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Indonesia Economic Growth: Determinants and Prospects

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Info Articles

Abstract

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Accepted: 8 October 2020 Published: 31 January 2021 This research examines the impact of government expenditure and a few other factors on long-term economic growth in Indonesian provinces. This research is based on a panel data analysis of 26 provinces from 2000 to 2018. The data passed the stationarity test using Madalla and Wu's suggested Augmented Dickey Fuller (ADF) - Fisher test for panel data (1999). As a result, data at the first difference level is stagnant. The coefficient on real government expenditure is highly positive, according to this study. This indicates that government expenditure has a significant impact on Indonesia's economic growth. The impact of total government spending is examined in this study.

Keywords: Panel Data, Government Expenditure, Economic Growth, Unit Root Test

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INTRODUCTION

Economic growth, defined as the process of growing output through time, has become a key indicator of a country's successful development (Todaro, 2005). As a result, it's worth digging deeper into the identification of many elements that influence it, including the function of government. According to Solow and Swan's (1956) basic theory of Neoclassical economic growth, the role of government in terms of expenditure and taxes has no impact on growth (Kneller, 1999). Exogenous capital stock, labor, and technology are the only factors that influence economic growth. The government has the potential to influence population increase, which affects labor availability but not economic growth.

Long-term economic growth is influenced by investments in physical and human capital, according to endogenous growth theory. The government's contribution to economic growth can be explained by its ability to affect changes in consumption and expenditure for public investment as well as tax income. Infrastructure, law and regulation, political stability, government policy, bureaucracy, and the foundation of international exchange are all essential aspects that affect economic growth, according to this theory group.

Government expenditure, as a concrete form of government intervention in the economy, has become a hot topic of study. Among other things, research was done on Asian countries (Cheng 1997). Cheng demonstrated a strong beneficial connection between government expenditure and economic growth in South Korea using the Vector Autoregres sive (VAR) technique. Other studies, such as those conducted by Singh and Sahni (1984) and Ram (1985), suggest that increased government expenditure has a beneficial influence on economic growth (1986). On the other side, there are studies that demonstrate the importance of the link between the two variables, but with negative association patterns. Landau (1986) and Russek (1986) were two of the researchers that worked on the project (1990).

In Indonesia the government sector has a major role in the history of the economy. The role is poured in the government form of fiscal policy implementation to achieve the main development goals in the form of high economic growth, reducing unemployment and controlling inflation. The fiscal policy implemented by the Indonesian government has two main instruments, namely taxation and expenditure.

Government expenditure as one of the important instruments of fiscal policy is expected

to be able to encourage economic activity and increase economic growth. The government optimizes this role by increasing spending to Gross Domestic Product (GDP). In real terms government spending also increases in line with the increase in Gross Domestic Product (GDP). The role of government in the economy is shown by spending on the economy as a percentage of total expenditure tends to increase.

One source of economic development is government expenditure, which is a fiscal policy tool. Whether the previous period's economic growth has a major impact on the next period's economic growth is one of the research issues that will be answered. Does the amount of money spent by the provincial government have an impact on the growth of the province's economy? Is there a link between openness and economic growth in the provinces? Is the province's economic growth largely influenced by its population?

This study aimed to analyze the effect of government spending and other variables (budget deficits, openness, inflation, and population) on economic growth. Meanwhile, the benefits of this research are expected to add to the literature in the public economy and as a reference further research, as well as providing input and information for the government as policy makers and all parties interested in the study of the influence of government budgets, especially spending on economic growth.

LITERATURE REVIEW

Economic growth is one measure of a country's economic development success. The quantity of growth reflected by changes in national production determines an economy's welfare and advancement. A short-term economic analysis is the existence of changes in production in the economy.

According to Adam Smith, the government has three basic tasks in supporting the economy: (1) preserving domestic security and defense; (2) administering justice; and (3) supplying products that the private sector does not offer, such as infrastructure and public amenities. To carry out its tasks correctly, the government need a budget, and the method for carrying out the budget is fiscal policy. Fiscal policy refers to the amount, growth, and structure of a country's government budget.

