



## **The Phenomenon of Labors Migration in Semarang City**

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Article Info	Abstract
<p>Article History : Received January 2024 Accepted March 2024 Published June 2024</p> <p>Keywords: <i>Shuttle Migration, Labors , Semarang City</i></p>	<p>This research aims to analyze the factors that influence labors migration in the city of Semarang. This research uses Sakernas data for 2023 and uses logistic regression analysis with a total of 4,876 respondents. The results of this research show that: (1) The wage level has a positive and significant effect on the opportunities for Semarang City labors to undertake shuttle migration. (2) The level of education has a positive and significant effect on the opportunities for Semarang City labors to undertake shuttle migration. (3) Age has a positive and insignificant effect on the opportunity for Semarang City labors to undertake shuttle migration. (4) Gender has a positive and significant effect on the opportunities for Semarang City labors to undertake shuttle migration. (5) Marital status has a positive and insignificant effect on the opportunity for Semarang City labors to undertake round-trip migration. (6) The employment sector has a positive and significant effect on the opportunities for Semarang City labors to undertake shuttle migration.</p>

INTRODUCTION

Indonesia is a developing country that has a large workforce and is faced with various problems such as poverty, employment inequality and unemployment. This problem has increased from the period after Indonesia experienced the crisis in 1998 until now. Problems arising from the large growth of the workforce include employment problems, job opportunities that are linked to the economic opportunities obtained (Agustin et al., 2021; Ilham et al., 2020).

A large workforce with high growth is a problem in efforts to provide sufficient employment opportunities (Wangga et al., 2022). The 1945 Law explains this problem in article twenty-seven which reads "all citizens have the right to work and a living that is adequate for human life. From this statement, employment opportunities are a very basic problem (Hajian et al., 2020; Theoharides, 2020; Filimonau & Mika, 2019).

Mantra (2004) stated that migration among the workforce often occurs, one of which is non-permanent migration which is included in horizontal migration. This non-permanent migration is divided into two types, namely circular migration (settled migration) where labors leave their area of origin to their destination area (place of work) to work, trade and so on by staying for more than one day or returning to their area of origin on certain time (Angelina et al., 2022). Meanwhile, the second type is shuttle migration where labors leave their area of origin to their destination area (place of work) and return to their area of origin on the same day.

**Table 1.1**  
Number of Labors Carrying Out Shuttle Migration in Semarang City in 2020 - 2023

Year	Number of people)	Rate (%)
2020	18,186	Information: 1.3% -9.5% 0.3%
2021	18,916	
2022	19,265	
2023	19,827	

Source: BPS Semarang City Sakernas 2023

The data in table 1.1 explains the number of labors who carry out shuttle migration in Semarang City. The number of shuttle migrations experienced fluctuations from 2020 - 2023, where

the highest was in 2023 at 2.3% and the lowest was in 2021 at -9.5%. This is caused by one of the factors which is the lack of attention from the government and the private sector in providing employment opportunities in the area of origin as well as technological developments which are balanced by the skills and education of those seeking labors , causing labors to shuttle back and forth to improve their economic situation (Sundari et al. al., 2020; Rahayu & Martini, 2022; Hadi et al., 2020; Parida, 2019). This phenomenon is interesting, therefore the author is interested in writing research in Semarang City with the title The Phenomenon of Labors Migration in Semarang City.

RESEARCH METHODS

This research is classified as descriptive and associative research. Descriptive research is a type of research that describes and describes the variables studied. Associative research is research that aims to find whether there is a relationship or influence between independent variables. (wage level, education level, age, gender, marital status, and employment sector) as well as the dependent variable, namely labors who undertake Shuttle Migration. The data used in this research is secondary data, namely sourced from the official BPS agency using data from the 2023 National Labors Force Survey. The time of the research is February 2024 until completion. The population used in this research is all labors in the Semarang City Province and were recorded by Sakernas in 2023 by BPS. The samples studied were all labors who carried out shuttle migration in the city of Semarang. The analysis technique used in this research is logistic regression analysis. The models used in this research are:

$$Li = Ln \left[ \frac{Pi}{1-Pi} \right] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

the possibility of round-trip migration or

others, X1 is wage level, X2 is education level, X3 is age, X4 is gender,

Operational Definition

Variable	Definition
Shuttle Migration (Y)	The dependent variable is the dependent variable. In this study, the dependent variable is the decision of labors to become shuttle labors. labors who leave in the morning to work in another area and return to their place of origin in the afternoon. In this research, it is measured with a dummy, 1= Respondents who work as a shuttle and 0= Respondents who work not as a shuttle.
Wage Level (X1)	For the purposes of logistic regression, wages are measured based on the Semarang City Minimum Wage of Rp. 1,950,000. For wage levels equal to or greater than the Semarang City Minimum Wage level dummy 1= > Rp. 1,950,000 and for a wage level that is smaller than the Semarang City Minimum Wage level, namely 0= < Rp. 1,950,000. Education level is measured based on years of schooling ( <i>years of school</i> ) in units of year.
Level education (X2)	
Age (X3)	Age is the age the respondent was based on when data was collected or interviewed. This age is measured in years.
Gender (X4)	Marital Measured with a dummy, male=1 and 0, female=0 1 = if married or divorced
Status (X5)	alive/divorced dead, 0 = if not married.
Job sector (X6)	1= Formal 0= Informal

## RESULTS AND DISCUSSION

Based on the results of logistic regression data analysis, the following results were obtained:

Table 2.

