

## **THE IMPACT IMPAC OF GOOD GOVERNANCE ON THE POVERTY ALLEVIATION IN WEST PAPUA PROVINCE IN THE PERSPECTIVE OF NEW INSTITUTIONAL ECONOMICS**

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### **ABSTRACT**

Good governance and poverty alleviation were closely related because the good governance could influence the poverty level through the quality of the public services delivered by a government regime. The difference between successful economy and unsuccessful economy was found in the government institutional policies or infrastructures that supported economic activities. Good infrastructures would support production and the production subsequently supported the economic activities. The difference between rich country institutions and poor country institutions also played an important role. It was because the government institutions were the ones that created both formal and informal rules. The study aimed at analyzing how significant was the impact of the good governance variables on the poverty level of West Papua province. The dependent variable of the study was poverty level, while the independent variables were voice and accountability, government effectiveness, regulatory quality and rule of law. Econometric method was used to analyze the impact of the good governance on the alleviation of the poverty in West Papua province in the perspective of new institutional economy using logistic binary regression analysis. The appropriateness of the study's model was measured using Chi square value with Hosmer and Lemeshow's goodness of fit test. The results of the estimation using the logistic binary method showed that there were three variables that had significant impact on the probability of

the poverty level in Wes Papua province. The three variables were voice and accountability, regulatory quality and rule of law, while the variable of government effectiveness did not have any significant impact.

**Keywords:** good governance, poverty alleviation

**JEL classification:** G34, I32, P36

### **INTRODUCTION**

Poverty was a multidimensional problem because it related to the lack of economic, social, cultural and political access and also of people participation. Also, it had a broader meaning than individual's lower income or consumption than the existing prosperity standard as indicated by minimum calorie or poverty line. It was because the poverty related to the inability to gain non-income factors as the access to minimum requirements of health, education, fresh water and sanitation. In addition to the high level of the poverty the dimension other than the income also posed complicated problems in the effort to alleviate the poverty. Indonesia was considered to fail in improving the factors other than the income, especially those related to the target of MDGs. For example, the high level of malnutrition of children under five, the low level of mothers' health, the low education level of those in poverty, the low

access to fresh water and sanitation. Concerning with mothers' health, there were 307 deaths of 100,000 births and the number was three times higher than the mortality of laboring mothers in Vietnam and six times higher than the mortality of laboring mothers in Malaysia and China.

Governance was a concept of the relationship between state and its people or government and society whose dimension was wide and related to political, legal, economic, social and cultural aspects and also to public policies and development management to improve people's prosperity of the state. Because of its multidimensional nature, the governance was also multi-interpretative. However, there have been good governance principles used by various parties in evaluating, studying and supervising the governance, which could also be used at the same time as measuring instrument whether public policies and government management have fulfilled the requirement of good governance.

The public expenditure became more effective when there was good government and became less effective when there was bad governance. The study concluded that public institutions that well functioned were very important in delivering good public services. The frequently emerging government internal challenge was the likelihood of opportunistic behavior that subsequently influenced government performance in accomplishing the mandate given by people as agent. It was necessary for the government to be stronger in solving the aforementioned problems and in formulating various programs to solve the problem of poverty. Therefore, the apparatus of the government institutions should follow the principle of good governance in the development process, including the development management, in policy making, in planning and in using budget. It was also the case of the monitoring, the evaluation and the auditing of the development budget, including the legal framework for the participation and the involvement of the people in the policy making, budgetary formulation and so on, as regulated in the Act No. 25 of 2004 on Planning, the Act No. 32 of 2004 on Local Government, the Act No. 28 of 1999 on the Implementation of Government Free of Corruption, Collusion and Nepotism, the Act No. 23 of 1992 on Health, the Act No. 20 of 2003 on Education, and various Government Regulation, Minister Regulations and

Local Regulations and the Regulation of Local Heads.

