Research Paper

Determinants of Labor Migration in Overseas in Indonesia

*Nurhuda, *Madris, *Fatmawati

(Post Graduate Masters in Resource Economics, Hasanuddin University)
(Lecturer at the Faculty of Economics and Business, Postgraduate School, Hasanuddin University)
(Lecturer at the Faculty of Economics and Business, Postgraduate School, Hasanuddin University)
Corresponding Author: Nurhuda

ABSTRACT: *This study tries to look at the effect of the Young Dependency Ratio, provincial minimum wages and the quality of human resources on migrant migrant workers abroad labor force ratios through employment in 15 provinces in Indonesia with the largest TKI delivery rates to overseas. The analysis technique used in this study is the Structural Equation Model (SEM), to see the direct and indirect relationship between the dependent and independent variables and the intervening variable, namely labor absorption. From the results of the analysis, it was found that the Young Dependency Ratio directly affected migrant workers' migrations abroad, while the ratio of temporary labor force through employment was not influential. Variable provincial minimum wages directly do not affect migration of migrant workers abroad, while indirectly through influential employment. The quality of human resources, both directly and indirectly through the absorption of labor influences the migration of migrant workers abroad.*
Keywords: *YDR, Provincial Minimum Wages, Quality of Human Resources, Absorption of Labor, Migration of Indonesian Migrant Workers Abroad*

I. INTRODUCTION

Indonesia, with an increasingly rapid population growth, has caused the proportion of the immature population to become increasingly high and the relatively large number of family members which indirectly have an impact on the addition of the workforce and the Young Dependency Ratio (YDR)

Demographic factors are factors that have a strong relationship with the level of migration, especially family burden. The amount of dependence on the number of household members is a driving factor in deciding migration, especially if the household members are not classified as the workforce. This allegation is reinforced by (Leuwol in Budijanto 2015) that the magnitude of the dependency ratio (Dependency Ratio) is one of the factors driving migration is the large number of children owned by migrants.

The low absorption of labor in the country has encouraged workers to seek and take advantage of employment opportunities abroad. In addition, the level of wages offered is relatively higher compared to the wages of similar jobs in the country, which is also a consideration for workers to migrate. The sending of labor abroad is a 'savior valve' for efforts to increase the income of the sender's country. This is due to the lack of jobs obtained by the domestic workforce which has implications for increasing economic pressures.

One of the problems commonly faced by a number of developing countries is brain drain, the emigration of many highly educated workers to rich countries, in an effort to find a higher standard of living. If human capital has a positive external, the brain drain makes the people they leave behind poorer. This problem will further reduce the inventory of poor countries' human capital (N. Gregory Mankiw, 2003). This problem occurs mainly in scientists, engineers, academics, and doctors who are in the thousands. They have obtained education in their home countries with enormous social costs just to reap the benefits of and contribute to their expertise in enhancing the economic growth of already affluent countries (Michael P. Todaro, 1994)

Indonesia with 34 provinces has differences in terms of economic conditions, education and demographics which have an impact on the number of the workforce. This condition also applies to the migration rates of migrant workers abroad that are not the same from the 34 provinces. Migration of migrant workers abroad measured by the number of migrant workers sending tends to be high in some provinces and vice versa. It was against this background that led the author to design a study of the labor force ratio against international

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migration of Indonesian workers abroad in 15 provinces in Indonesia with the largest sending of Indonesian migrant workers from 2011-2016 which was titled "Determinants of Labor Migration Abroad in Indonesia "

II. LITERATURE REVIEW

The high number of unemployed people in Indonesia and the narrowing of employment, make the majority of the population choose to migrate abroad to find work. The economic development conditions of developing countries in recent decades have been unable to provide more employment opportunities than population growth, so that the problem of unemployment from year to year is increasingly serious. If this is not immediately addressed and a solution is sought, it will cause social insecurity and potentially increase the level of poverty (Siswosoemarto, 2012).

