

Three Essays on Labour Market Outcomes of Youth

*Thesis submitted in partial fulfillment of the requirements for the award of
the Degree of Doctor of Philosophy in Arts at Jadavpur University, Kolkata*

Sweta Lahiri

Centre for Studies in Social Sciences, Calcutta (CSSSC)

Jadavpur University

Kolkata – 700032

2021

Certified that the Thesis entitled

Three Essays on Labour Market Outcomes of Youth submitted by me for the award of the Degree of **Doctor of Philosophy** in Arts at Jadavpur University is based on my work carried out under the supervision of **Dr. Tushar Kanti Nandi, Associate** Professor of Economics, Indian Institute of Science Education and Research Kolkata.

And that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere/elsewhere.

Candidate: Sweta Lahiri

Signature: *Sweta Lahiri*

Date: 23/04/2021

Countersigned by the

Supervisor: Dr. Tushar Kanti Nandi (Associate Professor, IISER, Kolkata)

(Former Assistant professor, Centre for Studies in Social Sciences, Calcutta (2012-2019))

Signature: *Tushar Kanti Nandi*

Date: 23-04-2021

Assistant Professor *(Former)*
CENTRE FOR STUDIES IN
SOCIAL SCIENCES, CALCUTTA

Acknowledgement

It is a genuine pleasure to convey my deep sense of regards and gratitude to my mentor, philosopher and guide Dr. Tushar Kanti Nandi, Associate Professor, IISER, for his immense patience, excellent guidance, keen interest, belief in my abilities and overwhelming encouragement for accomplishment of my dissertation. His timely advice, meticulous scrutiny and scholarly suggestions have been mainly responsible for completion of this work.

I would like to express my sincere thanks and regards to Prof. Sugata Marjit, Dr, Saibal Kar and Dr. Pranab Kumar Das for their invaluable suggestions and constant motivation that enriched me throughout this journey.

I thank profusely all our CSSSC library staff members for their humble co-operation and I would also like to convey my deepest gratitude to our MPhil/PhD co-ordinator, Ms. Kavita Bhowal for her constant support and enthusiasm for taking care of all the painstaking official formalities.

It is my privilege to thank Dr. Indrani Mitra (Head of the Department of Economics, Heramba Chandra College) for her kind co-operation in providing me enough flexibility and invaluable insights in carrying forward my research work along with my job as lecturer in Economics in Heramba Chandra College.

Finally I owe my sincere thanks to my grandmother Binapani Sikdar, mother Tripti Lahiri and especially Gargi Lahiri, my elder sister for their strong belief, motivation, support and blessings.

Last hence not least I am deeply thankful to my husband Sumit Sengupta for being an attentive listener and a strong motivator. I would also like to express my gratitude to my friends, Tussar Samanta, Saanvi Gupta, Shib Sankar Sengupta, Mali Sengupta, Dr. Diparna Jana and Dr. Gunja Baranwal for being helpful and initiating valuable discussions that have augmented further my journey as a researcher.

Sweta Lahiri

Content

	Page No.
Acknowledgement	ii
List of Tables	v
List of Graphs	vi
List of Tables –Appendix A	vii
Chapter 1	1-7
1.1 Introduction	1
1.2 Literature gap and the research questions	3
1.3 Summary findings	5
Chapter 2: Like Father, Like Son: Intergenerational Occupational Persistence among Youth in India	8-30
2.1 Introduction	8
2.2 Literature review	9
2.3 Data source and descriptive	12
2.3.1 Occupational persistence across caste and religion	13
2.3.2 Transition matrix	16
2.3.3 Occupational persistence in the formal and informal sectors	17
2.4 Estimation	19
2.4.1 Impact of own education, background factors and father's network on persistence	20
2.4.2 Impact of educational mobility on persistence	25
2.5 Conclusion	29

Chapter 3: Impact of internal migration on left behind youth's labour force participation in India	31-57
3.1 Introduction	31
3.2 Data and descriptive statistics	33
3.3 Methodology	38
3.4 Estimation results	40
3.4.1 Impact of short-term and long-term migration by at least one male member	40
3.4.2 Impact of migration by different male members to different destinations	48
3.5 Concluding remarks	53
Chapter 4: Labour market transition among the youth: Evidence from ten developing countries	58-85
4.1 Introduction	58
4.2 Literature review	61
4.3 Country context	68
4.4 Data and descriptive	70
4.4.1 Transition across the countries	70
4.4.2 Transition with respect to different spells of unemployment before the current job	73
4.4.3 Transition across the occupations	75
4.4.4 Transition across different status of employment	75
4.4.5 Reasons behind not being transited in current job	76
4.5 Methodology and estimation results	77
4.6 Conclusion	83
Chapter 5: Concluding remarks	84-85
References	86-92
Appendix A	93-97

List of Tables

Table No.	Table Title	Page No.
Table 2.1	Persistence of industry across generations (percentage) (Five digit)	15
Table 2.2	Intergenerational industry transition matrix (2 digits)	17
Table 2.3	Intergenerational persistence of occupation in formal and informal sectors	19
Table 2.4	Probit estimation results for household asset	23
Table 2.5	Probit estimation results for father's network	24
Table 2.6	Probit estimation results with differences in education	27
Table 2.7	Probit estimation results with more education of son at different levels of father's education	28
Table 3.1	Youth labour force participation for different migration status of the household members across different attributes	37
Table 3.2a	Recurssive biprobit estimation results (Marginal effects)-Rural-Short term Migration	42
Table 3.2b	Recurssive biprobit estimation results (Marginal effects)-Rural-Long term Migration	43
Table 3.2c	Recurssive biprobit estimation results (Marginal effects)-Urban-Short term Migration	46
Table 3.2d	Recurssive biprobit estimation results (Marginal Effects)-Urban-Long term Migration	47
Table 3.3a	Probit estimation results (Marginal Effects)- Rural- Short term Migration	54
Table 3.3b	Probit estimation results (Marginal Effects)- Rural- Long term Migration	55
Table 3.3c	Probit estimation results (Marginal Effects)- Urban- Short term Migration	56
Table 3.3d	Probit estimation results (Marginal Effects)- Urban- Long term Migration	57
Table 4.1	Country Context- demographic, geographic and labour market indicators	68
Table 4.2	Transition rate among youth (%)	72
Table 4.3	Estimation results	81

List of Graphs

Graph No.	Graph Title	Page No.
4.1	Transition for different unemployment spells	74
4.2	Transition across the occupations (%)	75
4.3	Transition across different status in employment (%)	76
4.4	Reason for not being transited (%)	76

List of Tables -Appendix A

Table No.	Table Title	Page No.
Table 3a	Instrumental Variable Results	93
Table 4a	Distribution of youth (%) in the sample	94
Table 4b	Transition rate for different unemployment spells	95
Table 4c	Transition rate across the occupations	92
Table 4d	Transition rate across different status in employment	96
Table 4e	Reason for not being transited among the group of employed (reasons for quasi employment)	96
Table 4f	Variable Description	97

Chapter 1

1.1 Introduction

Developing regions are on the verge of unveiling the potentials of demographic dividend¹ and this is crucially related to successful transition of youth to the labour market. The youth population has an important role to play as potential demographic dividend by constituting skilled stock of human capital (Report on Youth Employment Unemployment Scenario, 2013). The magnitude of this benefit depends on the ability of the economy to absorb and productively integrate this group to the labour market rather than be a pure demographic gift. Further a youth focus in employment-development debate gains prominence since such factor has spillover effects in the society's economic and political stability. In recognition of this potential many steps have been initiated by government of most of the developing countries. However, any attempt directed towards skill formation and creation of employable opportunity will not be enough in this regard unless the labour market provides equal space to all its eligible performers. Besides in most of these regions early employment is often backed by larger dropout and poverty where youth cannot afford to be unemployed or inactive for long. In absence of well-functioning credit market and transmission of unequal socioeconomic status across the generations, youth frequently end up with the jobs with ease of entry (with some influence on the hiring process) and often identified to remain unproductive, low paid. Lower levels of human capital, experience trap, dearth of information and financial resources accentuate their hardship. They continue to be plagued by working poverty streaming from their irregularity of work and lack of formal employment and social protection (Global Employment Trends for Youth – Geneva: ILO 2015). Undoubtedly skill mismatch, high unemployment and dearth of education are the major challenges associated with youth's successful labour market transition (Global Employment Trends for Youth -Geneva: ILO 2013). Labour force participation at this stage increasingly becomes a consequence of compulsion rather than the choice they make to support their families. Inability to prove oneself productive member of the society can overshadow their career prospect in the long run. This premise has engendered a serious debate on education and employment of youth especially in

¹ The concept of 'demographic dividend' was conceived following the United Nations International conference on Population and Development in Cairo in 1944. Demographic contribution to accelerating economic growth became known as 'demographic dividend'.

the context of the favourable demographic transition experienced by most of the developing countries.

Therefore, it is needless to say that an in-depth understanding of prevailing youth labour market situation is of crucial importance to find out whether the labour market provides equal opportunities to all its young entrants. Researchers often favour equality of opportunity as an underlying goal of the society – the idea is that those who work hard should be able to succeed regardless of his/her family background (Black and Devereux, 2010).

Our current thesis embraces into some of the long standing issues concerning to youth's successful transition to the labour market. In the recent decade the various youth employment indicators show that low unemployment and inactivity rates are not necessarily enough to ensure a smooth transition of youth to labour market, as they mask high rates of vulnerable employment, informal work and working poverty. Here we are to assess whether observed disparity in the achieved labour market outcomes is justified with respect to the extent of differences prevailing across individuals in terms of acquired skill and ability. However, this is often not the case for countries with an immensely un-equal socio-economic condition of its population. In presence of strong influence of the background factors like financial resources, social network of parents and strong intergenerational linkages, the labour market may not appear level playing ground to all its participants who managed to acquire skill. Inability of the countries to integrate the favourable demographic transition to the economy implies failure of the youth to escape working poverty and deterrence of country's development prospect for the generations to come (Global Employment Trends for Youth-Geneva: ILO 2013).

Literature provides corroborating evidences that often getting employment also is not sufficient to ensure stability among the participants (Abebe et al, 2018). It gains prominence with few observations in the context of labour market outcomes like this group of young workers are more likely to exhibit larger degree of intergenerational persistence in the field of education, occupation and industry (Hnatkovska, Lahiri and Paul, 2012; Nandi, 2016). Persistence is often perceived as a strong channel of transmission and perpetuation of inequality across the generations. In presence of such linkage particularly in the societies with persistent wealth inequality and credit market imperfection (Ghatak and Jiang, 2002) skill formation in isolation may fail to mitigate their youth's labour market hardship. Further they are also the group to show larger degree of instability in the labour market with high job quit intentions (quasi

employed) apart from being in the group of NEET²(Neither in Employment nor in Education and Training). The present dissertation therefore, prioritises the need for understanding the extent and the reasons behind the hardship experienced by the young entrant in the labour market, bestowed on understanding of the social cost associated with it.

The dissertation has been divided into the following chapters:

Chapter 1: Introduction and Literature gap

Chapter 2: Like Father, Like Son: Intergenerational Occupational Persistence among Youth in India

Chapter 3: Impact of internal migration on left behind youth's labour force participation in India

Chapter 4: Labour market transition among the youth: Evidence from ten developing countries

Chapter 5: Concluding remarks

1.2 Literature gap and the research questions

Literature finds youth transitions in the labour market are markedly different and debatable issue in the outset of the recent demographic transition mostly witnessed by the developing economies. These are also the economies with immense poverty and persistent socio economic inequality. With a concern that labour market in these economies has disproportionately favoured skilled workers we have the broad research question 'what makes the youth's transition in the labour market of a developing country more difficult than adult with respect to high occupational persistence and lack of stability among this group'. Is it education or family background that matters at the time of labour market entry?

Our first research question is what determines high degree of intergenerational persistence of occupation among the youth? The developing countries that often lack investable resources, understanding such intergenerational linkages in the labour market appears fundamental to the formulation of effective public policies that make the society level playing field for its younger members. Despite of the fact that, there is a renewed interest in literature in exploring observed

² The share of youth which are neither in employment nor in education or training in the youth population (the so-called "NEET rate") is a relatively new indicator, but one that is given increasing importance by international organizations and the media-ILO,2015

differences in the economic outcome from an intergenerational perspective, such issues in the context of developing countries are less interrogated and almost nonexistent in the context of youth. In order to address the issues discussed above, here we look into the incidence of intergenerational persistence of industry among working youth, aged between 15-24 years in India. The analysis covers three consecutive employment unemployment surveys (conducted by the National Sample Survey Organization) in order to find out probable answer to the question whether education or family background is the prime force behind choice of industry.

Our second research question is in the context of growing internal migration in India. Here we investigate into the consequences of such migration on the labour market outcome of the left behind youth. Internal migration appears to be a complex issue with multiple factors affecting it. In the economy, when there are concerns for economic growth there are also consensus that growth pattern within the country immensely unequal forcing migration of people to other economic sectors and regions. However, there exist very few studies exploring the impacts of such inter-regional disparity of economic opportunities through the channels of migration on the livelihoods of these sending households. Unlike the previous studies, we empirically examine the impact of internal migration, both short-term and long-term by the working age male person of a household on the probability of labour force participation among left behind youth (15-24 years).

