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Rural-Urban Migration in South Asia: A Case Study of Pakistan

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ABSTRACT

The recent estimates suggest that South Asia is the least urbanized region in the world, however, Pakistan is one of the most urbanized countries in this region. Rural-urban migration is considered the main cause of urbanization and an inherent part of economic development process. *Therefore*, this study examines the determinants of rural-urban migration in Pakistan and utilizes two waves of Labour Force Survey of Pakistan (2006 & 2018). The study finds that there are various determinants of migration such as age, gender, marital status and education but higher levels of education appear to be important determinants of migration. This finding suggests that migration decision is positively linked to the human capital embodied in the individual. Therefore, policy makers should focus on the provision of higher education institutions. So, people may contribute to their own development as well as to the development of the country.

Key Words: Rural-urban migration, South Asia, Pakistan, Education & Labour Force Survey

Introduction

The term rural-urban migration describes the mass directional movements of a large number of individuals from rural to urban areas within the country (Blaug, 1976; Baudino, 2020). While rural-urban migration is almost completed in the developed regions of the world, this process is currently underway in the less developed countries and particularly in the South Asian countries (Henderson & Turner, 2020). Rural-urban migration is not only important in influencing a nation's demography but it is also liked with economic development and social transformations. Moreover, rural-urban migration has been identified as the main driver of urbanization (Nauman et al., 2015; Baudino, 2020). Hence, this study investigates the determinants of rural-urban migration in Pakistan and the findings of this study may be helpful to the policy makers of the South Asian countries.

The fundamental shift in the world's population from predominantly rural to predominantly urban has crossed the halfway mark (United Nations, 2012). Likewise, the recent trends put the global population at more than two-third urban by the year 2050 (United Nations, 2012; Nauman et al., 2015). In addition, the

recent estimates suggest that Europe, Latin America and the Caribbean, North America, and the West Asia have shares of urban population over 68 percent, with most regions near 80 percent (Figure 1). Likewise, East Asia has rapid urbanization and its urban population is over 60 percent just like more developed regions of the world while North and West Africa have almost 50 percent urban population. However, Southern Asia has minimum level of urbanization with a minimum share of 36 percent of urban population (in the year 2019). Although, rural-urban migration or urbanization has long been associated with economic growth in the literature but the recent estimates suggest that South Asia is the least urbanized region in the world, even behind the Sub-Saharan Africa (Henderson & Turner, 2020). Figure 1 shows the percentage of urban population in different regions of the world.



Source: United Nations, World Urbanization Prospects: The 2018 Revision

Figure 1 shows that the developed regions of the world are generally fully urbanized, with almost 60 to 80 percent of urban population (Henderson & Turner, 2020). While poor countries have largely less urban population. In particular, South Asia has the lowest share of urban population in the world.

South Asia is the home of almost 1.4 billion individuals and approximately two third of this population lives in the rural areas. In addition, South Asia accounts for roughly 40 percent of world illiterates and it is one of the major debt dependent regions in the world (Chaudhary & Khan, 2002). Moreover, the incidence of rural poverty is one of the main challenges faced by all South Asian countries (Dudwick et al., 2011; Khan & Akram, 2018). While it has been established that urbanization improves standards of living and lessens rural

poverty, South Asia is the least urbanized part of the world. Figure 2 describes the pattern of urban population within South Asia.



Figure 2: Share of urban population within South Asian countries

Source: United Nations, World Urbanization Prospects: The 2018 Revision

Figure 2 shows that South Asian countries are at different stages of the urbanization and there are considerable differences in the pace and level of urbanization among these countries. In addition, it is argued that the dynamics of urbanization are complex in South Asia and there are different drivers of urbanization. Despite that, the empirical evidence suggests that rural-urban migration is the major driver of urbanization in most of the countries (Dudwick et al., 2011; Baudino, 2020). Pakistan is one of the most urbanized countries in South Asia (Hasan et al., 2019). Therefore, rural urban migration in Pakistan is the focus of our attention.

