



Original Article

How Do the Individual-level Factors Impact Labour Migration: A Case of Vietnam's Migration

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Abstract: This paper focuses on the effects of individual-level factors on labour migration in Vietnam. In this study, the author uses the descriptive statistics and quantitative methods using the Vietnam Household Living Standards Survey 2018 data. The research illustrates that the migratory probability of female is lower than male; the higher levels of education lead to increase the migratory probability of people; the married group seem to decrease in migration, while the migration of divorced group grew. Furthermore, the housing area increases higher lead to decrease in migration.

Keywords: Migration, labour migration, individual-level factors, Vietnam.

1. Introduction

Countries are always trying to promote economic growth, increase the income, and improve the living standard of people. To obtain the high economic growth and development goal, Vietnam has impressive achievements both in terms of economic growth, increasing incomes, and people's living standards. The process of growing up also varies between localities and provinces in the country. The movement of labour occurs in order to meet labour requirements between regions and this

process is complicated. According to a survey by the General Statistics Office, Vietnam has 6.4 million people aged 5 years and over who are migrants, accounting for 7.3% of the total population. Migrant adults in the young age group of 20-39 years old (accounting for 61.8% of all migrants) in 2019 [1]. However, different socio-economic ancestors have different special points of residence process.

Migration can be started from differences between origin and destination as factors of push and pull in migration [2]. They include the research of Ravenstein [3]; Stark [4]; Harris and

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Todaro [5]; Massey & España [6]; Parrado and Cerrutti [7] and Schewel and Franssen [8] which presented and researched the different factors at both macro and micro level. Meanwhile, it is necessary to study the individual-level factors for labour migration through new evidence in Vietnam. However, currently, there are not many studies to clarify these effects in relation to labour migration. Labour migration, especially recent new data in Vietnam contributes to proposing appropriate policies in a timely manner and close to the constantly changing trend of the economy. Therefore, in this study, the author clarifies the individual-level factors for labour migration – a case of Vietnam's migration in order to add more arguments and correct perception for labour migration in order to act in controlling future migration flows as well as policies to regulate Vietnam's economy and the labour market in the integration period.

2. Literature Review

In order to better explain the nature of migration under different socioeconomic conditions, researchers often focus on analyzing why some people migrate, others do not. These different approaches explain the causes of migration, including labour migration. Expanding, Lee [2] confirms the driving forces of migration such as poverty, population, unemployment, social status; and pull forces such as employment, education better education, welfare, environment, living conditions. Ravenstein [3] argues that strict laws, heavy taxes, unfavorable climate, social environment are the basic causes of migration. Interestingly, Stark [4] analyzes the economic resource available to migrants in their sending communities, such as access to houses, land, or businesses. Harris & Todaro [5] noted that the younger people are more likely to move because they can expect to a longer period to reap the benefits of migration. Thus, Massey & España [6] argues that the tendency for single men to migrate at a higher rate than married men.

In addition, Parrado & Cerrutti [7] with the analysis in Argentina and Paraguay shows that the age of migration is quite young at 26 years old on average, the ability to migrate increases as the number of years of schooling increases. The migration rate is higher if the people have more education level; while people who have higher property ownership have lower rate of migration probability. A recent study on migration among young people in Ethiopia in the years 2013-2014 shows that the older age has the lower migration rate and this rate is also lower, if the people have lower level of education [8]. Nhat & Hai [9] when studying the data set Vietnam Household Living Standards Survey 2010 concluded that women's rate is higher than men, those with general education (including educational levels) have a higher increase the likelihood of migration. This conclusion is also true for the observed divorced or separated situation. Meanwhile, age and housing area are negatively related to the probability of migration. Zabel [10] investigates how the housing market affects the flow of workers across cities in the United States.

In short, the results of recent empirical studies show that there are still many differences or disputes about the results of analysis of individual-level factors affecting migration. Therefore, this study continues to analyze the latest data for Vietnam to provide additional, supplement and reinforce previous theories and research, as well as provide scientific arguments that contribute to policy implications related to the issue that researchers are still very interested in the individual-level migration.

3. Data and Methods

3.1. Researching Model and Methods

From the theoretical basis and based on the research of Lee [2], Harris & Todaro [5], Parrado and Cerrutti [7] and previous studies, the author proposes a model for this study. In this study, the individual-level factors included in the analysis include education, gender, marital status, age,

and the housing area which have an impact on labour migration.

In addition, the number of people in the household, the household head factor, and the housing area have not been studied, there are many studies to clarify the above impact on labour migration, so in this study, the author wants to specify the influence of these factors on labour migration. At the same time, because there is not enough data on the occupation and number of working years of migrants, the authors do not include these two factors in the model. Thus, with the repeated study with additional individual-level factors shown in the above studies, the proposed research model includes the following factors: gender, age, marital status, education level, and housing area affecting labour migration. The research model is as follows.