Applied economics, by applying the theory of the factors driving someone to migrate, namely the reduction of wages, unfair taxes, the poor organization of the social security system, and the lack of functioning of the food distribution system (Kryger in Setiadi: 2000).

International migration provides many economic benefits. For workers, the level of income in a new place is higher than what they get from their place of origin (Salvotore: 1996) A person's decision to migrate is not only determined by the income that will be received in the destination country, but also takes into account how much opportunity to get a job, this is closely related to the employment opportunities that exist somewhere (Todaro: 2003) The dependency ratio in this case the number of children owned is one of the motivating factors for someone to do migration (Leuwol in Budijanto 2015) The driving factor of the country of origin of migrant workers is the consideration of low salaries, limited field of employment and low social access of people in the country of origin (Everet Lee: 1996)

According to the development model proposed by W. Arthur Lewis in Todaro (1998) which was further developed by Jhon Fei and Gustav Ranis, known as the Two Lewis Sector Model (Lewis Two Sector Model). This model explains that the economy in developing countries consists of two sectors, namely the traditional sector, namely the subsistence rural sector which has a population surplus and is characterized by the marginal productivity of labor equal to zero, and the modern industrial sector with high productivity subsistence. Lewis assumed that wage rates in urban areas must be at least 30 percent higher than wages in rural areas. This will force workers to move. While the movement of labor and employment growth leads to the growth of modern sector output (Todaro 1998).

III. METHOD

Research sites

This research was conducted in 15 provinces in Indonesia with the largest number of TKI shipments. Includes, West Java, Central Java, East Java, West Nusa Tenggara, Banten, DKI Jakarta, Lampung, Bali, South Sulawesi, West Sumatra, East Nusa Tenggara, DI Yogyakarta, South Sumatra, West Kalimantan and Riau Islands.

Types and Data Sources

The type of data used in this research is secondary data in the form of panel data (pooled data) with the characteristics of cross section and time series simultaneously. The cross section data in this study is data consisting of 15 provinces in Indonesia with the largest number of TKI shipments abroad. Whereas for time series data, it is an entity data with the time / period dimensions in this study using the 2011-2016 period

The type of data used in this study is quantitative data in the form of panel data. The data in question are, population data by age group, provincial minimum wage, average length of school, number of workforce and the number of workforce working in 2011-2016 in Indonesia obtained from the Central Statistics Agency (BPS), while for data migrant workers abroad are obtained from BNP2TKI.

Analysis Model

The data analysis technique used to discuss the problems in this study is the Structural Equation Model (SEM). Structural Equation Models or SEM are statistical techniques that allow testing of a series of relatively complex relationships simultaneously. Complex relationships can be built between one or several dependent variables with one or several independent variables. There may also be a variable that has a dual role, namely as an independent variable in a relationship, but becomes a dependent variable in another relationship given the existence of a tiered causality relationship. Each dependent and independent variable can be shaped

$$Y_1 = f(X_1, X_2, X_3)$$
$$Y_2 = f(Y_1, X_1, X_2, X_3)$$
$$Y1_{it} = \alpha_0 + \alpha_1 X_{1\,it} + \alpha_2 X_{2\,it} + \alpha_3 X_{3\,it} + \varepsilon_{1\,it} \qquad (3.1)$$

$$Y2 \quad = \quad f(Y_1, X_1, X_2, X_3)$$
$$Y2_{it} \quad = \quad \beta_0 + \beta_1 Y_{1\ it} + \beta_2 X_{1\ it} + \beta_3 X_{2\ it} + \beta_4 X_{3\ it} + \varepsilon_{2\ it} \qquad (3.2)$$
$$= \quad \beta_0 + \beta_1(\alpha_0 + \alpha_1 X_{1\ it} + \alpha_2 X_{2\ it} + \alpha_3 X_{3\ it}) + \beta_2 X_{1\ it} + \beta_3 X_{2\ it}$$
$$+ \beta_4 X_{3\ it} + \varepsilon_{2\ it}$$
$$= \quad \beta_0 + \alpha_0 \beta_1 + \alpha_1 \beta_1 X_{1\ it} + \alpha_2 \beta_1 X_{2\ it} + \alpha_3 \beta_1 X_{3\ it} + \beta_2 X_{1\ it}$$
$$+ \beta_3 X_{2\ it} + \beta_4 X_{3\ it} + \varepsilon_{2\ it} \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots.(3.3)$$

