

# Poverty and Child Labor: Are Children as the Economic Resource of the Household?

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## ABSTRACT

Income (or expenditure) is the most common poverty indicator which measures at the household level; however poverty is an individual concept. Poor household have always thought that all household members share fortunes and misfortunes equally, which is particularly problematic in the case of children. This problem is exacerbated by the globalization which could impact on reducing household incomes and worsen the position of children in the household. The purpose of this study is to identify the impact of economic globalization to poverty and to identify relation between poverty and child labor. The method used in this study is empiric study with data from Statistics Indonesia (BPS) and The National Socioeconomic Survey (SUSENAS). The results of this study indicate that changes in economic globalization, poverty and household welfare shed lights on the causes and consequences of child labor.

Keywords: child labor, globalization, household welfare, poverty

## INTRODUCTION

Does globalization reduce poverty? This question assumes the importance of information in the globalization era, which is a common cliché in the literature as well as in the streets that globalization is making the rich man becomes richer and the poor man becomes poorer. Globalization gives not only economic advantages – such as increasing innovation, new skills, reducing asymmetric information, and entrepreneurship – but also disadvantages such as poverty and inequality. Bardhan (2006a, 2006b) and Harrison and McMillan (2007) claimed that the rise of poverty is a result of globalization. Though the matter is actually much more complicated, it is not like black and white that can be

easily and quickly understood. According to Harrison (2006), Gross Domestic Product (GDP) only measures the country's income or globalization's level, and does not measure the poverty, the super-exploitation of workers, generally, and of children, specifically being concerned. Based on Dale, et al. (2011) a poorly life can exacerbate the poverty in which these laboring children live.

This paper is divided into five sections including this introduction. Section two explains the research method, section three presents globalization and poverty in Indonesia and the relation of poverty and child labor in Indonesia. Section four is the discussion about the results and the last section presents the conclusion and some suggestions for future studies and the set of feasible policies that can alleviate poverty and child labor without giving up on the gains of globalization.

## METHOD

According to Harrison (2006, 2007), Harrison and McMillan (2007), and Bharadwaj (2014), we need to use aggregate data to examine the impact of globalization on the number of the poor. On the other hand, we need to use microdata to examine the impact of globalization on the incomes of the poor in a single country. Therefore, this study will be presented in two different approaches: an empirical study and binary logistic regression. An empirical study will be used to see the relation between globalization and poverty.

The binary logistic is used to see the household's decision to employ their children. The binary logistic is used when the dependent variable is dichotomous (two categories) and independent variables are various (Cox and Snell, 1989; Hosmer and Lemeshow, 2000).

The coefficient from binary logistic regression indicates the contribution of independent variable against the varied dependent variable. However, the dependent

variable can be determined only by two values which are 0 or 1. The results of the predicted probability ( $p$ ) in binary logistic regression show, that 1 is not 0 (For example, events / decision making). Binary logistic regression can be described by this equation (Abdou et al, 2008):

$$\text{Log} \left[ \frac{p}{1-p} \right] = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

where  $p$  is the probability outcome that we want, and  $\alpha$  is the constant from the equation and  $\beta$  is the coefficient of the independent variable,  $X_i$ , for  $i=1$  to  $n$ . As a result, the following nonlinear function is used to express the relationship between the independent variables and the binary dependent variable (Canbas et al., 2005; Premachandra et al., 2009):

$$P(Z_i) = \frac{e^{Z_i}}{1 + e^{Z_i}} = \frac{1}{1 + e^{-Z_i}}$$

where  $P(Z_i)$  is the cumulative probability function derived from a value between 0 and 1; and

$$Z_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

The binary logistic regression in this paper predicts the household's decision to employ their children; with independent variables are poverty and welfare.