According to Todaro, there are three main determinants of a country's economic growth: (1) capital accumulation, which includes all forms or types of new investments in land, physical equipment, and human resources; (2) population growth, which increases the number of workers

in the coming years; and (3) technological progress. Economic growth, according to Kuznets, is an increase in a country's long-term potential to supply different economic commodities to its population. Increases in capacity are brought about by technical, institutional, and ideological advancements in response to diverse needs in the current environment.

Economic growth theories may be divided into two categories: classical economic growth theories and current economic growth ideas. The analysis in classical economic growth theory is founded on a confidence in the efficacy of free market forces. Economic ideas produced by economists from the 18th through the early 20th century are known as classical economic theory. Classical economists included Adam Smith, David Ricardo, and W. A. Lewis.

The theory of modern economic growth is another theory that explains economic growth. This theory's general characteristics acknowledge the importance of government in the economy in overcoming the failure of the free market system. This group does not believe in the freemarket system's success in the absence of government involvement. Harrold Domar's economic growth theory is one of the modern growth theories. Harrod-Domar is a direct extension of Keynes' short-term macroeconomic theory to long-term macroeconomic theory. According to these two economists, investment expenditure (I) affects both aggregate demand (AD) and aggregate supply (AS) through its impact on production capacity. In the long run, investment increases the stock of capital (C). According to Harrod-Domar, every extra stock of communal capital boosts the community's ability to create output. The targeted output is the maximum amount of production that can be generated with the current capital stock. While realized and potential output are not always the same, the quantity of aggregate demand influences this.

The volume and form of government purchases, transfers, and taxes are referred to as fiscal policy. Fiscal policy is also described as the government's economic policy of altering (increasing or decreasing) state revenue and/or state spending to meet certain objectives. The policy's focus is on government expenditure and tax revenue, which is why it's also known as budget policy. In general, the fiscal policy goals to be reached are an increase in national income, an increase in employment opportunities, a decrease in inflation, a decrease in the trade deficit, and a decrease in the international balance of payments deficit.

Fiscal policy has 3 main functions, namely: a) allocation function in the form of social goods supply or distribution process overall resources to be used as personal goods and social goods and how social goods are composed determined, b) the distribution function, namely the adjustment to the distribution of income and wealth to ensure the fulfillment of what is considered by the community as a condition of fair and equitable distribution, and c) the stabilization function as a tool to maintain a high level of employment opportunities, the level of stability that should be , And the rate of growth which is right by calculating its impact on trade and balance of payments.

There is a limit to the amount of government expenditure that has a favorable impact on economic growth. Government spending will boost economic growth if the government can establish conditions where the government's share of output is totally dedicated to providing public goods that are used as competitive production inputs.

Wagner came up with a general hypothesis regarding a positive long-term relationship between government spending with economic development based on observations in European countries, U.S. and Japan. The hypothesis explains that economic growth is a fundamental factor that determines growth public sector including government spending and consumption. This statement is called the law of expanding state activity or Wagner's Law.

The relationship between government spending and economic growth is complex. From the results of existing research to date, at least some acceptable econometric theories and techniques are needed so that the results of the study are not spurious. This requirement makes a study as well as proof of the relationship both of these variables continue to develop followed by the use of the latest econometric techniques so that the results are closer to reality and can be used for forecasting.

Research on the effects of fiscal policy, especially government spending on economic growth is always become an interesting issue at any time period and generate debate. On the one hand there is research that concludes that the impact of government spending on economic growth is positive. Ram (1986) using time series data and cross-country 115 countries found that high government consumption contributed to economic growth. Other studies have shown the negative impact of government spending on economic growth as found by Folster and Henrekson (1999) in Nijkamp and Poot: 2003.

Log(DEFct)

Too much government expenditure, according to Sjoberg (2003)'s research in Sweden, will stifle economic progress. This study explores a substantial association between government expenditure in the form of investment, consumption, and government transfers with economic development using endogenous growth models and Ordinary Least Square (OLS) methodologies. Sinha (2000) conducted similar research in Malaysia, looking at the link between expenditure government and economic development. Sinha discovered negligible outcomes.

Meanwhile several studies on fiscal policy and economic growth using panel techniques the data show almost the same results. Bania, Gray and Stone (2007) try to measure the nonlinearity of the impact of using taxes to finance spending productive government like health on economic growth. This study shows that the impact of tax increases used to finance government spending is non-monotonic, which is initially positive but at one time decreased. This decrease occurred due to crowding out of capital privately due to a tax burden that reduces the net return on private capital.

