysis.

The results of the path analysis regarding the direct influence of the interrelationship between variables are as follows (see table 4):

- The direct effect of regional tax on economic growth is negative and insignificant with beta coefficients of -0.714;
- The direct effect of Revenue Sharing Fund from provincial governments on economic growth is negative and insignificant with beta coefficients of -1,091;
- The direct effect of Revenue Sharing Fund from the central government on economic growth is positive and significant with p-value of <0.01 and beta coefficient of 1,909;
- The direct effect of General Allocation Grant on economic growth is negative and significant with p-value of <0.05 and beta coefficient of -3,676;
- The direct effect of investment on economic growth is positive and significant with p-value of <0.01 and beta coefficient of 1,649;
- The direct effect of labor on economic growth is negative and significant with p-value of <0.01 and beta coefficient of -2,482;
- The direct effect of goods, services, and capital expenditure on economic growth is negative and insignificant with beta coefficient of -0.521;
- The direct effect of personnel expenditure on economic growth is positive and significant with p-value <0.01 and beta coefficient of 5,043;

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- The direct effect of regional tax on goods, services, and capital expenditure is positive and significant with the p-value of <0.01 and beta coefficient of 0.417;
- The direct effect of Revenue Sharing Fund from the provincial government on goods, services, and capital expenditure is positive and insignificant with beta coefficient of 0.073;
- The direct effect of Revenue Sharing Fund from the central government on goods, services, and capital expenditure is negative and significant at the error rate of 10% (p-value 0.077) and beta coefficient of -0.079;
- The direct effect of General Allocation Grant on goods, services and capital expenditure is positive and significant with p-value of <0.01 and beta coefficient of 0.473;
- The direct effect of regional tax on goods, services, and capital expenditure is positive and insignificant with beta coefficient of 0.001;
- The direct effect of Revenue Sharing Fund from the provincial government on personnel expenditure is positive and insignificant with beta coefficient of 0.042;
- The direct effect of Revenue Sharing Fund from the central government on personnel expenditure is positive and significant with p-value of <0.01 and beta coefficient of 0.068;
- The direct effect of General Allocation Grant on personnel expenditure is positive and significant with the p-value of <0.01 and beta coefficient of 1.054;

Table 4 – Weight of Regression in Factors

Variable			Estimate	S.E.	C.R.	P	Label
BBJM	<---	PD	,417	,087	4,779	***	par_1
BBJM	<---	DBH_Prop	,073	,115	,635	,525	par_2
BBJM	<---	DBH_Pst	-,079	,045	-1,768	,077	par_3
BBJM	<---	DAU	,473	,071	6,704	***	par_4
BP	<---	PD	,001	,039	,017	,986	par_11
BP	<---	DBH_Prop	,042	,051	,815	,415	par_12
BP	<---	DBH_Pst	,068	,020	3,455	***	par_13
BP	<---	DAU	1,054	,031	33,802	***	par_14
PE	<---	PD	-,714	,706	-1,010	,312	par_5
PE	<---	DBH_Prop	-1,091	,783	-1,394	,163	par_6
PE	<---	DBH_Pst	1,909	,368	5,191	***	par_7
PE	<---	DAU	-3,676	1,721	-2,136	,033	par_8
PE	<---	Inv	1,649	,330	5,001	***	par_9
PE	<---	TK	-2,482	,676	-3,670	***	par_10
PE	<---	BBJM	-,521	,576	-,905	,366	par_15
PE	<---	BP	5,043	1,383	3,647	***	par_16

Source: Path Analysis.

The negative relationship with different levels of significance indicates that tax has a negative influence on economic growth, confirming the results of Engen and Skinner (1996) that the application of budget by increasing tax revenues reduces economic growth. Khusaini (2017) in his research also showed that not all local taxes in East Java can be seen as local income potentials that increase local economic growth. A literature survey found that 40 of 57 studies that have at least one tax variable with a negative effect on economic activity found that the elasticity of economic activity on state and local taxes is -0.25 in the average (Bartik, 1992). Walker and Greenstreet (1991) found that property taxes have a negative influence and are generally significant on manufacturing plants in the Appalachian region. In addition, this study found that local taxes have a positive and significant effect on goods, services, and capital expenditures yet insignificant on personnel expenditure. The results of previous studies show that local own-source revenue, in this case is local tax, partially has a significant influence on capital expenditure (Darwanto, 2007).

