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The Impact of Unemployment and Poverty on Indonesia's Foreign Labor Migration In North Sumatera

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Abstract

As a developing country, Indonesia faces many problems economic development, such as unemployment, poverty, and other problems. etc. The high level of unemployment in Indonesia and the narrowing of employment opportunities, making most Indonesians choose to migrate abroad to find work. migrate abroad in order to get a job. This study aims to determine the effect of unemployment and poverty on Indonesian labor migration abroad. The unemployment variable is measured by the number of open unemployment, and the poverty variable is measured by the number of open unemployment. the number of open unemployment, and the poverty variable is measured by the number of poor people. poor population. The type and source of data used in this research is secondary data. which comes from Badan Pusat Statistik (BPS) and Badan Perlindungan Pekerja Migran Indonesia (BP2MI). Indonesian Migrant Workers Protection Agency (BP2MI). The secondary data used in this This research is a combination of cross section and time series data from the province of North Sumatra from 2015-2021 or more commonly called the North Sumatra from 2015-2021 or more commonly referred to as panel data. This research aims to find out whether the independent variables which are Unemployment and poverty have an interrelated relationship with the dependent variable. interrelated with each other with the dependent variable, namely the Migration of Indonesian Migrant Workers (TKI) abroad. Indonesian Labor Migration (TKI) abroad. The results showed that simultaneously the independent variables (Unemployment and Poverty) show that there is a significant influence on the migration of Indonesian Migrant Workers (TKI). on the migration of Indonesian Migrant Workers (TKI). Partially, it is known that Unemployment variable has a negative and significant effect on migrant worker migration. Meanwhile, the Poverty variable has a positive and significant effect on migrant worker migration.

Keywords: Indonesian labor migration; unemployment; poverty

1. Introduction

Indonesia is the most populous country and ranks fourth after China, India, and the United States. Rapid population growth, especially in the productive age group, will affect labor absorption. states that very high population growth will cause various problems and obstacles for development efforts carried out in developing countries, because high population growth will cause a rapid increase in the number of workers, while the ability of developing countries to create new job opportunities is very limited [1]. The increase in population and labor force beyond the ability of government's ability to create jobs causes various problems, one of which is unemployment [2].

Based on data from Badan Pusat Statistik (BPS), the number of open unemployment in North Sumatra Province is ranked ninth out of 34 provinces in Indonesia. There are many conditions that cause the number of unemployment has increased. One of them is low education and low skills, job opportunities that are influenced by the season, the use of technology that is increasingly advanced so that it makes the need for labor labor and so on [3]. High levels of unemployment can create social problems in society, such as an increase in the number of poor people. Poverty occurs because there is no equitable distribution of economic progress, the quality of education is still low, and people with low quality education often cannot compete for jobs. The adverse effect of unemployment on poverty is that people's income is reduced because they do not have a job, which in turn reduces the level of prosperity that a person has achieved [4]. The welfare of the community is decreasing because unemployment will certainly increase their chances of being trapped in poverty because they have no income.

The high number of unemployment and poverty in North Sumatra province is ranked in the top ten, namely the number of unemployed people and the number of poor people. The difficulty of finding work for residents in North Sumatra Province has led to international migration [5]. The occurrence of international migration is when a person crosses national borders and lives in another country for a period of time. Labor migration is part of international migration. Therefore, to ease the burden on the family, one of the solutions is to work as an Indonesian migrant worker as an Indonesian Migrant Worker (TKI). The act of immigration generally has positive effects on income growth and productivity with limited displacement of low-skilled workers [6].

Table 1. Placement of Migrant Workers, Open Unemployment, Poverty in North Sumatera in 2015-2021 (People)

Tahun	Penempatan TKI (Jiwa)	Pengangguran Terbuka (Jiwa)	Kemiskinan (Jiwa)
2015	12.054	428.794	1.463,66
2016	14.137	372.000	1.455,95
2017	17.109	377.288	1.453,87
2018	17.903	396.027	1.324,98
2019	15.948	382.438	1.282,04
2020	2.840	507.805	1.283,29
2021	194	475.156	1.343,86

Source: Badan Pusat Statistik, Badan Perlindungan Pekerja Migran Indonesia (2015-2021)

2. Literature Review

2.1. Migration

Migration is the movement of people with the aim of settling from one place to another beyond political/country boundaries or administrative boundaries/section boundaries within a country [7]. So, migration is often defined as a relatively permanent movement from one area to another. There are no restrictions on the distance or nature of the movement, whether it is voluntary or forced, and there is no distinction between in country and overseas migration [8].

2.2. Unemployment

Unemployment is the condition of someone who has not gotten a job who enters the labor force and is looking for and wants to have a job [9]. In the standard definition that has been internationally defined, unemployment refers to a person in the labor force who is actively looking for a job with a certain wage level but is unable to find the job he or she want.