The next question that we put forward is the causes of lack of transition of youth in the context of ten developing countries of different developing regions. The objective is that instead of sharing some common features we may observe an extensive variation in the rate of youth's successful transition to the labour market and its association with various individual and background factors. Here in order to specify the group of youth not being transited in the labour market we pool the group of unemployed and inactive into a single category of non-employment and incorporate self-employed and wage workers with quit intention as quasi-employment, involved in quasi-search activity. Here our concept of transition among the youth in reference to their quit intention is not in contrast but a broader concept with respect to the definition by ILO (2015). International comparative studies on youth's labour market transition from such a perspective is almost non-existent. Under this background using the information available in School to Work Transition Survey (SWTS) data for the age group 15-29 we mark a young worker as 'transited' if he does not have any 'job quit intention'. He is marked as 'not-transited' if he is either 'quasi employed (employed with a job quit intention)', or NEET (Not

in Education, employment and training). Therefore, non-transition or existence of quit intention reflects the possibility of potential instability (Jovanovic, 1979) among the youth even when they are employed. We document how transition varies for male youth in Madagascar, Tanzanian, Zambia (Sub Saharan Africa), Cambodia, Nepal, Bangladesh (South and East Asia), Kyrgyzstan (Europe and Central Asia), El Salvador (Latin America and Caribbean), Palestine and Egypt (Middle East and North Africa) for individual and background characteristics.

In any case, much remains to be learned about the determinants of youth labour market transition. This piece of work deviates from the earlier studies in this fields of research in some important aspects. First of all we choose to analyse youth's transition in developing countries with respect to the criteria mentioned above. Adding to this we have the opportunity to use a unique data set entirely focusing on the School-to Work Transition among the youth aged within 15-29 years. This survey has been conducted by the International Labour Organization from 2012-2016 for 30 developing countries and contains all possible retrospective information on individual's labour market activity, educational activities, parental, socioeconomic characteristics, allowing us to take the advantage of this rich data base in studying transition behavior of employed youth.

1.3 Summary findings

In Chapter 2 we observe the incidence of intergenerational persistence of industry of occupation among the group of employed youth in India. Following the three NSSO employment unemployment survey rounds (61st, 66th and 68th respectively) such persistence is found to be very high (nearly 64%) among the youth in recent years. By persistence here we mean youth are in the industries same as their fathers. On the contrary mobility is a situation where the son works in the industry different from the father. Using a probit model we estimated the relative strength of human capital and family background in explaining the probability of such incidence. We find that education has a significant impact in ensuring occupational mobility only at a higher level that too in urban area. This is indicative of the fact that unless the household ensures sufficient financial investment toward capital formation of the offspring, labour market may not appear a level playing field for its participants. On the other hand, ownership of productive assets has played a decisive role in the occupational outcome across the generations. The results in the rural area is suggestive of the 'weightier credit constraint' among the poorer households. This effect indicates that wealthier households

can invest sufficiently in their children's human capital, subsequently increasing the probability of their accessibility to different industries of the economy. Occupational hierarchy of the father is another significant factor, especially in urban area, which strongly affects the likelihood of the son to be employed in the same industry as his father. In rural area however, we find such influence to be reversed. Mobility is significantly less among low skilled workers. The reason behind this may be countercyclical. That is returns from low-skilled occupations are so meager to ensure enough investment in education the offspring and they continue to be plagued in to the vicious circle of less skill and less paid occupation across the generations. Therefore having skill levels higher than the earlier generations is expected to reduce the possibility of such persistence. We have witnessed such educational mobility to transmit into occupational mobility only at higher levels that too in urban area. The implication of our results is significant from policy perspective. Though education can enhance opportunity in labour market strong and positive association between asset ownership, father's occupation and intergenerational persistence may be an indication of the difficulties faced by young individuals with poor family background.

Chapter 3 enquires into the diverse effect of internal migration of working age family members in determining the labour market choice of the left behind youth from the same household using a simple empirical framework (Using 64th round of NSSO data). We find that the short-term internal migration by the male member of the household significantly decreases the probability of labour force participation in both the areas while long-term absence of the father to any other state makes the youth more likely to be in the labour force. Our results help to resolve the ambiguity in the relationship between migration and wellbeing of family members left behind that observed at the beginning of our study. In India the intermittent flow from the temporary migration has the potential to ease the credit constraint on the part of migrant sending households. However, this also indicates strong inter-regional inequality of the economic opportunity youth are indirectly victims of. Adding to this the rise in the labour force participation among the left behind youth for long-term migration of the father from the household to any other state is alarming in the sense that such migration often requires the son to join the labour force early as well. The disparity of economic opportunities along with the long-term absence of the family member from the household is more likely to make the youth's labour market choice a compulsion.

Chapter 4 explores the probable reasons behind the incidence of extensive lack of transition among the youth using the school to work transition survey (carried out between 2012-2016)

data from the Work for Youth project of the International Labour Office (ILO) for Madagascar, Tanzania, Zambia, Nepal, Cambodia, Bangladesh, Kyrgyzstan, El Salvador, Palestine and Egypt. The descriptive and estimation analysis show that always higher rate of transition may not be a good indication of the young workers settlement in the labour market as happened to be in Bangladesh and Madagascar. It is the background factors (financial status, fathers' occupation) in most of the developing countries under consideration that strongly influences the rate of transitions. We observed strong association of transition of the son with father either being in agriculture or in high-skilled occupation where there is a larger possibility of transmission of active social network. Successive levels of education exerting a negative impact indicates larger incidence of skill-mismatch among the employed except in Nepal, Bangladesh and Cambodia. It is a situation where the skill acquired is often different from what is required or it may also be attributed to dearth of information. This may be a result of lack of well-functioning labour market institutions or productive opportunity in the economy as a whole. Being poor is another challenge associated with successful transition. However, this particular factor may suffer from endogeneity bias as well. Therefore, increasing the level of education in isolation is insufficient in presence of strong background factors like financial status, parents' occupation etc. In absence of well-functioning capital and labour market institutions the problem accentuates further.

Summarising we say early employment in these countries are often backed by the consequences of larger dropout and poverty where youth cannot afford to be unemployed or inactive for long. Experience trap, dearth of education and information and fear of unemployment scarring lead to larger instability among them. Being quasi employed here young workers continue to compete with their unemployed counterparts with an objective of getting a better match for them and remain unsettled in the labour market. Our finding emphasises- in presence of strong unequal socio economic background and intergenerational linkages any attempts directed toward enhancing vocational educational training or employer specific skill formation fails to mitigate youth's labour market destitution in general. With almost non-existent unemployment benefit, job search subsidies youth often end up with the job that fails to match their skills and aspiration. Therefore, the initiatives must be directed towards some target group specially the economically vulnerable one.

Finally Chapter 5 offers a brief conclusion based on the findings of the earlier chapters. This chapter also points to some policy prescription in this regard.

Chapter 2

Like Father, Like Son: Intergenerational Occupational Persistence among Youth in India

2.1 Introduction

India is currently experiencing demographic transition in favour of its working age population in general and youth³ in particular. The change in the age structure has the potential to add up to its GDP growth rate almost by 2% (Report on Youth Employment and Unemployment Scenario, 2013). This phenomenon is popularly known as demographic dividend⁴. Realization of this potential in developing countries is largely related to enabling youth to escape ‘working poverty’ and facilitation of their successful transition from ‘school to the labour market’ (Global Employment Trends for Youth – Geneva: ILO 2013). However, as early entrant youth face disproportionate difficulties in the job market in the form of lower levels of human capital, skill mismatch, experience trap, dearth of information and financial resources. In absence of well-functioning capital market and transmission of unequal socioeconomic status across the generations, young persons may have limited options and be forced to take up unproductive, low paid, insecure work. Inability to prove oneself productive member of the society can overshadow their career prospect in the longer run. They continue to be plagued by working poverty streaming from their irregularity of work and lack of formal employment and social protection (Global Employment Trends for Youth – Geneva: ILO 2015). India is not an exception in this context, with most of its working youth population, engaged either in own-account work, un-paid family work, casual paid employment or temporary (non-casual) work (Report on Youth Employment Unemployment Scenario, 2013). It is hard to feel positive about one’s future prospect when one becomes blocked at the entry level. Therefore, it is needless to say that an in-depth understanding of prevailing youth labour market situation is of crucial importance to find out whether the labour market provides equal opportunities to all its young entrants. Researchers often favour equality of opportunity as an underlying goal of the society – the idea is that those who work hard should be able to succeed regardless of his/her family background (Black and Devereux, 2010). Any attempt directed towards skill formation

³A period of transition from childhood to the adulthood, bringing with it the prospect of social and economic freedom. Youth is defined by United Nations as persons between the ages 15-24 (2013 International Labour Office – Geneva: ILO 2013).

⁴The concept of ‘demographic dividend’ was conceived following the United Nations International conference on Population and Development in Cairo in 1944. Demographic contribution to accelerating economic growth became known as ‘demographic dividend.’

and creation of employable opportunity will be effective only if the labour market provides equal space to all its eligible performers (Bowels and Gintis, 2002).

Under this backdrop we analyze one of the dimensions of inequality in the youth labour market, namely intergenerational persistence in the industry. There exists extensive literature that maintain that persistence is a strong channel of transmission and perpetuation of inequality from one to other generation. Our objective in this chapter is to explore the underlying causes and determinants of intergenerational persistence in the industry among youth. By persistence here we mean youth are in the industries same as their fathers. Using data from the latest three rounds of the employment-unemployment survey of NSSO we find that such persistence is very high (above 60%) among youth in recent years. We use a probit model for estimating the effect of own, parental education, asset ownership and father's network on such probability. We find considerable variation in the effect of these factors in urban and rural areas. For higher (Higher Secondary, College and University) levels of education youth are always less likely to work in the industry same as their father. There exists positive effect of household productive asset ownership on persistence. However, such positive effect in case of rural area diminishes with increase in the size of land ownership. We also find evidence of significant influence of father's network on such incidence. Besides we have also analysed the impact of educational mobility and observed such mobility to exert negative impact on the probability that the son will work in the same industry as their father. There is an indication that difference across castes and religions has been declining in recent years. Rest of the chapter is organized as follows. Section 2.2 provides a brief literature review and conceptual framework for the empirical analysis of the chapter. Section 2.3 and 2.4 present the data source, descriptive statistics and the estimation results respectively. The last section concludes the chapter.

2.2 Literature review

During the last two decades along with globalization and technological advancement, Indian labour market has witnessed significant economic, social and demographic changes. One of the critical aspects of this transformation is advent of a large number of young labour market participants⁵. This group of young participants often encounter number of challenges associated with the evolving economic and social structure. They largely work either as own-account worker, unpaid-family worker, casual paid employees or temporary (non-casual)

⁵ Almost quarter of its youth population in the labour market (Report on Youth Employment and Unemployment Scenario, 2013).

labourer. These jobs are often less satisfactory, in the sense that they are low skilled, less paid and less secured (Report on Youth Employment and Unemployment Scenario, 2013). These young workers are more likely to concentrate in the industries where their father works. Hence there is a high degree of intergenerational persistence of industry (Hnatkovska, Lahiri and Paul, 2012; Nandi, 2016).

Researchers differ markedly regarding the causes of this observed disparity in the labour market outcomes among individuals. Bowles and Gintis (2002) in their study on ‘Inheritance of Inequality’ suggest that, there are two main strands on the issue of labour market inequality at any point in time. One in which different individuals face equal opportunity in labour market and the outcome differences are accrued to one’s skill and ability. The other strand emphasizes on the role of inequality of opportunities, primarily caused by intergenerational transmission of socio-economic status. Transmission of success is fair so long as differences in achieved outcomes can be explained by skills and ability. However, this is often not the case for countries with an immensely un-equal socio-economic condition of its population. In presence of strong intergenerational linkages, the labour market may not appear level playing ground to all its participants and gains from growth naturally fails to trickle down properly to all of its population. There is a growing concern that India’s economic growth has been accompanied by rising inequality. Therefore, intergenerational mobility in the terrain of occupation and skill among these early entrants of the labour market in the developing countries is one of the requisites to make economic growth an inclusive process. Focusing on the existing situation, our objective in this chapter is to seek what determines young individual’s choice of industry. Does education play the crucial role in such a choice? Or, is it that the family background matters at the time of labour market entry? Answer to these questions is important to understand whether the labour market provides equal opportunity to all its participants. If family background is more important than education for labour market choices, inequality in employment outcomes can be traced back to the transmission of advantages or disadvantages from one generation to other. Intergenerational transmission of success or failure thus can negatively affect the possibility of the realization of demographic dividend.

We can broadly divide the determinants of the youth labour market outcome in three categories (Freeman and Wise, 1982). These are ‘individual characteristics’ like capital (human, physical and social) endowment, family background. ‘Strength of the economy as a whole’, often represented by the growth rate of personal income, average income, industry mix and poverty

mix in the area of residence. Lastly, the ‘demographic conditions’ like proportion of youth in the population. Under the backdrop of favorable demographic transition toward youth population in particular (Dev and Venkatnarayana, 2012), our study focuses on individual characteristics of the youth in determining their industry of employment. At the beginning of their economic life, youth incorporate all the information available to them regarding the level of capital (physical, human and social) they are endowed with and the parental background they inherit (Manski, 1993; Streufert, 2000). Genetic endowment (Emran and Shilpi, 2011) is the fundamental source of intergenerational linkage. Apart from this parents can directly influence the levels of initial capital stock through investing in offspring’s education and transferring physical and financial capital. Offspring’s human capital is likely to be influenced further by ‘role model effect’ as children often try to imitate parents’ educational and occupational achievements. Children can gain valuable skill and experience by observing their parents at work as well. This is more likely through informal apprenticeship at parents’ workplace, especially when the work place is in close proximity to home (Lentz and Laband, 1983). Successful parents often transfer reputation and a rich social network (as social capital) to their children. In other words father’s network can exert varying effects on the hiring process, this in turn may influence son’s choice of employment (Coark and Heisz, 1999; Nandi, 2016).

