

THE IMPACT OF GOVERNMENT EXPENDITURE ON POVERTY: CASE OF JAVA 1996, 1999 AND 2002

Rahadi Nugroho

ABSTRACT

Penelitian ini menggunakan data SUSENAS tahun 1996, 1999 dan 2002 di 5 provinsi di Jawa untuk melihat pengaruh pengeluaran pemerintah kabupaten dan kotamadya terhadap tingkat kemiskinan (PO). Secara statistik pengeluaran pemerintah untuk sektor sumber daya manusia menunjukkan pengaruh bahwa pengeluaran tersebut dapat dipergunakan untuk mengurangi kemiskinan tahun yang bersangkutan. Sedangkan pengeluaran selain untuk sektor sumber daya manusia tidak secara signifikan berpengaruh terhadap angka kemiskinan tahun yang sama. Selain itu, keseluruhan pengeluaran pemerintah tidak berpengaruh terhadap angka kemiskinan. Oleh karena itu, jika pemerintah daerah berkeinginan untuk mengurangi angka kemiskinan tahun yang bersangkutan, pengeluaran untuk pengembangan sumber daya manusia perlu diprioritaskan.

Keywords: pengeluaran pemerintah, kemiskinan, sumber daya manusia, pemerintah daerah.

- Mahmood, M.A., et al. 2000. "Variable Affecting Information Technology End-user Satisfaction: A Meta-Analysis of the Empirical of the Empirical Literature". International Journal of Human Computer Studies. 52: 4.
- McGill, et al. 2003. "User-Developed Applications and Information Systems Success: a Test of DeLone and McLean's Model". Information Resource Management Journal. Jan-Mar. 16 No. 1. 4.
- McKiney, K.Yoon, dan Fatemeh Zahedi. 2002. "The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach". Information System Research. 13. 3.
- Pitt, L.F., R.T. Watson, dan C.B. Kavan. 1995. "Service Quality : A Measure of Information Effectiveness". MIS Quarterly. 19:2.
- Rai, A., S.S. Lang, dan R.B. Welker. 2002. "Assessing the Validity of IS Success Models: An Empirical Test and Theoretical Analysis". Information Systems Research 13. No.1: 29-34.
- Schaupp, L.C. dan France B. Wiguo F. 2009. "Examining The Success of Website Beyond E-Commerce: An Extension of The IS Success Model".
- Seddon, Peter B. 1997. " Respesification and Extension of the DeLone and Mc Lean Model of IS Success". Information System Research. 8:3.
- Seddon, Peter dan Siew-Kee Yip. 1992. "An Empirical Evaluation of User Information Satisfaction (UIS) Measures for Use with General Ledger".
- Sekaran, Uma.1992. A Skill Building Approach : Research Method for Business. Second Edition. New York: John Wiley & Sons, Inc.
- Wijanto, Setyo Hari. 2008. Structural Equation Modeling dengan Lisrel 8.8. Graha Ilmu.
- Yelkur, R. 2000. "Customer Satisfaction and The Service Marketing Research Mix". Journal of Professional Services Marketing. 21:

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Keywords: pengeluaran pemerintah, kemiskinan, sumber daya manusia, pemerintah daerah.

INTRODUCTION

Statistic Indonesia (2008) reported in 2007 that 37.17 million or 16.58 percent of the population of the country lived below the poverty line. Prior to the Asian financial crisis in 1997 poverty incidence in Indonesia decreased dramatically, from 40 percent of the total population in 1970 to around 11 percent in 1996. Having achieved such incredible performance in poverty alleviation by 29 percentage points, poverty incidence surged drastically when the Asian financial meltdown hit the Indonesian economy. During the crisis, economic growth decreased sharply, from an average annual growth rate of 7 percent to -13 percent in 1998. The decline in economic growth caused an increase in poverty incidence from 11 percent in 1996 to 24.2 percent in 1998. In order to protect citizens from the crisis negative effects, the government of Indonesia developed Social Safety Nets programs that included program on food security, community empowerment, employment creation, scholarship and subsidies on health programs. The government's policy toward poverty eradication when safety nets were introduced was considered successful. The percentage of people who suffered from poverty decreased from 24.2 percent to 18.9 percent during the period 1998-2000 (Statistic Indonesia, 2008). However, Damuri and Perdana (2003) indicated that Social Safety Net programs were considered failures because of erroneous program design.