Based on the results of the study it was found that one of the causal factors of the high poverty level in West Papua province was the weak role of the government in delivering good public services, especially those related to local economic governance. West Papua was one of the provinces in the category of the highest poverty level in Indonesia after Papua, though the province was rich of natural resources and classified by central government in special autonomy region. The fact was that though the economic growth of the province was relative high, which was 26.82% in 2010; the poverty level of the province was high, which was 34.88% in 2010. The condition was confirmed by UNDP (Weiss, 2000:82) that the development strategy that emphasized growth did not result in fundamental change of the following four problems: 1) the aggravating poverty condition and the increasingly wide gap between the rich people and those in poverty, 2) the increase in unemployment, 3) the broken social bond of the people, and 4) environmental damage. Thus, without any ignorance of the economic growth, new measure was proposed for the advancement of a society, which was good governance.

#### LITERATURE REVIEW AND METHOD

There are rich and poor countries. The terms of rich and poor countries are based on the factors such as GDP that varies across countries. The capital flow from a country is influenced by how the government operates. The difference between successful economy and unsuccessful economy was found in the government institutional policies or infrastructures that supported economic activities. Good infrastructures would support production and the production subsequently supported the economic activities. The difference between rich country institutions and poor country institutions also played an important role. It was because the government institutions were the ones that created both formal and informal rules and also the economic structure. Government institution influences the decision related to investment that subsequently influences poverty alleviation. Therefore, it may be said that weak government system leads to the uncertainty of economic activities. The increasingly better government quality will increase the economic activities.

Other study by Rjkumur and Swaroop (2002) found that the efficiency in public expenditure decreased the mortality rate of babies or children, increased people education level, and was positively correlated with the government. The public expenditure became more effective when there was good government and became less effective when there was bad governance. The study concluded that public institutions that well functioned were very important in delivering good public services.

The government represents the place in which various policies able to draw capital inflow, while at the same time it maintains the stability of the capital inflow. The role of the government is very important (Globerman, *et. al.*, 2004). The success of the investment is when it is made in economic growth and in the alleviation of poverty or in people prosperity that is regulated by the government (Pham, 2004).

The study was conducted by analyzing the impact of the variables of good governance on the poverty alleviation in West Papua province. It used primary data collected by distributing questionnaires to the local government, business sector and the people of three districts in the province as the samples of the study. Meanwhile, the secondary data of the study was collected from the institutions and other related sources such as literature study, publication, reports and other supporting materials.

The sample was drawn using purposive sampling technique and considering the location and the number of the population, the economic basis and the income basis of the three districts that met the existing criteria, which were Manokwari, Sorong and Fakfak districts. Additionally, the selection of the three districts was also based on the poverty levels of high, medium and low. The number of the samples was 225 and according to Gay and Diehl in Kuncoro (2003) the recommended minimum number of the sample in a causal and comparative study was 30 subjects for each group. Meanwhile, 30 samples were required to examine whether there was a correlation.

The dependent variable of the study was dummy variable of the respondents' response about poverty indicators with the following estimations: If the respondents said "Yes" at least for three indicators of the seven indicators, it was given the value 1. If the respondents said "No" for more than four indicators

of the seven indicators, it was given the value 0. The independent variables of the study were: 1) Voice accountability: the perception of the respondents of the extent to which people could participate in government process, 2) Government effectiveness: the perception of the respondents of the extent to which the quality of public services, bureaucracy performance, bureaucracy independence and government credibility in implementing policies; 3) Regulatory quality: the perception of the respondents of the extent to which public policies took side in creating conducive business climate, 4) Rule of law: the perception of the respondents of the extent to which laws or rules of game could be consistently enforced through just and accountable mechanism. For quantitative analysis, the respondents' responses based on their perception were given the following values: 5 = very good, 4 = good, 3 = good enough, 2 = bad, 1 = very bad.

Binary logistic regression analysis was used because the dependent variables were dichotomous, which used dummy variable and the independent variables was the combination of discrete and continue variables (Ghozali, 2006). The justification of the statistical significance of each of the variables was based on the probability value of less than  $\hat{\alpha} = 0.05$  and hence the observed independent variables significantly influenced the dependent variable. Considering that the analysis instrument was binary logistic regression model, the determination coefficient value ( $R^2$ ) was not used to detect the goodness of fit of the model. The goodness of fit of the model might be observed on the basis of the percentage of correct prediction (Kuncoro, 2003). Following was the general logistic regression analysis equation:

$$\hat{Y} = \frac{e^u}{1 + e^u}$$

where the estimated probability of the case was  $i=1, \dots, n$  and  $\hat{u}$  was the usual linier regression equation, while  $\hat{u} = A + b_1X_1 + B_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \dots + b_kX_k$  with the constant A, the regression coefficient  $b_i$ , and the predictor variables  $X_j$  with the number of predictor k was ( $j = 1, 2, 3, 4, 5, \dots, k$ ).

