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Religion and Poverty Alleviation in South Sulawesi: Analysis at the Village Level

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Abstract.
The influence of religion on poverty reduction has become an exciting study in various countries. Several studies have proven no relationship between religious observance and poverty alleviation. However, on the contrary, other studies have proven that religion affects poverty alleviation. In fact, religion should be able to help overcome poverty. Based on this phenomenon, this study will use raw data of Village Potential (Podes) data issued by BPS in 2018 for South Sulawesi Province, with around 3000 villages. The dependent variable of this study is the number of poor people in each village. Poverty data is taken from the number of poverty certificates issued by the village. This data explains the willingness of people to be considered poor, so that it can show voluntary poverty. Meanwhile, the independent variables include the number of religious places of worship, the number of educational institutions, the number of health institutions, the number of electricity customers, and the number of small-scale industries in the village. This study will use a simple regression method to find the relationship between the variables studied. Even though econometrically many variable relationships are not statistically significant which may be due to the completeness and abnormal distribution of the data, there are interesting variable relationships from this study. The relationship between religion and poverty is negative, indicating that religion can reduce poverty. Community-based health services (posyandu) can also reduce poverty. Markets that show economic aspects will also have an impact on reducing poverty. The same thing is technology proxied with electricity customers will also reduce poverty. Meanwhile, the geographic variable proxied by the distance between the village and the sub-district is not significant and the direction is not as expected.

Keywords: religion, poverty, South Sulawesi

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1. Introduction

Studies on the influence of religion on poverty alleviation have been carried out in many countries. Several studies have found that there is a religious relationship with the process of poverty alleviation. Such as studies in India Utara [1], Nigeria [2], Myanmar [3], Ahmedabad India [4]. Meanwhile, recent studies on the relationship between religion and poverty actually link it to energy problems in Melbourne Australia [5], and in Bangladesh [6].

Based on the studies above, we see that studies on religion and poverty in Indonesia are still rare. Some of the main reasons for the unavailability of adequate data on both religion and poverty. Even though this study is very important for Indonesia, which postscript is a country whose people are obliged to have religion according to what is regulated by the constitution. So this study is very challenging to do whether religion has an effect on poverty alleviation? For this research activity, we will examine one of the provinces, namely the Province of South Sulawesi, on the grounds that the majority of the population, namely 89.87% are Muslim at 2021. The data used in this study is raw data from the 2018 Village Potential Survey (Podes) conducted by BPS.

2. Literature Review

What is poverty? Poverty is a matter of deprivation or problematic lack. Poverty is something of a deficient person or family. From the definition of poverty can be divided into two namely absolute and relative. Absolute poverty is defined as the inability to achieve the minimum standard of life. Understanding the needs of the minimum standards vary by country. Relative poverty on the other hand is defined as the inability to meet the standards of contemporary needs, which are associated with the average welfare or average societal income at the time [7]. At present absolute poverty is the most widely used throughout the world where the poverty line used is always increasing from year to year. In 2008 the World Bank set a poverty line or purchasing power parity of US$1.90)[8].

Meanwhile, when viewed from the point of view of the concept of poverty alleviation, there are at least three approaches. First, the welfare view (the welfarist school), which sees that poverty is a situation in which people cannot achieve a certain level of welfare. This understanding is shared by mainstream economists where the solution is through increased economic growth which will automatically reduce poverty levels. So the solution is how people should improve their welfare through direct assistance

such as cash transfers and coupons which are mostly carried out in welfare states. Second, the view of basic needs (the basic need school) is more of the view that the poor are due to the inability to meet their basic needs. According to this view, the right solution is for the state to provide assistance to fulfill basic needs such as education, health, and infrastructure and facilities. Several developing countries have opted for this basic needs strategy, namely primarily providing easy access to education, health and capital, as has been done in many developing countries, including Indonesia. Third, the view of capability (the capability school) which sees that the problem of poverty is due to the lack of capability possessed by the poor, so they cannot compete in the labor market. So, the step to overcome poverty in this view is to encourage community capacity building. The policy implemented is to increase the ability of the community to compete in fighting for access to economic growth [9] .

Meanwhile, in the latest analysis that developed in the 2000s, there are differences in views on poverty alleviation between geographic and institutional approaches. The geographical approach was adopted by Jeffry Sachs from Harvard University which became the rationale for the birth of the Millennium Development Goals (MDGs) which began in 2000 to 2015. This view sees that geography is the most important factor that must be considered in efforts to eradicate poverty. Because geography has a strong influence on all factors including climate, season, pests, diseases, which greatly affect poverty. For example, countries in the south of the equator are greatly influenced by these factors, which cause decline and decline in all fields [10] .