Studies on the impact of public expenditure on poverty have quite at-

tracted researchers' attention. Results of their studies vary. Several studies indicated that government expenditures have a significant impact on poverty reduction. Fan et al. (2000) investigated rural poverty in India during the period 1970-1993 and found that investment in rural roads and agricultural research were important factors in rural poverty reduction. On the other hand, study by Obi (2007) concluded that transfers were considered ineffective to eradicate poverty in Nigeria. This study, indeed, has contributed to the debate whether public spending have significant effects on poverty reduction. Most research about the impact of fiscal policy on poverty has been conducted using a Computable General Equilibrium Model (CGE); few studies, utilized Ordinary Least Square (OLS). In addition, few researchers employed survey data. This study, on the other hand, will be conducted using a regression analysis but also use data from the survey.

The main objective of this research is to investigate the impact of government expenditure on poverty. The other objective is to identify which type of government expenditure has the most significant impact on poverty reduction.

LITERATURE REVIEW

Government intervention to eradicate poverty can be classified into two approaches (Bhagwati, 1998). First is the long-term approach, in which the government maintains pro-poor economic growth by creating an environment for the efficient use of resources and technology. Second is the short-term approach, which relates to giving

job opportunities and social security programs to the poor.

Studies on poverty alleviation showed various results. For example, public investment on rural infrastructures has a positive impact on poverty reduction by improving productivity, mobility, and industrialization (Bhagwati, 1998). Research by Fan et al. (2000), which used simultaneous equation method to measure the direct and indirect impacts of government spending in rural India, concluded that investments on rural roads and agricultural research have the highest impact on poverty alleviation. They claimed that 1 percent increase in rural road spending and research would reduce poverty by 0.05 percent and 0.06 percent, respectively. They also pointed out that education and rural development should be given a priority when the governments formulates a budget because they reduce poverty significantly.

Warr (2003) studied the relationship between fiscal policy and poverty incidence in Thailand using simulation method. A 10 percent increase in education, health and social services expenditure will reduce poverty. However, he claimed that an increase in transportation expenditure would increase poverty because it provides greater benefit to those with private transport.

Obi (2007), using a static general equilibrium model, studied the impact of three hypothetical fiscal policies in Nigeria's poverty reduction. He examined a cash transfer to households, increase of public spending in several sectors, and tax policy changes using the 1999 data set. He argued that

transfers to poor households were ineffective to alleviate poverty, as compared with government spending in agriculture, construction, and services.

After examining the impact of welfare programs on poverty in the United States, using state level data, Fording & Berry (2007) argued that welfare programs have two effects: an income enhancement effect that decreases poverty and a work disincentive effect which increases poverty through discouraging people to search for a job. If an income enhancement effect is larger than a work disincentive effect, government welfare programs diminish poverty; on the other hand, if smaller, government welfare programs will increase poverty. They found that welfare programs are less effective because policy makers tend to shift cash program to in-kind program that resulted in the greater work disincentive effect than income enhancement effect.

In the case of Indonesia, a study conducted by Damuri and Perdana (2003), which analyzed the impact of fiscal policy on income distribution and poverty using a CGE model, found that a 20% fiscal expansion would reduce poverty by approximately 9.5%.

The objective of this research is to determine the impact of local government expenditures on poverty. Thus, significance of total government expenditure, human capital expenditure and non human capital expenditure on poverty alleviation will be tested by a model which mostly quoted from a study conducted by Krongkaew et al. (2006), which analyzed the relationship between growth, employment, and poverty in Thailand during the

period from 1988-1996. Human capital expenditure and non human capital expenditure hypothetically have a significant impact on poverty reduction. However, non human capital expenditure seems to benefit everyone. Hence, this expenditure is expected to have no significant impact on poverty reduction.