The econometric formulation of the study could be completely written in the following equation:

$$D_{poverty} = \hat{a}_0 + \hat{a}_1 X_1 + \hat{a}_2 X_2 + \hat{a}_3 X_3 + \hat{a}_4 X_4 + e$$

where:

- $X_1$  = Voice and accountability (VA)
- $X_2$  = Government effectiveness (GE)
- $X_3$  = Regulatori quality (RQ)
- $X_4$  = Rule of law (RL)
- $D_{poverty}$  = Poverty dummy (where 1 representing poor and 0 representing rich)

Based on the equation above, some goodness of fit tests were conducted below. According to Ghozali (2006), the first step was to evaluate the goodness of fit of the model using the data. The hypotheses for the goodness of fit of the model were:

H0 : The hypothesized model fitted the data.

HA : The hypothesized model did not fit the data.

The H0 would not be denied because the model fitted the data. The statistical analysis used was likelihood function. The likelihood of the model was the probability that the hypothesized model described input data.

In the test of H0 and HA the probabilith L transformed into -2LogL that was sometimes referred to as the likelihood ratio ÷2. The statistic -2LogL could also be used to establish whether the independent variables improved the model if they were added to the model. The difference in the -2LogL for the model with the constant only and the -2LogL for the model with the constant and the independent variables that were distributed as ÷2 with df (the difference between the two models) (Ghozali, 2006). The entire model was tested by comparing the value of the -2LogL at the beginning (block number 0) and the second -2LogL (block number 1). If the decrease took place, the model was good.

Cox dan Snell's R Square was used to replicate the R<sup>2</sup> value in multiple regressions on the likelihood estimation technique with the maximum value of less than one that it was difficult to interpret. Nagelkerke's R<sup>2</sup> was the modification of Cox and Snell's coefficient to establish that its value varied from 0 to 1. It was obtained by dividing Cox and Snell's R<sup>2</sup> by its maximum value. The value of Nagelkerke's R<sup>2</sup> could be interpreted as the R<sup>2</sup> of the multiple regressions (Ghozali, 2006).

Hosmer and Lemeshow's Goodness of Fit Test

was used to test the hypotheses. If the significance of the Hosmer and Lemeshow's Goodness of Fit Test Statistic equaled or less than  $\alpha = 0.05$ , HO was denied. It meant that there was a significant difference between the model and its observation model that the goodness of fit of the model was not good because the model could not predict its observation value. The model would be good if the significance of Hosmer and Lemeshow's Goodness of Fit of the Test Statistic Test was more than  $\alpha = 0,05$ .

The 2 x 2 classification table was used to calculate the estimated value of the right and the wrong. If the model was perfect, all cases would be on the diagonal with 100% predicted correctness (Ghozali, 2006) and if there was homoscedasticity, the percentage of the correct would be the same on the two lines. If the two lines were different, it meant that they were free of homoscedasticity and further study might be conducted.

The justification of the significance of each of the variables was conduced on the basis of wald ratio (÷2 - wald). If the probability was less than  $\alpha = 0.05$ , the independent variables had significant impact on the dependent variable. The statistical hypothesis H0 was denied if ñ-value was less than  $\alpha = 0.05$ . According to Nachrowi and Hardius (2005), the impact of each of the independent variables on the dependent variable could be seen in the wald ratio (÷2 - wald) using the following hypotheses:

Hypothesis I, which was the variable of voice and accountability (VA)

H0 :  $\beta_1 = 0$  : there was not any significant impact of the variable of voice and accountability on the variable of poverty level.

H1 :  $\beta_1 < 0$  : there was a negative impact of the variable of voice and accountability on poverty level.

Hypothesis II, which was the variable of government effectiveness (GE)

H0 :  $\beta_1 = 0$  : there was not any significant impact of the variable of government effectiveness on the variable of poverty level.