METHOD

This study uses annual data from 26 provinces in Indonesia in the period 2000 to 2018. Because of the larger number of observations, the use of panel data in this study is predicted to give more full information and be able to reveal a more accurate link (Nijkamp and Poot, 2003). Significant policy changes to the preparation of the State Budget (APBN), which impact the amount of government expenditure, are expected to be accommodated throughout the chosen time period.

The equation system used refers to the model formed by Miller and Russek (1993) about relationships between fiscal structure and economic growth. The model will be analyzed by the econometric regression method of panel data. Model used in this research are:

Log (PDRBPct) = a1 + a2Log(PDRBPct-1) + a3Log(EXct) + a4Log(DEFct) + a5Log(OPNct) + a6Log(INFct) + a7Log(POPct) + a8Dsda + a9Dlok + a10Ddes + ect Information :

Log (PDRBPct) = Pendapatan Domestik Regional Bruto Perkapita (Gross regional domestic income real capita)

Log (PDRBPct-1) = Pendapatan Domestik Regional
Bruto Perkapita riil Tahun
Sebelumnya (Gross regional

domestic income capita previous year)

Log(EXct) = Pengeluaran Pemerintah

(government expenditure)
= Defisit Anggaran Pemerintah

(government budget deficit)

Log(OPNct) = Keterbukaan Ekonomi (opennes

conomy)
Log(INFct) = Inflation
Log(POPct) = Population

Dsda = Natural Resources
Dlok = Location
Ddes = Decentralization
ect = Error term

Regression analysis used in this study is panel data analysis. Panel data or pooled data is a combination of time series data and cross location data. According to Batalgi (2000), panel data includes two dimensions, namely spatial dimensions and dimensions temporal. Spatial dimensions are a set of units observations of certain variables, while the temporal dimension is a set of time coherent observation units.

Statistic Test

Variable significance test (T test). This test is intended to measure the significance of each variable in the regression model. If the t-value the statistics obtained through regression are significantly far from zero, at a certain degree of significance, the variable it is statistically significant. Testing can be done with two sides or one side. Two-sided testing is testing the hypothesis to be reject the null hypothesis, if the statistical value has a real difference greater or smaller than the population parameters used as a hypothesis.

Concurrent significance test (F test). Statistics are used to measure the significance of variables simultaneously in a model. The idea of this test is if the statistic F value is large enough, meaning that what is explained is greater than what cannot be explained in the model, then H0 is rejected that there are no independent variables that affect the dependent variable.

Test the coefficient of determination R2. R2 can be done after we do the regression. R2 measures the proportion of the total variation in Y which can be explained through the linear relationship between Y and X where R2 lies between 0 and 1.

Model Selection Test

The decision to use FEM or REM is determined with consideration if it is assumed that ϵi and the independent variable X are correlated, then FEM is more suitable to be chosen. Conversely, if ϵi and the independent

variable X do not correlate, then REM is better to choose. Some considerations that can be used as a guide to choose between FEM or REM are (Judge et al., 1985):

- 1. If T (number of time series units) is large while N (number of cross section units) is small, then the results are fixed effects and random the effect is not much different so that an easier approach to calculate can be chosen namely the fixed effect model.
- 2. If N is large and T is small, the estimated results of the two approaches will differ greatly. So, if we believe that the cross section units that we chose in the study were taken randomly then random effects must be used. Conversely, if we believe that the cross section unit we selected is in research is not taken randomly so we must use fixed effects.
- 3. If the individual error component I corresponds with the independent variable X, the random effect parameters will be refracted but the fixed effect parameters will not
- 4. The random effect is more efficient than the fixed effect if N is big and T is small, and the assumptions behind the random effect can be met.

Consideration of the selection of the model used is approached using the F statistic which attempts to compare the value of the sum of the squares of errors from the estimation process using the least squares method and the fixed effects that have included puppet variables.

In addition, the selection of models with this approach with the LM test aims to choose between the PLS and REM models. With this test the calculated LM value will be compared with $\chi 2$ -table. The choice of using this model is guided by: (1) LM value < $\chi 2$ -table then H0 is rejected, which means the PLS model is selected, and (2) LM value > $\chi 2$ -table then H1 is rejected, which means the REM model is selected. In addition, the Hausman test was used in the choice between FEM models and REM models. The difference between the two is the presence or absence of a correlation between individual effects and independent variables.