Rural-urban migration has been an important topic in Pakistan due to rapid urbanization. The urban population, that was 17.05 percent of the total population in 1950, has increased to 36.67 percent in 2018 (United Nations, 2018). Notably, the growth rate of urbanization was even higher than 5 percent during the 1950s.¹ One of the main reasons for this high rate of urbanization is rural-urban migration.² Because of limited economic opportunities in rural areas, people migrate to cities. However, urban areas are also facing problems such as urban unemployment, congestion and law and order situation. Although, rural urban migration is an important issue, however, considerable attention has not been paid to this issue in Pakistan (Ishfaq et al., 2017). Therefore, it is essential to address

¹ In history, migration started in Pakistan at the time of independence, at that time many refugees came from India and started living in urban areas of Pakistan.

² Source: Ministry of Planning, Development and Reforms, Population Projections for the Year 2007-2030.

rural-urban migration in detail to efficiently manage the challenges and opportunities that rural-urban migration presents.

Even though some studies are available for Pakistan that discuss rural-urban migration, but these studies are either based on descriptive analysis or based on quite old data sets. For example, Khan and Shehnaz (2000) investigate the determinants of migration in their study however use Labour Force Survey of Pakistan (1997). Similarly, Ahmad et al. (2013) investigate the determinants of migration but utilize an old data set (LFS, 2011). Moreover, the existing literature although includes education as a determinant of migration but usually education is not further divided into sub-categories. Furthermore, technical education is usually not included in the analysis of migration. These gaps in the existing literature provide us additional rationale for this study.

The study plans to investigate the determinants of rural-urban migration in Pakistan utilizing micro-data provided by the Labour Force Survey of Pakistan (LFS). Moreover, the study makes a comparison of two waves of LFS (2006 & 2018) to understand the relative importance of factors behind rural-urban migration in Pakistan. In our analysis, migration is our dependent variable which is assumed to be dichotomous and logistic regression approach has been employed for the empirical analysis. We include age, gender, marital status and education as explanatory variables. However, education is divided into three sub-categories (i.e. matric, graduation and higher education) to understand the impact of different levels of education on migration. In addition, our study includes technical education as an additional determinant of migration.

Our study contributes to the existing literature and utilizes the latest LFS (2018). Moreover, education is a very important determinant of migration and our study divide education into three sub-categories. Furthermore, our study includes technical education as a determinant of migration, which is usually ignored in migration literature. Lastly, our study utilizes two LFS (2006 & 2018) to make an over-time comparison of determinants of migration.

The structure of the study is as follows: Section 2 reviews the relevant literature on migration while Section 3 describes the data. Section 4 provides the methodological framework and Section 5 discusses the estimation results of the study. Finally, Section 5 concludes the study.

Review of literature

From the beginning of human civilization, migration has been one of the fundamental instruments to shape the distribution of population in the world. Global estimates suggest that 740 million people around the world are internal migrants (UNOCHA, 2010). Therefore, migration is considered a global issue and it is linked with poverty, inequality, human capital and economic growth. In addition, it is argued that migration is an essential and potentially beneficial component of economic and social life of every state and every region.

Migration literature offers different theories of migration and these theories can be broadly divided into two groups; the macro and micro level theories of migration. While the early macro theories look at the aggregate data and often see migration as equilibrating mechanism, the focus has been shifted towards microeconomic models since the 1980s. These theories usually assume that individuals rationally consider various locations and finally choose the one that maximizes their gains from migration. Although, different migration theories are available yet there is no universally accepted theory of migration.

Since the pioneer work of Ravenstein in 1880s, migration researchers have introduced different theories of migration to explain why humans migrate. One of the seminal works on migration theories was done by Ravenstein (1885). The study introduced push and pull factors for the migration decision. While the push factors referred to the insecurity regarding social, economic or political conditions, the pull factors included economic, social and other environmental benefits at the new place of destination. The study presented different laws of migration which were based on empirical data and concluded that migration is the result of movement of labor from labor surplus to labor deficit areas.

