



The Effect Ethnic on Poverty in DIY Province

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Abstract

The Special Province of Yogyakarta does not to allow non-native Indonesian citizens residing in the Province of DIY to possess land titles. This study aims to analyze the effect of ethnic discrimination on poverty by adding control variables such as working capital credit, investment credit, economic and education infrastructure. It employs time series data in the period 2000-2018 and are analyzed using multiple linear regression with ordinary least Square (OLS) model. The results show that working capital credit and investment credit have a negative and significant effect on poverty. Ethnicity has a positive and significant effect on poverty. Education infrastructure has a significant effect on poverty. The findings imply the need for a review of the policy on the prohibition of land ownership and the need for the performance of the banking sector in the form of lending as well as the need to support human resources improvement through improving educational infrastructure and promoting the quality of teachers in reducing the number of poor people.

Key words : Poverty, Ethnic, Working Capital Credit , Investment Credit, Infrastructure

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INTRODUCTION

According to Ozughalu (2016) Ozughalu (2016) the challenges in a country's economic development are the poor population and the population who are vulnerable to poverty. Policy in reduce on poverty entered as the first of the seventeen goals in achieving the Sustainable Development Goals (SDGs) in 2030 (Todaro and Smith, 2008). Thus, poverty is a crucial issue and must receive special attention for all countries and must be immediately addressed further.

Poverty is a complex social gap across countries by involving interrelated factors, including: income, health, education, access to goods and services, geographical location, gender, and environmental conditions (Todaro and Smith, 2008). The complexity of

the problem of poverty makes the effort to reduce poverty quite difficult. Therefore, all countries need to make strategies in reduce on poverty (Hasan et al, 2015).

The poverty in Indonesia tends to decrease. This shows that the positive impact of the poverty program that has been implemented. But in reality the number of poor people still exists and has a negative impact on national development (Kriswandari, 2016). According to the Central Statistics Agency the number of poor people in Indonesia is spread across 34 provinces. The island of Papua has the highest percentage of poverty in Indonesia compared to other islands. But in absolute terms Java has the largest poverty in Indonesia. Table 1 shows the poverty in Java by province.

Table 1. Poverty Rate by Province in Java Year 2012-2018 (%)

No	Province	Year							Average
		2012	2013	2014	2015	2016	2017	2018	
1	Special Region of Yogyakarta	15,23	14,78	14,04	13,22	12,69	11,97	13,99	15,97
2	Central Java	15,50	14,02	13,45	13,23	12,62	11,26	13,61	15,16
3	East Java	12,64	12,35	12,31	11,95	11,48	10,92	11,98	12,24
4	West Java	9,57	9,31	9,55	8,86	8,27	7,35	8,99	9,99
5	Banten	5,82	5,43	5,83	5,39	5,52	5,25	5,57	5,78
6	Special Capital Region of Jakarta	3,63	4,00	3,77	3,75	3,76	3,56	3,74	3,69

Source: Central Bureau of Statistics, 2018

Table 1 shows that on average in that period Yogyakarta Province was ranked first with the largest poverty in Java and second in the province of Central Java and in the lowest order in DKI Jakarta.

Poverty conditions in Yogyakarta Province were exacerbated by a policy issued by the Deputy Governor of Yogyakarta in 1975 number K.898 / I / A / 1975. The contents of the policy are about Uniforming the Policy on Granting Rights to Land to Indonesian Non-Indigenous Citizens. The

contents of the decree are not allowing non-native Indonesian citizens domiciled in the Province of DIY to own land or land titles. The policy does not only apply to Chinese citizens, but citizens of Indian, Arabic, European and non-European and other foreign ethnicities (Anggraeni, 2012).

