

Is There a Close Relationship Between the Role of Women and The Level of Poverty in Indonesia?

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ABSTRACT

In this era, education is a key factor that must be considered in order to break the cycle of poverty. Higher education will also encourage work to be more productive. Women are a gender that part of the workforce who need good education and health support so that their productivity increases. This study aims to determine the role of women in overcoming the national poverty rate. The data and variables used include the poverty rate, the number of female workers, the average salary of women, the number of female workers with high school education and above and the number of women who were attended by trained medical personnel during childbirth in all provinces in Indonesia in 2008-2013. As a result, the average salary of women has no significant effect on the level of poverty. Meanwhile, other independent variables based on statistics have a significant influence in reducing the national poverty rate.

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1. INTRODUCTION

The realization of a competitive, superior and prosperous society in a country can be implemented through a comprehensive national development program. In an effort to make the level of development in all regions more even, the Indonesian government is actively carrying out various development initiatives, especially in places that are still far behind from other regions. The reduction in the number of individuals living in extreme poverty is one of the main indicators that development efforts have been effective. The main goal of development is to find methods that are effective in reducing the number of people living in poverty. As a result, this suggests that one of the most important considerations in determining which industry will become the foundation for a country's growth is the extent to which it is successful in reducing the overall poverty rate (Simatupang & Saktyanu, 2003).

The central and regional governments have made various efforts, both direct and indirect, in an effort to alleviate poverty. Even so, the results are still far from the target set. The policies implemented have not yielded the best results. Because policies and programs designed for poverty alleviation are more focused on individual programs in each sector. So that there is still a gap between the plan and the realization that occurs. Therefore, government programs to alleviate poverty need to be integrated both vertically and horizontally.

The inability of citizens to meet their basic needs in life, both food and non-food, is a general definition of poverty. There are various standards, both national and international, to determine whether a person is classified as poor or not. National standards usually use standards from BPS, while international standards use World Bank standards, namely a salary of \$ 2 per day as a limit. From 2004 to 2015, there was a consistent trend of decreasing the number of poor people in Indonesia, with the percentage decreasing from 16.66% in 2004 to 11.22% in 2015 (BPS, 2015).

Poverty issues that have been identified for Indonesia are a priority that must be addressed. Based on BPS data it is concluded that the number of individuals living in poverty has decreased every year. However, the decline is not too marked. The number of people living in poverty fell by 1.05 million between 2004 and 2005, from 36.15 million in 2004 to 35.10 million in 2005. This figure decreased from the previous year's figure of 36.15 million. There was also a decrease in the proportion of poor people, from 16.66 percent in 2004 to 15.97 percent in 2005. Furthermore, the number of poor people decreased by 10.75 million during the 2006-2013 period, from 39.30 million in 2006 to 28.55 million in 2013. This means that the proportion of people living in poverty fell from 17.75 percent in 2006 to 11.47 percent in 2013. In 2014 there was again a decrease in the number of people living in poverty, from 28, 55 million in the previous year to 27.73 million. in 2014. Meanwhile, the proportion of poor people decreased from 11.47 percent in 2013 to 10.96 percent in 2014 (BPS, 2015). After that, in 2015 there was an increase in poverty again.

Education is one of the elements that can affect the ups and downs of the number of people living in poverty. Sachs stated that investment in education and health is the most important component in efforts to reduce poverty (Sachs, 2005).

Education is very necessary for humans to have a meaningful and satisfying life. Education is one of the most important factors determining the capacity of developing countries to assimilate contemporary technology and acquire the capabilities necessary for long-term growth and development to be achieved.

In the context of concerns related to gender and poverty, the house is a source of inequality that places women in a subordinated position. The fact that men and women face different types of poverty is shown by the unequal distribution of resources within the family unit in accessing work. In the public arena, the concept of women's poverty cannot be separated from the existence of an inhospitable environment for women's involvement in official decision-making processes related to women. The notion of public space is often understood by women to refer to a workplace or place of business rather than a gathering place within the community. Participation in public forums in the community is often limited and this cannot be separated from her position as a wife or mother at home. An example of such a forum is a routine community meeting.