## RESULTS AND DISCUSSION

### LINKAGE OF GLOBALIZATION AND POVERTY

One of the most famous theorems in international trade is the Stolper–Samuelson theorem. This theorem suggests that the abundant factor should see an increase in its real income when a country opens up to trade (Bardhan, 2006a; Harrison, 2006). This framework suggests the developing countries which have the abundant factor (unskilled labor or poor people), they have the most to gain from trade (Bardhan, 2006). Bhagwati and Srinivasan (2002) argued this insight that developing countries are most likely to have a comparative advantage for producing goods made with unskilled labor and trade reforms should be pro-poor. Based on Davis and Mishra (2004), application of the trade theory to suggest that liberalization will raise the wages of the unskilled in poor countries is “worse than wrong – it is dangerous.”

Globalization is based on a concept of liberalization and the removal of barriers from economic and trade, towards

a world without borders and is open (Halwani, 2005). Trade reforms may result in less protection for unskilled workers, who are most likely to be poor and reduce the income of developing country. Pritchett and Sethi (1994) analyzed the experience of Jamaica, Kenya, and Pakistan on their tariff reductions and found that revenues often fell substantially less than tariff rates did. The decreasing revenue for the country also affects the government's role in poverty alleviation.

The poor countries with an abundance of unskilled labor do not always gain from trade reform. Poor people everywhere are hurt by their lack of access to capital and opportunities to learn new skills. In some developing countries, their counterparts in Asia with labor-intensive manufacturing workers are losing their jobs. At the same time, foreign investment has also brought new jobs. In Indonesia, poverty headcount is declining that are more caused by skilled and enterprising people migrating to improve their incomes independently than globalization accomplishes.

According to Harrison (2006) trade shares or export shares of GDP measure the countries income or globalization level and do not measure poverty. Poverty is an individual concept and has many determinants. Determinants of resources prices and employment such as wage rate determination, in competitive market worker tend to be paid according to the value they add to the firm, in terms of increased revenue. The price of a unit of capital (machine) is determined in a way similar to the price of a unit of labor. Determinants of an individual or family income are the income of a person which depends on the price he or she receives for his/her resources, labor and capital, and the quantities of resources he/she can place in employment (Balisacan, et al. (2003); Black and Sanders (2004); Bardhan (2006); Houghton and Khander (2009)).

### Figure 1 Export Shares, Headcount Poverty, Trade Share and Income per Capita in Indonesia

Different measures of globalization are associated with different poverty outcomes. In Indonesia, poverty has fallen where exports or trade share is growing. However, during the financial crises in 2008-2009 the income per capita has declined and we can conclude that a crisis is costly for Indonesia. While recovery in Indonesia was rapid and globalization was always up and the trend was similar with income per capita. This means that globalization increase Indonesia's wealth. Bardhan (2006) believes that globalization can cause many

hardships for the poor in developing countries. In Indonesia, a comparison between the headcount poverty and the trade share or the export share, shows the headcount poverty is not affected by fluctuation of globalization measurement. This means that globalization has no effect on poverty reduction in Indonesia. Most of the declining headcount poverty is supported by government policies such as the *Raskin* program (rice for the poor), fuel subsidies, education and health insurance and poverty reduction which merely are promoting economic growth.

#### POVERTY AND CHILD LABOR

What interventions might end child labor without hurting children? A well-meaning however poorly designed policy can exacerbate the poverty in which these laboring children live, even leading to starvation. In the mid-1990, it became more commonly understood that some work could be beneficial for children in the industrial era than in developing countries currently (Humphries, 2003; Rogers, et al. (2008); Polakoff (2007)). Several articles have already studied the issue of child labor in developing countries. Among them, Salmon (2005), by using the 2000 Labor Force Survey (LFS), found that poverty compels children to work. Levison, et al. (1998), and Basu and Tzannatos (2003), and Clark (2011) explained one of the reasons why child labor is always increasing is the possibility of replacing child labor with adult labor, however adult labor cost more and for this reason, firms are unwilling to make transition to adult labor. Haughton and Khandor (2009) stated that poverty is pronounced deprivation in well-being. Becker and Lewis (1973) and Cockburn, et al (2009) asserted poverty caused child labor and it's not to deny that it can have other causes, some even beyond economics. Doepke and Zilibotti (2002) asserted that households with many children and less wealth tend to oppose legal restriction on child labor.