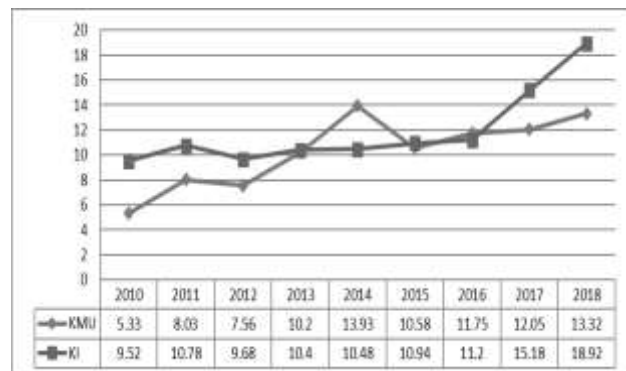
Land is an important asset for citizens. According to the Central Statistics Agency (2017) land is physical capital if used for business activities will increase income for the owner. The causes of poverty can be analyzed

through two factors, namely 1) the difficulty of access to work and 2) the low access to proxied production through the lack of access to factors of production such as capital and asset ownership (Kuncoro, 2003). Thus, assets affect poverty. This is supported by the findings of Hirashima (2009), Sa'diyah & Arianti (2012) and Meidinan & Marhaeni (2019) which explain that asset ownership affects the number of poor people. Thus, it is suspected that ethnicity in the Province of DIY affects the number of poor people. This is due to the non-indigenous population's difficulty in accessing assets in the form of land ownership.

In addition, the problem of poverty in Indonesia is the lack of understanding of financial access. This is supported by the Asia Foundation survey (2018) that 50 percent of poor households do not have access to credit. In addition, less than 40 percent of the poor population have savings accounts in financial institutions. This figure is lower for rural areas due to low income, so that rural communities. Whereas an inclusive financial system plays an important role in poverty alleviation and reduces income disparity. Khasnabis & Mavrotas (2008) and Patten et al., (2018) emphasize that poverty reduction can be done through access to financial services such as savings, credit, insurance, pension funds and payment facilities. Equitable access to financial institutions in the distribution of banking products in the form of working capital credit and investment credit. Both credit are long-term credit and short-term credit to increase the stock of capital goods including machinery, equipment, land and inventory. Investment credit will drive a significant increase in national output and will increase demand for inputs, which in turn will increase employment opportunities

and community welfare and decrease the number of poor people as a consequence of increased income received by the community (Sekhampu, 2013).

Working Capital Credit is a method used to alleviate poverty or improve people's welfare. Distribution of working capital credit can reduce poverty for the poor who own a business or residents who have businesses that can absorb labor. Distribution of working capital credit is expected to increase its income and improve technology, even if the business develops it can create job opportunities, increase sales and business profits (Balaka, 2007). According to Sani et al. (2018) credit can provide diversified financial resources for micro businesses, so they can improve business results, increase company assets, especially for durable goods, and most importantly for companies can increase business profits.



KMU: working capital credit

KI: Investment Credit

Source: Bank Indonesia, 2019

Figure 1. Working capital credit and Investment credit of the Special Province of Yogyakarta, 2009-2018 (%)

Figure 1 shows that working capital credit have increased. In 2014 to 2015 decreased by 3.35 percent and in subsequent years increased. Madajewicz, (2011) suggested that the distribution of working capital credit has quite a broad influence in relation to poverty alleviation. Financial institutions not only have an impact on increasing the income of

individuals and households, but also make a positive contribution to the economy of rural communities, especially the poor.

In Bangladesh, one of the strategies used in poverty alleviation is to provide credit services for business capital for poor people driven by Grameen Bank Pitt & Khandker (1998). Khandker and Faruquee (2003) explained that the distribution of working capital credit in Bangladesh has succeeded in increasing people's per capita income, consumption and income distribution. Karyani (2012) and Sumanto (2016) also found that distribution of working capital credit had a positive impact on poverty alleviation through empowering women in community economic activities.

Referring to Figure 1, investment credit growth has increased significantly. However, in the period 2011 to 2012 it decreased by 1.10 percent and in subsequent years experienced growth. Investment will drive a significant increase in national output and will increase demand for inputs, thereby increasing employment opportunities, community welfare and reducing the amount of poverty as a consequence of increased income received by the community (Sekhampu, 2013). High investment will lead to high employment. If a lot of workers in the area are absorbed, this means increasing income distribution and reducing poverty.