To facilitate the calculation of the equation model (3.1), the equation is changed to multiple linear with the double log method or natural logarithm (Ln) as follows:

$$\ln Y_{1\ it} = \ln \alpha_0 + \alpha_1 X_{1\ it} + \ln \alpha_2 X_{2\ it} + \alpha_3 X_{3\ it} + \varepsilon_{1\ it} \qquad \ldots\ldots(3.1.1)$$
$$Y_{2\ it} = \ln \beta_0 + \ln \beta_1 Y_{1\ it} + \beta_2 X_{1\ it} + \ln \beta_3 X_{2\ it} + \beta_4 X_{3\ it} + \varepsilon_{2\ it} \qquad \ldots\ldots\ldots\ldots\ldots(3.2.1)$$

Information

X1	=	Young Dependency Ratio (<15 years old unproductive population divided by productive age population 15-64 years)
X2	=	Provincial Minimum Wage
X3	=	Quality of Human Resources (average length of school)
Y1	=	Employment Absorption (number of workforce employed)
Y2	=	Migration of Indonesian Migrant Workers to Overseas Labor Force (the number of overseas migrations multiplied by 1000 divided by the number of labor force
i	=	15 Provinces in Indonesia
t	=	Year (2011-2016)

IV. RESULTS

A. Direct Effects of the Young Dependency Ratio on Indonesian Migration to Overseas Labor Force Ratios

The results of the study indicate that the value of the Young Dependency Ratio coefficient on Indonesian labor migration abroad is 0.409 with a probability of 0.000. This means that the Young Dependency Ratio has a positive effect. Every 1 percent increase in the Young Dependency Ratio will increase Indonesia's labor migration abroad by 0.409 percent, whereas a 1 percent decline in the Young Dependency Ratio will reduce the number of Indonesian labor migrations abroad by 0.409 percent.

This result is in accordance with the findings (Waridin: 2012), the number of family dependents is a driving factor for Indonesian migrant workers to work abroad both permanently and temporarily. This is because one's intention will actually be influenced by a strong determination from within the individual to dare to make a decision (risk taker) in line with the obligation to be responsible to bear the burden of the family.

B. Indirect effects of Young Dependency Ratio through employment of Indonesian Migrant Workers to Overseas Labor Force Ratios

The results of the study show statistically the Young variable coefficient value of Dependency Ratio for migrant workers migrating abroad through absorption of energy by 0.037. From the results of the data shows the direct value coefficient value is greater than the indirect relationship (0.409 > 0.307). This shows that there is no influence of the Young Dependency ratio indirectly on migrant workers migrating abroad through employment. Different findings can be seen in the findings (Akbar Sisputro: 2013) which states that the level of burden / dependence of the population has a positive and significant effect on the unemployment rate which means that YDR has a negative effect on employment.

C. Direct Effects of Provincial Minimum Wages on Indonesian Labor Migration to Overseas Labor Force Ratio

The results showed statistically the provincial minimum wage coefficient value of migrant workers abroad was -1.947 with probability 0.394. This shows that there is no variable effect of provincial minimum wages on migrant workers' migration abroad. Any increase or decrease in 1 rupiah UMP will not have an impact on increasing or decreasing the number of migrant workers abroad. This finding is not in line with (Kryger in Setiadi: 2000) applied economic theory, by applying the theory of factors driving someone to migrate, namely wage reductions, unfair taxes, poor organization of social security systems, and lack of functioning food distribution systems.