DATA AND METHODOLOGY

Data

This study employed the consumption expenditure module of National Socioeconomic Survey (SUSENAS) conducted by the Statistics Indonesia (BPS) every three years since 1981. Consumption expenditure module is a survey of household expenditure on food and non-food items. This study used the consumption expenditure survey compiled in 1996, 1999, and 2002 in 5 provinces in Java. These surveys covered over 90,000 households, 210 food items and over 100 non-food items. Expenditure per capita can be calculated using these surveys. This study like the studies of many other researches, used expenditures derived from the surveys to measure the incidence of poverty. Expenditure figures were used because they are better indicators of living standard than income (Huppi & Ravallion, 1991). The other reason is that income data is unreliable in Indonesia.

The 1996 consumption expenditure module included 5 provinces in Java: 1) Jakarta, which consists of 5 districts; West Java, 25 districts; Central Java, 35 districts; Yogyakarta, 5 districts; and East Java, 37 districts. In 1999, the survey included a new city, Bekasi City, which was established in West Java

Province. Moreover, Pandeglang, Lebak, Tangerang, Serang, and Tangerang City were separated from West Java Province to form a new province -Banten Province-, and now includes a new city -Depok City- formed in the year 2000. As a result, 5 districts were removed and one district was added in West Java in our data set. Moreover, in all surveys, some districts, especially city districts, do not have rural areas and one district, Pacitan, do not have urban areas. Therefore, this study can not cover all the districts in Java.

Aside from the consumption expenditure module of SUSENAS, this study utilized the government expenditure data for 1996/1997, 1999/2000 and 2002 fiscal years at the district level compiled by the Ministry of Finance. All the districts reported their expenditures in 1996/1997 and 1999/2000 fiscal year. However, due to the new financial law implemented in 2001, provincial and district governments are no longer required to submit their expenditure reports to the Ministry of Finance. Some districts, therefore, like Pati and Magelang in Central Java Province and Sleman in Yogyakarta Province, did not report their expenditure in the 2002 fiscal year. Moreover, Semarang City and Kudus only reported their total expenditures. They did not report their expenditures in detail. In addition, government expenditure data in Jakarta is available only at the provincial level while district level data was unavailable.

Methodology

The objective of this research is to determine the impact of local government expenditures on poverty. This

study conducted a panel data regression analysis using district level data in Java provinces for 1996, 1999, and 2002 based on the following model where i refers to districts and t refers to survey years.

$$\rho_{0it} = \beta_1 + \beta_2 \text{MEANEXP}_{it} + \beta_3 \text{SDEXP}_{it} + \beta_3 \text{TOTEX}_{it} + e_{it}$$

Furthermore, to analyze the impact of a particular expenditure, the following model was used:

$$\rho_{0it} = \beta_1 + \beta_2 \text{MEANEXP}_{it} + \beta_3 \text{SDEXP}_{it} + \beta_3 \text{NONHUMEX}_{it} + \beta_4 \text{HUMEX}_{it} + e_{it}$$

where:

- PO = headcount index in district or rural and urban within district;
- MEANEXP = average of per capita household consumption expenditure;
- SDEXP = standard deviation of per capita household consumption expenditure;
- TOTEX = per capita total government expenditure ;
- NONHUMEX = per capita non human capital expenditure (expenditure on industry, transportation, trade, business development, and cooperation, agriculture and forestry, irrigation and water resources management, mining and energy, tourism and telecommunication, housing, environmental, science and technology, law, district apparatus and monitoring, politic and mass media, and security);
- HUMEX = per capita human capital expenditure (expenditure on education and culture, family welfare, social welfare, and religion)

Headcount index of poverty (P_0) was used as the dependent variable. Headcount index that used in this study was estimated based on consumption expenditure data and the poverty lines for each provinces.

The independent variables in the model were suggested by the study done by Krongkaew et al. (2006), which analyzed the relationship between growth, employment, and poverty in Thailand during the period from 1988-1996. They considered the logarithm of the headcount ratio as an endogenous variable. As exogeneous variables, they used the logarithms of GDP, of the elasticity of employment with respect to real output, of per capita household income, of dependency ratio and of the Gini coefficient. As a proxy for per capita household income, this study used average per capita household expenditure instead; whereas, standard deviation of per capita household expenditure was used as proxy for the Gini coefficient.