All these background factors or intergenerational linkages have both direct and indirect influence on youth’s labour market outcome particularly in the societies with persistent wealth inequality and credit market imperfection (Ghatak and Jiang, 2002). Early studies often conceptualize intergenerational linkages in terms of intergenerational earning elasticity (Blau and Duncan, 1967; Becker et al 1986). Bowles and Gintis (2002) find such mechanism to be often inadequate, since lots of other factors like genetic and cultural transmission of cognitive skills, personality traits, belonging to superior race, superior health and education may govern such transmission. Further, they also find that the estimation of earning elasticity often suffers from two types of measurement error: mis-reporting of income and incorporation of transitory component in current income (often uncorrelated with permanent income). Even though, study on the intergenerational linkages in the occupation is less likely to suffer from these problems associated with income, such issues have received less attention in the context of labour market outcome of youth. Empirical studies in exploring intergenerational linkages in the context of developed countries maintain that there is both significant direct and indirect effect of parental education, occupation and income on young children’s educational attainment and their choice of employment (Bowles and Gintis 2002). Lambert et al. (2011) find significant importance of

inheritance (productive household asset) and parental traits on intergenerational occupational mobility in Senegal. Using data from Nepal and Vietnam, Emran and Shilpi (2011) have concluded that, intergenerational occupational correlation between father and son to be significantly driven by unobserved genetic endowment beyond all the widely discussed channels of education and wealth. Coark and Heisz (1998) find strong effect of father's network on the hiring process of their off springs. They used the number of firms with which the father has worked as an indicator of network. Although, there exists few studies (Majumder, 2010; Hnatkovska et al,2012) exploring intergenerational linkages in occupational and educational outcomes with a special focus on social groups based on caste in India, they do not shed much light on the factors responsible behind such linkages.

Nandi (2016), demonstrated the importance of parental education, family wealth and father's network in determining the degree of intergenerational persistence of industry in India. The study concluded that mobility in employment is more likely among the well-off families and less at the top and bottom end of the occupational ladder. In developing countries that often lack investable resources, understanding intergenerational linkages in the labour market appears fundamental to the formulation of effective public policies that make the society level playing field for its younger members. Despite of the fact that, there is a renewed interest in literature in exploring observed differences in the economic outcome from an intergenerational perspective, such issues in the context of developing countries is less interrogated and almost nonexistent in the context of youth. In order to address the issues discussed above, this chapter looks into the incidence of intergenerational persistence of industry among working youth, aged between 15-24 years in India. The analysis covers three consecutive employment unemployment surveys (conducted by the National Sample Survey organization) in order to study the change in the determinants of intergenerational persistence. It attempts to find out whether education or family background is the prime force behind choice of industry.

2.3 Data source and descriptive

We use data from the Employment Unemployment Surveys in India, carried out by the National Sample Survey Organization (NSSO) to analyse the issue of intergenerational persistence of occupation. NSSO is the primary source of data on various labour market indicators from a nationally representative sample of households. The survey collects data since 1972-73 and provides vast set of detailed socio-economic and demographic information on each individual of the households selected in the sample across all the states of India. Data used in this chapter

come from 2004-05 (61st round), 2009-10 (66th round) and 2011-12 (68th round) – the latest three rounds on employment and unemployment surveys in India. For employed individuals, the industries are recorded in the three rounds using five digit National Industrial Classification (NIC) codes of 1998, 2004 and 2008, respectively.

2.3.1 Occupational persistence across caste and religion

Before presenting a detailed analysis of the incidence, we present a brief description of how the samples are selected for the analysis. We select the employed male individuals provided their fathers are alive and information on their employment is also available. We also restrict the sample to sons who are 15-24 years old. Hence, we have employment information on a subset of the working age group. Our analysis focuses on the industry of employed male youth (15-24 years) and their fathers (five-digit NIC).

Table 2.1 reports the intergenerational occupational persistence of youth across caste⁶ and religious groups. It also provides the persistence for different age groups, educational levels and place of residence (urban/rural) for all the social and religious categories. Intergenerational persistence is defined as the event in which a father-son pair is observed to be employed in same industry (identified by the five digit NIC), while intergenerational mobility is when they are employed in different industries. The numbers in the first column of the table present the intergenerational persistence for the full sample in a survey round. The first number, 62, in the table indicates that during 2004-05, 62 per cent of the 15-24 year old employed sons are working in the same industry as their fathers. It is important to note that we use sample weights in our analysis, so the numbers represent population figures. We find that the persistence has increased to 65 per cent during 2009-10 and again in 2011-12 the percentage has fallen down to 62 per cent. Looking at persistence among different age groups, we find that the percentage decreased with age. In other words the percentage of sons employed in the same industry as their fathers is considerably lower among the 20-24 years old. This pattern prevails for all the different social and religious groups except for the Muslims. This interesting pattern suggests that for most of individual 20-24 years may be a period to explore new employment options.

We also find that higher levels of education are consistently associated with lower likelihood that the son and the father will be in the same industry. Comparing the persistence for different

⁶ Broadly there are 4 castes in India. One unreserved or General Caste. Reserved castes are of three types- Schedule Caste (SC), Schedule Tribe (ST) and Other Backward Class (OBC) respectively.

levels of education, we observe that with a movement from no education to college or university level education (more than HS) persistence goes down by nearly 30 percentage points during 2004-05, 2009-10 and 2011-12. Consecutive levels of higher education is associated with decline in the persistence, however, there is variation in the magnitude of decrease across the time periods.

The fall in persistence with higher education has two noticeable phases, first with a movement from no education to primary and the other with a movement from HS to more than HS. We observe sons with at least primary education is considerably less likely to be in their father's industry compared to the sons without any formal education almost by 6 percentage points all the years under consideration. A second leap is observable with a movement from 'HS to 'More than HS', reducing the persistence level nearly by 20 percentage points during the three time points.

For all the social (except the STs) and religious groups such pattern is observable. Though the difference in the likelihood to be in the same industry without any formal education and primary education is not very consistent and impressive but with a movement from HS to 'More than HS' we can observe nearly 30 percentage points fall in the persistence. The fall in persistence with a movement from HS to more than HS is higher among STs during 2004-05, followed by SC, GEN and OBC. This pattern almost remain unaltered for the rest two years.

We also find that intergenerational persistence is the highest among the ST and least among GEN. This holds well for the full sample and for all the age groups with a slight variation for the older age group.

Persistence is noticeably higher among the rural individuals. It has increased in 2009-10 in both rural and urban areas. However, it seems that the persistence in both the areas has come down during 2011-12.

Table 2.1- Persistence of industry across generations (percentage) (Five digit)

	Full Sample	GEN	OBC	SC	ST	Hindu	Muslim	Christian	Others
2004-05									
All	62	58	63	61	72	64	55	60	64
Younger (15-19)	64	60	64	64	75	66	54	67	67
Older (20-24)	61	58	62	59	70	62	56	56	62
Education									
No Formal Education	69	65	69	70	72	70	64	77	74
Primary	63	56	67	60	76	66	51	80	56
Secondary	60	59	60	55	71	62	49	50	62
Higher Secondary (HS)	61	57	44	48	70	50	56	16	69
More than HS	39	40	39	37	32	39	39	21	52
Rural	68	65	68	66	76	68	60	64	71
Urban	41	41	44	35	33	40	45	32	38
2009-10									
All	65	62	66	63	78	66	60	52	70
Younger (15-19)	69	65	68	67	83	71	59	63	69
Older (20-24)	63	60	64	59	73	63	61	48	72
Education									
No Formal Education	72	57	73	73	87	75	59	46	85
Primary	66	67	63	64	80	67	60	67	75
Secondary	64	64	66	59	73	65	61	58	63
Higher Secondary (HS)	63	68	62	48	79	63	61	62	73
More than HS	43	43	49	28	23	43	60	12	47
Rural	70	68	70	68	80	72	63	63	76
Urban	46	46	49	39	36	44	54	29	50
2011-12									
All	62	56	62	63	76	64	57	64	58
Younger (15-19)	65	56	66	68	80	70	56	68	50
Older (20-24)	61	56	60	61	75	62	57	63	60
Education									
No Formal Education	69	57	68	77	76	72	61	95	71
Primary	63	52	64	62	82	65	55	88	61
Secondary	61	60	61	57	75	63	55	53	51
Higher Secondary (HS)	61	63	55	62	74	61	62	40	57
More than HS	41	42	44	29	43	43	29	25	47
Rural	68	62	67	67	80	69	59	76	61
Urban	44	44	45	43	40	40	53	23	41

In rural and urban areas, the STs and OBCs have the highest persistence respectively. Individuals from GEN caste and SC have the lowest persistence in the rural and urban areas, respectively. Furthermore, it appears that the persistence among ST has increased in rural areas by 4 percentage points from 72 per cent to 76 per cent during 2004-05 to 2011-12. Looking at the percentage for different religions, we find persistence is lower among ‘Muslims’ and it

continue to be so. In rural (urban) area, Christians and Hindus have higher (lower) persistence than Muslims in all years.

2.3.2 Transition matrix

In this section, we present analysis of transition across industries from one generation to next. Based on the percentage concentration of fathers and sons in twenty one industries, we have grouped them into six broad industry categories for the transition matrix. The six categories are - Agriculture & fishing (Agri), Manufacturing (Manu), Construction (Const), Wholesale & retail trade (W& R), Transport (Trans) and Other (Other) respectively. Upper and lower panels of the table 2.2 present the distribution of sons' employment in different industries (Son's industry) given their father's industry of employment (father's industry) for rural and urban area respectively. The diagonal elements of the matrix give the measure of persistence and the off diagonal elements show mobility across generations.

In the rural area, persistence is highest in the agriculture & fishing sector; the persistence in this sector has remained almost unaltered at 78 per cent from 2004-05 to 2011-2012. Among the rest of the industries worth mentioning are, manufacturing, construction, wholesale & retail trade where the persistence is higher than 50 percent. Persistence is least in the transport industry. During 2009-10, persistence in most of the industries increased from their 2004-05 levels. In 2011-12 persistence has spectacularly decreased in manufacturing, wholesale & retail trade and transport from 2009-10 levels. It increased considerably in construction industry.

In the urban area, persistence is highest in the manufacturing with almost 68 percent of the sons are likely to work provided their fathers are in the same. This is followed by wholesale & retail industry where the percentage is 64. The incidence is least in case of transport industry, like in case of the rural area. In 2009-10 persistence has increased in most of the industries except manufacturing. In 2011-12 however, we observed persistence to decline in most of the industries except manufacturing.

Table 2.2- Intergenerational industry transition matrix (2 digits)

NSS rounds	2004-05						2009-10						2011-12					
Father's industry	Son's industry																	
	Rural																	
	Agri	Manu	Const	W & R	Trans	Other	Agri	Manu	Const	W & R	Trans	Other	Agri	Manu	Const	W & R	Trans	Other
Agri	78	4	5	5	3	5	79	4	7	3	3	3	78	4	9	4	2	3
Manu	15	65	6	6	2	5	9	74	9	3	2	3	12	63	11	6	5	3
Const	16	8	62	5	5	5	14	8	68	3	3	4	10	5	75	4	3	4
W & R	18	10	6	53	5	8	15	8	11	58	4	5	18	14	13	46	3	5
Trans	30	10	8	9	33	8	14	10	23	3	43	8	18	10	19	14	31	8
Other	28	8	5	10	4	46	16	11	12	9	5	46	18	4	8	7	4	59
	Urban																	
	Agri	Manu	Const	W & R	Trans	Other	Agri	Manu	Const	W & R	Trans	Other	Agri	Manu	Const	W & R	Trans	Other
Agri	44	14	13	17	8	5	56	7	12	14	4	8	55	12	8	9	7	9
Manu	2	68	6	11	4	9	0	67	4	10	2	16	0	73	6	7	3	11
Const	1	21	50	12	3	12	0	13	61	10	8	9	1	18	58	8	4	10
W & R	2	17	6	64	4	8	1	12	7	68	4	8	0	13	5	61	4	16
Trans	2	22	14	22	25	15	2	18	14	19	30	17	2	18	11	20	26	22
Other	2	21	8	16	9	45	1	16	10	18	4	52	1	15	7	16	6	53
"Other"= All other industries																		

To sum up, we find that agriculture and manufacture in rural area and manufacturing and wholesale & retail trade in the urban area are the industries identified with highest concentration of the father and son pair across the generations. This situation persisted for the three time points. Besides construction sector has witnessed a considerable increase in such persistence in both the areas.

2.3.3 Intergenerational persistence of employment in formal and informal sectors

We cannot discard the possibility that intergenerational persistence may over emphasize the inequality of opportunity in the context of the occupational outcome across the generations. Stated differently there is concern that the father and son pair exhibiting persistence in terms of the industry may show mobility in terms of sectors (formal and informal). That is the father son pair identified to work in the different sectors of the same industry- a situation more likely to be associated with intergenerational mobility rather than persistence in occupational

outcome. In this context addressing the issue of occupational persistence from industry perspective only misreports the actual immobility in the labour market outcome among the youth. Hence study of the intergenerational persistence across formal and informal sector along with the industries appears as essential requisite to unveil the actual scenario of inequality in the labour market opportunity.