#### Table 1 Binary-logistic Result

Based on SMERU report, both child poverty and total poverty declined during the period 2003-2009, and child poverty declined faster. This implies that reducing overall poverty lifts greater proportion of children out of poverty. Poor households often force their children to work since it is associated with the rise and fall of their welfare. It is supported by the binary logistic results which shows that poverty (measured by household income) and welfare (measured by expenditures) of the household may influence the families' decision to force their children to work. The poverty's variable has a positive and

significant relationship. It indicates that poverty becomes a dominant factor in the decision to employ their children. The least household income is, the more children are employed. It means, a child from a poor household becomes the economic resource for his/her household. The welfare's variable has a negative and significant relationship. It indicates the increase of welfare will reduce the decision to employ their children. This means, the parent's calculations of benefits to be gained from child-rearing must include an estimate of their access to their children's labor or earnings. The children are able to make a significant material contribution to the welfare of the family; the easier it is for parents to make a net profit on child-rearing, and children are considered as the economic resource of the household especially of poor households.

#### CONCLUSION

The developing or poor countries with an abundance of unskilled labors do not always gain from trade reforms since they do not have any comparative advantages. In this paper, we use data from BPS to analyze the impact of globalization to poverty in Indonesia. We found that globalization has no effect on poverty reduction in Indonesia. It is caused by government's policies, such as *Raskin* (rice for the poor) program, fuel subsidies, education and health insurance. On the contrary, by a rapid economic growth in Indonesia, we can solve the poverty problem by opening new job opportunities or supporting local products. The second aim is to know the impact of poverty to child labor in Indonesia; we use data from SUSENAS 2014. We found that income and expenditure as poor and welfare measurements have impact to force their child to worked. So, children are considered as the economic resource of the household especially poor households. Indonesia must solve the poverty problem first and reduce the child labor. Indonesia's law about child protection or child labor must have strict punishment, in order to decrease child labor in Indonesia, especially in some provinces which have lower economics' growth, for example Papua.

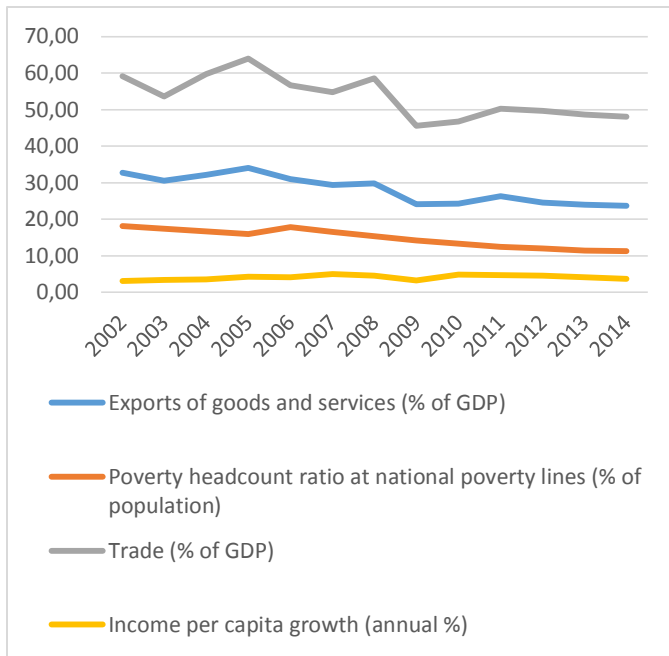
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**Figure 1. Export Shares, Headcount Poverty, Trade Share and Income per Capita in Indonesia**



Sources: Author's calculation

**Table 1. Binary-logistic Result**

Child Labor	Coef.	Std. Err.	z		P> z	[95% Conf. Interval]
Poor	0.997339	0.3463929	2.88		0.004	0.3184214 1.676257
Welfare	-0.1395917	0.0660608	-2.11		0.035	-0.2690685 -0.0101149
Prob > chi2 = 0.4478						

Source: Author's calculation