Results of Parameter Estimation and Logistic Regression Odd Ratio Factors Affecting Opportunities for Semarang City Labors to perform shuttle migration in 2023

Variable	B. Parameter	S.E	Sig	Exp (B)	dy/dx
Wage Level (X1)	0.444	0.125	0.01	1,554	0.032
Level of education (X2)	0.1102	0.024	0.01	1,115	0.015
Age (X3)	0.015	0.015	0.345	1,015	0.01
Gender (X4)	0.373	0.125	0.012	1,448	0.027
Marital status (X5)	0.086	0.173	0.651	1,089	0.013
Job sector (X6)	0.331	0.14	0.024	1,389	0.026
Constant	-4,698	0.285	0.01	0.019	-

Source: Processed Data (STATA, 2024)

Based on the data in table 2, it can be explained as follows:

### The Influence of Wage Levels on the Opportunities for Semarang City Labors to Commit to Shuttle Migration

The wage level variable (X1), this wage variable has a parameter of 0.444 with an odd ratio value of 1.554, meaning that it is possible that for every increase in wages received by labors, it will increase the chances of these labors commuting by

1.554 times. If we look at the marginal effect of 0.032, on average, when the wage level rises, it will increase the opportunity for labors to shuttle by 0.032.

The results of the analysis show that the wage variable has a positive and significant influence on the opportunity for labors to shuttle in the city of Semarang. This happens because the higher the income a person receives, the higher the person's mobility to carry out round-trip migration. Because with high wages the welfare of the workforce will be met. With welfare that has been fulfilled it will increase the number of labors who carry out shuttle migration in the city of Semarang.

According to Todaro (2011), the higher the wage a person receives, the higher a person's mobility in migrating because economic motives are an incentive to migrate. These results are also in line with research conducted by Susetyo (2015) which states that there is a positive relationship and has a significant influence on the decision to undertake shuttle migration. Where the higher the wages, the greater the opportunity for labors to migrate back and forth to the city.

#### **The influence of education level on the opportunities for Semarang City labors to undertake shuttle migration.**

Education Level Variable (X2) The Education Level variable has a parameter of 0.1102 with an Odd Ratio of 1.115, which means that the opportunity for labors who carry out round-trip migration with a high level of education is 1.115 times greater than the opportunity for labors who make round-trip migration with low education. If we look at the marginal effect of 0.015, on average, the higher the education level of the workforce, the greater the opportunity for labors to undertake round-trip migration by 0.015.

The results of the analysis show that the education level variable has a positive and significant influence on the opportunity for labors to undertake round-trip migration in Semarang City. These findings conclude that the higher the education of a labors, the more likely the probability of that labors to undertake round-trip migration is. With higher education, labors think they will get better jobs and income, so the tendency to migrate will be high.

The results of this research are in accordance with the theoretical basis of Borjas (2000) that people who have higher education will be interested in migrating because they are more selective in looking for job opportunities in the labors market.

#### **The Influence of Age on the Opportunities for Semarang City Labors to Commit to Shuttle Migration.**

Age Variable (X3) This Age variable has a parameter of 0.015 with an Odd ratio value of 1.015, which means that every time the labors' age increases, it will increase the possibility of the labors' chance of re-migrating by 1.015 times. If we look at the marginal effect of 0.010, it means that on average, every increase in age received by labors will increase the opportunity for labors to undertake re-migration by 0.000.

The results of the analysis show that the age variable has a positive and insignificant effect on the opportunity for labors to undertake shuttle migration in the city of Semarang. This finding concludes that the age variable has no influence in determining a person's opportunity to undertake round-trip migration, but the age variable has a positive effect, meaning that the more a person is at the peak of productive age, the tendency or probability of the workforce to undertake round-trip migration also increases. This happens because More young labors migrate, because they are still physically strong and their productivity at work is still very good. Meanwhile, if the age of the workforce has reached the age of 60 years or above, then the probability of the workforce to carry out shuttle migration will decrease because as the age of the workforce increases, the workforce's immune system to carry out shuttle migration decreases, so the workforce will choose to settle in the destination area (place of work). This is related to a decrease in body resistance in old age.

The results of this research are in accordance with the theoretical basis presented by E. G Ravenstein (Mulyadi, 2014) that young labors migrate more, because they have strong stamina and productivity at work is still very good. The increasing age of the workforce will reduce the opportunity for labors to undertake round-trip migration.

### **The Influence of Gender on the Opportunities for Semarang City Labors to Commit to Shuttle Migration**

Gender Variable (X4) The Gender variable has a parameter of 0.337 with an Odd ratio value of 1.397, which means that the opportunity for a male workforce is 0.337 times greater than that of a female. If we look at the marginal effect of 0.025, it means that on average male labors have a higher chance than female labors to undertake roundtrip migration in the city of Semarang.