This is of concern because instead of persistence in the industry, mobility from informal to formal sector across the generations is implicit of intergenerational mobility at the employment level. We also cannot disregard the fact that the industrial classification at much disaggregated (5 digit) level is also very much likely to include the formal informal disaggregation. However, in order to address the doubt stated above we explicitly examined intergenerational persistence across formal and informal sectors among the father son pair along with their persistence at the industry level. Following the NSS reports we have chosen two categories - ‘number of employees (Formal_1)’, ‘existence of electricity in the work premise (Formal_2)’ for classifying the sector of employment as formal and informal sector. A third category has also been incorporated - ‘existence of employees benefit’ (Formal_3) in order classify the employment as formal in nature.

Here we observe the persistence across the industries (at five digit level), sectors and nature of employment respectively for father’s employment in the following six industries- agriculture, manufacturing, construction, wholesale & retail trade, transport and group of other industries. This has been done for the three NSS rounds under consideration and for rural and urban areas separately.

The first column of table 2.3 reports percentage of the sons working in the industry same as his father. The second column shows the percentage of sons being employed in the same sector as their father across father’s industry of employment. Looking at the figures we observe that persistence across the industries is comparatively less than persistence across the sectors of the same industry. That is if the father is employed in agriculture then nearly 75 % of the sons are likely to be in the same industry. 81 percent of the son belongs to the same sector of this industry where their fathers also belong. That is in the particular industry the son is 81 % likely to belong to the same sector as their father does. Following the different classification of the sectors and employment we observe that the intergenerational sectoral persistence of employment is quite larger than the persistence observed in the industries.

Table 2.3: Intergenerational persistence of occupation in formal and informal sectors

	Son's Industry and sector of employment											
	Rural											
NSS rounds	2004-05				2009-10				2011-12			
Father's industry	industry	Formal_1	Formal_2	Formal_3	industry	Formal_1	Formal_2	Formal_3	industry	Formal_1	Formal_2	Formal_3
Agri	75	81	89	99	77	97	88	98	74	99	76	97
Manu	56	79	87	89	63	89	94	94	55	85	85	88
Const	60	77	91	97	66	94	88	98	71	96	93	96
W & R	40	77	90	99	50	96	93	91	42	92	87	99
Trans	27	66	90	88	42	92	95	95	24	89	77	90
Other	37	66	86	70	37	82	85	75	79	86	89	60
	Urban											
	2004-05				2009-10				2011-12			
Father's industry	industry	Formal_1	Formal_2	Formal_3	industry	Formal_1	Formal_2	Formal_3	industry	Formal_1	Formal_2	Formal_3
Agri	40	59	87	86	55	85	88	77	52	97	96	93
Manu	53	82	79	83	55	82	85	89	58	83	84	81
Const	47	81	79	97	57	91	88	96	55	82	86	99
W & R	49	88	90	98	54	93	89	93	45	91	77	98
Trans	18	71	78	86	23	72	74	86	19	86	73	90
Other	26	63	75	50	27	73	76	50	28	74	79	78

Observing the last column we conclude that probability of son being employed as informal worker if the father is informal worker is also very high. This means the sons are more likely to be in the same sector of employment compared to same industry. Therefore, the probability of persistence of industry has not overshadowed the inequality of opportunity in the labour market.

2.4. Estimation results

Using a probit model we examine the effect of educational attainment and family background on the probability that young son and his father are employed in the same industry. Our dependent variable takes the value one if the son and father work in the same industry, otherwise zero. Within the category of individual determinants, we include age, education and other background variables like caste and religion. We employ three sets of specifications. In section 2.4.1 we have included the first two sets. The first specification incorporates the variables for ownership of productive asset. In the second, we include father's occupation (proxy for father's network). These two sets of variables are included in two different specifications as they are likely to be highly correlated. Section 2.4.2 includes the last specification examining the impact of educational mobility on the incidence of occupational persistence. In order to control for district specific macro factors that may affect the

employment conditions in different industries, we incorporate district fixed effects. Table 2.4, 2.5, 2.6 and 2.7 reports marginal effects and standard errors from probit estimation for urban and rural area for three rounds of the surveys respectively.

2.4.1 Impact of own education, background factors and father's network on persistence

The estimation results show that levels of education have a different and varying role to play in both urban and rural area during the three years under consideration. While in the rural area almost all the successive levels of education is associated with significant fall in the probability of persistence, in urban area such impact of education is visible only above higher secondary level. The marginal effects of education are not only negative but also becomes stronger at higher levels in the rural area. During 2009-10, all the levels of education loses significance in rural area except educational level beyond HS. However, in the urban area higher secondary education becomes significant in lowering the probability of persistence in 2009-10. This pattern remains unchanged in 2011-12 with a slight fall in the marginal effect of HS and increase in the marginal effect of college level education in lowering the incidence of persistence. Alternatively stated, education beyond a threshold level- college level remain significant in lowering persistence. However the magnitude of the marginal effect suggest that higher education's strength in explaining such occupational outcome of youth has decreased in rural area overtime.

We observe that intergenerational persistence is lower among all the castes compared to GEN. Estimation results show that only Muslims are significantly less likely to work in their fathers industry in rural area.

We incorporate parental education in our model. They also serve as a proxy for permanent income of a household and innate ability. Although, there is considerable variation across the areas of residence and periods of survey, there is an indication that father's education is negatively associated with the probability of sons being employed in father's industry in the rural area. In recent years such negative association remained significant only if the son belonged to the father with college level education. Adding to this we can also observe such negative association to become significant in urban area at father's secondary level of education. Surprisingly, mother's higher secondary education is positively -associated with persistence in urban area. However, this has happened only during the initial years.

Ownership of productive asset can influence the household's decision to invest in young sons' employable educational activities. This in turn may affect the incentive to search employment opportunities elsewhere mainly in the following two ways. On one hand, the person will be less likely to work outside if he is forced to maintain subsistence family enterprise or, if there are fewer options in the labour market and lower expected gain from employment outside. On the other hand, depending on the size of the household asset and return from it, his incentive to find better employment opportunity outside may increase. In this case, size of the asset may have a favourable effect by easing credit constraint and provide incentive to find a job elsewhere.

Variables for the household productive assets are represented by household enterprise (proxied by father's self-employment) and land ownership (in hectare) in urban and rural areas, respectively. The estimation result shows that father's self-employment increases the probability that the father and son will be in the same industry.

In order to capture the differential impacts of land ownership on intergenerational persistence across varying size of land holding, we also introduce a quadratic term in the estimation. The quadratic term is negative and significant. The result suggests that the probability of persistence increases with land ownership at a decreasing rate. At the lower levels of land ownership there is an incentive for the young sons of the household to be in their father's industry of employment. Nevertheless, after a threshold level of land holding such incentive falls. This is indicative of the fact that large land ownership has a negative impact on the incidence of persistence. This nonlinear effect of asset ownership has a crucial importance in the literature (Becker and Tomes, 1986). The conjecture is that poor households (in our case it is in terms of land ownership) face a weightier borrowing constraint than their well off (households identified with large land ownership) counterparts. Our result indicates that large land holding of household may not encounter financial constraint at the time of human capital investment of their younger generation. This in turn enhances the likeliness of mobility in the occupation across the generations. Comparing the three time points in concern, we see that the positive marginal strength increases during the initial periods (2004-05 and 2009-10), followed by a decrease in the last periods (2009-10 and 2011-12).

In our following set of estimations in Table 2.5, we try to examine the impact of father's network through his occupation on the incidence of persistence of industry across generations. We argue that father's occupational status is an important factor in influencing son's employment. A number of empirical studies lend support to the conjecture that a father's

occupational hierarchy exerts network influence in determination of son's labour market outcome (Coark and Heisz 1999; Nandi, 2016). According to Coark and Heisz (1999), there exists strong relationship between father's informational network and hiring process of his offspring. In this context they have used information on the number of firms the father has worked with. Nandi (2016) using data on father's occupation, found that at the top and bottom end of occupational ladder, father's influence on the hiring process affects son's industry of employment. NSS data does not provide any retrospective information on father's previous employment and employers, hence, in order to find out such network influences on the incidence of persistence we consider father's occupation.

We incorporate description of occupational division as per NCO (National Classification of Occupation) -1968 and -2004 for NSS 61st (2004-05) and 66th (2009-10), 68th (2011-12) round respectively in the estimation. The occupations are categorised based on skill level, as high, medium and low-skilled⁷ occupations; two dummy variables are used for the first two categories.

Estimation results from urban sample show that a father being in the high skilled occupations is associated with higher probability of persistence. This may reflect network influence of a father in hiring process of the firm where he works, or in other firms of the same industry. Comparing the marginal effects we find that the strength of such network has increased during 2009-10. However the magnitude of such effect has decreased during 2011-12. When the father works in a medium-skilled occupation, such persistence is lower in this area. This may imply that these low skilled categories include the occupations which provide limited opportunity for network influence. For rural area the pattern is just the reverse. Here skilled occupations are associated significantly with lower persistence compared to low skilled occupations. Our result shows that top and bottom ends of occupation are significantly associated with the incidence of persistence in urban and rural areas, respectively.

⁷ For collection of information on occupation of workers three digit NCO code was used during NSS rounds. NCO 2004 was used in NSS 68th (2011-12) and 66th (2009-10) rounds and in the quinquennial rounds prior to that 3-digit code of NCO 1968 was used. Concordance between 3-digit code of NCO-2004 and NCO-1968 is not possible (NSS, 2009-10). There are seven and nine major occupational categories in NCO-1968 and NCO-2004 respectively. In our study for 2004-2005 (NCO-1968) we consider 'low-skilled' category as 'Farmers, Fishermen, Loggers, Hunters and Related workers (code-6)', 'Operator and Labourers (code-7-8-9)'. The category comprises of 'Skilled Agricultural and Fishery (code-6)', 'Craft and related (code-7)', 'Craft and Related Workers (code-7)', 'Plant and Machine Operators (code-8)' and 'Unskilled Workers (code-9) for 2009-10 and 2011-12 (NCO-2004). The 'medium-skilled' is comprised of 'Clerical and Related (code-3)', 'Sales (code-4)' and 'Service (code-5)' Workers in case of NCO-1968. We consider 'Clerks (code-4)' and 'Service workers and Shop and Market Workers (code-5) under this category for NCO-2004. We incorporate 'Professional, Technical and Related Workers (code-0-1)', 'Administrative and Executive and Managerial Workers (code-2)' as high-skilled category for NCO-1968. For NCO-2004 we consider 'Legislator, Senior Officials and Managers (code-1)', 'Professionals (code-2)', 'Technicians and Associate Professionals (code-3) as 'high-skilled' workers.

Table 2.4: Probit estimation results for household asset

Years	2004-05				2009-10				2011-12			
Area of residence	Urban		Rural		Urban		Rural		Urban		Rural	
Variables	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error
Age	0.008	0.005	-0.003	0.002	0.003	0.006	-0.003	0.004	0.005 ***	0.006	0.00 ***	0.004
Own Education												
Primary education	0.046	0.044	-0.012	0.017	-0.038	0.050	0.025	0.029	-0.018	0.053	-0.001	0.032
Secondary education	0.030	0.041	-0.058 ***	0.015	-0.069	0.044	-0.011	0.026	0.013	0.046	-0.008	0.029
Higher secondary (HS)	-0.052	0.058	-0.153 ***	0.030	-0.121 **	0.061	0.002	0.041	-0.044	0.064	0.018	0.043
More than HS	-0.125 **	0.068	-0.231 ***	0.038	-0.119 *	0.071	-0.137 ***	0.059	-0.251 ***	0.069	-0.061 ***	0.052
Caste												
ST	-0.063	0.080	0.033	0.028	-0.128	0.086	0.039	0.046	-0.080	0.082	0.146 ***	0.045
SC	-0.110 **	0.044	-0.017	0.019	-0.056	0.050	-0.049	0.030	-0.115 **	0.050	0.023	0.032
OBC	0.013	0.034	-0.017	0.017	-0.008	0.039	-0.035	0.026	-0.093 **	0.042	-0.019	0.029
Religion												
Muslim	-0.020	0.038	-0.082 ***	0.021	0.045	0.041	-0.086 ***	0.030	0.032	0.040	-0.088 ***	0.033
Christian	-0.046	0.132	-0.078	0.056	-0.084	0.124	-0.087	0.079	-0.135	0.168	0.101	0.077
Other religion	-0.014	0.065	0.109 **	0.042	0.093	0.071	0.241 ***	0.069	0.096	0.098	-0.159 **	0.083
Father's education												
Primary education	0.016	0.040	-0.009	0.017	0.040	0.048	0.006	0.026	-0.031	0.046	-0.012	0.030
Secondary education	-0.043	0.037	-0.049 ***	0.018	0.030	0.041	-0.040	0.026	-0.093 **	0.043	0.016	0.028
Higher secondary (HS)	-0.057	0.075	-0.108 **	0.044	0.013	0.073	-0.143 ***	0.065	-0.036	0.085	-0.108	0.069
More than HS	-0.026	0.078	-0.207 ***	0.050	-0.011	0.105	-0.229 ***	0.079	-0.069	0.083	-0.279 ***	0.089
Mother's education												
Primary education	-0.031	0.039	-0.035	0.022	-0.039	0.047	-0.048	0.032	-0.050	0.048	-0.090 **	0.038
Secondary education	-0.016	0.042	-0.042	0.029	0.020	0.054	-0.027	0.038	0.018	0.055	-0.044	0.041
Higher secondary (HS)	0.202 **	0.096	-0.197	0.131	-0.200	0.131	0.193	0.122	0.160	0.117	0.172	0.131
More than HS	0.148	0.104	0.182	0.155	-0.151	0.128	-0.650 ***	0.186	0.208 ***	0.117	-0.255	0.178
Household ownerships												
Family Enterprise	0.259 ***	0.027			0.208 *	0.031			0.138 ***	0.032		
Land Owned			0.053 ***	0.006			0.059 ***	0.010			0.071 ***	0.011
Land Owned ^{1/2}			-0.002 ***	0.000			-0.002 ***	0.001			-0.002 ***	0.001
Log pseudo likelihood	-3507336		-1.42E+07		-3221976.5		-10980117		-3139679		-10429497	
Pseudo R ²	0.1911		0.1607		0.1981		0.2236		0.238		0.2385	
No. of observation	4651		13328		3347		7916		2941		6881	
Note: All specifications include district fixed effects.												
*, **, *** stand for 10%, 5%, and 1% significance respectively.												