Poverty also has a relationship with economic infrastructure and education infrastructure. Economic infrastructure which is proxied by road length has an impact on reducing production costs. In addition, infrastructure development will increase labor productivity and access to employment, so that it will have an impact on reducing poverty and improving people's welfare (National Planning and Development Agency,

2018). In addition, infrastructure development aims to facilitate the mobility of people, goods and services, so that it will have an impact on poverty reduction. According to Perkins et al., (2005) and Seetanah et al., (2009) infrastructure development is needed in every country to support business, so that infrastructure improvement is expected to increase welfare and increase per capita income and reduce poverty. The findings of Canning & Pedroni (1999), and Prasetyo (2010) Barika (2013) show that infrastructure development in the form of transportation infrastructure, electricity and telecommunications networks and the provision of clean water have a direct effect on increasing national income and reducing poverty.

According to Rahayu (2005), Brata (2010), Awan et al., (2011), Colclough (2012) and Tarabini, & Jacovkis, (2012) education infrastructure has a relationship with poverty. The development of educational infrastructure such as school buildings, universities, and quality teachers will have an impact on human investment which includes education and skills which are the main elements in building society. Thus, the development of education infrastructure is a way to reduce poverty by increasing equity and expanding access to education (Mahsunah, 2013). Thus this study aims to analyze the effects of ethnicity, working capital credit, investment credit, ethnicity, economic infrastructure, and education infrastructure on poverty in the Special Province of Yogyakarta.

METHOD

This type of research is quantitative descriptive. Descriptive research is to explain the phenomena of the present or the past. (Supranto, 2000). Table 2 shows an explanation of the research variables.

Table 2. Definition of variables

No	Variable	Definition	Unit
1	Poverty	Population below the poverty line in Yogyakarta Special Province.	Percentage
2	Ethnic	Residents who are not indigenous groups are prohibited from owning land ownership rights	Person
3	Working Capital Credit	The amount of funds channeled from banks to the public is used for business activities	Rupiah
4	Investment Credit	The amount of money channeled from banks to the public is used for investment activities.	Rupiah
5	Economic Infrastructure	The length of the road that has been realized is the development of city roads, provincial and national roads.	Kilometers
6	Educational infrastructure	The number of study rooms that have been realized, both from elementary school to university level.	Unit

To analyze the effects of ethnicity, Working Capital Credit, investment credit, economic infrastructure, and education infrastructure on poverty in the Special Province of Yogyakarta in 2000-2018. This study uses a multiple linear regression model with the least square Square (OLS) model with eviews tools. The following basic equation in this study.

$$Y = f(X_1 + X_2 + X_3 + X_4 + \dots + U_n) \quad (1)$$

Based on the above equation, it can be transformed in this research equation as follows:

$$P_t = \beta_0 + \beta_1 E_t + \beta_2 WCC_t + \beta_3 IC_t + \beta_4 ECOI_t + \beta_5 EDUI_t + e \quad (2)$$

Where :

P = Poverty

β_0 = Constanta

$\beta_{1,2,3,4,5}$ = Regression Coefficient

E_1 = Ethnic
 WCC_2 = Working Capital Credit
 IC_3 = Investment Credit
 $ECOI_4$ = Economic Infrastructure
 $EDUI_5$ = Education Infrastructure
 e = Standard Error.
 t = Time Series

In regression analysis, there are some basic assumptions that can produce the Best Linear Unbiased Estimator (BLUE). The classical assumption tests include normality, multicollinearity, heteroscedaticity, and autocorrelation (Gujarati, 2012).

RESULTS AND DISCUSSION

Before discussing the results of the regression estimation on the effects of ethnicity, venture capital credit, investment credit, economic infrastructure and education infrastructure on poverty in the Special Province of Yogyakarta, first classical

assumption tests were conducted which included normality test, multicollinearity test, heteroscedasticity test, and test autocorrelation.