The revenue sharing fund from the provincial government has a negative and insignificant relationship, so it can be said that in many parts of East Java economic growth

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from the revenue sharing fund from the provincial government tends to be negative. The revenue sharing fund from the central government obtained by regencies and cities has a positive and significant influence on economic growth. The same result was also found by several previous studies, which stated that the Revenue sharing fund from the central government had a positive and significant influence on economic growth (Hasan, 2015; Pujiati, 2008; Santosa, 2013), although the study did not describe sources of revenue the sharing fund. Therefore, it can be concluded that the Sharing Fund Revenue is directly proportional to economic growth. In addition, Revenue Sharing Fund from the central government have a positive and significant influence on personnel expenditure and are negative and insignificant on goods, services, and capital expenditure. This confirms the research of (Sihite, 2010) that the Sharing Fund Revenue affects direct expenditure as in personnel expenditure. The government will have the ability to set a larger direct expenditure if the Revenue Sharing Fund is high. In contrast, if the Revenue Sharing Fund budget is low, the government's ability to determine direct expenditure will also be small.

General Allocation Grant from the central government to the governments of regencies and cities has a negative and significant influence on regional economic growth. The same result is shown by Hartono (2012), that General Allocation Grant has a negative and significant influence on the economic growth of regencies and cities in the Special Region of Yogyakarta. Setyawati and Hamzah (2007) also found that General Allocation Grant has a negative and significant influence on economic growth in regencies and cities in East Java. General Allocation Grant has a positive and significant influence on two variables of local expenditures, namely goods, services, and capital expenditure and personnel expenditure. Previous studies also show the same results that General Allocation Grant affects goods, services, and capital expenditure and personnel expenditure (Abdullah and Halim, 2004; Prakosa, 2004; Santoso, 2013; Sihite, 2010; Darwanto, 2007).

Local income from the Revenue Sharing Fund of tax from the central government and General Allocation Grant become a variable with a significant effect ($p < 0.05$) on economic growth, but the relationship is different. Revenue Sharing Fund of tax from the central government increases economic growth, but General Allocation Grant actually decreases economic growth. This is based on the fact that local income in the form of Revenue Sharing Fund of tax from the central government tends to be allocated for personnel expenditure. Thus, it can be said that regions in East Java tend to use their budgets for personnel expenditure. General Allocation Grant actually will reduce economic growth if it is allocated to goods, services and capital expenditure. However, the economy tends to increase if General Allocation Grant is directed for other local expenditures such as personnel expenditure.

The components of local expenditures, such as goods, services, and capital expenditure, and personnel expenditure, shows that goods, services, and capital expenditure actually has a negative effect, although not significant. This is in line with several previous empirical studies that economic growth does not have a positive and significant influence on goods, services, and capital expenditure (Sudrajat, 2017; Tuasikal, 2008; Setiyawati & Hamzah, 2007). Khusaini (2016) also revealed the indirect effects on education and health expenditures, but infrastructure expenditure does not have any significant indirect effect on economic growth. Thus, it can be concluded that higher goods expenditure does not necessarily increase regional economic growth because goods expenditure is used for government operational costs, such as office stationery, correspondence, etc., so as not to affect economic growth. Capital expenditure also does not necessarily increase regional economic growth because this expenditure is intended to increase regional assets such as roads, buildings, land, etc. as well as providing public goods for the community. The amount of capital expenditure should be followed by the effectiveness of capital expenditure in public interest, which directly affects the development activities in the area.

Personnel expenditure actually has a positive and significant influence. The same result is shown by Rekanaharto (2014) that local expenditures, namely personnel expenditure, have a positive and significant influence on economic growth. Personnel expenditure affects economic growth significantly, i.e. <0.01. Thus, it can be concluded that personnel expenditure can increase regional economic growth and employee welfare and

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performance. This increase in welfare increases the purchasing power of people and the economy which ultimately increases the welfare of the community and employees. Increasing public welfare and employees certainly increases economic growth.