Table 2.5: Probit estimation results for father's network

Years	2004-05				2009-10				2011-12			
Area of residence	Urban		Rural		Urban		Rural		Urban		Rural	
Variables	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error
Age	0.010 *	0.005	-0.001	0.002	0.000	0.006	-0.001	0.004	0.005	0.006	-0.001	0.004
Own Education												
Primary education	0.045	0.041	-0.006	0.016	-0.041	0.050	0.011	0.029	-0.018	0.053	-0.001	0.031
Secondary education	0.033	0.039	-0.039 ***	0.015	-0.067	0.044	-0.001	0.027	0.011	0.046	0.003	0.028
Higher secondary (HS)	-0.070	0.059	-0.117 ***	0.030	-0.128 **	0.063	0.014	0.041	-0.047	0.066	0.047	0.042
More than HS	-0.133 **	0.068	-0.189 ***	0.038	-0.160 **	0.072	-0.108 *	0.059	-0.259 ***	0.070	0.013	0.051
Caste												
ST	-0.087	0.086	0.017	0.028	-0.126	0.091	0.023	0.046	-0.087	0.082	0.123 ***	0.045
SC	-0.127 ***	0.044	-0.050 ***	0.019	-0.068	0.049	-0.072 **	0.029	-0.120 **	0.050	-0.018	0.031
OBC	0.012	0.033	-0.024	0.017	0.002	0.039	-0.036	0.026	-0.089 **	0.042	-0.040	0.029
Religion												
Muslim	0.027	0.037	-0.074 ***	0.021	0.061	0.041	-0.084 **	0.030	0.043	0.040	-0.087 ***	0.033
Christian	-0.019	0.147	-0.091 *	0.053	-0.077	0.121	-0.099	0.079	-0.160	0.167	0.081	0.076
Other religion	0.009	0.070	0.101 **	0.044	0.083	0.073	0.236 ***	0.065	0.093	0.099	-0.137 *	0.079
Father's education												
Primary education	0.014	0.037	0.010	0.017	0.025	0.046	0.028	0.026	-0.028	0.046	0.011	0.030
Secondary education	-0.047	0.036	-0.025	0.018	0.029	0.042	-0.010	0.026	-0.095 **	0.044	0.035	0.028
Higher secondary (HS)	-0.118	0.083	-0.045	0.044	-0.024	0.074	-0.116 *	0.068	-0.055	0.086	-0.106	0.071
More than HS	-0.112	0.077	-0.091 *	0.053	-0.113	0.101	-0.122	0.075	-0.110	0.086	-0.195 **	0.085
Mother's education												
Primary education	-0.048	0.040	-0.020	0.022	-0.027	0.046	-0.054 *	0.032	-0.054	0.049	-0.081 **	0.037
Secondary education	0.004	0.043	-0.012	0.029	0.035	0.054	-0.005	0.038	0.023	0.054	-0.011	0.040
Higher secondary (HS)	0.297 ***	0.108	-0.215	0.131	-0.177	0.126	0.250 **	0.115	0.163	0.124	0.213 *	0.122
More than HS	0.169	0.106	0.204	0.132	-0.145	0.130	-0.599 ***	0.181	0.212 *	0.117	-0.140	0.179
Father's occupation												
High_Skilled	0.219 ***	0.043	-0.256 ***	0.037	0.232	0.042	-0.225 **	0.039	0.102 ***	0.041	-0.158 ***	0.039
Medium_Skilled	-0.010	0.028	-0.291 ***	0.021	-0.110	0.036	-0.304 **	0.042	0.003	0.044	-0.283 ***	0.042
Log pseudo likelihood	-3592458.2		-14236762		-3211934.1		-11066775		-3160988		-10687904	
Pseudo R ²	0.1693		0.1756		0.1995		0.2362		0.2323		0.2389	
No. of observation	4641		13585		3337		8039		2938		7050	
Note: All specifications include district fixed effects.												
*, **, *** stand for 10%, 5%, and 1% significance respectively.												

2.4.2 Impact of educational mobility on persistence

In this analysis we further explore how the intergenerational educational mobility influences such persistence in both rural and urban areas respectively. At first we consider the degree of upward mobility in the levels of education among the son compared to the father. Here we hypothesise that eligibility of the son increases to opt employment in an industry different from father as the son acquires more education than the father. The concerned variable on the educational mobility of the son is measured by difference in the levels of education among the son and his father. There are five categories of education ‘no formal education’, ‘Primary’, ‘Secondary’, ‘Higher secondary (HS)’ and ‘More than HS’. The variable of our interest in this case is ‘Difference’ between the levels. It is also a categorical one, assuming the value zero when son has same or less education than his father. It will be Difference_1, Difference_2, Difference_3 and Difference_4 depending on the distance in the educational attainment of the son compared to his father. Table 2.6 reports the marginal effects of all the relevant variables. Here the marginal effect of the ‘Difference’ occurs with a negative sign implying that with more education than the father, son is less likely to be in the same industry. This holds good for both rural and urban area. Marginal effects are not only negative but also increasing in the extent of differences.

All the differences in the rural area are significant during the initial period (2004-05). In urban area if the educational attainment of the son is higher than the father by three levels then only the difference is significant in reducing persistence. In other words, if the son has HS or more education and that of the father has primary or less, the son is significantly less likely to be in father’s industry. Considering the following period (2009-10) of analysis we find that in both the areas educational mobility at larger levels remain significant in reducing the probability of persistence of industry among the son. In the next period however, we find that significance of the educational mobility to disappear altogether in the rural area. In the urban area only higher levels of mobility is associated with a significant negative impact on the incidence of persistence. One surprising observation in the context of rural area is that during 2011-12 higher educational mobility shows a positive association with the probability of persistence. This may be a clear indication the choice constrained in the form of lack of availability of appropriate job leaving the more educated son only with the father’s occupation. The situation in the urban area is implicit of the fact that undoubtedly educational mobility appears as one of the major determinants of occupational mobility but this becomes significant only after a

threshold level. However, this variable of educational mobility only measures the differences in level so it is quite possible that the 'Difference_1' imply difference between 'primary' and 'no education' or 'secondary' and 'higher secondary' of the son and father respectively. Therefore, in this case we are unable to separate the effect of educational mobility at higher and lower levels of education.

In our following specification, we choose to show the impact of upward educational mobility of son at different levels of father's education on intergenerational persistence in the industry. This is also a categorical variable assuming five values. It is meant to explore at which level of father's education, intergenerational educational mobility is significantly translated to occupational mobility. Our base category is the situations where the son is less or same educated as the father. It will be 'more at' one, two, three and four if the son has higher education than the father where the father has no, Primary, Secondary and HS education respectively. The estimation analyses for the urban and rural areas separately (Table 2.7) show that the marginal effect of son's upward educational mobility is negative and decreasing at father's education. Alternatively stated, for sons with less educated fathers, educational mobility is more effective in reducing the probability of intergenerational persistence. During the initial period (2004-05) educational mobility does not exert any significant impact at any level of father's education in the urban area. Such mobility appears significant in rural area only. In 2009-10 such impact remains significant only in case the father has secondary education that is with higher educated fathers the son's educational mobility no longer plays significant role in reduction of the probability of persistence in rural area. However, during 2011-12 significance of son's educational mobility is restored in urban area in the cases where the father is primary educated. From the estimation results we can conclude that though educational mobility significantly reduces intergenerational persistence of industry, it is not consistent in its impact with higher qualified fathers. More explicitly we can say that in recent times son's educational mobility remains significant in reducing persistence of industry among them at father's lower levels of education. In other educational mobility among the sons is effective in generating occupational mobility on in those families where the sons are able to acquire moderately higher levels of education compared to their fathers.

Table 2.6: Probit estimation results with differences in education

Years	2004-05				2009-10				2011-12			
Area of residence	Urban		Rural		Urban		Rural		Urban		Rural	
Variables	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error
Age	0.007	0.005	-0.004	0.002	0.003	0.006	-0.003	0.004	0.003	0.006	-0.003	0.004
Difference in the level of education												
Difference_1	0.030	0.034	-0.004	0.015	-0.017	0.039	0.001	0.024	-0.027	0.043	0.012	0.026
Difference_2	-0.039	0.041	-0.071 ***	0.0158	-0.040	0.041	-0.056 **	0.026	-0.066	0.043	-0.001	0.027
Difference_3	-0.265 ***	0.079	-0.194 ***	0.041	-0.212 **	0.092	-0.102 *	0.054	-0.127	0.089	-0.048	0.053
Difference_4	0.043	0.173	-0.276 ***	0.067	-0.093	0.131	-0.045	0.107	-0.224 *	0.130	0.025	0.075
Caste												
ST	-0.043	0.082	0.037	0.028	-0.130	0.087	0.034	0.045	-0.071	0.082	0.147 ***	0.045
SC	-0.097 **	0.044	-0.013	0.019	-0.058	0.050	-0.050 *	0.030	-0.097 **	0.050	0.025	0.032
OBC	0.022	0.034	-0.012	0.017	-0.007	0.039	-0.035	0.026	-0.089 **	0.042	-0.018	0.029
Religion												
Muslim	-0.016	0.038	-0.079 ***	0.021	0.044	0.041	-0.089 ***	0.030	0.042	0.040	-0.089 ***	0.033
Christian	-0.034	0.134	-0.075	0.056	-0.086	0.123	-0.086	0.079	-0.098	0.177	0.106	0.077
Other religion	-0.015	0.064	0.107	0.042	0.090	0.071	0.249 ***	0.069	0.083	0.093	-0.164 **	0.083
Father's education												
Primary education	0.005	0.040	-0.047	0.017	0.013	0.049	-0.017	0.027	-0.053	0.049	-0.016	0.031
Secondary education	-0.063	0.038	-0.112 ***	0.019	-0.024	0.046	-0.075 ***	0.028	-0.153 ***	0.048	0.013	0.031
Higher secondary (HS)	-0.103	0.075	-0.195 ***	0.044	-0.062	0.078	-0.189 ***	0.065	-0.140	0.087	-0.120 *	0.070
More than HS	-0.080	0.082	-0.311 ***	0.051	-0.099	0.112	-0.299 ***	0.077	-0.236 ***	0.089	-0.288 ***	0.090
Mother's education												
Primary education	-0.032	0.039	-0.041	0.022	-0.040	0.047	-0.054 *	0.032	-0.041	0.048	-0.094 **	0.038
Secondary education	-0.025	0.041	-0.057	0.029	0.011	0.053	-0.032	0.038	0.009	0.056	-0.045	0.041
Higher secondary (HS)	0.180 *	0.098	-0.195	0.131	-0.215 *	0.128	0.129	0.112	0.131	0.120	0.156	0.132
More than HS	0.091	0.100	0.124	0.148	-0.164	0.126	-0.666 ***	0.179	0.132	0.117	-0.272	0.173
Household ownerships												
Family Enterprise	0.262 ***	0.027			0.209 ***	0.031			0.137 ***	0.032		
Land Owned			0.053 ***	0.006			0.059 ***	0.010			0.071 ***	0.011
Land Owned^2			-0.002 ***	0.000			-0.002 ***	0.001			-0.002 ***	0.001
Log pseudo likelihood	-3505477		-14199254		-3220286		-1.1E+07		-3166369		0.2396	
Pseudo R^2	0.1915		0.1603		0.1985		0.2234		0.2311		-10414579	
No. of observation	4651		13328		3347		7916		2941		6881	
Note: All specifications include district fixed effects.												
*, **, *** stand for 10%, 5%, and 1% significance respectively.												