Likewise, the early migration models include Lewis (1954) traditional dual economy model which rationalizes that migration occurs because of the differences in the demand and supply of labour between the urban and rural sectors.³ The model assumes perfect markets and surplus labour in the traditional agricultural sector that is absorbed by the modern sector. However, another important migration theory introduced by Sjaastad (1962), considers migration as a human capital investment and suggests that age is an important variable in explaining migration. This theoretical framework has been extended by Harris and Todaro (1970), who hypothesized that migration decision is based on a rational comparison of anticipated benefits from migration with actual costs of migration. Harris and Todaro (1970) highlight that rural-urban migration materializes when expected real income differential between urban and rural areas is positive. Consequently, migration increases when urban wages are higher (ceteris paribus). The study also mentions that migration is not absolutely risk free and migrant may or may not get a job upon his arrival in the urban areas. This model has clear predictions about the significance of income differentials in the urban and rural areas. It is important to mention that Lewis (1954) and Harris and Todaro (1970) have important contribution in shaping the neoclassical economic theory of migration.

The neoclassical migration theory assumes that migration decision is made by rational utility-maximizing individual and it is primarily driven by wage differentials. This theory includes the works of multiple theories (for example Lewis, 1954; Harris & Todaro, 1970) and considers labour market as the fundamental factor in influencing migratory decisions. According to this theory,

³ In addition, Zipf (1946) used the concept of gravity and explained that migration is inversely related to distance.

wage difference between two geographic locations is the key reason for migration decision (Kurekova, 2011). In general, this theory is used to describe the transnational migration.

The world systems theory is due to (Wallerstein, 1974) which explains that the migrants move in the light of economic liberalizations which are perceived to assist labour flow across different markets. This theory considers institutions in more detail and includes structural factors that other theories neglect. On the other hand, dual labour market theory (Piore, 1979) explains that migration is driven by pull factors in the destination areas and labour demand is an important variable in migration decision.

A fundamentally different migration theory, the new economics of labour migration (NELM) has been developed in the 1980s. It assumes that migration decisions are generally taken at the household level and meant for the wellbeing of the family as a whole. The NELM suggests a wide range of explanatory variables for migration decision. Stark and Bloom (1985) suggested that migration decision is a joint family decision and it is made by the household members together. The theory perceives that migration decisions are taken in response to wage differentials, however, the decision guarantees sustainable livelihoods for migrant families through the diversification of household resources such as labor. In the same vein, Stark and Taylor (1989) proposed that individuals migrate in response to a variety of market variables, and not just income and employment differences. The NELM concludes that rational individuals maximize joint income, status and minimize risks. Therefore, these three aspects determine the migration decision of the household.

On the other hand, human capital theory is a neoclassical micro-level migration theory and it is based on the work of Sjaastad (1962). This theory focuses on the labour market and treats migration decision as an individual investment decision to increase the productivity of human capital, however, it involves costs and returns. According to this theory, human capital is the dominant personal driver of migration and individual migrate if the discounted values of expected returns of migration are higher than discounted values of expected costs of migration (Blaug, 1976; Korpi & Clark, 2015). In human capital theory, education, employment and gender are the main variables. Likewise, Korpi and Clark (2015) reviewed human capital theory and suggested that employment opportunities and education are the main reasons behind migration.

Moreover, the literature has identified additional determinants of migration. Amara and Jemmali (2018) investigate internal migration and analyze the role of demographic, socioeconomic and geographical factors in migration. The study finds that economic factor or potential for employment is the main factor behind migration. However, education is an important determinant of migration as well as an important element of human capital and economic growth.

The field of migration is multifaceted and different theories of migration have been tested by different authors in their studies. However, this review of literature suggests that macro-level theories usually focus on aggregate migration trends and

explain these trends with the help of macro-level explanations and consider migration as a part of economic development whereas micro-level theories look at the individual migration decisions. Nonetheless, migration theories moved from mechanical models to more sophisticated theories with the passage of time. This review of literature also suggests that migration is a complex phenomenon and a detailed investigation is needed to understand its dynamics and determinants.