Regarding control variables, investment has a positive and significant effect on economic growth. Investment often leads to changes in overall demand and influences the business cycle, besides leading to capital accumulation that can increase the country's potential output and develop a long-term economic growth (Samuelson, 2005). This result is in accordance with the findings of Devarajan (1996) who used a sample of 95 developing countries during 1970-1990. The study found that private investment has a far greater impact on economic growth than public investment. Labor has a negative and significant influence on economic growth. According to Todaro (2003) other factors that determine economic growth are the number and quality of labor. The number of labors in an area can be high if the area has a large population. This large population tends to influence the economic growth of the region. Economic growth will slow down when labor cannot be absorbed properly. This is closely related to a relatively low level of education, knowledge, and technology. The same empirical results were also found by Santoso (2013), who stated that the coefficient of labor is -68.84, which is statistically significant on economic growth in Manado.

CONCLUSION

The general conclusions obtained from this study are, theoretically, the regional finance approach (government revenues and expenditures) and regional non-finance approach (investment and labor) complement each other in explaining the economic growth model in East Java.

Conclusions that can be drawn from the results of the analysis and discussion above are as follows:

- Local income in East Java, such as local taxes, increases regional goods, services, and capital expenditure. Furthermore, Revenue Sharing Fund from the central government increases personnel expenditure. General Allocation Grant affects goods, services, and capital expenditure and local expenditures. Regional economic growth tends to be oriented to local expenditures for personnel expenditure, not for goods, services, and capital expenditure. Thus, goods, services, and capital expenditure by the government are still limited to the fulfillment of goods, services, and capital in the internal scope of the government and do not have any positive impact on economic productivity.
- Local income such as Revenue Sharing Fund from the central government has a positive effect on economic growth. In addition, the Revenue Sharing Fund from the central government for personnel expenditure has a significant impact on economic growth. Local income from General Allocation Grant directly decreases economic growth. However, it has a positive influence if it is allocated to personnel expenditure because it indirectly has a positive influence on economic growth.
- Regarding non-financial factors, investment has a positive impact on economic growth. This shows that investment increases economic growth. It is good for investors because their expansion is supported by good economic conditions. Nevertheless, labor shows different results. Areas with good economic growth are regions with a lower number of labor than the average number in the region.

Based on the results above, this study provides the following suggestions:

- Sources of local income such as Revenue Sharing Fund from the central and provincial governments and General Allocation Grant that is useful for local expenditures and economic growth need to be optimized.
- Local expenditures such as goods, services, and capital expenditure should be oriented more to the effort of increasing the economic productivity, not only to the internal needs of the government but also to economic drivers such as roads and human capital such as entrepreneurship trainings.

- Local expenditures, especially in goods, services, and capital expenditure, need to be monitored so that they are in line with the objectives of improving the regional economy, so the achievement target and multiplier effect target on the economic output from the expenditure are needed.
- Regional competitiveness needs to be increased to attract investment.
- The leading sectors in each region need to be optimized in order to be able to absorb production capital and human resources.
- Local workers in areas with low economic growth need to be optimized through training so that they have high competitiveness.