The results of the analysis show that the gender variable has a positive and significant influence on the opportunity for labors to undertake round-trip migration in Semarang City. This means that the opportunity for male labors to return to shuttle migration is greater than that of female labors. This is because men have a large responsibility in the household, so they will spend more time working to increase their income and welfare. In contrast to the female gender, they are more likely to take care of the household, if they want to work they only work voluntarily with the aim of increasing their income, whose working hours are not fixed or as large as men's working hours.

The results of this research are in accordance with the theoretical basis presented by Simanjuntak (2001), the contribution of men is always greater than that of women because they are the backbone in earning a living.

### **The Influence of Marital Status on the Opportunities for Semarang City Labors to Commit to Shuttle Migration.**

Marital Status Variable (X5) The Marital Status Variable has a parameter of 0.086 with an Odd ratio value of 1.089, meaning that the chance of labors commuting with labors who are married is 1.089 times greater than those who are unmarried. If we look at the marginal effect of 0.013 on average, when there are more labors who carry out roundtrip migration who have married status, it is likely that the chances of these labors making roundtrip migration will increase by 0.013.

The results of the analysis show that the marital status variable has a positive and insignificant influence on the opportunity for labors to undertake round-trip migration in the city of Semarang. These findings conclude that a person's

marital status has no influence in determining a person's opportunity to undertake round-trip migration. Married labors will have a fairly high probability of commuting because of the greater incentive to earn a better income. However, it does not rule out the possibility for someone who has an unmarried marital status to return to shuttle migration because of the desire to earn a higher income in the destination city.

The results of this research are also in line with the results of research conducted by Shidiq (2016) showing that the marital status variable has a positive and insignificant effect on the opportunity for labors to undertake round-trip migration. Most of the male respondents, both married and unmarried, decided to work and migrate back and forth to the destination city, because according to them this decision was taken because they did not get a better income in their area of origin than in the destination city.

### **The Influence of the Employment Sector on the Opportunities for Semarang City Labors to Commit to Shuttle Migration**

Employment sector variable (X6) The employment sector variable has a parameter of 0.331 with an odds ratio value of 1.389, meaning that the chances of labors who shuttle and work in the formal sector are 1.389 times greater than labors who work in the informal sector. If we look at the marginal effect of 0.026, it means that on average, the more labors who work in the formal sector, the greater the opportunity for these labors to undertake round-trip migration by 0.026.

The results of the analysis show that the employment sector variable has a positive and significant effect on the opportunities for Semarang City labors to undertake shuttle migration. These findings conclude that job sector variables have an influence in determining a person's opportunities for roundtrip migration. This means that labors who work in the formal and informal sectors will have an influence on the opportunities for labors who undertake shuttle migration.

If we look at the results of descriptive data on the employment sector, it is clear that the formal sector dominates in absorbing labors who undertake this roundtrip migration with a percentage of 4.6%, while the informal sector has a

percentage of around 1.8%. This happens because labors who carry out shuttle migration have high education and soft skills so that they are more dominant in working in the formal sector such as employees, labors ers and employees.

The results of this research are also in line with previous research conducted by Indriani (2010) showing that employment sector variables have a significant effect on shuttle migration because labors will tend to shuttle to cities with the aim of improving their economic situation.

### **The Influence of Wage Level, Education Level, Age, Gender, Marital Status and Job Sector on Semarang City Labors Committing to Shuttle Migration**

The results of the analysis show that together the variables wage level, education level, age, gender and marital status have a positive and significant effect on the opportunity for Semarang City labors to undertake shuttle migration with a probability value  $> \chi^2$  is 0.010 with a real level of 5% significance  $0.010 < 0.05$ . This means that together the variables of wage level, education level, age, gender and marital status have a significant influence on the opportunities for Semarang City labors to undertake shuttle migration. Based on the Pseudo R<sup>2</sup> (Goodness of fit) value of 0.0610, 5.1% of the dependent variable for shuttle migration can be explained by the independent variables (variables for wage level, education level, age, gender, marital status and employment sector). The Pseudo R<sup>2</sup> value of 0.0610 for research is sufficient to determine the influence of each independent variable on the dependent variable, which means that together the contribution of the independent variables to the dependent variable is 5.1% while the other 94.9% is explained by the variables others outside this research.

### **CONCLUSION**

Based on the results of data processing using logistic regression analysis. So the wage level has a positive and significant influence on the opportunities for Semarang City labors to carry out shuttle migration, the level of education has a positive and significant influence on the

opportunities for Semarang City labors to carry out shuttle migration, age has a positive and insignificant influence on the opportunities for Semarang City labors to perform round-trip migration. Marital status has a positive and insignificant influence on the opportunity for Semarang City labors to carry out shuttle migration, and the Employment Sector has a positive and significant influence on the opportunity for Semarang City labors to carry out shuttle migration.

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