

# DETERMINANTS OF IN-MIGRATION IN JAMMU AND KASHMIR, INDIA -AN EMPIRICAL INVESTIGATION

Farah Farooq Shah, Shri Mata Vaishno Devi University

## ABSTRACT

*The paper uses primary data to evaluate the determinants of in-migration in J&K. A primary survey was undertaken in the year 2019 which was tailored study the in-migrants in J&K exclusively. We used a multi stage survey to perform the study. We divided the entire J&K into two strata's i.e., Jammu and Kashmir. After stratification two clusters were selected (rural and urban). After locating in-migrants in the selected clusters, we randomly selected 253 samples in a 70:30 urban–rural ratio. This ratio was based on the inter-state migration data of Census. A simple Probit model is used to identify the determinants of in-migrants. The determinants were broadly classified as economic factors and non-economic factors and the analysis was run with these two factors as dependent variables. Results reveal that wages are positively affecting the economic factors of in-migration. In addition, we analyse that males migrate mostly for economic factors (e.g. employment, higher wage) and females are the ones who migrate for non-economic reasons (e.g. marriage).*

**Keywords:** In-migration, Economic, Non-economic, Probit model.

## INTRODUCTION

Migration from origin to destination has been eased by growing interdependence of economic, non-economic and cultural aspects (Panda & Mishra, 2018). Domestic and international inequalities, ever growing population, demand for cheap migrant labour and conflicts (political and social) have all contributed to the process of migration (Czaika and Haas, 2014). In general, the factors which motivate people to move can be classified into two categories. They are economic and non-economic factors. In this paper, we have made an attempt to analyse these economic and non-economic determinants of in-migration in the Union Territory of Jammu and Kashmir (J&K) which is the northern most part of India. This study makes major contributions to literature in the migration domain. First, a primary survey was conducted in the year 2019 which was exclusively instrumented to capture the details on in-migrants in J&K. Thus, the sample data collected represents relatively new phenomenon as against the National Data on migration by NSS Organization collected in the year 2007-08. It helped us to understand the phenomenon of in-migration empirically which complimented the previous studies on migration.

## Survey of Existing Literature

The determinants in this paper are categorized as economic determinants and non-economic determinants. Despite the relevance of non-economic factors most of the studies indicate that migration is primarily motivated by economic factors (Kainth 2010). Economic factors have been broadly classified into “Push factors” and “Pull Factors.” When people migrate due to compelling circumstances which push them out of the place of origin or they are lured by the attractive conditions in the new place, these are termed as push factors. The instances of push factors are low productivity, poor economic conditions, unemployment and

underdevelopment, lack of opportunities, exhaustion of natural resources as stated by Kainth (2010). The Pull factors according to Kainth (2010), refer to those factors which attract the migrants to an area, such as, opportunities for better employment, higher wages, basic amenities, facilities and better working conditions. There is generally migration to urban centers when the rapid growth of industry, commerce, and business takes place. Migration from the countryside to the cities bears a close functional relation to the process of industrialization, technological advancement and other cultural changes which characterize the evolution of modern society in almost all parts of the world.

Non-economic factors can be sub-divided into two categories same as the economic factors. Examples of non-economic push factors are; war or other armed conflict, famine or drought, political corruption, disagreement with politics, religious fundamentalism or religious intolerance, lack of various rights, natural disasters, goal of spreading one's own culture and religion (Ciarniene & Kumpikaite, 2011). Social and cultural factors also play an important role in migration. Search for independence and family conflicts also cause migration particularly in younger generations. The impact of social media, television, the urban oriented education which results in changed values and attitudes are also the non-economic push factors of migration as explained by Kainth (2010). Examples of pull factors as stated by Ciarniene & Kumpikaite (2011) are better climatic conditions, political stability, better education facilities, better medical facilities, national prestige, better behaviour among people and religious tolerance.

### Empirical Strategy: Probit Model

To study the determinants of in-migrants, we model it using probit estimation method. A probit model is capable of treating non-linear probability distribution functions and estimates the probability of happening or non-happening of the event.