REFERENCES

1. Adi, P. H. (2005). Dampak Desentralisasi Fiskal Terhadap Pertumbuhan Ekon. J. Kritis.
2. Adi, P. H., & Harianto, D. (2007). Hubungan Antara Dana Alokasi Umum, Belanja Modal, Pendapatan Asli Daerah and Pendapatan Per Kapital. Simposium Nasional Akuntansi X Makassar.
3. Abdullah, S., & Halim, A. (2004). Pengaruh Dana Alokasi Umum (DAU) and Pendapatan Asli Daerah (PAD) terhadap Belanja Pemerintah Daerah: Studi Kasus pada Kabupaten/Kota di Jawa-Bali. Jurnal Simposium NasionalAkuntansi (SNA), 32-41.
4. Arsyad, L. (2004). Ekonomi Pembangunan. Yogyakarta: Bagian Penerbitan Sekolah Tinggi Ilmu Ekonomi YKPN.
5. Attari, M. I. J., & Javed, A. Y. (2013). Inflation, Economic Growth and Government Expenditure of Pakistan: 1980-2010. Procedia Economics and Finance, 5, 58 – 67.
6. Bartik, T. (1992). The Effects of State and Local Taxes on Economic Development: A Review of Recent Research. Economic Development Quarterly, 6.
7. Chu, A. C., & Yang, C. C. (2012). Fiscal centralization versus decentralization: Growth and welfare effectsof spillovers, Leviathan taxation, and capital mobility. Journal of Urban Economics, 71(2012), 177–188.
8. Devarajan, S., Swaroop, V., & Zou, H. (1996). The composition of Public Expenditure and Economic Growth. Journal of Monetary Economics, 37, 313-344.
9. Darwanto., & Yustikasari, Y. (2007). Pengaruh Pertumbuhan Ekonomi, Pendapatan Asli Daerah, and Dana Alokasi Umum Terhadap Pengalokasian Anggaran Belanja Modal. Simposium Nasional Akuntansi X Makassar.
10. Djojohadikusumo, S. (1994). Perkembangan Pemikiran Ekonomi: Dasar Teori Ekonomi Pertumbuhan and Ekonomi Pembangunan. Jakarta: PT Pustaka LP3ES Indonesia.
11. Gunantara, P. C., & Dwirandra, A. A. N. B. (2014). Pengaruh Pendapatan Asli Daerah and Dana Alokasi Umum pada Pertumbuhan Ekonomi dengan Belanja Modal sebagai Variabel Pemoderasi di Bali. E-Jurnal Akuntansi Universitas Udayana, 7(3),
12. Ghozali, I. (2013). Aplikasi Analisis Multivariate dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.
13. Hasan, M. (2015). Pengaruh Dana Transfer Pusat Terhadap Daerah Pertumbuhan Ekonomi Daerah Kabupaten/Kota Di Sulawesi Selatan. Jurnal Ekonomi, 3(1),
14. Hyman, D. N. (2010). Public Finance: A Contemporary Application of Theory to Policy. USA: South-Western Cengage Learning.
15. Hartono, F. W. (2012). Analisis Pengaruh Dana Alokasi Umum and Pendapatan Asli Daerah terhadap Pertumbuhan Ekonomi Kabupaten/kota di Propinsi Daerah Istimewa Yogyakarta dengan Belanja Daerah Sebagai Variabel Intervening. Jurnal Ilmiah Mahasiswa Fakultas Ekonomi Universitas Atma Jaya Yogyakarta,
16. Isti'anah. (2008). Optimalisasi Peran Dana Bagi Hasil (DBH) Dalam Pembangunan Daerah. Jurnal Informasi, Perpajakan, Akuntansi and Keuangan Publik, 3(1), 45-54.
17. Khusaini. (2018). Keuangan Daerah. Malang: UB Press
18. Khusaini. (2014). Local government planning and budgeting process : a case of districts and cities in Indonesia. International Journal of Economic Policy in Emerging Economies, 7(2), 6–8.
19. Khusaini. (2017). Local Taxes and Pro-cyclical Fiscal Policy in Indonesia. International