Damuri and Perdana (2003), using a Computable General Equilibrium (CGE) model, stated that the expansion of government expenditures mostly benefited non-poor segments of society. Therefore, additional independent variables, which are total government expenditure and government expenditures on human capital and non human capital were included in order to analyze the impact of public expenditure on poverty. This study used the actual government expenditure in 1996/1997, 1999/2000, and 2002 fiscal year as government expenditure in 1996, 1999, and 2002, respectively. Government expenditure in 1999/2000 and 2002 fiscal year were deflated into

1996 base year using Consumer Price Indices (CPI).

RESULT

This study conducted six regressions, which are headcount poverty in district, urban and rural areas within district with per capita total government expenditure and sectoral government expenditures, using panel data. Therefore, 3 models which are pooled regression model, fixed effects model, and random effects model can be selected as the appropriate model for each regression. While all pooled regression models resulted in negative R², all fixed effects model resulted in positive R². Thus, fixed effects is better than pooled regression in all regressions.

Fixed effects model generally gives a consistent estimator but does not give an efficient one. However, random effects model gives an efficient estimator but does not assure whether this model is consistent or not. In order to review whether random effects model is consistent or not, the Hausman test is usually conducted. The null hypothesis of Hausman test is that coefficient estimated by random effects model is the same as coefficient estimated by fixed effects model. Receiving null hypothesis refers to conclusion that coefficient estimated by random effects model is the same as fixed effects model; thus, it is more appropriate to select random effects model

since estimation by random effects model is not only the same as fixed effects model but also gives an efficient estimator. On the other hand, refusing the null hypothesis gives a conclusion that the coefficient estimated by random effects model differs from fixed effects model. Therefore, it is more appropriate to select fixed effects model.

Table 1 shows the Hausman test of six regressions. Five regressions out of six regressions resulted in refusing null hypothesis. This implies that fixed effects model is more appropriate than random effects model. On the other hand, Hausman test resulted in receiving null hypothesis in the regression for headcount poverty index in urban areas and per capita total government expenditure; therefore, random effects model should be selected in this regression.

Using the most appropriate model, the results of this study are: first, the coefficient mean expenditure as proxy of income was negative and significant at 1% significance level. This result shows that increasing income will reduce poverty in both rural and urban areas. Second, the coefficient standard deviation income was positive and significant at 1% significance level. This finding implies that the more equal the distribution of income, the lesser the poverty incidence in a population. On the other word, inequality increase poverty incidence.

Table 1. Hausman Test

Regression	Chi square statistic	Chi-square degree of freedom	Probabilities
P0 and total government expenditure	20.606479	3	0.0001
P0 and sectoral government expenditure	21.162936	4	0.0003
P0 and total government expenditure in rural areas of the district	10.254616	3	0.0165
P0 and sectoral government expenditure in rural areas of the district	20.479906	4	0.0004
P0 and total government expenditure in urban areas of the district	3.772711	3	0.2871
P0 and sectoral government expenditure in urban areas of the district	9.528170	4	0.0492

Third, relationship between local government expenditure and poverty are indicated various results. The detail results are presented in the following discussion:

The effect of district government expenditure on poverty

Table 2 shows the regression results where poverty incidence is the dependent variable and the mean per capita household consumption expenditure income, the standard deviation of per capita household consumption expenditure and per capita total government expenditure are the independent variables. The coefficient of per capita total government expenditure

indicates a positive sign but is statistically insignificant. This result indicates that government expenditure does not have much effects on poverty reduction.

Table 3 shows regression result for the case where per capita human capital and per capita non human capital expenditures are included as independent variables. The results show that the coefficient of per capita human capital expenditure has a negative sign and is statistically significant while non human capital per capita expenditure has a positive sign and is statistically significant at 5 percent significance level.