The institutional view led by Daron Acemoglu refutes the geographical approach. From historical experience, the most important and important role is the institutional approach. Apart from writing in NBER and in scientific journals, Acemoglu also wrote a very provocative book entitled Why nations fail? In that book Acemoglu rejects geographical arguments as one of the causes of poverty, because the problems presented such as climate, humidity, epidemics and diseases are suffered by almost all nations. It is proven that there are nations that survive but many nations fail and become extinct. An important factor that causes the survival of a nation is an institutional factor, namely the willingness of the government to make the right rules, regulations and policies. Based on this view, the world development paradigm which was originally the MDGs has changed to become the Sustainable Development Goals (SDGs) by incorporating more ongoing institutional aspects from 2015-2030 [11].

In addition, poverty is also distinguished between those in rural and urban areas. Rural poverty consists of (i) limited access to land and irrigation facilities; (ii) slow adaptation to modern technology; (iii) the burden is too large; (iv) limited human capital;

(v) concentrated in suburban areas; (vi) concentrated on ethnic minorities. Urban poverty consists of (i) having limited access to resources and services; (ii) limited qualified human resources; (iii) the burden is too large; (iv) low wages; (v) many small businesses are not organized (vi) many groups do not have capabilities [12].

3. The Previous Studies

There have been many studies on poverty in Indonesia over a considerable period of time. In the first generation that is the period of the 1970s there are studies of poverty is quite monumental of which is Singarimbun and Penny at 1976 who raised the case in Yogyakarta Special Region (DIY) that is Sriharjo Village. This study has succeeded in building an awareness of the problem of poverty in rural areas with complex dimensions of economic, social and demographic. A more general and conceptual study of poverty was written by Sajogyo at 1978 in the very famous Prisma magazine. In that paper Sajogyo proposed the criteria of poverty in Indonesia by using the approach of per capita rice equivalent consumption level. For rural areas, if one consumes only a rice equivalent of less than 240kg / person / year and for urban areas of less than 360kg / person / year, then the concerned is classified as very poor. Esmara at 1986 also proposed that poverty line determination be based on the amount of expenditure to meet the basic needs per capita for a year. What is meant by basic needs is the need for basic goods such as rice, cassava, meat, vegetables, housing, education, and health [13].

Meanwhile, in the 1980s, there were studies by Arief at 1978 and Arief and Sasono at 1981 who saw poverty as a result of periphery constraints facing major states that practice neo colonialism. This book attempts to apply the dependent thesis as applied to scientists in Latin America such as Andre Gunder Frank and Samir Amin, for the case of Indonesia. The work of Arief and Sasono suggests an endemic view of dependent thesis which sometimes leads to new left views among intellectuals and critical students in Indonesia. The general criticism of this new left view is very good as an analysis, but very weak in providing alternative solutions. This is the focal point of Sjahrir at 1986 - one of the socialist activists - to seek other approaches beyond the thesis of dependence by offering basic needs [14]. In his book, Sjahrir argued that with the basic needs approach, at least there are solutions to overcome the problem of poverty by taking the case in Indonesia, namely the agricultural credit program (Bimas/Inmas), education (SD Inpres), health (Puskesmas) [15].

The next phase of poverty studies took place in the 1990s, an era where poverty reduction programs were more focused, especially with more foreign aid. Among them like several poverty reduction programs such as Presidential Instruction (Inpres) Program, Regional Development Program (PPW), Integrated Areas Development Program (PPWT Swadana), Integrated Area Development Program (PKT). In general this study concludes that these programs have succeeded in reducing poverty. Other anti-poverty programs of this era are also conducted by foreign observers [16]. This paper evaluates the Underdeveloped Village Inpres Program (IDT) implemented in 1994 -1996, with the findings that this program has a positive effect on the increase of regional income. The most abundant study of poverty occurred precisely in the aftermath of the 1997 economic crisis. Most of these studies are still struggling with poverty calculation problems such as those employing descriptive approaches in times of crisis [17] [18]. Meanwhile a recent poverty study evaluating poverty policies from the mid-2000s to the present [19])[20].

4. Method

This research refers to a recent study for the Province of Riau[21] and for the Province of Nanggroe Aceh Darussalam (NAD) [22], where both of these studies used raw data from Podes. In the 2018 Podes data, there are two data on poor people in each village, namely first, data on poor people based on Jamkesmas/Jamkrida participants, while the second data on poverty comes from the number of poverty certificates issued by the village upon request. In this study, we chose the second type of data because it better describes people's desire to be considered poor. Meanwhile, the independent variable is the number of Muslim places of worship, non-Muslim places of worship, educational facilities, health, community-based health services (posyandu), witch doctor, markets, small industries, cooperatives, state electricity customers (PLN), and finally customers. The following is the equation model followed by table 1 which contains a description of the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta \quad (1)$$

The method used in this study is econometrics with multiple linear regression methods with cross section data. The data used is raw data from the 2018 Podes of 3049 villages in South Sulawesi.This used a regression model that involves more than one independent variable. Multiple linear regression analysis was carried out to determine the direction and how much influence the independent variables have on the dependent

Table 1: Description of Variables.