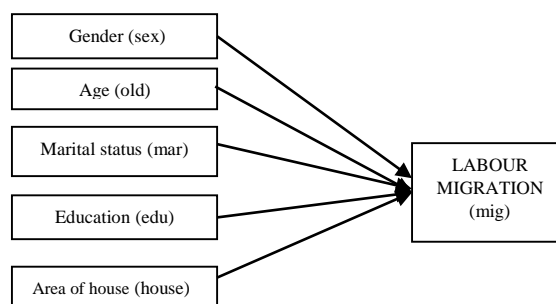


Figure 1. Researching model.

The author proposes the econometric model which is illustrated follow as:

$$\ln \left[\frac{P}{1-P} \right] = \beta_0 + \beta_1 Sex + \beta_2 Old + \sum_3^{i=1} \beta_i Mar_i + \sum_7^{i=1} \beta_i Edu + \beta_6 House + u_i$$

Where: Mig is the dependent variable -1 if labour migration, 0 if non-migration, p is the migratory probability. Other variables show in the Table 1.

Table 1. List of dependent and independent variables

Abbreviation	Variable	Description	Expected signs
mig	Labour migration	Labour migration 1/ Non-migration 0	Dependent variable
sex	Gender (Dummy)	Male 1/Female 0	Both signs possible
old	Old	Year	Negative sign
mar	Marital status (Dummy)	Mar01: married Mar02: divorced Mar03: widowed	Negative sign (married) Positive sign (divorced) Negative sign (widowed)
edu	Education level (Dummy)	0: General education (no education; primary graduate; secondary; high school) 1: Job education (college; university; master; PhD or above)	Positive sign
house	Area of house	Area of house (m ²)	Negative sign

3.2. Data

In this study, the author uses a combination of descriptive statistical methods and quantitative research methods to examine the factors affecting labour migration, including statistical descriptions of individual factors such

as gender, age, education level, marital status and housing area. By using the logit regression analysis to estimate the probability of labour migration analyzed from the dataset of Vietnam household living standard survey 2018. With this data set, the study took directly 101,051 observations including both labour migrants and

non-workers, which included 6,556 migrants to work far away or as domestic workers (called labour migrants) and 94,495 people who did not move out of the household (non-migrant).

4. Results and Discussion

4.1. Descriptive Statistics of Individual-level Characteristics

The results of the demographic characterization follow as:

Table 2. Descriptive statistics of demographic characteristics

Variable	Obs	Mean	Std. Dev.	Min	Max
old	101,051	40.8252	18.0413	0	113
sex	101,051	0.50195	0.49999	0	1
edu	101,051	0.10064	0.30086	0	1
mar01	101,051	0.65050	0.47681	0	1
mar02	101,051	0.01974	0.13911	0	1
mar03	101,051	0.06276	0.24253	0	1
house	101,051	93.5226	55.7683	0	550

The results of descriptive statistics show that: Educational variable is 0 with general education and 1 with job education level, the oldest age is 113 years old and the mean age of the research data set is 40.83 years old. The highest housing area is 550 m² and the average is more than 93.52 m². The marital status is the dummy variable with mar01 (married), mar02 (divorced) and mar03 (widowed)

4.2. Results of Binary Logistic Regression

Table 3. Model goodness-of-fit measures

Iteration 0:	log likelihood	= - 24270.839
Iteration 1:	log likelihood	= - 22201.999
Iteration 2:	log likelihood	= - 21495.708
Iteration 3:	log likelihood	= - 21489.673
Iteration 4:	log likelihood	= - 21489.651
Iteration 5:	log likelihood	= - 21489.651

We will need to ascertain how good our regression model is once we have fitted it to the data. The - 2 log likelihood (-2LL) statistic is a fit measure. The smaller it is, the better the fit. According to these results, the author agrees that the model is accepted.

The accuracy of the forecast shown in the Classification Table is calculated as follows:

Table 4. Analysis of correct prediction results of the model

Classified	True		Total
	D	~D	
+	434	526	960
-	6122	60996	67118
Total	6556	61522	68078

Table 4 shows that the correct prediction rate of the model is 90.23%.

Regression results are performed Binary Logistic regression has the following results:

Table 5. Binary Logistic Regression Results

Logistic regression				Number of obs	=	101,051
				LR chi2(7)	=	5562.38
Log likelihood = -21489.651				Prob > chi2	=	0.0000
				Pseudo R2	=	0.1146
mig	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
sex	1.425449	0.0387497	13.04	0.000	1.351489	1.503456
old	0.966878	0.0013114	-24.83	0.000	0.964311	0.969452
edu	2.524975	0.0893361	26.18	0.000	2.355813	2.706285
mar01	0.410252	0.0156962	-23.29	0.000	0.380613	0.442199
mar02	1.438793	0.1118437	4.68	0.000	1.235466	1.675583
mar03	0.407340	0.0491674	-7.44	0.000	0.321524	0.516060
house	0.996682	0.0002712	-12.21	0.000	0.996151	0.997214
_cons	0.347184	0.0148679	-24.70	0.000	0.319233	0.377583