Table 2.7: Probit estimation results with more education of son at different levels of father's education

Years	2004-05				2009-10				2011-12			
Area of residence	Urban		Rural		Urban		Rural		Urban		Rural	
Variables	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error	M. Effect	S. Error
Age	0.005	0.005	-0.005	0.002	0.001	0.006	-0.003	0.004	0.001	0.006	-0.004	0.004
More education												
More_father_noeducation	0.007	0.042	-0.034 **	0.015	-0.021	0.046	-0.012	0.026	0.005	0.046	0.008	0.028
More_father_primary	0.020	0.063	-0.053 *	0.030	-0.097	0.086	-0.032	0.047	-0.159 *	0.089	-0.066	0.053
More_father_secondary	-0.057	0.054	-0.056	0.037	-0.020	0.060	-0.092 **	0.042	-0.056	0.063	0.074	0.047
More_father_HS	0.058	0.142	-0.196 *	0.109	-0.011	0.141	-0.007	0.157	-0.033	0.143	-0.215	0.145
Caste												
ST	-0.041	0.082	0.043	0.028	-0.123	0.086	0.035	0.046	-0.067	0.081	0.147 ***	0.045
SC	-0.100 **	0.044	-0.010	0.019	-0.048	0.050	-0.051 *	0.030	-0.099 **	0.049	0.025	0.032
OBC	0.018	0.034	-0.011	0.017	-0.006	0.039	-0.037	0.026	-0.093 **	0.042	-0.018	0.029
Religion												
Muslim	-0.016	0.038	-0.075 ***	0.021	0.052	0.040	-0.089 ***	0.030	0.049	0.040	-0.088 ***	0.033
Christian	-0.040	0.134	-0.075	0.056	-0.093	0.122	-0.084	0.077	-0.097	0.178	0.105	0.078
Other religion	-0.011	0.065	0.109 **	0.042	0.096	0.071	0.246 ***	0.070	0.072	0.093	-0.169 **	0.083
Father's education												
Primary education	0.011	0.063	-0.012	0.026	0.081	0.083	0.016	0.045	0.073	0.081	0.037	0.050
Secondary education	-0.031	0.045	-0.092 ***	0.021	-0.005	0.057	-0.039	0.033	-0.098 *	0.057	0.002	0.037
Higher secondary (HS)	-0.092	0.086	-0.154 ***	0.048	-0.035	0.091	-0.169	0.072	-0.089	0.105	-0.057	0.082
More than HS	-0.059	0.083	-0.291 ***	0.051	-0.075	0.113	-0.281 ***	0.077	-0.183 **	0.089	-0.278 ***	0.091
Mother's education												
Primary education	-0.033	0.039	-0.040 *	0.022	-0.041	0.047	-0.055 *	0.032	-0.043	0.048	-0.094 **	0.038
Secondary education	-0.027	0.042	-0.052 *	0.029	0.012	0.054	-0.033	0.038	0.009	0.057	-0.047	0.041
Higher secondary (HS)	0.169	0.099	-0.213	0.131	-0.214	0.133	0.136	0.123	0.128	0.119	0.151	0.134
More than HS	0.088	0.100	0.131	0.146	-0.161	0.127	-0.653 ***	0.179	0.141	0.118	-0.306 *	0.174
Family Enterprise	0.260 ***	0.027			0.207 ***	0.031			0.132 ***	0.032		
Land Owned			0.050 ***	0.006			0.058 ***	0.010			0.070 ***	0.011
Land Owned^2			-0.002 ***	0.000			-0.002 ***	0.001			-0.002 ***	0.001
Log pseudo likelihood	-3521634.9		-14264506		958.45		-10998599		-3165352.5		-10399374	
Pseudo R^2	0.1878		0.1564		0.197		0.2223		0.2313		0.2407	
No. of observation	4651		13328		3347		7916		2941		6881	
Note: All specifications include district fixed effects.												
*, **, *** stand for 10%, 5%, and 1% significance respectively.												

2.5. Conclusion

This chapter studies the intergenerational persistence of industry among the youth in India. Using data from the latest three rounds of nationally representative sample survey, we find that high intergenerational persistence among youth is evident in recent years. We focus on the relative strength of human capital and family background in explaining the probability of such incidence. We find that education has a significant impact in ensuring occupational mobility only at a higher level that too in urban area. That is only if the household invests enough in son's education to make him college graduate or equivalent we can expect the offspring to take the opportunity to get employment outside father's industry. Even though all the successive levels of education is associated with such mobility but it is significant only at and above a threshold level. This is indicative of indivisibility of education and investment in it. That is unless the household can ensure sufficient financial investment toward capital formation of the offspring, labour market may not appear a level playing field for its participants. On the other hand, it is evident from all our specifications that household ownership of productive assets time and again has appeared to play a decisive role in the occupational outcome across the generations. In case of rural area we observed probability of occupational persistence to increase initially with increase in the size of land holding. However, such effect declines with land size and there is a critical level of land ownership beyond which such ownership encourages mobility across the generations. This nonlinear relationship is also suggestive of the widely discussed 'weightier credit constraint' among the poorer households, which most of the households in rural area are exposed to at the time of taking investment decisions on their offspring's human capital. This effect indicates that wealthier households invest in their children's human capital, subsequently increasing the probability of their accessibility to different industries of the economy.

Occupational hierarchy of the father is another significant factor, especially in urban area, which strongly affects the likelihood of the son to be employed in the same industry as his father. In rural area however, we find such influence to be reversed. The possibility of transmission of information and skill through informal channels is stronger especially if the father is engaged in low skilled occupation in this area. In other words these are the occupations in most of the rural areas which are associated with least possibility of mobility and the reason behind this may be countercyclical. That is returns from low-skilled occupations are so meager to ensure sufficient skill formation especially in the absence of credit facility and proper labour

market institutions making their offspring less skilled across the generations. The sons continue to be plagued in to the vicious circle of less skilled and less paid occupations. Therefore having skill levels higher than the earlier generations can be expected to reduce the possibility of such persistence. In this context we have witnessed the educational mobility to transmit into occupational mobility only at higher levels that too in urban area. The implication of our results is significant from policy perspective. Though education can enhance opportunity in labour market, the family background still matters to a large extent. Strong and positive association between asset ownership, father's occupation and intergenerational persistence may be an indication of the difficulties faced by young individuals with poor family background at the beginning of their career. The non-existence of proper functioning capital and labour market accentuates their problem in employment outcome further. However, in this piece of analysis we have incorporated mostly the supply side factors so further research should focus on prevailing labour market opportunities (demand side factors) in this regard. It is encouraging to find that the influence of caste and religion has declined over the recent years.

Chapter 3

Impact of internal migration on left behind youth's labour force participation in India

3.1 Introduction

The extent and impact of internal migration in a large diversified society like India is undoubtedly greater compared to that of international migration (UNDP 2009, p.22; Lucas, 1997). This becomes more prevalent with growing inter-regional inequalities in economic opportunities within the country. Along with long-term migration the relevance of temporary migration on the well-being of the family members left behind has been widely recognized in the literature (Behrman, 1997; Banerjee and Duflo, 2007), however, such issues are less interrogated empirically. Migration of the family members for different tenure may have distinguishing impacts on different members of the household especially on the younger one with respect to their educational and labour market activities. The present analysis explores the impact of such migration on the labour force participation choices of young members of the family. The situation of youth in the contemporary Indian labour market is deplorable with most of them lacking employable skill, experience, information and financial resources to start their economic career early (Report on Youth Employment-Unemployment Scenario 2013). In absence of well-functioning capital market and presence of unequal socioeconomic status, they hardly avail themselves of sufficient options but to take up unproductive, low paid, insecure work (Mitra et al. 2013, Global Employment Trends for Youth 2015). Therefore, early labour force participation becomes often a consequence of compulsion rather than choice the youth make to support their families. Under this backdrop the chapter studies the implications of the migration of the family member on the left behind youth.

We try to interpret the relation between migration and well-being of non-migrant younger members of the household in a way similar to child labour analysis. There may be three main explanations behind the decision to send youth early at work instead of imparting higher education. These are 1) parents' concern for household survival (Luxury axiom: where youth education is assumed to be luxury) coupled with substitutability in production between youth and adult worker (Substitutability axiom) (Basu and Van, 1998). 2) Poverty combined with absence of well-functioning credit market (Ranjan, 1999). 3) Poverty together with low returns to enhanced schooling (Bacolod and Ranjan, 2008). Amidst financial constraints, time of the

family members appears to be one of the primary resources available for allocation to the households. In this context the prevailing studies suggest possibility of the following three states - a good and stable state with all adults working at a higher wage, bad and stable with all youth working at a lower wage instead of completing education, unstable with both of them working at an intermediate wage. In this context, Epstein and Kahana (2008) found migration of the family member for employment purposes as a positive externality having the potential to uplift the existing wage structure and encourage youth education by lowering the likeliness of labour force participation among them.

Migration is often a consequence of household utility maximization decision (Stark and Levhari, 1982), regarded as inter-familial contract (Lucas and Stark, 1985) and remittances appears to be one of the important clauses in it. Whatever be the motivation it is well documented that migration acts as an avenue for capital flow. Migrant sending families rely on remittances to augment consumption and investment. Therefore, adult migration be it temporary or for longer time period, can promote investment in skill formation of youth as per the requirement of the modern economy. Precisely migration may have the capacity to enhance household's affordability to carry out youth's extended educational attainment by reducing their job market activity. Some of the existing studies support this conjecture (Edward and Ureta, 2003; Adams, Richard and Page, 2005) showing that remittances relax credit constraint among recipient families enabling parents to promote enhanced educational activity among their young children. Alternatively, some other studies have highlighted negative effects of such migration (Mckenzie and Rapoport, 2006; Srivastava, 2011). According to these studies both the explicit and implicit costs associated with such migration of the adult member may be higher than financial benefits from it, causing the left behind young family member to join labour market activity to supplement household income instead of completing education. On the other hand, relaxing information and network constraints migration not only reduces the transaction costs but also induces consumption and investment decision with potential spillover effect over the local community. Empirical evidences around the world therefore, examine diverse subjects and come up with ambiguous results making it hard to draw any unique relationship between migration of the adult and labour force participation outcome of the young member left behind.

In the context of India internal migration appears to be a complex issue with multiple factors affecting it. In the economy, when there are concerns for economic growth there are also

consensus that growth pattern within the country is very unequal forcing migration of people to other economic sectors and regions. However, there exist very few studies exploring the impacts of such inter-regional disparity of economic opportunities through the channels of migration on the livelihoods of these sending households. In a recent extensive theoretical and empirical study by Nandi and Kar (2015), short-term internal migration has been found to play a significant role in the rural economy in promoting intergenerational mobility across the industries among the working sons (aged between 18-30). Unlike the previous studies, we empirically examine the impact of internal migration, both short-term and long-term by the working age male person of a household on the probability of labour force participation among left behind youth (15-24 years). We confine our analysis to male youth since female labour force participation considerably is a separate issue of concern and may be determined by a non-overlapping set of factors. Using a micro econometric frame-work we find that left behind young male members are less likely to be in the labour force with temporary (short-term) migration of male person from the household. However there exists variation in the marginal effects across the area of residence for long-term and short-term migration. Our result indicates that intermittent flow from the temporary migration can enhance schooling among the youth, while, long-term absence of the household member increases the probability of labour force participation by them. Besides we have also estimated the differential impact of migration by different members of the household to different destinations. We observed temporary absence of the father to exert a stronger impact on the left behind compared to that by any other male member of the household in both rural and urban areas respectively. Long-term absence of any male member of the household found to be associated with fall in the probability of labour force participation by the left behind youth, while that by father to any other state likely to increase such probability.

Rest of the chapter is organised as follows. The second section presents the source of data and discusses the descriptive statistics. Third and fourth section describes the methodology and the estimation results respectively. Last section concludes the chapter.

3.2 Data and descriptive statistics

We use data from the 64th round survey on employment, unemployment and migration particulars, carried out by the National Sample Survey Organisation (NSSO) during July 2007 to June 2008 in India. The survey collects information on both short-term (temporary) and long-term migration. We consider only the internal migration dividing it broadly in two

categories- long-term and short-term. A person is identified as long-term migrant if last usual principal residence (UPR) at any time in the past is different from the present. However instead of having different UPR, if the nature of movement is found to be temporary we consider him as short-term migrant. This short-term migrant also incorporates those, who does not change their UPR but undertake temporary movements and had stayed away from village or town for a duration of one to six months during the last 365 days (for employment or in search of employment).

Since our focus is labour force participation of non-migrant male youth, the sample is restricted to 39,336⁸ (68 per cent of total youth in the sample) male individual aged between 15-24⁹. For the purpose of our study we divide these youth in two groups 'in labour force' and 'not in labour force'. Almost 53 per cent of them are in the labour force. Rest are mostly at education or enrolled (43 per cent) followed by idle or inactive (4 per cent). Nearly 10 (3,850) and 9 (3,529) per cent of the youth belong to the households with at least one 'working age male individual (aged between 15-70)' internally migrated for short-term and long-term from the household respectively. The average age of all the youth is 19 irrespective of migration status of the working age family member.

Table I shows the percentage distribution of the youth in the labour force with respect to the migration status of the working age male member of the household for their individual (general levels of education) and household characteristics (caste, religion, household asset, consumption expenditure). We have executed a two sample 't' test and have reported whether the mean difference with respect to migration status of the family member is significant or not. We do not show the test statistics for sake of keeping the description simple. A general observation from this description is that, if youth belongs to the household with one male member internally migrated, he is significantly less likely to be in the labour force irrespective of the differences in individual and household characteristics. We find that most of the migrant sending households are systematically different from non-migrant in the context of labour force participation by youth in the household. Rate of labour force participation is noticeably higher in rural areas and more specifically from those households without any migration. The descriptive further unveils that the percentage of labour force participation is almost same in

⁸Total no. of male youth in the sample is 58, 095. Nearly 45,087 of the total male youth are non-migrant (we have discarded the international migration). In order to compare the probability of labour force participation decision among youth with and without internal migration of one male member we retained the information only for those who live in a household with one member as head hence, our observation is restricted to 39,336 married or unmarried sons of the household.