Variables		Description	Information
Y	:	Willingnes to poor	Poor Letter (Surat Keterangan Miskin)
X1	:	Muslim place of worship	Mosque, muslim prayer room
X2	:	Non Muslim place of worship	Church, temple, non muslim prayer room
X3	:	Education fasility	Public elementary, middle, and high school
X4	:	Medical fasility	Hospital, community health center
X5	:	Rural Public Health Cummunity	Posyandu at in Rukun Warga (RW)
X6	:	Witch doctor	Traditional medicine praktice (dukun)
X7	:	Market	Traditional market
X8	:	Small industries	Small industries
X9	:	Cooperative	Village unit cooperative (KUD)
X10	:	State electricity Customers	Customers of state electriciy (PLN)
X11	:	Distance from Village to Sub-District	Distance in kilometers

variable. Some of the tests seen in this model are first statistical tests consisting of the the goodness of fit (R-square), the F test (simultaneous test), and t test (partial test). The second is economic interpretation, by looking at the sign of the relationship between variables adjusted to the theory.

5. Result and Discussion

As stated earlier, the econometric analysis is carried out in two parts. First, evaluate the statistical results, namely seeing that the R-Square value is relatively very small, namely only 0.007, indicating that the variables used can only explain 7%. From the simultaneous test using the F test where the value is 2.04 which indicates that this model passes the simultaneous test. This means that all the independent variables used can explain the dependent variable. Meanwhile, from the t test, all independent variables did not pass, except for the education variable (X3). This indicates that statistically this model is not good (see table 2).

Nevertheless, the results of this study can still be analyzed based on the signs of the resulting variables compared to the signs of the theory used. What's interesting is that the core variable of this study, namely Muslim (X1) and non-Muslim (X2) religious facilities, is in accordance with the theory, namely negative. This means that if religious facilities increase, it will reduce poverty. This finding is important because it is in line

TABLE 2: Result of Model.

Dependent Variable: SKM				
Method: Least Squares				
Date: 06/21/23 Time: 10:36				
Sample(adjusted): 1 3048				
Included observations: 3048 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	57.63225	25.42109	2.267104	0.0235
X1	-2.722953	4.745480	-0.573799	0.5661
X2	-0.242877	3.626406	-0.066974	0.9466
X3	21.24674	7.899715	2.689557	0.0072
X4	2.111897	7.387492	0.285875	0.7750
X5	-1.438131	4.912917	-0.292725	0.7698
X6	6.885489	5.040929	1.365917	0.1721
X7	-15.79593	34.01805	-0.464340	0.6424
X8	0.065892	0.239213	0.275452	0.7830
X9	6.975106	6.856477	1.017302	0.3091
X10	-0.024516	0.126134	-0.194368	0.8459
X11	-0.119222	0.459654	-0.259373	0.7954
R-squared	0.007370	Mean dependent var		133.3576
Adjusted R-squared	0.003774	S.D. dependent var		615.3524
S.E. of regression	614.1903	Akaike info criterion		15.68242
Sum squared resid	1.15E+09	Schwarz criterion		15.70613
Log likelihood	-23888.00	F-statistic		2.049241
Durbin-Watson stat	1.962004	Prob(F-statistic)		0.020829

with the purpose of this study whether religion has an effect on poverty. From these results it proves that in South Sulawesi Province religion can reduce poverty. Then the variable that fits the theory again is community-based health services (posyandu) (X5) which shows that community-based health forums have an impact on reducing poverty. The market (X7) also turns out to reduce poverty. The last one that has an impact on reducing poverty is electricity customers (X10) who are representatives of technology. This confirms that technology is an important factor for overcoming poverty (see table 3)

TABLE 3: Theoretical Relations and Research Results between Variabel.

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
Theory	-	-	-	-	-	-	-	-	-	-	+
Result	-	-	+	+	-	+	-	+	+	-	-

6. Conclusion

The conclusion from the study is that in general the econometric model used is not statistically good. Based on experience this often happens for raw data processing. All of the variables did pass the F test (simultaneously) but only one variable was significant with the t test, as well as the very small R-square indicating that this model did not pass the goodness of fit test. Nevertheless, from the economic interpretation it appears that the initial hypothesis in this study is answered, that religion is negatively related to poverty. While other variables that are also in line with the theory are community-based health services (posyandu), the market and PLN customers which are proxies for technology that are negatively related to poverty.

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