A further challenge faced by women is progress in almost all scientific disciplines which are not often directed towards the advancement of women. Policy discussions often marginalize the role of women in decision making. Formal development programs often exploit the role of men. This is often due to the fact that women are often excluded from formal decision-making procedures. Now, the fact is that Indonesian women are starting to be more involved in public life. However, this does not necessarily mean that the rights of female employees will be respected simply because more and more women are participating in public service work. For example, female employees still experience discrimination in the workplace. The salary they get is often lower than the salary that male workers receive. Despite doing the same type of work, female employees are not always entitled to the same benefits as their male counterparts. Regarding access to public services, the majority of women in Indonesia are still faced with a scenario that is no less disappointing. One of the most important aspects is the availability of health care for Indonesia's female population. Maternal Mortality Rate (MMR) which is still high during childbirth is the only clear sign of this phenomenon. MMR in Indonesia does not appear to have shown significant indicators of decline over the last 10 years. According to the latest survey data, the current maternal mortality rate is 37 deaths per 100,000 population (Kementerian Kesehatan, 2008).

In various fields of life, such as in the political, economic, social and cultural fields, women in Indonesia are still placed in a much lower position than men. Women's access to political and economic resources is quite limited [9]. The events described above show that women continue to be a minority group, therefore, the issue of empowering women covering a wide potential scope of

activities must be pursued. Women's economic independence is an interesting issue to discuss. One sign of progress towards greater well-being is when women are given more say in their economic situation. This is a sign of increasing household welfare when women become educated, have property rights, and are free to work outside the home and have independent income (Dreze & Sen, 1999).

It has to do with the balance of power in terms of access to and control over resources. Despite the fact that women are responsible for producing from 40 to 100 percent of the world's needs. In most countries and across different socioeconomic strata, they have less influence over available productive assets. The inability of women to have access to and control available resources is the main contributor to poverty experienced by women. It is necessary to carry out a thorough study to find the right formula in alleviating women's poverty. This is because it is impossible to eradicate poverty without paying attention to the causes of powerlessness.

In relation to the issues raised, this study aims to investigate the factors that influence women, which can be stated as follows: What is the relationship between women's roles in education, health, work contribution and women's wages with the poverty rate in Indonesia?

2. RESEARCH METHOD

Secondary data was obtained from the Central Bureau of Statistics (BPS) and the Ministry of Health for the purposes of this study (BPS, 2015). The data is data for the period 2008-2013, the focus of the study is spread across 33 provinces in Indonesia. The information collected is annual data from the province and covers the following categories: number of poor people, number of working women, number of working women who have graduated from high school or above, average salary of working women, and percentage of births assisted by medical personnel.

In this study, both quantitative and descriptive methods were used as an analytical approach. Knowing the relationship between the status of women in Indonesian society and the level of economic backwardness, a quantitative study was carried out using a panel data approach. The E-Views 8 application and Microsoft Excel are used throughout all stages of the data processing procedure. Meanwhile, quantitative data showing the role of women in the poverty rate in Indonesia is used to interpret the results of this study's descriptive analysis. The number of female workers (AKW), the percentage of female workers who have graduated from high school or more (PWSA), women's salaries (RUW), and women's access to health services (LKW) are the four independent variables used in this study. Meanwhile, the degree of poverty, more specifically the proportion of the population living in poverty, is the dependent variable (POVERTY). The model used in this study is as described below:

$$\text{LnPOVERTY}_{it} = \alpha + \beta_1 \text{LnAKW}_{it} + \beta_2 \text{LnPWSA}_{it} + \beta_3 \text{LnRUW}_{it} + \beta_4 \text{LKW}_{it} + \varepsilon_{it}$$

Descriptions:

A	Intercept
$\beta_1 - \beta_4$	Independent Variable Coefficients
LnPOVERTY_{it}	The amount of Indonesian included poverty in province i and year- t (million people)
LnAKW_{it}	The amount of women worker in province i dan year- t (hundred thousand people)
LnPWSA_{it}	The amount of women worker having senior high school education and above in province i dan year- t (hundred thousand people)
LnRUW_{it}	The average of woman worker salary in province i dan year- t (Million Rp)
LKW_{it}	Women's access to health services in province i dan year- t (%)

<i>E_{it}</i>	<i>Error term</i>
<i>I</i>	<i>Cross section Data of 33 Provinces in Indonesia</i>
<i>T</i>	<i>Time series Data 2008-2013</i>

3. RESULTS AND DISCUSSIONS

3.1 The Relationship Between the Role of Women and Poverty Levels

When using the panel data analysis method, the best model is selected by performing statistical tests such as the Chow test and Hausman test. These tests are used in conjunction with one another. To determine which of the two models, the Pooled Least Square (PLS) model and the Fixed Effect (FE) model, is superior, the Chow test (FEM) was performed. The resulting probability level is smaller than the 5% significance level, the Chow test results show a probability value of 0.0000. This shows that the Fixed Effect Model is a superior choice between the PLS model and the FEM model because the probability level is less than the 5% significance level. The Hausman test will be used as the next step to determine which of the two models is better, the Fixed Effect Model remains superior. According to the findings of the Hausman test, the probability value is 0.000. This shows that the Fixed Effect Model is the one that must be chosen as the most appropriate choice because the probability value is lower than the 5% significance level. Table 1 displays the findings obtained from the Chow test as well as the Hausman test.