Journal of Business and Management, 11, 261–269.
20. Khusaini, M. (2016). The role of public sector expenditure on local economic development. International Journal of Economic Policy in Emerging Economies, 9(2), 182 -190.
21. Kalirajan, K., & Keijiro, O. (2012). Fiscal Decentralization and Development Outcomes in India:An Exploratory Analysis. World Development, 40(8), 1511–1521.
22. Mankiw, N. G. (2006). Makro Ekonomi. Jakarta: Erlangga.
23. Musgrave, R. A., & Musgrave, P. B. (1980), Public Finance in Theory and Practice, International Student Edition. USA: Mc Graw Hill.
24. Muis, N. H. (2012). Pengaruh Dana Alokasi Umum and Dana Alokasi Khusus Terhadap Pertumbuhan Ekonomi and Belanja Modal Sebagai Variabel Intervening Pada Kabupaten/Kota di Provinsi Sumatera Utara (Unpublished Thesis). Sekolah Pascasarjana Universitas Sumatera Utara, Medan.
25. Mangkoesoebroto, G. (2010). Ekonomi Publik. Yogyakarta: BPFE.
26. Nanga, M. (2005). Makroekonomi: Teori, Masalah and Kebijakan. Jakarta: PT Raja Grafindo Perkasa.
27. Pujiati, A. (2008). Analisis Pertumbuhan Ekonomi Di Karesidenan Semarang Era Desentralisasi Fiskal. Jurnal Ekonomi Pembangunan,
28. Prakosa, K. B. (2004). Analisis Pengaruh Dana Alokasi Umum and Pendapatan Asli Daerah Terhadap Prediksi Belanja Daerah (Studi Empirik di Wilayah Propinsi Jawa Tengah and DIY). JAAI, 8(2),
29. Rekanaharto, M. (2014). Pengaruh Belanja Modal and Belanja Pegawai Terhadap Pertumbuhan Ekonomi Daerah Di Kabupaten Tulang Bawang Tahun 2003-2012 (Unpublished Thesis). Universitas Lampung, Lampung.
30. Santoso, B. (2013). Pengaruh Pendapatan Asli Daerah and Dana Perimbangan daerah Terhadap Pertumbuhan Ekonomi, Pengangguran and Kemiskinan 33 Provinsi di Indonesia. Jurnal Ekonomi and Bisnis, 5(2),
31. Suparmoko, M. (2002). Keuangan Negara dalam Teori and Praktek. Yogyakarta: BPFE.
32. Setiyawati, A., & Hamzah, A. (2007). Analisis Pengaruh PAD, DAU, DAK, and Belanja Pembangunan terhadap Pertumbuhan Ekonomi, Kemiskinan and Pengangguran: Pendekatan Analisis Jalur. Jurnal Akuntansi and Keuangan Indonesia, 4(2),
33. Sudrajat, M. A., et al. (2017). Analisis Pengaruh PAD, DBH, DAU, DAK and Pertumbuhan Ekonomi terhadap Belanja Modal Kabupaten Ngawi Tahun 2003 – 2015. Jurnal Akuntansi FEB Unipma, 1(1),
34. Sumedi. (2013). Impacts of Deconcentration Fund of Ministry of Agriculture and Local Spending for Agricultural Sector on Local Agricultural Sector Performance. Jurnal Agro Ekonomi, 31(2), 97-113.
35. Sugiarthi, N. P. D. E. R., & Supadmi, N. L. (2014). Pengaruh PAD, DAU, and Silpa pada Belanja Modal dengan Pertumbuhan Ekonomi sebagai Pemoderasi. E-Jurnal Akuntansi Universitas Udayana, 7(2), 477-495.
36. Samuelson, N. (2005). Economics (18th Ed). New York: Mc Graw Hill-Irwin.
37. Sukirno, S. (2008). Pengantar Teori Makro Ekonomi. Jakarta: PT Raja Grafindo Persada.
38. Sihite, F. (2010). Pengaruh Pendapatan Asli Daerah, Dana Alokasi Umum and Fiscall Stress terhadap Kinerja Keuangan di Kabupaten and Kota Provinsi Sumatera Utara (Unpublished Thesis). USU, Medan.
39. Sobel, M. E. (1982) Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. Sociological Methodology, 13, 290-321.
40. Tuasikal, A. (2008). Pengaruh DAU, DAK, PAD and PDRB Terhadap Belanja Modal Pemerintah Daerah. Jurnal Telaah & Riset Akuntansi, 1(2), 142-155.
41. Todaro, M. P. (2003). Pembangunan Ekonomi Di Dunia Ketiga. Translated by Aminuddin., & Mursid. Jakarta: Ghalia Indonesia.
42. Widmalm, F. (2001). Tax structure and growth: Are some taxes better than others? Kluwer Academic Publishers. Journal Public Choice, 107, 199–219.
43. Walker, R., & Greenstreet, D. (1991). The Effect of Government Incentives and Assistance on Location and Job Growth in Manufacturing. Regional Studies, 25.