Data

The data for empirical analysis is taken from Labour Force Surveys of Pakistan (LFS), published by the Pakistan Bureau of Statistics (PBS). The bureau started the conduction of Labor Force Survey in 1963. This survey gives information about the labor force of the country and include the population aged 10 years and above. Our study has used two waves of LFS (2006 & 2018).

The labor force survey questionnaires are revised many times and include subjects like economic activity, informal sector and migration. According to LFS "migration is a movement from one district to another administrative district at any time of their lives and eliminates the ones moved in the current districts". The interview is taken from the head of the household and if the head is not available then the interview is taken from the additional members of the house.

Variables and description

The study is conducted at the household level and the dependent variable is migrants from rural to urban areas (Khan & Shehnaz, 2000; Kurekova, 2011; Nguyen et al., 2015; Amara & Jemmali, 2018). Therefore, migration variable is constructed from the question "What was the previous residence"; it has two categories rural to urban (i.e. migration from rural to urban areas) and urban to rural (i.e. migration from urban to rural areas), however, our focus is rural-urban migration. Therefore, the dependent viable migration is constructed that has two categories; migrated or not migrated (1, 0). In this study, people who migrated to urban areas have the value 1 and who do not migrate have 0 value. Table 3 shows the description of the dependent and independent variables included in the study.

Name of variables	Symbol	Description		
		=1 if an individual has migrated from		
Migration	М	rural to urban areas (migrated person)		
		and; =0 otherwise		
Gender	Gender	=1 if individual is male and; = 0		
Gender	Gender	otherwise		
Age	Age	Age of the individual in years		
Age_Sq	Age ²	Square of age		
Married		=1 if an individual is married and; $=0$		
Married	Marital Status	otherwise		
Matric	D.J.	=1 if an individual has 10 years of		
Matric	Edu _m	schooling and; =0 otherwise		
Graduation	Edu	=1 if individual has 14 years of		
Graduation	Edu _G	schooling and; =0 otherwise		
	-	=1 if individual has acquired higher		
Higher education		than 14 years of schooling and; =0		
		otherwise		
Technical	Edu_Technical =1 if an individual has any technica			
Education	Euu_rechinical	education and; =0 otherwise		
Employment	Employment	=1 if a person is employed and; = $($		
Employment	Employment	otherwise		

Table 1: Variables and description

On the independent side, our study has included variables such as gender, age, marital status, employment and education following human capital theory. Education is further divided into three categories matric, graduation, and higher education while technical education is also added in the model to examine the impact of technical education on migration. Chandrasekhar and Sharma (2014) also discussed education as the main determinant of migration in their study.

The study has utilized two waves of Labour Force Surveys of Pakistan (2006 & 2018) and Table 2 shows the sample size and its allocation between rural and urban areas of Pakistan for these two years.

Year	Enumeration Blocks/Villages		Sample Households			
	Urban	Rural	Total	Urban	Rural	Total
2006	1090	1229	2319	13080	19664	32744
2018	1772	1260	3032	28352	15120	43472

Table 2: Sample size and its allocation (Nos)

Table 3 shows the distribution of population by migration status for the two years (2006 & 2018). In 2006, the total number of households surveyed was 32744 and the households who decided to migrate to urban areas were 2906 suggesting that 08.90 percent households migrated to urban areas in 2006.

Year	Migrated	Non Migrated	Total Households
2006	2906	29838	32744
	(08.90%)	(91.10%)	(100%)
2018	3271	40043	43314
	(07.55%)	(92.45%)	(100%)

 Table 3: Distribution of population by migration status (age 10 and above)

Source: Labor force Surveys of Pakistan

However, fewer households decided for rural-urban migration in 2018. The total households are 43314 and only 3271 households migrated to urban areas in 2018 suggesting that 7.55 percent households preferred to move towards urban cities. It implies that rural-urban migration has lessened for the period 2006 to 2018.