Table 2
Regression result of district poverty and per capita total government expenditure

Variable	Coefficient	Std. Error	t-Stat	Prob.
C	0.315011	0.021000	19.0000	0.0000
MEANEXP?	-4.16E-06	4.37E-07	-9.5003	0.0000
SDEXP?	1.31E-06	3.14E-07	4.1853	0.0000
GOVEX?	6.33E-08	3.79E-08	1.6700	0.0966

R-squared 0.679505

Adjusted R-squared 0.513194

Table 3. *Regression result of district poverty and per capita sectoral government expenditure*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.321399	0.021484	14.95966	0.0000
MEANEXP?	-4.14E-06	4.41E-07	-9.39667	0.0000
SDEXP?	1.22E-04	3.18E-07	3.8364	0.0002
HUMEX?	-1.94E-03	7.71E-07	-2.5149	0.0128
NONHUMEX?	6.29E-07	2.12E-07	2.9690	0.0034

R-squared 0.679505

Adjusted R-squared 0.513194

The effect of government expenditure on rural poverty

Table 4 presents the regression

result for rural district. The per capita total government expenditure has no significant impact on rural poverty.

Table 4. *Regression result of rural's district poverty and per capita total government expenditure*

Variable	Coefficient	Std. Error	t-Statistic	Prob,
C	0.429488	0.027842	15.4261	0.0000
MEANEXP?	-6.69E-06	5.80E-07	-11.5415	0.0000
SDEXP?	7.37E-07	2.07E-07	3.5683	0.0005
GOVEX?	1.67E-08	5.49E-08	0.3040	0.7615

R-squared 0.751961

Adjusted R-squared 0.622115

Table 5 presents the regression result for the impact of sectoral government expenditures on poverty incidence. The coefficients of per capita human capital expenditure is negative and not

significance, while the coefficient of non human capital expenditure is positive and not significant. This result indicates government expenditures did not have significant impacts on rural poverty.

Table 5. *Regression result of rural's district poverty and per capita particular government expenditure*

Dependent Variable: POV?

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.443931	0.028564	15.5417	0.0000
MEANEXP?	-6.73E-06	5.99E-07	-11.2359	0.0000
SDEXP?	6.96E-07	2.05E-07	3.4015	0.0009
NONHUMEX?	8.21E-08	4.72E-07	0.1740	0.8621
HUMEX?	-1.89E-06	1.29E-06	-1.4623	0.1458

R-squared 0.768437

Adjusted R-squared 0.644616

The effect of government expenditure on urban poverty

Table 6 shows the regression result for urban poverty with per capita total government expenditure. The coefficient of per capita total government expenditure has a negative sign but is not significant. It means that government expenditure does not have significant impact on poverty.

The regression result for per capita government expenditure on human capital and non human capital for urban poverty is shown in Table 7. The coefficient of non human capital

expenditure has a positive sign and is significant at 5% significance level. This means that per capita non human capital expenditure has a significant impact on urban poverty. Increase in per capita non human capital expenditure would increase urban poverty. On the other hand, the coefficient of per capita human capital expenditure has a negative sign and is significant at the 1% significance level. This result indicates that human capital expenditure has a significant impact on reducing poverty.

Table 6. Regression result of rural's district poverty and per capita particular government expenditure

Dependent Variable: POV?

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.388970	0.018676	20.82750	0.0000
MEANEXP?	-3.76E-06	3.02E-07	-12.47142	0.0000
SDEXP?	1.05E-06	2.69E-07	3.90232	0.0001
GOVEX?	-2.82E-08	4.55E-08	-0.62090	0.5352

R-squared 0.436236

Adjusted R-squared 0.429949

Table 7. Regression result of urban's district poverty and per capita sectoral government expenditure

Dependent Variable: POV?

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.443931	0.028564	15.5417	0.0000
MEANEXP?	-6.73E-06	5.99E-07	-11.2359	0.0000
SDEXP?	6.96E-07	2.05E-07	3.4015	0.0009
NONHUMEX?	8.21E-08	4.72E-07	0.1740	0.8621
HUMEX?	-1.89E-06	1.29E-06	-1.4623	0.1458

R-squared 0.768437

Adjusted R-squared 0.644616

CONCLUSION

The Asian financial crisis that hit Indonesia in the middle of 1997 obviously affected poverty. Using the FGT indices, this study found that the incidence of poverty in the districts of Java Island mostly increased during the pe-

riod from 1996-1999. However, Java Island seems to have recovered from the crisis since Java districts mostly decreased their poverty incidence during the period from 1999-2002. Conducting a simple regression analysis, this research investigates the impact of public spending on poverty in five

provinces in 1996, 1999, and 2002.