Unit Root Test

Unit root test is testing of a series of data in the initial stages which aims to find out the stationarity of the data. Stationary data is needed so that the estimation results are not spurious (suporious regression) (Enders, 1995).

Table 1. Variability Stationary Test Results

	Level			First Deferent		
Variable	Interception	Trends and Interception	Without Trends and Interception	Interception	Trends and Interception	Without Trends and Interception
GRDP	30.684	73.606	3.465	319.755***	246.506***	344.203***
(PDRB)	0.992	0.026**	1.000	0.000	0.000	0.000
GRDP-1	348.079***	288.081***	370.994***	500.607***	411.388***	677.214***
(<i>PDRB-1</i>)	0.000	0.000	0.000	0.000	0.000	0.000
EX	32.898	42.167	11.581	309.471***	257.786***	445.231***
	0.982	0.833	1.000	0.000	0.000	0.000
DEF	210.348***	148.829***	206.169***	423.679***	363.772***	594.744***
	0.000	0.000	0.000	0.000	0.000	0.000
OPN	65.772*	111.336***	41.915	512.495***	425.404***	700.433***
	0.095	0.000	0.840	0.000	0.000	0.000
INF	300.159***	224.886***	216.588***	524.385***	416.495***	713.006***
	0.000	0.000	0.000	0.000	0.000	0.000
POP	29.16	52.14	16.33	348.55***	287.90***	151.25***
	0.995	0.468	1.000	0.000	0.000	0.000

Information: *** = Significant 1%, ** = Significant 5%, * = Significant 10%

From this table it can be seen that all stationary variables are first degree (significant difference) and significant at $\alpha = 1\%$ (0.01).

Table 2. Estimated Results

Independent \	Value	
С	Koe	3.015***
	SE	0.276
	t-stat	10.923
	Prob	0.000
Log	Koe	0.238***
PDRBPct-1	SE	0.022

GRDP-1	t-stat	10.799	
oner i	Prob	0.000	
Log EXct	Koe	0.227***	
Log Liter	SE	0.039	
	t-stat	5.771	
	Prob	0.000	
Log DEFct	Koe	0.057***	
Log DEI et	SE	0.016	
	t-stat	3.541	
	Prob	0.000	
Log OPNct	Koe	0.127***	
Log Office	SE	0.013	
	t-stat	9.994	
	Prob	0.000	
Log INFct	Koe	-0.046	
208 11 11 01	SE	0.030	
	t-stat	-1.540	
	Prob	0.124	
Log POPct	Koe	- 0.368***	
	SE	0.034	
	t-stat	-10.766	
	Prob	0.000	
Dsda	Koe	0.294***	
	SE	0.054	
	t-stat	5.399	
	Prob	0.000	
Ddes	Koe	0.319***	
	SE	0.044	
	t-stat	7.238	
	Prob	0.000	
Dlok	Koe	0.139*	
	SE	0.072	
	t-stat	1.919	
	Prob	0.056	
R2	0.767		
Adj R2	0.762		
F-statistik	161.979		
Prob F-stat		0.000	
Durbin-Waston	0.479		

Information: *** = Significant 1%

** = Significant 5%

* = Significant 10%

RESULTS AND DISCUSSION

The results of data analysis starting with the stationarity test for panel data recommended by Maddala and Wu (1999) are by using the Augmented Dickey Fuller-Fisher (ADF-Fisher) test with the results as described in Table 1. From Table 1 it can be seen that all variables are stationary at one degree (first difference) and significant at $\alpha = 1\%$ (0.01).

The results of the panel data estimation on the model with 453 observations during the 2000-2018 observation period were obtained seen in Table 2. This estimate provides empirical support for the relationship between economic growth and government spending accompanied by several important variables in the economy such as inflation, openness and population. Estimates also include control variables in the form of crisis

dummy, source natural resources, decentralization, and location.

Table 2 is an estimation result with the dependent variable real Per capita Gross Regional Domestic Product (Log PDRBPct) Province. The variable (Log PDRBct-1) representing the real per capita GRDP per province in the previous year was used to indicate intergregational convergent speed. This variable shows a significant positive relationship on all models. This means that high convergent speeds will drive increase in per capita GRDP per province in Indonesia.