The Labour force Survey of Pakistan has mentioned different reasons of migration which include job transfer, education, business, health, marriage etc. Table 4 shows the relative share of each reason in total migration.

S. No	Reasons for migration	Percentage Share of Each Reason in Total Migration		
	_	2006	2018	
1	Job Transfer	12.66	2.57	
2	Found a job	15.39	5.34	
3	Searching for a job	9.88	4.96	
4	Searching for a better agriculture	3.64	0.96	
5	Education	0.79	1.54	
6	Business	5.76	1.53	
7	Health	0.19	0.15	
8	Marriage	4.91	32.82	
9	With Parents	13.10	21.31	
10	With spouse	1.87	10.78	

Table 4: Reasons of migration

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11	With son/daughter	0.40	1.10
12	Change of residence	N.A	2.57
13	Return to his home	17.19	10.93
14	Security/Law & order situation	N.A	1.09
15	Other	13.49	2.39

Table 4 shows that the highest percentage of the migrants (32.82 percent) decided for migration because of marriage in 2018, while return to home (17.19 percent) was the main the reason behind migration decision in 2006. Figure 3 also shows the relative share of each reason in total migration.

Figure 3: Reasons of migration



Source: Labor force Surveys of Pakistan

Figure 3 also provides the same information for the two data sets, we have discussed above. The figure shows that the share of education in migration decision was 0.79 percent in 2006 but it has increased to 1.54 percent in 2018.

Methodology

Our study investigates the determinants of migration decision in a human capital framework and explanatory variables represents the determinants of migration in terms of costs and returns to migration (Sjaastad, 1962; Blaug, 1976; Khan & Shahnaz, 2000; Korpi & Clark, 2015). The set of explanatory variables includes standard human capital variables such as age in years, age squared, education attained in terms of years of schooling completed and technical education. The other variables include employment and marital status.

The study has specified migration model as follows: $M = \alpha + \beta_1 Gender + \beta_2 Age + \beta_3 Age^2 + \beta_4 Marital Status + \beta_5 Edu_{Technical} + \beta_6 Edu_m + \beta_7 Edu_G + \beta_8 Edu_h + \beta_9 Employment + e$ (1)

The study investigates the determinants of the migration decision and dependent variable in our analysis represents the migrant households who have migrated from rural to urban areas. However, the decision to migrate is modeled as a dichotomous variable representing migrant/non-migrant status as explained in Table 1. Other variables are gender, age, marital status, educational attainments and employment status.

We can estimate this models with Ordinary Least Square (OLS) technique. However, OLS will give biased and unsatisfactory results because of the dummy variable introduced on the dependent side of the model (M). If the regressor takes the value of 0 and 1, it will be called a binary, categorical or dichotomous variable. Binary and dichotomous variables are also called nominal scale variables. When a category is equal to 0, it means the attribute is not present and if the category is equal to 1 then the attribute is present. In this case, the researchers estimate the probability associated with the attributes. This is the reason that qualitative response models are called probability models.

Three types of approaches are used for the estimation of these models: Linear probability model, probit and logit models. The first option is Linear Probability Model (LPM) but this method has many problems. For example, the estimates interpreted Likewise. from LPM be easily. LPM has cannot а binomial distribution instead of a normal distribution and then the problem of boundedness arises. On the other hand, probit and logit techniques are equally popular nonlinear approaches to handle binary dependent variable. In practical applications, usually, both approaches provide similar marginal effects, however, logit has easier interpretation than probit. Therefore, the study has employed logit technique for the estimation of model.

The coefficients estimated through logit model cannot be interpreted directly. For the interpretation of results, the odd ratios or marginal effects are calculated. Although, the logit model can be interpreted through odd ratios yet marginal effects are a better way of explaining results. The marginal effects explain that one-unit change in the independent side variable, holding all other variables constant in the model, gives a change in the probability of the dependent side variable, which shows a marginal effect of that variable. The study has used marginal effects for the interpretation of results.