The normality test aims to test the extent to which the distribution of sample data corresponds to the normal distribution (Gujarati, 2012). In a normality test research using a histogram normality test. Normality test results show that the probability value of 0.845 or greater than the significance value ($\alpha = 0.05$), so it can be concluded that the distribution of variable data in the study is normally distributed.

Multicollinearity test is used to find out whether there is an association between two or more interrelated variables in a model. Client detection is performed by regressing an independent variable on other independent variables.

The rule of thumb is by comparing the model R^2 and R^2 of auxiliary regression. When the auxiliary R^2 is greater than R^2 of the regression model, the model shows the multicollinearity symptom. Conversely, when the auxiliary regression R^2 is smaller than the model R^2 , then the model does not contain the multicollinearity system (Gujarati, 2012).

Table 3. Multicollinearity Test

No	Independent variables	R^2 auxiliary regression	R^2 regression model
1	Ethnic	0.62587	0.80482
2	Working capital credit	0.25347	0.80482
3	Investment credit	0.45346	0.80482
4	Economic Infrastructure	0.53635	0.80482
5	Educational infrastructure	0.23396	0.80482

Source: Output regression

Table 3 shows the value of R^2 auxiliary regression is greater when compared to R^2 model of the regression, so the research doesn't have multicollinearity.

Heteroscedasticity test to find out whether in the regression model variance inequality occurs from the residuals of one observation to another. Test for heteroscedasticity can be performed by Glejser test (Gujarati, 2012). Heteroscedasticity test using the Glejser test shows that the chi-square probability value is 0.231. Glesser test results showed a chi-square probability value of 0.22, this value is greater than alpha ($\alpha = 0.05$). Therefore, this research doesn't have heteroskedasticity.

Autocorrelation test aims to identify whether the regression model contains correlation between residuals in the t period

with residuals in the t-1 period (Ghozali, 2016). The results of the autocorrelation test through the Durbin Watson value were 1.930. These results indicate that there is no definitive conclusion that the data do not contain symptoms of autocorrelation because $dU (1.73612) < dw (1.930) < 4-dU (2.24173)$, so it is feasible to use to predict relationships between variables. Table 4 shows the results of the regression estimation.

Regression estimation results show that ethnic have a regression coefficient of 0.000001 with the value t-statistic (2.381) is greater than t-table (1.770), so that ethnicity has a positive and significant effect on poverty. This shows that the ethnic discrimination policy in the Special Province of Yogyakarta regarding ownership of land assets for non-Javanese residents affects the amount of poverty.

Table 4. Regression Estimation Result

Variable	Coefficient	t-statistic	t-table
Konstanta	60.48150	11.64641	-1.770
E	0.000001	2.381	-1.770
WCC	-0.0001	-7.704	-1.770
IC	-1.168	-2.314	-1.770
ECOI (-4)	-1.824	-0.874	-1.770
EDUI (-6)	-2.420	-2.581	-1.770
Adjusted R Square			0,820

According to Hirashima (2009), Patten et al., (2018) and Meidinan & Marhaeni (2019) ownership of assets such as land will be an important factor considering that with productive land available, households with agricultural business fields will be able to generate more income well. Ownership of physical capital and the ability to obtain income as labor will be the main capital for generating family income. This finding supports the cause of poverty according to (Kuncoro, 2003). that the cause of poverty is caused by the difficulty of access in getting jobs and the low access in production which is proxy from capital and asset ownership. This ethnic discrimination policy on land ownership is contrary to the poverty alleviation strategy issued by the National Planning and Development Agency (2018) where increasing the productivity of the poor can be done by increasing complementary assets or resources such as land and capital and introducing technological changes that can increase productivity.

Despite this ethnic discrimination for non-indigenous residents to own land, it is permissible to have the Right to Use Bagunan. however, the policy of prohibiting ownership of land assets is contrary to President Joko Widodo policy of granting certificates of land rights for all Indonesian citizens. Quoting from the merdeka.com news which explains that President Joko

widodo gives certificates that people who want to use certificates as collateral in banks for business capital and are not used for consumptive purposes (Merdeka.com). Thus, granting land rights has an effect on poverty.