Hypothesis III, which was the variable of regulatory quality (RE)

H0 :  $\beta_1 = 0$  : there was not any significant impact of the variable of regulatory quality on the variable of poverty level.

Hypothesis IV, which was the variable of rule of law (RL)

H0 :  $\beta_1 = 0$  : there was not any significant impact of the variable of rule of law on the variable of poverty level.

H1 :  $\beta_1 < 0$  : there was a negative impact of the variable of rule of law on the variable of poverty level.

If the confidence level of 95% of the  $\div 2$ -wald value was less than 0.05, H0 was denied and H1 was confirmed. It meant that there was a significant impact of each of the independent variables on the dependent variable. If the confidence level of 95% of the  $\div 2$ -wald value was more than 0.05, H0 was confirmed and H1 was denied. It meant that there was not any significant impact of each of the independent variables on the dependent variable.

**RESULTS AND DISCUSSION**

A regression model was free multicollinearity if the correlation coefficient between the independent variables was weak, which was below 0.8 (Ghozali, 2006). The estimation presented in table 1 of the best fit model indicated that all of the correlation numbers between the variables was below 0.8. For example, the correlation between the variable VA and the variable RQ was only 0.186.

The model was used to establish whether there was homoscedasticity as observable in the classification table that tried to remove the predicted value of the right and the wrong. If the model was perfect, all of the cases would be on diagonal at the predicted correctness of 100%. Table 2 showed that the percentage

of the right did not equal to the second line. So, it meant that the binary logistic regression model was free of homoscedasticity.

**Table 2**  
**Classification Table**

Observed	Predicted			Correct Percentage
	Poverty Dummy			
	0	1		
Dummy	0	62	2	96.9
Poverty	1	3	158	98.1
Overall Percentage				97.8

Source: Raw data, processed.

There were 158 individuals of the 225 respondents were poor and the remaining 62 individuals were not poor. The 2 x 2 classification table tried to remove the prediction of the right and the wrong. The data in the table above showed that the dependent variable of poverty level = 0 (not poor) and it was proven that the right prediction was 96% in which there were 62 individuals of the 64 observations predicted to be right (correct percentage) and 2 individuals predicted to be wrong. Conversely, the dependent variable of poverty level = 1 (poor) and 98% was predicted to be right, in which there were 3 individuals of the 158 respondents predicted to be wrong. Collectively, the prediction was 97%.

A regression model was used to examine the goodness of fit in which H0: there was not any significant different between the predicted classification and the observed classification. H1: there was a significant differ-

**Table 1**  
**The Correlation between Variables**

	Constant	VA	GEF	RQ	RL
Constant	1.000	-.101	-.539	.250	-.053
VA	-.101	1.000	-.329	.186	-.395
GEF	-.539	-.329	1.000	-.495	-.240
RQ	.250	.186	-.495	1.000	-.507
RL	-.053	-.395	-.240	-.507	1.000

Source: Raw data, processed.

ence between the predicted classification and the observed classification. So, the decision was made by considering the value of the goodness of fit as measured using Chi square in Hosmer and Lemeshow test:

1. If its probability > 0.05, H0 was confirmed.
2. If its probability < 0.05, H0 was denied.

It was clearly observed in table 3 that the probability value was 0.944 and the Chi square was more than 0.05. So, H0 was confirmed and it meant that there was not any significant different between the predicted classification and the observed classification. So, the binary logistic regression model was used in the next analysis (Ghozali, 2006).

All of the models could be tested by comparing the -2LogLikelihood value at the beginning (block number: 0) and the second -2LogLikelihood value (block number: 1). If a decrease took place, the models were good. The advantage of using the minimal likelihood in the logistic regression test was that it was capable of calculating a big number of samples. The maximal and non-biased likelihood was the minimal for the big number of the samples. The result was that at the beginning (block number: 0) the -2LogL value was 268.696 and then (block number: 1) decreased to 27.136, which meant that the regression model was better.