We run two probit models, one for the economic factors and other for the non-economic factors. Therefore, the outcome or the dependent variable ( $Z$ ) of the model-1 is Economic Factors which takes the value 1 if the respondent in-migrated due to economic factors and 0 otherwise. And the outcome variable of the model-2 is Non-Economic Factors which takes the value 1 if the respondent in-migrated due to non-economic factors and 0 otherwise.  $V_i$  is a vector of individual attributes and other controls.  $\beta_i$  are the parameters to be estimated. Empirically it can be presented as:

$$\Pr(Z=1/V_i, \beta_i) \quad (1)$$

In this case, i.e., the binary choice model case Maximum Likelihood Estimate (MLE) can be used for parameters estimation. Specifying the dependent variable ( $Z$ ) as 1 or 0 implies that the expected value of  $Z$  is simply the probability that  $Z = 1$ .

$$E(Z/V_i, \beta_i) = 1 \cdot \Pr(Z=1/V_i, \beta_i) + 0 \cdot \Pr(Z=0/V_i, \beta_i) = \Pr(Z=1/V_i, \beta_i) \quad (2)$$

Estimated probit model is:

$$\Pr(Z=1/V_i, \beta_i) = \Phi(V_i, \beta_i) \quad (3)$$

Where  $\Phi$  is the cumulative density function of the standard normal variate.

$$Z = \beta_0 + \sum_{i=1}^{14} \beta_i V_i + e_i \quad (4)$$

$Z$  is the dependent variable,  $V_i$  are independent variables defined in Table 1 and are 14 in number.  $\beta_0, \beta_i$ , are the parameters to be estimated and  $e_i$  is the error term. The probit model

was chosen because we assume that the error term follows a normal distribution  $e_i \sim N(0, 1)$ ,  $\beta_i$ )

## Empirical Results

To analyze the determinants of in-migration in J&K, we divide the determinants into two broad categories of economic and non-economic factors. In our study the economic factors of migration include lower levels of income from agriculture, marginal landholding, lack of economic opportunities, search of employment and lower wages. The non-economic factors of migration include marriage, migration with family, better climatic conditions and migration due to family network. We made use of a simple probit model to ascertain the determinants of in-migration. The independent variables are written in the first column and on top of other columns are the dependent variables. The results show that wages are a positively affecting the economic factors of in-migration. The same has been established by studies which indicate that higher wages at the destination or higher expected wages at destination motivates individuals or households to migrate (Srivastava and Sutradhar,2016; Harris and Todaro,1970). On the contrary, wages are negatively determining the non-economic factors of in-migration. Age as another variable is positively affecting the economic factors but the marginal effect shows that the effect is very small. Similarly age negatively determines the non-economic factors but the marginal effect is very less. For our categorical variables, we have used a reference category which is italicized and marked in bold. Starting with the variable gender, we analyse that males migrate mostly for economic factors (e.g employment, higher wage) and females are the ones who migrate for non-economic reasons (e.g marriage).This is consistent with the literature which establishes that males mostly migrate for employment related reasons and females migrate mostly for marriage (Vakulabharanam and Thakurata, 2014).

Variables	Economic Factors		Non-Economic Factors	
	Coeff (St.Err)	dy/dx	Coeff (St.Err)	dy/dx
Log Wages	1.030*** (.242)	0.285	-1.038*** (0.245)	-0.298
Age	0.027*** (.007)	0.007	-0.029*** (.008)	-0.008
Gender				
<i>Ref:Male</i>				
Female	-1.22*** (.158)	0.329	1.200*** (0.160)	-0.336
Assets				
<i>Ref:Low</i>				
Medium	0.023 (.255)	0.006	0.143 (.259)	0.041
High	0.162 (.281)	0.044	-0.079 (.288)	-0.022
Origin				
<i>Ref:Rural</i>				
Urban	-0.229 (.159)	-0.064	0.145 (.163)	0.042
Education				
<i>Ref:Below Matriculate</i>				
Matriculate	-0.047 (.142)	-0.013	0.131 (.145)	0.038
Graduate	0.623 (.437)	0.156	-0.520 (.442)	-0.136
Sector				

<i>Ref: Construction</i>				
Primary	1.953*** (.499)	0.355		
Secondary	1.294*** (.423)	0.293		
Services	-0.419** (.190)	-0.128	0.479** (.191)	0.143
Remittances				
<i>Ref: No</i>				
Yes	0.310** (.147)	0.087	-0.303** (.153)	-0.088
Livestock & Poultry				
<i>Ref: No Livestock</i>				
Cattle/ Buffalo/ Sheep/ goat	0.218 (.173)	0.059	-0.220 (.177)	-0.062
Hen/ Cock/ Chicken	-0.145 (.219)	-0.041	0.159 (.229)	0.047
Caste				
Marital Status:				
<i>Ref: Unmarried</i>				
Married	0.204 (.145)	0.057	-0.254* (.149)	-0.073
House				
<i>Ref: Kuchha House</i>				
Pukka House	-0.226 (.162)	-0.062	0.241 (.167)	0.069
Religion				
<i>Ref: Hindu</i>				
Islam	-0.041 (.199)	-0.011	0.195 (.210)	0.055
Others	0.208 (.212)	0.056	0.019 (.221)	0.005
Caste				
<i>Ref: OBC</i>				
Schedule Tribe (ST)	-0.613** (.266)	-0.178	0.772*** (.271)	0.235
Schedule Caste (SC)	-0.080 (.197)	-0.022	0.288 (.206)	0.085
General	-0.068 (.175)	-0.019	-0.036 (.184)	-0.01
Land Holding				
<i>Ref: Landless</i>				
Marginal	-0.312* (.177)	-0.087	0.273 (.183)	0.078
Medium	-0.019 (.273)	-0.005	0.094 (.274)	0.026
Small	-0.011 (.254)	-0.003	0.081 (.258)	0.023
Semi-Medium	-0.258 (.219)	-0.071	0.130 (.225)	0.037
Constant	7.312*** (1.487)		7.088*** (1.503)	
No. of Observations	506		No. of Obs	460
LR Chi2 (25)	170.77		LR Chi2 (23)	144.77
Prob > chi2	0.00		Prob > chi2	0.00
Pseudo R2	0.256		Pseudo R2	0.237
Log Likelihood	-247.928		Log Likelihood	-232.69
Source: Authors Estimation from Field Survey Data, 2019.				
Note: ***, **, * denote statistical significance at 1%, 5% and 10% levels respectively				
The first column shows the independent variables. On top of other columns are the				
dependent variables				
The numbers in paranthesis are the standard Errors				