In the estimation model, all fiscal variables, control variables and other important macro variables are included in the model. The result, all fiscal variables show a positive and significant effect on GDP per capita growth. The provincial

government budget deficit (Log DEFct) shows a significant positive effect that is in line with the hypothesis of this study. An increase in the government deficit of 1 percent will increase the GRDP per capita by an average of 0.057 percent. Total government expenditure (Log EXct) also shows the same effect, which is positive significant. The regression coefficient of this variable shows if there is an increase total government expenditure of 1 percent will increase GRDP per capita by an average of 0.227 percent.

Each control variable shows the same result. The effect of ownership of natural resources (DSDA) gives positive impact, meaning that provinces with natural resources in the form of mining have higher economic growth by 0.29 percent. Decentralization (DDES) also causes growth the provincial economy is higher by 0.13 percent. Differences in locations on the islands of Java and outside Java (DLOK) also show significant positive results meaning that province located on the island of Java has a higher economic growth of 0.13 percent.

Other variables, namely inflation log (INFct) and population log (POPct), respectively showed a significant negative effect. While economic openness (Openness) Log (OPNct) showed a significant positive effect of 0.127 percent.

The regression coefficient for each variable shows that if there is an increase in inflation of 1 percent it will decrease the average GRDP of 0.046 percent and if there is an increase in population of 1 percent will reduce the average GRDP by 0.368 percent.

In previous studies, economic openness had a positive influence on growth. A country's economy that is integrated with the global economy has more opportunities to expand markets and increase competitiveness so that efficiency is achieved. This is as found by Dollar (1992) in Yusufzai: 1996 which examined 95 developing countries. His research shows that outward-oriented countries grow faster than inward-oriented countries. The Indonesian economy is also an open economy, as long as the New Order leadership of the Indonesian economy is integrated with the world (Thee, 2003) so that the influence of export and import activities is one of the drivers of national economic growth.

Inflation variable has a negative effect on GRDP growth even though it is not significant. High inflation mimics the real value of money. In line with the study of Miller and Russek (1993), Levin and Renelt (1992) that inflation consistently has a negative impact.

The control variables tend to be consistently give a positive influence on the growth of GRDP per capita. Binary variables for natural resources (DSDA) show a significant positive relationship, meaning the availability of natural resources a mine in a province increases the GRDP per capita Province with abundant mining resources have a larger GDP per capita. The existence of a decentralization policy which began in 2001 also affects GRDP per capita growth. The Dummy variable for decentralization (DDES) shows a positive effect in each model and is significant.

The decentralization policy has provided opportunities and opportunities for each province to create policies that can improve the welfare of the community. Narrower territories and fewer inhabitants make it easier for the government regions to determine the right and effective policy in increasing the GRDP of the community.

Differences in the location of a province also affect the real per capita economic growth of a province. This is indicated by the binary variable for location (DLOK) which is positive although not significant. This indicates that the province is in Java tends to be more prosperous compared to provinces outside of Java.

Uneven economic development during the New Order infrastructure has created gaps and facilities economy between the two regions (Tambunan, 2001). In addition to physical factors, the difference is also due to the quality of human resources in Java, which is much better, so that the people have a better ability to create works.

CONCLUSION

The conclusion obtained in this study is the GRDP variable of the previous year had a positive impact on economic growth. This shows that the high converging speed will increase economic growth. Government expenditure has a positive impact on economic growth, as well as the variable openness, natural resources, location, and the variable decentralization has a positive impact on economic growth.

While population variables have a negative impact on economic growth. This shows that the number of non-workforce population is large enough to reduce the average productivity of the population who are in the workforce which has a negative impact on economic growth. This also affects the inflation variable negatively. This shows that the role of government in controlling prices for the long term is not able to support economic growth, but on the contrary can inhibit growth the economy.

This study tries to provide input for policy makers to determine policy decisions in the future

is related to the role of government spending on economic growth. Significantly positive results from the coefficient of government expenditure variables indicate that the government still plays an important role in supporting economic growth in Indonesia. This needs to be addressed with the seriousness of the government to allocate these expenditures to productive sectors and projects.