⁹ Following the definition of United Nations.

case of both temporary (52 per cent) and long-term migration (53 per cent) in the rural area. In the urban area youth are more likely to be in the labour force if the members are temporarily migrated (44 per cent) than migrated for a longer time period (42 per cent). The inverse association between both type of internal migration and likeliness of labour force participation in the rural area is almost similar and significant. However, in urban area such inverse association is significant in case of long-term migration.

The likeliness of labour force participation is found to be inversely associated with successive levels of education irrespective of the migration status of the family member. However, beyond higher secondary education the participation rate slightly increases. The inverse association of successive levels of education and labour force participation is stronger in case of short-term compared to long-term migration of the household members.

Labour force participation is generally higher among the reserve castes compared to the General category (GEN). Within the reserve castes participation rate is higher among SC (Schedule Castes) followed by OBCs (Other Backward Class) and STs (Schedule Tribe)¹⁰. In presence of migrant in the household youth is less likely to be in the labour force irrespective of their castes as well. However, the stated inverse association is found to be significant for temporary migration among SC and OBC household (almost by 10 and 4 percentage points respectively). In presence of long-term migrant the rate of participation is significantly lower among all the castes.

For the full sample labour force participation is highest among Muslims followed by Hindus, Other and Christians. Presence of any type of migrant in the household is associated with lower rate of labour force participation among the left behind youth. This difference in the rate of participation with respect to migration status of the family member is significant for all religions except for Christians.

We have also documented labour force participation rate at different household status. Monthly consumption expenditure, land possession and existence of family enterprise are used in this regard, since information on household income is not available in the data. Labour force participation rate in general is inversely related to higher levels of consumption expenditure. In presence of short-term migrant in the household youth are significantly less likely to be in

¹⁰ Broadly there are 4 castes in India. One unreserved or General Caste. Reserved castes are of three types- Schedule Caste (SC), Schedule Tribe (ST) and Other Backward Class (OBC) respectively.

the labour force for households with consumption expenditure less than 50 percentile. The difference in the rate of labour force participation with respect to migration status of the family member is not significant for consumption expenditure higher than 50 percentile. Long-term migration is significantly associated with rise and fall in the labour force participation for the households with consumption expenditure 25 to 50 percentile and above 75 percentile. Therefore, short-term and long-term migration in this case has different implications for poorer households. While short-term migration potentially can relax the credit constraint, absence of the family member for longer term has a reverse implication especially for the poorer households.

Land possession is originally a categorical variable. We grouped the variable in three categories: lower levels of land possession (no land possession-0.02 hectare), average land possession (from 0.02 hectare to 0.41 hectare) and more than average land possession (with more than 0.41 hectare). A movement from low to average land possession is always associated with considerable fall in the labour force participation among the non-migrant youth. A movement from average to larger land possession is again associated with increase in the labour force participation. The difference in this rate with respect to different migration status of the family members is also significant. This pattern remains same for both temporary and long-term migration of the household members. The likeliness of labour force participation among them remains same as full sample average if the father is self-employed. Considering the short-term and long-term migration separately we find that father's self-employment is associated with lower levels of son's labour force participation in case of long-term migration compared to that in case of short-term.

The extent of the fall in the likeliness of labour force participation is more in rural area with temporary migration. The inverse association between acquired levels of education and labour force participation becomes stronger with migration more specifically if it is temporary. Such migration is again associated with fall in the labour force participation among the poorer household and the households with lower levels of land holding. This descriptive suggests the temporary migration to serve as an effective avenue of providing financial ease to families in promoting educational activity among the young male members instead of pushing them early to the labour market. Therefore, it would be interesting to see how the probability of labour force participation responds with respect to migration of the family members remaining other things same. Hence, we perform an estimation analysis to interpret the effects of all these factors in terms of their average marginal effects.

Table 3.1					
Youth labour force participation for different migration status of the household members across different attributes					
	Full Sample	Short term migration		Long term migration	
Status of migration of the household member		No migrant in the household	Migrant in the household	No migrant in the household	Migrant in the household
In labour force	53	54	50	54	46
Area of residence					
Rural	56	57	52	57	53
Urban	45	47	44	48	42
Education					
No fomal education	85	86	81	85	82
Primary	84	85	79	84	82
Secondary	59	60	51	59	55
Higher secondary	36	36	32	37	30
College or more	39	40	35	40	37
Caste					
ST	52	52	50	52	45
SC	60	61	51	60	56
OBC	55	56	52	56	48
GEN	48	48	46	49	41
Religion					
Hindu	55	54	51	54	45
Muslim	60	61	53	61	57
Christian	42	42	39	42	37
Other	49	49	37	50	38
Father self employed	54	54	51	54	48
Land possession					
below average	55	56	51	57	48
at average	50	51	48	51	39
above average	53	54	50	54	44
Monthly percapita consumption expenditure (mpce)					
less than 25 percentile	66	67	55	66	66
25<=mpce<50	59	59	55	58	64
50<=mpce<75	51	51	49	51	50
75<=mpce	41	41	41	43	32
Nuber of observation	20,972	19,041	1,931	19, 358	1,614

3.3 Methodology

We estimate the impact of migration of working age male member on the labour force participation decision of the youth left behind in the same household. The analysis is done for short and long-term migration for rural and urban areas respectively. This required estimation of four sets of equation. Here the dependent variable ‘in labour force participation’ is a dichotomous response variable, which takes value 1 if the youth is in the labour force and 0 otherwise. The major explanatory variable is also a binary variable taking value 1 if at least one working male member from the household is internally migrated and 0 otherwise. However, the pool of migrants may not be a random sample. Migrants are often self-selected group in terms of motivation and risk aversion than non-migrants. The challenge is associated with selection of a proper method of estimation and instrument for migration of adult in the household to overcome the problem of endogeneity since the decisions of migration and youth employment choices are often made simultaneously. The presumption that non-migrants’ households are systematically different from migrants’ in observable (education, household wealth) and un-observable characteristics (motivation, income shocks) complicates identification of the effects of migration using standard probit estimation. In these cases sample selection and omitted variable problem may be present. Adults of the household who care more about the extended education of the younger members may migrate in order to earn income that can be used to finance schooling expenses. It may also be the case that negative labour market shocks (Hanson and Woodruff, 2003) experienced by adult migrant also requires the youth to work instead of continuing education. The observable factors may influence the decision of labour force participation directly as well as indirectly through the decision of the household members to migrate. This scenario leads to a spurious relation between migration and labour market choice. Variety of approaches are applied in the literature to address these issues. Edwards and Ureta (2003) have used a proportional hazard model, Demurger and Xu (2011), Nandi and Kar (2015) have used a recursive bivariate probit model to estimate the effect of migration in the context of Mexico, China and India respectively. Hosts of other studies have adapted an instrumental variable approach in this regard (McKenzie and Rapoport, 2006; Calero et al, 2009). This chapter justifies the selection of the bivariate recursive probit model (Greene, 2008) with introduction of a simultaneous equation system.

The two equations to be estimated;

$$Y_{1i} = 1 (\alpha Y_{2i} + X'_{1i}\beta_1 + \varepsilon_{1i} > 0) \quad (1)$$

$$Y_{2i} = 1(X'_{2i}\beta_2 + \varepsilon_{2i} > 0) \quad (2)$$

Where $1(.)$ is an indicator function. The dependent variables in the models are Y_1 (labour force participation) and Y_2 (migration of at least one male member of the household). Here the regressor vectors are X_1 and X_2 . They are comprised of the following independent variables x_1 (Own education), x_2 (Age), x_3 (Caste), x_4 (Religion), x_5 (Father's education), x_6 (Mother's Education) x_7 (Land holding), x_8 (Father's Self-employment), x_9 (Dependency burden) and x_{10} (percentage of migrants from the district). X_1 Comprises of $x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, x_9$ where as X_2 includes x_3, x_4, x_7, x_8, x_9 and x_{10} . The variable Y_2 is of primary interest in the first equation however it may be potentially endogeneous. Hence the model becomes recursive, simultaneous model. There are several independent variables in our specification like caste, religion and household wealth which directly influence the decision of labour force participation through their involvement in the first equation. Some of these variables also enter in the second equation and therefore, affect probability of migration of the household members. Since migration as most important explanatory variables enters in the labour force participation decision the above stated effect is transmitted back to labour force participation. The endogeneity issue arises when ε_1 and ε_2 are not independent. In order to estimate the coefficient parameters efficiently the dependence between these error terms has to be taken care of. In this context application of a recursive bivariate probit model seems to be appropriate to address all the issues discussed.

Initially the Instrumental Variable (IV) regression is applied to the analysis in order to diagnose the significance of the endogeneity. Though regression is not appropriate methodology for this model with dichotomous dependent variable but regression result never lies. Following the existing literature (Binzel and Assad, 2011; Mendola and Carletto, 2012; Nandi and Kar, 2015) we use share of adult migration in a particular district leaving the adult of the respective household as the instrument for adult migration from the household. This share is representative of migration networks. Based on the post estimation statistics (Durbin (score) and Wu Hausman) we conclude on the exogeneity of migration to the decision of labour force participation and weakness of the instrument. Finally we run a recursive bivariate probit model in order to address the issue of endogeneity in our specific framework. In this model, in addition to outcome equation of the probit model, a second equation estimates the migration decision. The covariance between the error terms of these two equations is considered to be a measure of strength of unobservable factors in determining both the dependent (labour force participation) and the major explanatory (migration from the household) variable. The Wald test reports the significance of the correlation between the errors of the two simultaneous recursive equation and helps us to conclude about endogeneity issue.

In order to provide robust estimation results we have estimated different specifications of the four probit models progressively incorporating additional variables in the equation of labour force participation. This analysis required eight successive estimations for each group. We reported all of the marginal effects obtained from different specifications of recursive bivariate probit model for rural and urban area for short and long-term migration respectively in Table 3.2(a), 3.2 (b), 3.2(c) and 3.2(d). The first column of every table represents the result obtained from the estimation analysis incorporating own education as the initial specification. In the following specifications we have successively incorporated age, caste, religion, father's education, mother's education, existence of household asset and dependency burden. The last three rows of each table reports the post estimation test statistics obtained from IV regression and Recursive probit estimation. The results have been duly discussed in section 3.4.1.

In the following section 3.4.2 we distinguished the impact of migration by the father from any other male member in the household. We have also focused the diverse impact of migration destination by different members on the decision of the labour force participation by the left behind.

3.4 Estimation results

3.4.1 Impact of short-term and long-term migration by at least one male member

Table 3.2 (a) reports the marginal effects obtained from the estimation of rural sample in case of temporary migration. We find the relationship between such migration of the adult and the probability of labour force participation among the youth to be quite stable across the specifications. Looking at the sign and the strength of the marginal effect we say that in the rural area temporary migration of at least one male member of the household significantly reduces the probability of labour force participation among the left behind youth. However, we also observe the magnitude of the marginal effect of such migration to vary across the specifications. In our second and third specification with inclusion of age and caste we find the magnitude of the marginal effect to decline. With inclusion of religion the magnitude increased. Again after inclusion of father's and mothers' successive levels of education as control variables in the fifth and sixth specification the marginal effect is found to decline and rise respectively. In the seventh specification with control for family's land possession the magnitude declines once more. Though the number of dependents in the household appears

insignificant but its inclusion in the last specification increased the strength of temporary migration.

Long-term migration in the rural area is found to exert a significant positive impact on the probability of labour force participation (Table 3.2 (b)). Strength of the long-term migration of the household members in explaining the likeliness of labour force participation falls after incorporation of age. However the magnitude increases with inclusion of caste, religion, father's and mother's education in successive specifications. After incorporation of land holding of the household the magnitude of the marginal effect of long-term migration decreases noticeably. The results suggest if at least one family member is migrated from the household for long-term the probability of labour force participation significantly increases among the young male members of the family.

In case of the other determinants of labour force participation we find almost a similar pattern in case of both temporary and long-term migration. Most of the variables under consideration show consistent pattern with their expected signs. With consecutive higher levels of education youth in the rural area are significantly less likely to be in the labour force. Older youth are significantly less likely to be in the labour force participation. It is STs and Christians who are significantly more and less likely to be in the labour force respectively. Sons with the higher educated fathers are often less likely to be in the labour force. The association is reverse in case of mothers' education. Initially with increase in the land size probability of labour force participation decreases at a larger extent compared to the large land holding.

Based on the post estimation statistics - Durbin (score) obtained from the estimation of the IV regression (the result of IV regression has been reported in Appendix Table 3a) we reject the null hypothesis that migration is exogenous to the decision of labour force participation for both temporary and long-term migration. Besides the Wu Hausman test for weak instrument suggests that the instrument for migration is not a weak one. Finally the covariance between the error terms of the two equations of the recursive model as a measure of strength of unobservable factors in determining both the dependent (labour force participation) and the major explanatory (migration from the household) variable is statistically significant for each specification (Wald statistics is significant).