Results and discussion

The study employs logit approach to examine the factors that influence the probability of rural-urban migration in Pakistan. Therefore, the study has calculated marginal effects and Table 5 shows the marginal effects of all those variables which are included in our human capital model (equation 1).

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Our study finds that gender has a positive and statistically significant impact on migration. It suggests that there are more chances that the person will migrate if gender is male. Hamid (2010) also explains that evidence from South Asian countries suggests that the pattern of internal migration is changing and it seems to be more urban oriented and gender has important role in explaining this migration trends. Although, Delazeri et al. (2021) find inconsistent results for the gender in Brazilian region, however, we find consistent results for both years. In addition, our study finds that cost of migration is perhaps higher for female in Pakistan and therefor the probability of migration is lower for female as compared to male.

Table 5: Results of the logit models for the years 2006 and 2018				
Year	2006		2018	
Variable	Coefficient	Marginal Effect	Coefficient	Marginal Effect
Gender	0.545477 (0.08517)***	0.043719	0.691816 (0.07255)***	0.047051
Age	0.023938 (0.00859)***	0.001918	0.012309 (0.00799)	0.000833
Age^2	-0.000152 (0.00008)*	-0.000012	-0.00001 (0.00008)	-0.000011
Marital _status	-0.189755 (0.06876)***	-0.015208	-0.116101 (0.06454)*	-0.007891
Edu- Technical	-0.449350 (0.12912)***	-0.036015	-0.064941 (0.01110)***	-0.004417
Edu_Matric	0.001651 (0.04288)	0.000132	0.05177 (0.03942)	0.003534
Edu_Grad	0.138416 (0.08316)*	0.011671	0.278861 (.07809)***	0.021112
Edu_Higher	0.438402 (0.11039)***	0.041723	0.436977 (0.09991)***	0.035483
Employment	-0.015548 (0.03390)	-0.001246	0.045921 (0.03063)	0.003124
Households	32,744		43,314	

Table 5: Results of the logit models for the years 2006 and 2018

standard errors are reported in parentheses ***p\0.01, **p\0.05, and *p\0.1

Table 5 also reports that age has positive impact in both years and probability of migration increases with age as coefficient of age is positive. Sjaastad (1962) explains migration as an investment in human capital and age is an important variable in migration decision. Age is also considered an important variable as it influences the age distributions of both the rural and urban areas. If most migratts to urban areas are adults then migration may increase the average age of the population in urban areas (United Nations, 2018). In contrast, the variable age squared has negative relationship in both years, which suggests the diminishing rate of migration with age. Khan and Shehnaz (2000) mentions that this variable is

usually insignificant signifying that the increasing effect of age does not fall with age.

Our findings also suggest that the marital status negatively and significant influences migration decision in both years. Regarding the marital status, we find that probability of migration decreases for married individuals, suggesting that the perhaps costs of migration is higher for those who have a spouse (Delazeri, 2021).

In general, the results for education indicate positive impact on the probability of migration in both years. By and large, schools for matric education are available in rural areas, however, the variable matric education shows insignificant but positive impact on rural to urban migration. On the other hand, graduation and higher education show positive and significant impacts in both the years. Although, Delazeri et al. (2021) finds inconsistent results about education, however, Ahmad et al. (2013) and Khan and Shehnaz (2000) also reported positive impacts for higher levels of education in their studies. It indicates that perhaps returns to migration are higher than cost of migration for educated individuals living in rural areas and therefore, they decide for rural to urban migration. If we move forward, technical education negatively effects migration. It means cost of rural-urban migration is higher for those individuals who have some technical education.

Our study finds inconsistent results about employment as it has negative impact on migration in 2006 while positive in 2018, however, it is insignificant in both years. Other studies also showed positive impact for employment (Andrienko & Guriev, 2004; Korpi & Clark, 2015).