In addition, the expansion of land access for the poor aims to (1) empower micro and small entrepreneurs through certification of land rights to increase access to capital through bank credit; (2) issuing land rights certificates for people with weak economic groups; (3) land redistribution of land reform objects for land-tenure farmers. Furthermore, certificates of land rights will also be issued for transmigration communities classified as poor.

Land rights aim to increase the role of poor communities and traditional institutions in spatial planning and implementation, increase the knowledge of poor communities on the legal aspects of land, develop mechanisms for protecting land rights for vulnerable groups, and develop mechanisms for selective land redistribution. Policy priorities are directed at increasing the legal certainty of land rights for the poor without ethnic and gender discrimination.

Working capital credit has a regression coefficient of -0.0001 with the value t-statistic (-7.704) is smaller than t-table (-1.770), so that the working capital credit has a negative and significant effect on poverty. This finding is in line with Khandker and Faruquee (2003) suggesting that the distribution of working capital credit in Bangladesh has succeeded in

increasing people's per capita income, consumption, income distribution and reduce on poverty. Quibra (2012) also found that business capital lending has a positive impact on poverty alleviation through empowering women in community economic activities.

Simanowitz (2004) argues that the program of providing credit by financial services is a very important form of intervention in developing countries in reducing poverty. Kurmanalieva et al., (2003) suggested that credit provision is a mechanism that can be used for poverty alleviation. If access to credit can be carried out by the poor and used for production activities, it is possible to increase income. This finding is supported by Karyani (2012) which states that the distribution of business capital loans has a negative effect on poverty.

Todaro and Smith (2008) explains that the causes of poverty are lack of employment opportunities and low productivity. therefore, when poverty is caused by lack of employment opportunities, to reduce poverty it is necessary to create new jobs and if poverty occurs due to low income and low productivity, poverty reduction requires investment in human resources and investment in physical capital to increase worker productivity. An alternative policy to reduce on poverty is by channeling credit to create employment opportunities and increase the income of the poor.

Adelman and Robinson (1989) explain that poverty alleviation must be asset-oriented, namely policies to increase the quantity of assets of the poor. This approach is carried out through agrarian reform so that the poor have access to accumulate assets for example through the provision of credit or by expanding the access of the poor to basic education. In addition, Nafziger (2005) in his book entitled Economic Development, added that by providing capital and credit for poor

people through banking and non-banking institutions with procedures that are not difficult will have an impact on the production capacity of the poor. This, as applied with special credit and capital programs for the poor, with easier and affordable conditions and procedures such as the "Grameen Bank" model in Bangladesh, needs to be developed and is very effective in reducing the number of poor people Pitt & Khandker (1998) .

Investment credit has a regression coefficient of -1.168 with the value t-statistic (-2.314) is smaller than t-table (-1.770), so that investment credit has a negative and significant effect on poverty. Investment credit are medium or long-term loans used to purchase capital goods and services needed for rehabilitation, modernization, expansion and relocation of businesses or the establishment of new businesses (Bank Indonesia, 2016). Investment will significantly increase national output and increase input demand, thereby increasing employment opportunities and community welfare and decreasing poverty as a consequence of increased income received by the community (Rini and Sugiharti, 2016). High investment will lead to high employment. If a lot of workers in the area are absorbed, it means that more even distribution of income and reduce the number of poor people. This is supported by the findings of Pitt & Khandker (1998), Khandker & Faruquee (2003) and Karyani (2012) explaining that investment credit has a negative effect on reduce on poverty. In addition, Sukirno, (2000) explained that investments made by the community would continuously increase economic activity and employment opportunities, increase national income, unemployment, poverty and improve the level of prosperity of the community.

Economic infrastructure measured from the length of the road has a regression coefficient of -1.824 with with the value t-statistic (0.874) is greater than t-table (-1.770),

so that economic infrastructure has a negative and not significant effect on poverty. This story is in line with Purnomo & Istiqomah (2019) which explains that economic infrastructure development in the form of road construction does not significantly influence poverty rates. In this case, infrastructure development is expected to facilitate and facilitate the mobilization of labor, goods and services, so as to open access to jobs and open new business opportunities. However, infrastructure development also requires support such as ownership of quality assets and human resources.