2.3. Poverty

In general, poverty is a condition in which a person or group of people does not have the ability to fulfill their basic needs and live a decent life [10]. The concept used by the Central Bureau of Central Bureau of Statistics (BPS) and several other countries is the basic needs approach, where poverty is measured based on the approach, in which poverty is measured based on a person's ability to fulfill basic needs such as food and (measured in terms of expenditure).

3. Research Method

This research uses a quantitative approach. The object of the study area of this research is 33 districts and cities in North Sumatra. The sample in this study was taken using nonprobability sampling technique using purposive sampling technique. The sampling criteria used in this study are Open Unemployment Rate (TPT) above 4%, Ranking the top 15 poorest population in the Regency / City of North Sumatra, The number of migrant worker placements that reach placements above 350. The placement of migrant workers reaching placements above 350 is taken from the average placement of migrant workers in regencies / cities in North Sumatra.

In this study, the research variables are divided into two, namely the dependent variable and the independent variable. The dependent variable in this study is denoted as Y, namely Indonesian Labor Migration Abroad in 9 Regencies in North Sumatra. The independent variable in this study is denoted as X. The independent variables used in this study are 2 variables, namely Unemployment as X1 and Poverty as X2. The data analysis used in this research is panel data model analysis. Panel data is a combination of time series data and cross-section data. The time series data in this study is the 2015-2021 period. Data calculations in this study were carried out with the help of the EvIEWS 12 and Excel 2010 programs.

$$MTKI_{it} = \alpha + \beta_1 \text{Pengangguran}_{it} + \beta_2 \text{Kemiskinan}_{it} + \epsilon_{it}$$

Y = Indonesian Labor Migration

A = Constant

β_{123} = Regression Coefficient

$MTKI_{it}$ = Indonesian labor migration in district i period t

Pengangguran_{it} = Unemployment in district i period t

Kemiskinan_{it} = Poverty in district i period t

E_{it} = error term in district i period t

Determination of Estimation Model

1. Common Effect Model, The Common Effect model is a combination of time series and cross-section data using the ordinary least square method to estimate the panel data model.
2. Fixed Effect Model, the fixed effect model is a model that assumes the existence of intercept differences in the equation. The fixed effect model technique is a technique that estimates panel data using dummies to capture differences in intercepts.
3. Random Effect Model, the random effect model is a model that will estimate panel data where the disturbance variables are interconnected between time and between individuals.

Selection of Estimation Method

1. Chow test, The chow test is to determine which of the two methods, the common effect method and the fixed effect method, should be used in panel data modelling.
2. Hausman test, The Hausman test is to determine which of the two methods, the fixed effect method or the random effect method, should be used in panel data modelling.
3. Lagrange Multiplier test, Lagrange Multiplier is a test to determine whether the most appropriate Random effect or Common Effect model is used. The LM test is not used if the Chow test and Hausman test show that the most appropriate model is the Fixed Effect model.

Classical Assumption Test

1. Normality test aims to test whether in regression the independent variable and the dependent variable or both have normally distributed data or not. A good regression model is residuals that are normally distributed or close to normal. The normality test in panel data can be seen by comparing the probability values.
2. Multicollinearity test aims to test whether the regression model found a correlation between independent variables (independent). A good regression model should not have a correlation between the independent variables.

4. Results and Discussion

Table 2. Result of Chow Test

Effect Test	Statistic	d.f	Prob.
Cross Section F	8.059582	(8.52)	0.0000
Cross Section Chi Square	50.806170	8	0.0000

Source: E-views processed

Based on Table 2, the Chow test estimation results show a significant F-statistic and Chi-square value of 0.0000 and 0.0000. Based on the hypothesis, if H₀ = CEM is accepted (probability > α (0.05)) and if H₁ = FEM is accepted (probability < α (0.05)), then the hypothesis is accepted. if H₁ = FEM is accepted (probability < α (0.05)). In this study, it can be concluded that the model chosen is the Fixed Effect Model (FEM). This is based on the F-statistic value of (0.0000) < 0.05 so that it is accepted with the FEM model. The next step is to continue testing with the Hausman test.

Table 3. Result of Hausman Test

Effect Test	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.744579	2	0.0000

Source: E-views processed

Based on Table 3, the results of the Hausman test estimation obtained shows a probability value of 0.0000 (probability < 0.05), then H₀ is rejected and H₁ is accepted, so it is concluded that the Fixed Effect Model selected is the best choice. H₁ is accepted, so it can be concluded that the Fixed Effect Model is selected. so that the most appropriate model used in this analysis is the Fixed Effect Model (FEM).