Lastly, if we compare the results of 2006 and 2018, the results are in general same however, migrant's ratio from rural to urban areas has decreased. In 2006, the migration rate is high as compared to 2018, the reason behind this result may be earthquake in the country in 2005. Therefore, people migrated to urban areas in 2006. These results also show that age significantly influenced migration in 2006 but not in 2018. Finally, in accordance with human capital theory, the study finds that there is higher probability that individuals will migrate to urban areas if they have higher education. In rural areas, jobs are not available for highly educated people, therefore, cost of migration are lower and returns to migration are higher and highly educated people decide about rural-urban migration.

Conclusion

The objective of this study is to investigate the determinants of internal rural urban migration within the theoretical framework of human capital theory which considers migration as an investment in human capital with associated returns and costs.

The study investigates the determinants of rural-urban migration in Pakistan utilizing two waves of LFS (2006) and (2018). In our analysis, migration is our dependent variable which is assumed to be dichotomous and logistic regression model has been employed for empirical analysis. We include gender, age, marital

status and education as explanatory variables. However, education is divided into three sub-categories (i.e. matric, graduation and higher) to understand the impact of different levels of education on migration. In addition, our study includes technical education as an additional determinant of migration.

To conclude, our findings suggest that graduation and higher education appear to have stronger effects on the probability to migrate than lower levels of education. The reassuring findings regarding education in terms of graduation and higher education with a positive effect on the probability of migration suggest the importance of higher education institutions in rural areas. It is important that policy makers should provide higher education institutions within rural areas so people will contribute to their own development as well as to the development of the country and we can avoid the big city problems without compromising economic growth.

There are some limitations of our study, for example, our study includes only two years (2006 and 2018), however a comprehensive investigation may include more years in its analysis. In addition, the statistical and empirical analysis in this paper shows that there are data limitations of the LFS data regarding the information on the migration process of internal migrants and more difficult analysis of internal migration based on a comfortable informational database on migrant characteristics needs to be undertaken for a better understanding of internal mobility.

Rural urban migration can be beneficial for the population of developing countries, because it can contribute to economic growth, poverty reduction and human development, however, effective planning is important. Therefore, the policy makers should focus on the determinants of migration and policy planners should assist and manage rural urban migration in South Asian countries.

References

- Ahmad, N., Akram, A., & Hussain, H. (2013). Determinants of internal migration in Pakistan. The Journal of Commerce, 5(3), 32-42
- Aliya, H. K., & Shehnaz, L. (2000). <u>Determinants of internal migration in</u> <u>Pakistan: Evidence from the Labour Force Survey, 1996-97</u>. <u>The Pakistan</u> <u>Development Review</u>, 39(4), 695-712.
- Amara, M., & Jemmali, H. (2018). Deciphering the relationship between internal migration and regional disparities in Tunisia. Social Indicators Research, 135(1), 313-331.
- Andrienko, Y., & Guriev, S. (2004). Determinants of interregional mobility in Russia. Economics of Transition, 12(1), 1-27.
- Baudino, M. (2020). Rural-to-urban migration in developing economies: Characterizing the role of the rural labor supply in the process of urban agglomeration and city growth. The Annals of Regional Science. <u>https://doi.org/10.1007/s00168-020-01028-9</u>