The Chi Square test shows $\text{sig} = 0.000 < 0.05$, so we can conclude about the overall model fit in the analysis. Thus, this study has a solid statistical basis to confirm the appropriateness of the model. This concordance is also shown through the forecast results. In which, the statistically significant independent variables are the education level, gender, age, marital status, house size which are significant and have an impact on increasing the probability of labour migration. Meanwhile, the variables such as higher age, men, job education and divorced status which affect positively labour migration. On the other hand, the age, single or widowed status and housing area have negative impact on labour migration.

4.3. Discussion

For gender, this study shows that there is a significant difference between men and women in the probability of labour migration. The men have a migration probability of 0.59 percent higher compared with the women (odds ratio is 1.43). This result is different from some previous studies that suggest that women have a higher migratory tendency following [3, 9]. But it is suitable for [7].

Moreover, regarding the group of education, the results show that the migration probability of job-educated people increases 0.72 percent more than others who have general education with odds ratio of 2.52. This result is in contrast with [8].

Thus, it is clear that the younger people have a higher probability of labour migration, the probability of labour migration decreases 0.49 percent when the age increases by one year (odds ratio is 0.97). This result is completely consistent with the research of [5, 7, 8].

For marital status, the result shows that divorced people have a higher probability of labour migration than other group about 0.59 percent (odds ratio is 1.43). This study shows that the probability of labour migration is significantly reduced for people who are married. This marriage is entangled with family ties, so their decision on labour migration is quite

difficult. These results agree with some research as [6, 9].

For the property ownership variable, the housing area have negative impact on labour migration, an increase of the housing area (square metre) decreases 0.50 percent of the migration probability (odds ratio is 0.997). This result is suitable for [4].

5. Conclusion

The variables such as higher age, men, job education, and divorced status affect positively labour migration. On the other hand, the age, single or widowed status, and housing area have negative impact on labour migration. The author wishes to provide some new research results consistent with the reality of labour migration that can be applied to make relevant policies in labour mobility which have the necessity for Vietnam in the period of international economic integration and the process of industrialization and modernization of the country. However, the issue of migration in general and labour migration, in particular, may be affected by other factors such as environment, economic factors, policy factors which the author hopes there will be more detailed research in the future.

References

- [1] GSO, Preliminary Result of Vietnam Population and Housing Census 2019, General Statistics Office of Vietnam, 2020, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2020/12/thong-cao-bao-chi-ket-qua-nghien-cuu-chuyen-sau-tong-dieu-tra-dan-so-va-nha-o-nam-2019> (accessed on: June 12th, 2021).
- [2] E. S. Lee, A Theory of Migration, *Demography*, Vol. 3, No. 1, 1966, pp. 47-57, <https://doi.org/10.2307/2060063>.
- [3] E. G. Ravenstein, The Laws of Migration, *J. Stat. Soc. Lond.*, Vol. 48, No. 2, 1885, pp. 167-235, <https://doi.org/10.2307/2979181>.
- [4] O. Stark, *Frontier Issues in International Migration*, *Int. Reg. Sci. Rev.*, Vol. 19, No. 1-2, 1996, pp. 147-177, <https://doi.org/0.1177/016001769601900214>.

- [5] J. R. Harris, M. P. Todaro, Migration, Unemployment and Development: A Two-Sector Analysis, *Am. Econ. Rev.*, Vol. 60, No. 1, 1970, pp. 126-142.
- [6] D. S. Massey, F. G. España, The Social Process of International Migration, *Science*, Vol. 237, No. 4816, 1987, pp. 733-738, <https://doi.org/10.1126/science.237.4816.733>.
- [7] E. A. Parrado, M. Cerrutti, Labor Migration between Developing Countries: The Case of Paraguay and Argentina, *Int. Migr. Rev.*, Vol. 37, No. 1, 2003, pp. 101-132, <https://doi.org/10.1111/j.17477379.2003.tb00131.x>.
- [8] K. Schewel, S. Fransen, Formal Education and Migration Aspirations in Ethiopia, 2018, <https://onlinelibrary.wiley.com/doi/full/10.1111/padr.12159> (accessed on: June 11st, 2021).
- [9] P. T. Nhat, H. H. Hai, The Effect of Demographic Factors on Job Migration in Vietnam, *Can Tho Univ. J. Sci.*, Vol. 32, 2014, pp. 45-53.
- [10] J. E. Zabel, Migration, Housing Market, and Labor Market Responses to Employment Shocks, *J. Urban Econ.*, Vol. 72, No. 2, 2012, pp. 267-284, <https://doi.org/10.1016/j.jue.2012.05.006>.