Based on Table 4, the panel data regression equation is obtained as follows:

$$\text{MTKlit} = 1426.612 - 0.041031\text{Pengangguranit} + 0.010543\text{Kemiskinanit}$$

The interpretation of the panel data regression model is as follows:

1. The constant value is positive, which is 1426.612, meaning that when the value of the independent variables, namely

Unemployment and Poverty, is constant, then migrant worker migration is 1426.612 people.

- The regression coefficient of the Unemployment variable (X1) has a negative value of -0.041031, which means that every increase of 100 unemployed people will reduce the migration of migrant workers by 4 people. The negative sign on the coefficient of the Unemployment variable indicates an inverse relationship between the Unemployment variable and the dependent variable of migrant workers.
- The regression coefficient of the Poverty variable (X2) is positive at 0.010543. This shows that every increase of 100 people of Poverty will affect the increase of the migrant worker variable by 1 person. The positive sign on the Poverty coefficient indicates that there is a straight relationship between the migrant worker variable and the Poverty variable.

Table 4. Estimation Result of Fixed Effect Model

Variabel	Coefficient	Std. Error	t-Statistic	Prob
C	1426.612	519.0882	2.748303	0.0082
Pengangguran	-0.041031	0.007502	-5.469066	0.0000
Variabel	Coefficient	Std. Error	t-Statistic	Prob
Kemiskinan	0.010543	0.004956	2.127473	0.0381
Effects Specification				
Cross-section fixed (dummy variables)				
R-Squared	0.654952			
Adjusted R-Squared	0.588597			
Prob (F-statistic)	0.000000			

Analysis of the Relationship Results of Independent Variables to Dependent Variables

1. Effect of Unemployment on Migrant Worker Migration in North Sumatra in 2015-2021

The hypothesis testing results show that the coefficient value of the unemployment variable is -0.041031 with a probability value of 0.0000 ($\alpha = 5\%$). Thus, the profitability variable has a negative and significant influence on the migration of Indonesian Migrant Workers (TKI). The results of this study are different from research conducted by Puspitasari (2017) which states that Unemployment has a positive and significant effect on the migration of Indonesian Migrant Workers (TKI). in the study explained that when the results of employment are not able to align the number of job seekers, the number of job seekers will increase. in the study explained that when the results of employment are unable to align the number of job seekers, then by sending Indonesian workers will get opportunities and breakers in solving the number of unemployment, therefore unemployment has a significant positive impact on the number of migrant workers. This is inversely proportional to the results of the study, due to other factors, namely in 2 years Indonesia and the world were affected by the Covid 19 pandemic, which caused the economy to weaken including the increasing number of unemployed. Although migration is a solution to overcome unemployment, it does not apply during a pandemic, because all countries severely limit population mobility. So when unemployment rises, the number of migrant workers decreases.

2. The effect of Poverty on migrant worker migration in North Sumatra in 2015-2021

The results of hypothesis testing show that the coefficient value of the poverty variable is 0.010543 with a probability value of 0.0381 ($\alpha = 5\%$). So, the poverty variable has a positive and significant effect on the migration of Indonesian Migrant Workers (TKI). poverty has a positive and significant relationship with the number of migrant workers. This means that when there is increase in the number of poor people, it will increase the number of migrant workers. This research is in accordance with the New Economics of Migration theory which explains that the reason a person works is to meet the needs of his household. So that the size of the income/wage does not matter to someone, the most important thing is that they get a job and get an income to fulfill their needs. the most important thing is that they get a job and earn income to meet the needs of both individuals and families. individual and family.

Based on the regression results, the R-Squared coefficient value is 0.654952 or 65,49%. This shows that the independent variables namely Open Unemployment and Poverty, have a relationship with the labor migration variable by 65,49%. Based on the regression results, the Adjusted RSquared value is 0.588597 or 58,85%. This shows that the independent variables namely Open Unemployment and Poverty can explain the labor migration variable by 58,85% with the remaining 41,15% explained by other variables not included in this study. Based on the regression results, the Prob (F-Statistic) value of 0.000000 is smaller than the significance value of 0.05, which means that the independent variables, namely Open Unemployment and Poverty together have a significant effect on the variable labor migration in North Sumatra

5. Conclusion

Based on the results of the analysis and discussion that has been carried out related to the influence of Unemployment and Poverty on the migration of Indonesian Workers (TKI) in North Sumatra Province. the following conclusions can be drawn:

1. Unemployment variable has a negative and significant effect on the migration of Indonesian Migrant Workers.
2. Poverty variable has a positive and significant effect on the migration of Indonesian Migrant Workers.
3. Simultaneously, the independent variables (Unemployment and Poverty) together have a significant effect on the dependent variable (migrant worker migration).

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