- Blaug, M. (1976). The empirical status of human capital theory: A slightly jaundiced survey. Journal of Economic Literature, 14(3), 827-855.
- Chandrasekhar, S., & Sharma, A. (2014). Internal migration for education and employment among youth in India. <u>Working Papers</u>: 5682, Indira Gandhi Institute of Development Research, Mumbai.
- Chaudhary, M. A. & Khan, F. N. (2002). Economic and social determinants of child labor: A case of Dera Ismail Khan, Pakistan. The Lahore Journal of Economics, 7(2), 15-40. DOI:10.35536/LJE.2002.V7.I2.A2
- Delazeri, L. M., Da Cunha, D. A. & Oliveira, L. R. (2021). Climate change and rural-urban migration in the Brazilian Northeast region. Geo Journal. https://doi.org/10.1007/s10708-020-10349-3.
- Dudwick, N., Hull, K., Katayama, R., Shilpi, F., & Simler, K. (2011). From Farm to Firm: Rural-Urban Transition in Developing Countries. World Bank.
- Hamid, S. (2010). Rural to Urban Migration in Pakistan: The Gender Perspective. PIDE Working Papers: 56, Pakistan Institute of Development Economics, Islamabad.
- Hasan, S. M., Maheen, J., & Hadia, M. (2019). A review of urbanization in Pakistan: Practices, policies and challenges. Country Background Report for Asian Development Bank.
- Harris, J., & Todaro, M. (1970). Migration, unemployment and development: A two-sector analysis. The American Economic Review, 60, 126-142.
- Henderson, J. V., & Turner, M. A. (2020). Urbanization in the developing world: Too early or too slow? Journal of Economic Perspectives, 34(3), 150-173. doi:10.1257/jep.34.3.150
- Ishfaq, S., Ahmed, A., Hassan, D., & Javed, A. (2017). Internal migration and labour mobility in Pakistan, In South Asia Migration Report 2017, Recruitment, Remittances and Reintegration edited By <u>S. Irudaya Rajan</u>, Routledge India.
- Khan, F. N., & Akram, S. (2018). Sensitivity of multidimensional poverty index in Pakistan. The Pakistan Journal of Social Issues, 9, 98-108.
- Korpi, M., & Clark, W. A. (2015). Internal migration and human capital theory: To what extent is it selective? Economics Letters, 136, 31-34.
- Kurekova, L. (2011). Theories of migration: Conceptual review and empirical testing in the context of the EU East-West flows. In *Interdisciplinary conference* on *Migration. Economic Change, Social Challenge*. April 6-9, 2011, University College London, London.
- Labor Force Survey (2006). Statistics Division, *Pakistan* Bureau of Statistics, Government of *Pakistan*.
- Labor Force Survey (2018). Statistics Division, *Pakistan* Bureau of Statistics, Government of *Pakistan*.
- Lewis, A. W. (1954), Economic development with unlimited supplies of labour. Manchester School of Economic and Social Studies, 22 (2), 139-191.

- Nauman, E., VanLandingham, M., Anglewicz, P., Patthavanit, U., & Punpuing, S. (2015). Rural-to-urban migration and changes in health among young adults in Thailand. Demography, 52(1), 233-57. doi: 10.1007/s13524-014-0365-y.
- Nguyen, L. D., Raabe, K., & Grote, U. (2015). Rural-urban migration, household vulnerability, and welfare in Vietnam. World Development, 71, 79-93.
- Piore, M. J. (1979). Birds of passage: Migrant labor and industrial societies: Cambridge University Press.
- Ravenstein, E. G. (1885). The laws of migration, Part 1. Journal of the Royal Statistical Society, 48(2), 167-235.
- Sjaastad, L. (1962). The costs and returns of human migration. Journal of Political Economy, 70(5), 80-93.
- Stark, O., & Bloom, D. (1985). The new economics of labor migration. The American Economic Review, 75(2), 173-178.
- Stark, O., & Taylor, J. (1989). Relative deprivation and international migration. Demography, 26(1), 1-14.
- United Nations (2012). World Urbanization Prospects: The 2011 Revision, Department of Economic and Social Affairs, Population Division, United Nations; New York.
- United Nations (2018). World Urbanization Prospects: The 2018 Revision, Department of Economic and Social Affairs, Population Division, United Nations; New York.
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) (2010). Human Security at the United Nations, New York.
- Wallerstein, I. (1974). The Modern World-system: Academic Press, New York.
- Zipf, G.K. (1946). The P1 P2/D hypothesis: On intercity movement of persons. American Sociological Review, 11 (6), 677-686.