Table 1. The Best Model Testing

The Best Model Testing	Probability
Prob. <i>Chow test</i>	0.0000**
Prob. <i>Hausman test</i>	0.0000**

Note : **Significance at 5% alfa

Testing the classical assumptions which include autocorrelation, heteroscedasticity and multicollinearity is the next step that must be carried out after obtaining the most accurate model possible. The multicollinearity assumption test is considered the first standard assumption test. According to the findings of the multicollinearity test conducted in this estimation, it is concluded that there is no multicollinearity because all values of r_{ij}^2 are smaller than the value of R^2 . The next assumption test is autocorrelation to determine the error correlation between observations. This is done by looking at the Durbin-Watson (DW) statistical test which gives the calculated DW value at a statistical weight close to two, namely 1.678283. This figure after being analyzed using the DW line shows that autocorrelation cannot be determined, but because the weighting method used uses the GLS (Generalized Least Square) method, namely by giving weight to the estimate in such a way that it meets the BLUE standard in statistics. The heteroscedasticity hypothesis is the one examined in the third assumption test. Model estimation was carried out using the cross section weight treatment and the white covariance covariance cross section approach to address violations of the heteroscedasticity assumption.

Table 2. Hasil Estimasi Model dengan Metode *Fixed Effect Model*

Dependent Variable = POVERTY					
No.	Independent Variables	Coefficients	S.E.	t-Stat	Prob.
1	AKW	-0.137346	0.027337	-5.02411	0.0000*
2	PWSA	-0.035001	0.008104	-4.31926	0.0000*
3	RUW	-0.039873	0.025321	-1.57472	0.1173
4	LKW	-0.001424	0.000557	2.558781	0.0114*
5	C	15.8568	0.306196	51.79231	0.0000*
	R ²	0.998261			
	F-Stat.	0.000000			

Note : *Significance at 5% alfa

The result of the process of estimating the model used is the FE Model. The estimation results are presented in Table 2. In evaluating the model based on statistical criteria, the value of the coefficient of determination (R^2) and the F-count probability are seen. This is done to determine the quality of the model. The coefficient value of R^2 for the model is 0.9982. This value indicates that the

independent variable can explain 99.82% of the variance in the dependent variable in this case for the poverty level. The remaining 0.18% can be estimated by other factors that are not yet in the model. Model evaluation is further supported by the fact that the probability value of the F-statistic is 0.0000, and is significant at the 5% significance level. This shows that the independent variables affect the dependent variable jointly. The t-test is used as a method to provide statistical evidence of each of the independent variables that have a significant impact on the poverty level or not. If the probability value is lower than the 5% significance level, it indicates that the variable is significant at each level of significance and influences the variables studied. According to the findings of the t-test conducted on the model, the three independent variables are significant at the 5% significance level, while the average salary variable is not significant at the 5% significance level. This finding is based on a 5% significance level.

Based on the estimation findings presented in Table 2, it is known that the proportion of female workers has a significant negative impact at a significance level of 5% on the number of poor people. According to this model, there will be 0.13% fewer people living in poverty for every one percent increase in the share of women participating in the labor force. The hypothesis put forward is supported by the presence of a negative sign on the coefficient representing women's participation in the labor force. From this it can be concluded that the extent to which women participate in the workforce has a significant impact on the overall poverty rate. The higher the percentage of low-income households where women participate in the labor force, the higher their household income will be. This in turn will increase the welfare of the family because their basic needs are met, which is a sign that they are gradually freed from the cycle of poverty. In families that are under poverty, women often have a role as housewives and the backbone of the family to support life so that it runs more decently (Sudarmini, 2006). For women, the profession of being a housewife and working woman is not always an option because of the lack of income. However, the ability to work and take care of the household is a necessity. Meanwhile, the income of women who have multiple important roles is influenced by various factors, including age, level of education, working hours, nature of work, and the number of people who rely on them financially.

The proportion of women of working age is much lower than the proportion of men of working age. There are often fairly consistent but small cyclical fluctuations in the total number of women actively participating in the labor market. Based on the findings of the August 2012 Labor Force Survey (Sakernas), the percentage of women working in the workforce has now reached 37.92% of the total workforce. Whereas in 2013, women amounted to 37.13% of the workforce. The shift is almost imperceptible as a result of the fluctuating nature of the female workforce, which can be attributed to a variety of factors including social, demographic, and cultural aspects.