D.   Indirect Effects of Provincial Minimum Wages on Indonesian Migrant Workers Abroad Overseas Labor Force Ratio through Labor Absorption

The results showed statistically the provincial minimum wage coefficient value of migrant workers migrating abroad through employment of 0.087. The results of the data show that the indirect correlation coefficient value is greater than the direct relationship (0.087 > -1.947), which means that there is an indirect influence of UMP on migrant workers migration abroad through employment. Any increase in 1 rupiah of the provincial minimum wage will reduce the migration rate of migrant workers abroad. Wages are the income of a worker. For companies, wages are one of the expenditures from the payment of production input factors provided by the company to the workforce. The higher labor wages will cause labor demand to decrease, which means that labor absorption also decreases. When an increase in provincial minimum wages in a country will have an impact on the low absorption of labor. Kaufman and Hotckiss (1999), the relationship of wages to unemployment. That labor sets the minimum wage level at a certain wage level, if the wages offered are below a certain wage level, someone will refuse to get the wage and consequently cause unemployment. If the wages set in an area are too low, it will result in a high number of unemployed people in the area. But from the entrepreneur's side, if wages increase and the costs incurred are high enough, it will reduce the efficiency of expenditure, so employers will take a policy of reducing labor to reduce production costs. This will result in an increase in unemployment This finding is in line with the theory (Everet Lee: 1996) the driving factor of the country of origin of migrant workers is the consideration of low salaries, limited field of employment and low social access of people in their home countriesfood distribution systems.

E.   The Effect of Direct Quality of Human Resources on Migration of Indonesian Workers to Overseas Labor Force Ratios

The results showed statistically the coefficient value of the variable quality of human resources to migrant workers abroad was -1.631 with a probability of 0.015, which means that the quality of human resources directly affects the migration of migrant workers abroad. A 1-year increase in the average length of school will reduce the rate of overseas migration by 1,631 percent.

This finding is supported (Candrawati: 2009) which states that in developing countries such as in Indonesia migration is mostly carried out by low-educated residents, because indeed most of the population has low education levels. Because there is no minimum education requirement that must be taken for prospective Indonesian Workers (TKI) to be sent. As long as the prospective TKI can read and write, because this ability is very necessary to facilitate the process of debriefing prospective TKI. This finding contradicts what was stated (Goerge J. Bourjas: 2013) which states that there is a positive correlation between the educational attainment of workers and the possibility of migration.

F.   Indirect Effects of Human Resource Quality on Indonesian Migrant Workers Abroad Overseas Labor Force Ratio through Labor Absorption

The results of the study show statistically the coefficient value of the variable quality of human resources for migrant workers migration abroad through employment of 0.2875. From the results of the data shows the indirect value coefficient value is greater than the direct relationship (0.2875 > -1.631), which means that there is an indirect influence of the quality of human resources on migrant workers migrating abroad through employment. In a comprehensive study, conducted by Barnum and Sabot in Tanzania, the relationship between education and migration was clearly documented, especially in relation to the impact of declining employment opportunities in urban areas on the educational characteristics of migrants. Middle school dropouts are an increasingly large proportion of migration flows. The explanation offered by Barnum and Sabot is that the limited employment opportunities in urban areas will be divided according to the level of education, and only those who taste secondary education have the opportunity to get a job. Those who only get basic education get hard work, and thus their proportion in migration flows begins to decline (Todaro 1994).

V. CONCLUSION

1. The burden of dependence on young people directly affects the migration of Indonesian migrant workers abroad, while indirectly through employment they have no effect.
2. Provincial minimum wages directly do not affect migration of migrant workers abroad, while indirectly through employment they have an influence
3. The quality of human resources both directly and indirectly through the absorption of labor influences the migration of migrant workers abroad.

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Corresponding Author: Nurhuda
(Post Graduate Masters in Resource Economics, Hasanuddin University)