The results of this study are still aggregate and have not analyzed the relationship between the two variables in more detail. However, the results of this study are expected to provide input for policy makers in designing government expenditure to support economic growth. It is hoped that further studies will be carried out on the analysis of the role of fiscal policy in economic growth that separates fiscal policy for productive interests such as public investment and unproductive interests such as routine consumption.

References

- Atkinson, Anthony B and Joseph E. Stiglitz (1980), *Lectures on PublichEconomich*. New York: McGraw-Hill.
- Badan Pusat Statistik. *Statistik Indonesia*, berbagai terbitan. Jakarta: BPS.
- Bania, Gray & Stone (2007). Growth, Taxes, and Government Expenditures: Growth Hills for U.S State, National Tax Journal.
- Barro, Robert (1990). Government Spending in a Simple Model of Endogenous Growth. Journal of Political Economy.
- Boediono, (1982). *Ekonomi Makro Ed. 4.* Yogyakarta: BPFE
- Cheng, Benjamin S and Tin Wei Lai (1997).

 Government Expenditures and Economic

 Growth in South Korea: A VAR Approach.

 Journal of Economy Development.
- Conte and Darrat (1988). Economic Growth and the Expanding Public Sector: A Reexamination. Review of Economics and Statistics.
- Damodar, N. Gujarati (2003). *Basic Econometrics* 4th Edition. New York: McGraw-Hill.
- Departemen Keuangan. (2004). *Dasar-dasar Keuangan Publik*. Jakarta: Tim Penyusun Badan Pendidikan dan Pelatihan Keuangan
- Dwi Sutatmi, Bernadetta (2008). *Makro Ekonomi Indonesia:Prospek Ekonomi 2008 Perkembangan Terkini 2007*. Jakarta:
 Lembaga Penelitian Ekonomi
- Farmer, R. (2002). *Macroeconomics, 2nd Edition*. South Western: Thomson Leraning.
- Grimes, Arthur, (2003). Economic Growth and the Size & Structure of Government: Implications for New Zealand. Dept. Of Economics. University of Waikato.

- Hyman, David, (2005). *Public Finance: A Contemporary Application of Theory to Policy,* 8th Edition. South Western: Thomson.
- Kneller, Richard, Michael Bleaney, and Norman Gemmel (1999). Fiscal Policy and Growth: Evidence from OECD Countries. Journal of Public Economics.
- Kuncoro, Mudrajad,. (2003). Ekonomi Pembangunan: Teori, Masalah dan Kebijakan. Yogyakarta: UPP YKPN
- Landau (1985). Government Expenditure and Economic Growth: A Cross-Country Study. Southern Economic Journal.
- Loizides and Vamvoukas, (2001). Government Expenditure and Economic Growth: Evidence from Trivariate Causality Testing. Journal of Applied Economics.
- Maddala, G. (2001). *Introduction to Econometrics,* 3rd *Edition.* England: John Wiley & Sons
- Mankiw, N. Gregory, (2005). *Macroeconomics, 6th Edition*, New York: Worth Publishers.
- Mangkoesoebroto, Guritno, (2001). *Ekonomi Publik, Edisi Ketiga*. Yogyakarta: BPFE
- Miller and Russek (1993). Fiscal Structures and Economic Growth: International Evidence. Working Paper: University of Connecticut.
- Nijkamp, Peter and Jacques Poot (2003). *Meta-Analysis of the Impact of Fiscal Policies on Long-Run Growth*. European Journal of Political Economy.
- Park (2006), Expenditure Composition and Distortionary Tax for Equitable Economic Growth. Working Paper, International Monetary Fund.
- Parkin, Micheal. (1993). *Macroeconomics*, 2nd *Edition*. USA: Addison Wesley Publishing.
- Rossen, Harvey. S. (1999). *Public Finance*, 5th *Edition*. New York: McGraw-Hill.
- Seda, Frans. (2004). Kebijakan Anggaran Penerimaan & Belanja Negara (APBN) Berimbang dan Dinamis. Jakarta: Kompas
- Suparmoko, M (2002). Ekonomi Publik untuk Keuangan & Pembangunan Daerah. Yogyakarta: Andi Press
- Sinha (2000). Government Expenditure and Economic Growth in Malaysia. Journal of Economic Development.
- Todaro, Michael P. and Smith, Stephen C. (2003). *Economic Development*. UK: Pearson Education Limited