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Article *in* Journal of Physics Conference Series · October 2019

DOI: 10.1088/1742-6596/1341/9/092005

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Abstract. The study of economic growth has been grown, if previously only paying attention to economic factors, now also consider non-economic factors. The development of growth studies has provided a new study perspective in recent decades so that it slowly develops into its own interest in study. This paper wants to fill this up by combining economic and non-economical factors as determinants of growth. This paper uses individual data for districts or cities in Central Java Province. The analysis technique used is ordinary least squares through multiple regression. The paper's findings show that only investment factors as a representation of economic factors that influence growth, while non-economic factors do not have a significant influence on growth, where the influence of non-economic factors produces ambiguous findings. From the findings of this paper, it still have some limitations that must be corrected for further study.

1 Introduction

The theory of economic development at the beginning of its development tends to emphasize economic factors such as human resources, natural resources, capital accumulation, and technological factors as part of its analysis. Factors other than that, namely non-economic, are rarely a concern, such as politics, culture, ideology, institutions, religion, and ethnicity. The five factors mentioned above are more treated as preliminary narratives and are often not part of the analysis. However, in recent decades, some of the above non-economic factors have been present to enrich the analytical repertoire in the latest economic development literature [1].

One study that combines the two factors. This study added other factors as a new measure that did not exist in previous empirical studies, namely ethnicity, language, and religion involving 190 countries so that with these three factors, the authors wanted to see their influence on the growth and quality of institutions. The authors find that ethnic and language fractionalization is important in explaining GDP growth (not just religious factors), besides that these factors can also explain other measures such as welfare and quality of policies (such as literacy, infant mortality, etc.), and quality of institutions (measured by the level of corruption, political freedom, etc.) [2].

Two years later, Noland try to estimates regression between countries with a country sample of 34 to 76 countries. It was found that, the impact on growth is still ambiguous. When there is an opinion stating that one religion tends to be anti-growth, in the same study, Nolland regresses separately for India, Malaysia and Ghana. The regression results across countries provide empirical findings that religion does not affect the growth of per capita income and has a positive effect on total factor productivity. In most countries, the coefficient values for certain religion proportion variables tend to be positive and significant, but produce different findings for Malaysia. In the same country case study,

other religious affiliations also gave the same direction. In addition, in Malaysia, the existence of ethnic and religious factors that are highly correlated, so that we cannot conclude how ethnic and religious influences affect economic growth [3].

At the individual level, studies involving both factors also try to link with fertility rates, where studies provide predictions that countries with higher fertility rates tend to have lower per capita income growth. Therefore, a possible question is whether ethnic diversity and polarization are related to economic growth through fertility channels. One study provides evidence that most variations in cross-country fertility and women's labor force participation can be explained by cultural norms and beliefs. Fernandez and Fogli suggest that when controlling for some characteristics of women (such as age, education, wealth, and so on). There remains a statistically significant cultural influence on women's employment and fertility choices. However, the choice of fertility in diverse ethnic communities may have an important political dimension [4].

It can be seen that as one branch of a scientific discipline, development economics has transformed into one branch of science that seeks to explore, identify, and provide alternative solutions to overcome the above conditions, including answering several economic challenges that emerge and become characteristic of several regions or regions which often falls into the bad category [5]. So, based on the background above, this paper wants to know the determinants of growth based on economic and non-economic factors. This paper also wants to contribute to the presence or absence of the role of the two factors on economic growth, with a case study in Central Java Province.

2 Data and Model Specification

2.1 Data

This paper uses data published by the Central Statistics Agency. The author uses six variables, namely GDP growth in 2010, average GRDP growth for four years (2010 - 2014), physical capital, the number of workforce employed, average school length, multi ethnic percentage, and multi-religious percentage. Data on multi-religious and multi-ethnic existence is obtained from Potential Village publications in 2018, while other data is obtained from Central Java in Figures (various publications) and publication of the Central Bureau of Statistics website

2.2 Model Specification

The empirical model in this paper refers to previous research, in which the empirical model is based on the Solow growth model. This model then developed, where for some studies there were those who adopted the Mankiw, Romer, Weil model or often known as the MRW model [6]. In this paper, the model used a modification model by adjusting to the available data, by including economic factors and non-economic factors. The basic empirical model specifications can be written as follows:

$$lnGRDP1014_i = \beta_0 + \beta_1 lnGRDP10_i + \beta_2 lnCap_i + \beta_3 lnLabor_i + \beta_4 \ln School_i + \beta_5 perc\_ethnic_i + \beta_6 perc\_religion_i + u_i \quad (1)$$