The regression result of this research shows that per capita total government expenditure does not seem to have a significant impact on poverty reduction. This finding indicates that, at least in this study, government expenditures were not pro-poor even though they were not pro-rich either.

The regression analysis of per capita non human capital expenditure and human capital expenditure yields a different interpretation. The regressions result for per capita non human capital expenditure with district poverty and urban poverty shows that per capita non human capital expenditure has a significant impact on poverty. However, the regression result for per capita non human capital expenditure with rural poverty indicates that non human capital expenditure does not have a significant impact on poverty. This results conclude that non human capital expenditure, in most cases, significantly increase poverty. This result might also be interpreted that non human capital expenditure mostly benefited the rich rather than the poor. However, human capital expenditures noted a different result.

The regression result for per capita human capital expenditure with district and urban headcount index shows that human capital ex-

penditure has a significant impact on poverty reduction. On the other hand, the regression of per capita human capital expenditure with rural poverty indicates that per capita human capital expenditure does not have a significant impact on poverty reduction. This results indicate that per capita human capital expenditure significantly reduces poverty in most cases. Furthermore, this outcomes infer that human capital expenditure was a pro-poor expenditure.

RECOMMENDATION

Local government should also make careful decisions about the best way to use public spending to reduce poverty. They should allocate more money to programs or expenditures that benefit the poor, in this case, human capital expenditure.

This study of the relationship between government expenditure and poverty is part of an on going research process. Examining whether fiscal policies have impact on poverty reduction or not is important to ensure that government policies implemented through public spending are pro-poor and effective in alleviating poverty. Further studies that employ better methodology such as utilizing appropriate CPI, covering a longer period, and using current data could provide a more acute analysis of poverty reduction programs.

REFERENCES

- Bhagwati, J. (1988).** Poverty and Public Policy. *World Development*, 16, 539-556
- Damuri, Y. R., and Perdana, A. A. (2003).** The Impact of Fiscal Policy on Income Distribution and Poverty: a computable general equilibrium approach for Indonesia. *Economic Working Paper*. CSIS, Jakarta.
- Directorate General of Fiscal Balance,** Ministry of Finance, www.djpk.go.id
- Fan, S., Hazell, P., & Thorat, S. (2000).** Government Spending, Growth and Poverty in Rural India. *American Journal of Agricultural Economics*, 82, 1038-1051.
- Fording, R. C., and Berry, W. D. (2007).** The Historical Impact of Welfare Programs on Poverty: Evidence from American States. *The Policy Studies Journal*, 35, 37-60.
- Foster, J., Greer, J. & Thorbecke, E. A. (1984).** Class of Decomposable Poverty Measures. *Econometrica*, 52, 761-766
- Kronkaew, M., Chamnivickorn, S. & Nitithanprapas, I. (2006).** Economic Growth, Employment, and Poverty Reduction linkages: The Case of Thailand. *Discussion Paper*. www.ilo.org.
- Nachrowi, N.D. and Usman, H. (2006).** *Ekonometrika. Pendekatan Populer dan Praktis (Econometrics: Practical Approach)*. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia. Jakarta
- Obi, B. O. (2007).** Fiscal Policy and Poverty Alleviation: some policy option for Nigeria. *AERC Research Paper*. Nairobi.
- Perdana, A. A. and Maxwell, J. (2004).** Poverty Targeting in Indonesia: Programs, Problems and Lesson Learned. *CSIS Working Paper Series, WPE 083*
- Rao, M. G., Bird, R. M. & Litvack, J. L. (1998).** Fiscal Decentralization and Poverty Alleviation in a Transitional Economy: The Case of Vietnam. *Asian Economic Journal*, 12, 353-378
- Statistic Indonesia.** www.bps.go.id
- Warr, P. (2003).** Fiscal Policies and Poverty Incidence: the case of Thailand. *Asian Economic Journal*, 17, 27-44