This finding is not in line with Laabas & Limam (2004), Klasen (2005), Nritasari (2013) and Amalia & Madris (2012) that government spending used for infrastructure development affects the poor population. This is based on infrastructure development in the form of roads that will affect the mobility of goods and services, so that it will accelerate the production and distribution process and will increase income and welfare of the community thereby reducing poverty.

Road infrastructure not only affects production activities and employment opportunities, but also affects production efficiency and encourages economic activity (Nuritasari, 2013). Infrastructure is highly important in boosting economic development since it increases effectiveness as well as efficiency for business and society. Good infrastructure reduces the costs of production, transportation, communication and logistics, increases production, increases operational income, leading to higher income of most people (Grigg, 1988). Infrastructure will accelerate equitable development but must meet the needs of each region, so that it will encourage investment, employment, income and welfare and poverty. (Wahyuni, 2009).

Amalia et al. (2015) find government spending on infrastructure to reduce poverty through employment in various economic sectors.

Educational infrastructure has a regression coefficient of -0.026350 with the value t-statistic (-2.581) is smaller than t-table (-1.770), so that the educational infrastructure has a negative and significant effect on poverty. But the effect of education infrastructure on poverty has a span of 6 years, meaning that the development of education infrastructure will affect poverty after 6 years of development.

School building is an important infrastructure and has become a basic need for an area. Building an area requires quality human resources and this can be obtained through mastery of science. Education is an important factor in eradicating poverty. Someone who obtains a higher level of education will have a better chance to improve his standard of living (Posunah, 2015) and (Bintang et al, 2018). The effect of education not only affects the ability of individuals to increase income, but can also affect individual behavior in decision making, which will increase the likelihood of success and reach basic needs, even education will make it avoid poor conditions (Tarbini & Jacovkis (2012), (Colclough, 2012) and (Zhang (2014).

The new growth theory shed light on the important role of government, especially in improving human capital and promoting research and development to increase human productivity. The higher the level of education, the higher the knowledge and expertise, thereby encouraging higher productivity. The low productivity of the poor could be due to low access to education, so that with adequate education infrastructure will encourage the quality of human resources and poverty will be reduced (Awan et al., 2011) and (Ogundede et al, 2012). Educational infrastructure includes physical infrastructure needed to support educational activities (school buildings,

teachers, books) and non-physical infrastructure, namely institutional frameworks covering various values, norms, especially those that have been developed and codified into legal and statutory regulations (DPR RI, 2003). The findings are in line with Au et al., (2008) and Lacour (2011) explaining that education infrastructure plays an important role in community welfare. The easier it is for the community to access education, the better the quality of human resources will be. The better the education level of a person, the more likely it will be to find employment and income, thus reducing poverty.

This finding supports the findings of Dollar & Kraay (2001) Fan & Rao (2004) Laabas & Liman (2004) and Klasen (2005) who find that government spending on infrastructure development has an impact on reducing poverty. He explained that spending on infrastructure has two effects. The direct effect is in the form of benefits received from spending on work programs, increased income and welfare. The indirect effect arises when government spending in rural infrastructure, farm research, health and education in rural areas stimulates farm as well as non-farm growth leading to greater employment and income opportunities for the poor and provision of cheap food.

CONCLUSION

The number of Poverty in the Special Region of Yogyakarta Province occupies the first position with the highest percentage of poor population when compared to other provinces on the island of Java. In addition, poverty is exacerbated by the policy of banning non-native ethnic groups who live in the Special Region of Yogyakarta Province to have land rights. The findings of this study are working capital credit, infrastructure,

ethnic loans, investment credit have a significant effect on poverty. The findings imply that the need for a review of the policy on the prohibition of land ownership and the need for the performance of the banking sector in the form of lending and the need to support improving the quality of human resources through improving educational infrastructure and supported by the quality of qualified teachers in reducing the number of poor people.

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