The two models above will be estimated by the OLS technique through multiple regression. In principle, regression produces parameters which are average effects. Because the data used are individual data in districts / cities, the resulting parameter is the average impact of all districts / cities in Central Java Province. Multiple regression is the development of simple linear regression analysis. The fundamental difference of the two regression analyzes lies in the number of independent variables, where in simple regression there is only one independent variable, whereas in multiple regression has more than one independent variable. In addition, the OLS method used has the assumption that the impact that occurs between the independent variables on the dependent variable tends to be the same over time. In addition, the impact on the dependent variable tends to be direct without going through other variables and has no time lag. Then, the impact on the dependent variable is average throughout the time of observation. The existence of intercepts represents the mean of the dependent variable if the independent variable is fixed [7,8]. The variables description involved in the model as follows:

Table 1. Description of Variable

Variable	Description
lnGRDP1014	the logarithm of GRDP in average between 2010 and 2014
lnGRDP10	the logarithm of GRDP in 2010
lnCap	the logarithm of total investment
lnLabor	the logarithm of the number of workforce employed
lnSchool	the logarithm of school length in average
perc_ethnic	percentage of villages in each districts / cities that is multi-ethnic
perc_religion	percentage of villages in each districts / cities that is multi-religion

3 Result And Discussion

Table 2 shows the regression results which want to see what factors influence economic growth in the province of Central Java, whether it is influenced by economic factors and also non-economic factors. Economic factors are represented by the growth of GRDP in 2010, total investment, the number of workforce employed, and average length of school. While non-economic factors are influenced by the percentage of multi-ethnicity and the percentage of multi-religions.

The result shows that economic factors have a positive and significant influence on economic growth in Central Java Province. These economic factors are total investments, of course this finding is not surprising because total investment is one of the components forming the GRDP. In calculating GDP from the expenditure side, the investment component is included as one of the constituent indicators. In addition, a positive total investment coefficient value is an indication that local governments need to create a good and conducive investment climate.

Table 2. Estimation Results

Dependent **lnGRDP1014**	Model 1			Model 2			Model 3		
Independent	Coef.	Std.Err	Sign	Coef.	Std.Err	Sign	Coef.	Std.Err	Sign
lnGRDP10	0.920	0.047	***				0.924	0.046	***
lnCap	0.138	0.075	*				0.157	0.084	*
lnLabor	0.112	0.076					0.078	0.059	
lnSchool	0.291	0.242					0.427	0.349	
perc_ethnic				2.267	1.454		-0.123	0.134	
perc_religion				1.734	1.706		-0.148	0.123	
cons.	-3.927	2.102	*	0.326	1.273		-3.887	2.105	*
Num of Obs		35			35			35	
F – Stat		389.560			1.300			297.470	
Prob F - Stat		0.000			0.287			0.000	
R - Squared		0.997			0.098			0.997	
Sign : α = 1% (***); α = 5% (**); α = 10% (*)									

Ethnic and religious variables provide a uniform finding that is an ambiguous and unsignificant effect on economic growth. According to Easterly and Levine state that there is a possibility that non-economic factors tend to polarize interest groups because there are indications of the behavior of each group to seek kick back resulting in a tendency to decrease the quality of public goods as a consequence of agreement between groups, consequently achieving long-term and maintained growth is difficult to achieve [9]. This findings can be explained by the possible indirect effects of the influence of ethnic and religious diversity on economic growth. La Porta argues that the adverse impact of ethnic diversity on economic growth through government consumption results from the fact that ethnic diversity captures

certain tendencies of the ruling ethnic groups to redistribute wealth [10]. Whereas Annett sees that diversity leads to increasing political instability, which in turn increases government consumption to ease conflicts between groups [11]. Therefore, in the future studies it is necessary to assume that religious and ethnic diversity can influence economic growth through a number of transmission channels that are possible to be included in the standard growth equation.

Besides that, studies involving these two factors will be interesting, because as previously done with the case of a neighboring country, Malaysia, ambiguous results are still found because there is a high correlation between ethnic and religious factors, so it cannot be concluded how ethnic and religious influence on growth economics [3]. In addition, studies on this topic are still interesting because diversity or heterogeneity increase the ability to solve problems from every point of view and some studies have claims that heterogeneous groups tend to do better than homogeneous groups [12].

4 Conclusion

The findings of this paper show that economic factors influence growth, especially investment variables. Other variables, especially non-economic, have not provided sufficient evidence of the influence of these variables on growth.

Nevertheless, the study of determinants of growth always develops, because not economic factors are not only a single factor that influences growth but also non-economic factors. From the findings of this paper, the authors argue that there needs to be further studies because the results of this paper cannot be used as a solid basis as Indonesia's representation in general and Central Java specifically, because there are still many limitations including the lack of observation periods, endogenous issues that have not been covered, until measurement proxy.

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