According to Sakernas 2012, the majority of the female workforce work in the agricultural sector. More women worked in the agricultural sector by 34.48%, in the trade sector by 27.81%, and in the service sector by 19.17%. Every year there is a general trend towards fewer available jobs in the agricultural industry, which in turn has an impact on female employees. This decrease was offset by an increase in the percentage of the population working in the industrial, commercial and service sectors. The increase in the number of women working in the service sector is far greater than the increase in the number of women working in both the manufacturing and retail trade sectors. Because the service industry is more flexible for women, it is easier for women to pursue and advance their profession in the service sector. This flexibility means that women can earn more money for their families, while fulfilling the role of a housewife. When compared to other industries, the highest proportion of women working in the informal sector is in the service industry. This is due to the greater leeway for creativity and autonomy afforded by business owners to workers in the informal sector, making women especially suitable for careers there.

The findings are shown in Table 2 based on the estimated model showing that the education level of high school graduates and above who are employed has a substantial and negative impact on the poverty rate. This shows that a one percent increase in the education level of women of working age will reduce the poverty rate by three point five percent. The quality of human resources can be developed through education, which will result in an increase in the amount of knowledge and skills possessed by employees. This in turn will affect productivity through the use of more efficient production techniques. Increasing women's educational attainment will have a beneficial

effect on the rate of economic expansion achieved through increasing the productivity of the female workforce.

Based on the estimated model in Table 2, it is known that the health service variable, namely the number of births assisted by health personnel, has a negative and statistically significant effect on the percentage of poor people. This suggests that a one percent increase in spending on health care will result in a 0.0014% reduction in the poverty rate. Examination of pregnant women is considered as an example of quality health services in Indonesia when performed by trained specialist doctors. Although expectant mothers can check their pregnancies with a variety of health workers, only the most highly trained and qualified medical professionals are used for the purpose of identifying high-risk pregnancies as early as possible.

In addition, it is the responsibility of the government and society to ensure that every mother has access to maternal health services and facilities that meet standards. These services should begin during pregnancy and include assistance during childbirth by medical professionals who have received appropriate training, postnatal care for mothers and newborns, and special care and referral if complications arise. Maternity and paternity leave must be provided. In addition, it is necessary to carry out additional treatment upstream, especially for groups of adolescents and young adults, in order to accelerate the process of reducing MMR (Kementerian Kesehatan, 2008).

The main target in the field of maternal health is to increase the number of deliveries assisted by medical personnel who are educated and have special competencies, such as obstetricians and midwives. In addition, related parties are pushing for these deliveries to take place in public health service facilities whenever possible, such as puskesmas or hospital. The delivery assistance method is delivery services starting from scale I deliveries to scale IV deliveries. The success of maternal health improvement initiatives is assessed using the indicator the proportion of deliveries supported by medical professionals with appropriate training. This indicator illustrates the extent to which the government is able to provide excellent delivery services supported by professional medical personnel who have received adequate training (Kementerian Kesehatan, 2008).

It is clear that the overall level of delivery assistance provided by health professionals in Indonesia is steadily increasing. National coverage in 2014 was 88.68%, still below the 90% target set in the 2014 Ministry of Health Strategic Plan (Kementerian Kesehatan, 2008). On the other hand, in Indonesia, up to fourteen provinces have succeeded in achieving the objectives of the Strategic Plan, while twenty other provinces have not succeeded in achieving these objectives. The provinces of DI Yogyakarta (99.96%), Central Java (99.17%), and Bali (97.66%) had the highest percentage of population covered by the survey. West Papua (44.73%), Maluku (46.90%), and Papua (63.15%) are the three provinces that have the lowest overall coverage (Kementerian Kesehatan, 2008).

Thus, the percentage of poor people in Indonesia will decrease in proportion to the increase in the number of births assisted by medical personnel. It can be said that the increased availability of health workers for childbirth shows increased knowledge, information, and easy access to women's health.

4. CONCLUSION

According to research findings, the poverty rate is strongly influenced by the number of working women, the quality of educational opportunities, and access to health services. Meanwhile, the poverty rate in Indonesia is negatively affected, although not statistically significant, by the wages of female employees. This variable produces findings that contradict the hypothesis, the high proportion of women in the labor force who have informal jobs is likely to be the reason for this difference in findings. The large number of female workers who have low levels of education is the root cause of the accumulation of female workers in the informal sector. A good education will break the vicious circle and have a multiplier effect on the quality of the nation's children.

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