The existing literature also suggests that migration is an adaptation method among the disadvantaged groups (Deshingkar and Akter,2009; Srivastava and Sutradhar,2016). Our results also show that OBC's are more likely to migrate for economic reasons and Schedule Tribes are more likely to migrate for non-economic reasons. Our results also analyse that the one who possess no landholding are the ones who in-migrate for economic reasons. Sector of employment also plays a significant role on determining in-migration. From our analysis we can infer that the primary and secondary sectors are more likely to witness in-migration as compared to other sectors due to economic reasons (Srivastava, 2020). And construction sector is more likely to witness in-migration due to non-economic reasons.

## CONCLUSION AND POLICY IMPLICATIONS

This study examined the determinants of in-migration in J&K. We divided the determinants of migration into two broad categories of economic factors and non-economic factors. We concluded that the in-migrants migrate due to economic as well as non-economic reasons. Variables like wage, age, sector of employment, caste and landholding are the positive and significant determinants of economic factors of migration while as the variables wage, age and marital status are negatively impacting the non-economic factors of migration.

The results from this study implicate that the migration process is inevitable, therefore there is dire need to channelize the migrated labour force in such a way that the urban resources are not under too much pressure. There should be proper infrastructural development in order to generate employment for the increasing labour force. One of the other important issues relating to labour in general include social security and social protection. Therefore, policies should be designed such that there is proper and inclusive development of migrant labour. The very recent COVID pandemic especially awakened the policy makers towards the crisis of the migrated labour due to weak social protection in the informal sector employment.

## REFERENCES

- Ciarniene, R. and Kumpikaite, K. (2011). International Labour Migration: Students Viewpoint. *Inzinerine Ekonomika-Engineering Economics*, 22(5), 527-533.
- Czaika, M. and Haas, H. (2014). The globalization of migration: has the world become more migratory? *International Migration Review*. 48(2), 283-323.
- Deshingkar, P., & Akter, S. (2009). Migration and Human Development in India. Research Paper 2019/13, Human Development Reports. New York: United Nations Development Programme.
- Harris, J., & Todaro, M. (1970). Migration, Unemployment and Development: A Two-Sector Analysis. *American Economic Review* , 60 (1), 126-142.
- Kainth, G.S. (2010). Push and Pull Factors of Migration: A Case Study of Brick Kiln Migrant Workers in Punjab. *Guru Arjan Dev Institute of Development Studies*.
- Panda, S., & Mishra, N. (2018). Factors Affecting Temporary Labour Migration for Seasonal Work: A Review. *Management Research Review* , 41 (10), 1176-1200.
- Srivastava, R. (2020). Labour Migration, Vulnerability, and Development Policy: The Pandemic as Inflexion Point? *The Indian Journal of Labour Economics* ,63(1),859–883.
- Srivastava, R., and Sutradhar, R. (2016). Labour Migration to the Construction Sector in India and its Impact on Rural Poverty. *Indian Journal of Human Development*, 10 (1), 27-48.
- Vakulabharanam, V., and Thakurata, S.G. (2014). Why do migrants do better than non-migrants At destination? Migration, class and inequality dynamics in India. *Singapore Economic Review*, 59(1),1-13.

**Received:** 09-Nov-2022, Manuscript No. AMSJ-22-12834; **Editor assigned:** 10-Nov-2022, PreQC No. AMSJ-22-12834(PQ); **Reviewed:** 24-Nov-2022, QC No. AMSJ-22-12834; **Revised:** 01-Dec-2022, Manuscript No. AMSJ-22-12834(R); **Published:** 06-Dec-2022