The partial Yi was obtained using t-test. It was clearly observed in table 4.7 that based on the best fit with maximal  $\alpha$  of 5%, the variables of VA, GEF, RQ and RL had significant impact on the dependent variable. The Exp (B) number indicated that the rule of law contributed more to the impact on the poverty (1.787). The results of the data processing was that the Cox's and Snell's  $R^2 = 0,658$  and the Nagelkerke's  $R^2 = 0,944$ . It meant that the variability of the dependent variable

was 94.4%. the binary logistic regression model with SPSS 18 gave the following results:

$$D_{\text{poverty}} = 14,178 - 3,014VA - 0,307GEF - 4,358RQ - 4,580RL + e$$

(0,006)\*    (0,863)<sup>ns</sup>    (0,005)\*    (0,001)\*

Description:

( ) = Probability value

\* = Significant at  $\alpha = 5\%$

NS = Not significant

### CONCLUSION

Concerning with the hypothesis of the best fit model, the variable of voice and accountability had a negative and significant impact (*p-value* 0,006) on the relative small probability of the decrease in the poverty. Exp (B) was 0.049 concluded that the impact of the voice and accountability on the probability of the decrease in the poverty was still relative small. At least the fact explained that the participation level of the people in the public policy making was relative low. The variable of government effectiveness did not confirm the hypothesis because it had a negative and insignificant impact with (*p-value* 0.863) that was bigger than  $\alpha = 0.05$ . The Exp (B) value of 0.735 indicated that the variable of government effectiveness contributed significantly to the alleviation of the poverty in West Papua. It meant that the quality of public service, the bureaucracy performance, the bureaucracy competence, bureaucracy independence and the government credibility in implementing policies had a significant impact on the alleviation of the poverty.

The variable of regulatory quality also confirmed the hypothesis, which meant that it had a nega-

**Table 3**  
**The Summary of Best-fit Variable and Hosmer and Lemeshow's Test**

Variable	Coefficient (B)	Wald	Sig.(p-value)	Exp(B)
VA	-3.014	7.485	.006	.049
GEF	-.307	.030	.863	.735
RQ	-4.358	6.052	.005	.257
RL	-4.580	6.101	.001	1.787
<b>Chi-square</b>		3.061	Prob-sig 0.944	
<b>(Hosmer and Lemeshow)</b>				

Source: Raw data, processed.

tive and significant impact with (*p-value* 0,005). The Exp (B) value showed that the impact of the regulatory quality on the probability of the decrease in the poverty level was 0.257. The policies responsive to the business climate became the key word. Because, the more taking side the public policies were, the more capable the policies to accommodate the interests of the business sector were, especially related to the cost and the time necessary in creating the opportunity and the chance for people in increasing their prosperity through the sector.

The variable of rule of law confirmed the hypothesis. The variable had a positive and significant impact (*p-value* 0.001) on the probability of the decrease in the poverty in West Papua. The rules of law and the law enforcement apparatus played a very important and strategic role in decreasing the transaction cost and in improving the productivity and hence they improved the performance and increased the income of those in poverty. The variable of rule of law contributed the most to the decrease in the poverty level as compared to other variables and considering the Exp. (B) value of 1.787.

#### RECOMMENDATIONS

Referring to the results of the study, some recommendations deserved serious attention in the implementation of policies, such as: 1) It was found that the variable of voice and accountability had a significant impact. The impact was increasingly high and hence it was necessary for the government to increase the participation of the people in the decision making related to the quality of public services; 2) The variable of government effectiveness had an impact on the probability of the decrease in the poverty level, but it was not significant. For the variables to have more significant impact in the future, it was necessary for the local government to improve the quality of the public service, the bureaucracy performance, the bureaucracy competence, the bureaucracy independence and the government credibility in the implementation of policies in the alleviation of poverty; 3) The variable of regulatory quality had a significant impact on the probability of the decrease in the poverty level. For the variables to continuously increase, it was necessary for the local government of West Papua province to

create the regulation and the policies that took side of the private sector that subsequently resulted in the creation of broader employment and hence decreased the poverty level; and 4) The variable of rule of law and the law enforcement had a quite significant impact on the probability of the decrease in the poverty level. As an important condition of the certainty for economic actors, it was necessary for the rule of law to enhance in the coming days that could stimulate investment and provide people and the business sector with the protection of their rights in economic activities.

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