Table 3.2 (a)								
Recursive biprobit estimation results (Marginal effects)								
Area of Residence	Rural							
	Short term Migration							
Specifications	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
<i>Migration of the household member</i>	-0.502*** (0.06)	-0.327*** (0.08)	-0.323*** (0.08)	-0.364*** (0.07)	-0.357*** (0.07)	-0.375*** (0.07)	-0.345*** (0.07)	-0.347*** (0.07)
<i>Own education</i>								
Primary	0.010 (0.03)	0.081* (0.03)	0.080* (0.03)	0.081* (0.03)	0.070* (0.04)	0.072* (0.04)	0.073* (0.04)	0.073* (0.04)
Secondary	-0.290*** (0.02)	-0.222*** (0.02)	-0.220*** (0.02)	-0.216*** (0.02)	-0.196*** (0.02)	-0.199*** (0.03)	-0.196*** (0.03)	-0.196*** (0.03)
Higher Secondary (HS)	-0.498*** (0.02)	-0.565*** (0.02)	-0.559*** (0.03)	-0.551*** (0.03)	-0.524*** (0.03)	-0.524*** (0.03)	-0.521*** (0.03)	-0.521*** (0.03)
More than HS	-0.487*** (0.02)	-0.796*** (0.03)	-0.787*** (0.03)	-0.778*** (0.03)	-0.729*** (0.03)	-0.733*** (0.03)	-0.731*** (0.03)	-0.731*** (0.03)
<i>Age</i>		0.138*** (0.00)	0.138*** (0.00)	0.138*** (0.00)	0.141*** (0.00)	0.142*** (0.00)	0.142*** (0.00)	0.142*** (0.00)
<i>Caste</i>								
ST			0.082*** (0.02)	0.101*** (0.02)	0.067*** (0.02)	0.063** (0.02)	0.063** (0.02)	0.063** (0.02)
SC			0.056*** (0.02)	0.065*** (0.02)	0.034* (0.02)	0.029 (0.02)	0.021 (0.02)	0.021 (0.02)
OBC			0.038** (0.01)	0.040** (0.01)	0.018 (0.01)	0.016 (0.01)	0.016 (0.01)	0.015 (0.01)
<i>Religion</i>								
Muslim				0.034* (0.02)	0.028 (0.02)	0.026 (0.02)	0.022 (0.02)	0.021 (0.02)
Christian				-0.136*** (0.04)	-0.094* (0.04)	-0.093* (0.04)	-0.094* (0.04)	-0.093* (0.04)
Others				-0.046 (0.03)	-0.039 (0.03)	-0.042 (0.03)	-0.046 (0.03)	-0.046 (0.03)
<i>Father's education</i>								
Primary					-0.016 (0.02)	-0.012 (0.02)	-0.010 (0.02)	-0.009 (0.02)
Secondary					-0.071*** (0.01)	-0.067*** (0.01)	-0.066*** (0.01)	-0.066*** (0.01)
Higher Secondary (HS)					-0.133*** (0.02)	-0.119*** (0.02)	-0.116*** (0.02)	-0.116*** (0.02)
More than HS					-0.225*** (0.03)	-0.216*** (0.03)	-0.213*** (0.03)	-0.213*** (0.03)
<i>Mother's education</i>								
Primary						-0.009 (0.02)	-0.010 (0.02)	-0.010 (0.02)
Secondary						-0.013 (0.02)	-0.014 (0.02)	-0.014 (0.02)
Higher Secondary (HS)						-0.099* (0.04)	-0.101* (0.04)	-0.101* (0.04)
More than HS						0.046 (0.06)	0.046 (0.06)	0.046 (0.06)
<i>Land Possession</i>								
at average							-0.062*** (0.02)	-0.062*** (0.02)
above average							-0.042** (0.01)	-0.042** (0.01)
<i>Dependency Burden</i>								0.000 (0.00)
Wald test for Rho Chi2(1)	25.9371***	6.583**	6.394**	11.032***	9.840***	11.817***	8.39***	8.58**
Durbin (score) chi2(1)	12.4085***	0.277	0.706	2.107	3.127*	5.384**	5.14**	5.07**
Wu-Hausman F(1,20711)	12.4113***	0.277	0.706	2.107	3.125*	5.38**	5.14**	5.06**
Observation	24654	24654	24654	24654	21474	20735	20735	20735

*, ** and *** stands for significance at 10, 5 and 1 per cent level respectively

Table 3.2 (b)								
Recursive biprobit estimation results (Marginal effects)								
Area of Residence	Rural							
	Long term Migration							
Specifications	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
<i>Migration of the household member</i>	0.542*** (0.05)	0.260*** (0.05)	0.282*** (0.05)	0.306*** (0.04)	0.300*** (0.05)	0.301*** (0.05)	0.248*** (0.05)	0.247*** (0.05)
<i>Own education</i>								
Primary	0.004 (0.03)	0.076* (0.03)	0.074* (0.03)	0.076* (0.03)	0.064 (0.04)	0.068 (0.04)	0.070 (0.04)	0.070 (0.04)
Secondary	-0.275*** (0.02)	-0.223*** (0.02)	-0.220*** (0.02)	-0.215*** (0.02)	-0.194*** (0.03)	-0.195*** (0.03)	-0.194*** (0.03)	-0.194*** (0.03)
Higher Secondary (HS)	-0.485*** (0.02)	-0.567*** (0.03)	-0.560*** (0.03)	-0.551*** (0.03)	-0.524*** (0.03)	-0.523*** (0.03)	-0.522*** (0.03)	-0.522*** (0.03)
More than HS	-0.467*** (0.02)	-0.798*** (0.03)	-0.786*** (0.03)	-0.776*** (0.03)	-0.727*** (0.03)	-0.730*** (0.03)	-0.732*** (0.03)	-0.731*** (0.03)
<i>Age</i>		0.139*** (0.00)	0.139*** (0.00)	0.139*** (0.00)	0.141*** (0.00)	0.143*** (0.00)	0.143*** (0.00)	0.143*** (0.00)
<i>Caste</i>								
ST			0.084*** (0.02)	0.103*** (0.02)	0.071*** (0.02)	0.066** (0.02)	0.065** (0.02)	0.065** (0.02)
SC			0.061*** (0.02)	0.070*** (0.02)	0.039* (0.02)	0.033 (0.02)	0.027 (0.02)	0.027 (0.02)
OBC			0.042*** (0.01)	0.045*** (0.01)	0.024 (0.01)	0.021 (0.01)	0.021 (0.01)	0.021 (0.01)
<i>Religion</i>								
Muslim				0.033* (0.02)	0.028 (0.02)	0.026 (0.02)	0.023 (0.02)	0.023 (0.02)
Christian				-0.146*** (0.04)	-0.106** (0.04)	-0.107** (0.04)	-0.103* (0.04)	-0.103* (0.04)
Others				-0.034 (0.03)	-0.027 (0.03)	-0.030 (0.03)	-0.034 (0.03)	-0.034 (0.03)
<i>Father's education</i>								
Primary					-0.020 (0.02)	-0.017 (0.02)	-0.015 (0.02)	-0.015 (0.02)
Secondary					-0.075*** (0.01)	-0.071*** (0.01)	-0.070*** (0.01)	-0.070*** (0.01)
Higher Secondary (HS)					-0.131*** (0.02)	-0.117*** (0.02)	-0.115*** (0.02)	-0.115*** (0.02)
More than HS					-0.231*** (0.03)	-0.222*** (0.03)	-0.220*** (0.03)	-0.220*** (0.03)
<i>Mother's education</i>								
Primary						-0.009 (0.02)	-0.010 (0.02)	-0.010 (0.02)
Secondary						-0.019 (0.02)	-0.019 (0.02)	-0.019 (0.02)
Higher Secondary (HS)						-0.091* (0.04)	-0.091* (0.04)	-0.091* (0.04)
More than HS						0.044 (0.06)	0.046 (0.06)	0.046 (0.06)
<i>Land Possession</i>								
at average							-0.060*** (0.02)	-0.060*** (0.02)
above average							-0.033* (0.01)	-0.034* (0.01)
<i>Dependency Burden</i>								0.000 (0.00)
Wald test for Rho Chi2(1)	53.92***	32.12***	45.25***	61.23***	45.75***	41.72***	27.75***	27.73***
Durbin (score) chi2(1)	98.29***	48.75***	47.16***	42.09***	23.50***	23.69***	19.77***	19.80***
Wu-Hausman F	98.68***	48.84***	47.23***	42.14***	23.51***	23.70***	19.76***	19.79***
Observation	22793	22793	22793	22793	19738	19002	19002	19002
*, **, and *** stands for significance at 10, 5 and 1 per cent level respectively								

We find considerable variation in urban area while estimating the impact of both temporary and long-term migration. Existence of a short-term migrant is significantly associated with a fall in the probability of labour force participation (Table 3.2 (c)). The marginal effect is also lower compared to that in rural area. With incorporation of age such significance of migration is lost. The strength of this factor increases to significant level only after controlling the entire analysis for mother's education. Existence of any enterprise with the household does not have any significant association with the probability of labour force participation. So holds good for family's dependency burden. However, incorporation of these two factors is associated with a fall and rise in the marginal strength of the long- term migration in explaining the dependent variable. However, in the urban area we do not observe any such significant association between long-term migration and labour force participation among the left behind youth for any of the specifications discussed above (Table 3.2 (d)).

Similar to the analysis of the rural area in urban area we find expected signs for all the control variables to be consistent for the specifications. Higher education exerts a similar impact upon the probability of labour force participation as in case of the rural area. One observable difference with the rural area in this case is that mothers' educational level have a strong association with fall in the likeliness of the son's labour force participation. The sons with post-secondary educated mothers are significantly less likely to be in the labour force. Therefore, mother's education is found to be more decisive compared to fathers' in urban area as compared to rural area in this regard. Existence of any enterprise with the household does not have any significant association with the probability of labour force participation. So holds good for family's dependency burden.

The significant Durbin (score) statistics leads to the rejection of the null hypothesis that migration is exogenous to the decision of labour force participation. Wu-Hausman F statistics indicates the instrument is not weak. However, the covariance between the errors of the equations obtained from the recursive bivariate probit model is statistically insignificant for our each specification suggesting that the issue of endogeneity is not significant.

To sum up, the estimation results show in rural area the bivariate approach diagnoses the issue of endogeneity and also takes care of it. However, in the urban area the insignificance of the covariance suggests that the problem of endogeneity is not severe. The explanatory power of temporary migration in both rural and urban area is sufficiently large, significant and negative in magnitude. This implies that short-term migration decreases the probability of labour force

participation significantly (almost by 34 per cent and 42 per cent in rural and urban areas respectively). This is in line with our descriptive statistics. The long-term migration appeared to be associated with a significant rise in labour force participation however, such significant association observed only in rural area. The difference in the impact of short and long-term migration may owe its support from the fact that the absence of the adult for a longer time period among the rural households necessitates the household's survival and substitution of young members' education by participation in the labour force participation. It may also be the case that negative labour market shocks (Woodruff and Hanson-2003) experienced by adult migration also requires the youth to work instead of continuing education. This fact is also in line with our descriptive statistics. The level of general education among youth increases the likeliness of advanced educational activity. This association is even stronger in the rural area. However, there is no difference in the marginal effects of successive levels of education on labour force participation for short-term and long-term migration. Among different castes STs are significantly more and less likely to be in the labour force in rural and urban area respectively. Religion does not exert any significance in the urban area. It is only the Christians who are significantly less likely to be in the labour force in the rural area.

Higher levels of parental education which is often considered as a proxy for permanent income of the household potentially increases the probability of youth's choice for educational activities and in turn reduces labour market activity among them. Sons with higher educated fathers are significantly less likely to be in labour force in both the areas. However, mothers' education is significant in urban area. This may be backed by several reasons. The number of sons with mothers having higher education is comparatively less in the rural areas¹¹. Sons with mothers having at least formal education is most likely to be found in urban area. Therefore, it is quite possible that we may not find a significant impact of mother's higher education on the probability of the son's labour force participation in rural area. Another fact worth mentioning here is the difference in the nature of jobs available in both urban and rural areas.

¹¹ In our sample for non-migrant young sons nearly 68 per cent belongs to household with mothers having no education in rural area while this percentage in the urban area is almost 40. Adding to this we also observe mothers' higher education is a phenomenon mostly associated with urban area with 23 per cent of the sons belonging to the mothers having educational qualification beyond secondary. However, this percentage is only 4 for the rural area.

Table 3.2 (c)								
Recursive biprobit estimation results (Marginal effects)								
Area of Residence	Urban							
	Short term Migration							
Specifications	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
<i>Migration of the household member</i>	-0.570** (0.19)	-0.090 (0.19)	-0.122 (0.19)	-0.298 (0.24)	-0.359 (0.24)	-0.423* (0.20)	-0.419* (0.21)	-0.429* (0.20)
<i>Own education</i>								
Primary	-0.011 (0.07)	0.021 (0.08)	0.018 (0.08)	0.024 (0.08)	0.061 (0.08)	0.058 (0.08)	0.057 (0.08)	0.054 (0.08)
Secondary	-0.278*** (0.05)	-0.250*** (0.05)	-0.243*** (0.06)	-0.226*** (0.06)	-0.173** (0.06)	-0.159** (0.06)	-0.159** (0.06)	-0.158** (0.06)
Higher Secondary (HS)	-0.562*** (0.05)	-0.647*** (0.06)	-0.638*** (0.06)	-0.613*** (0.06)	-0.519*** (0.06)	-0.495*** (0.06)	-0.497*** (0.06)	-0.495*** (0.06)
More than HS	-0.522*** (0.05)	-0.983*** (0.07)	-0.970*** (0.07)	-0.936*** (0.07)	-0.796*** (0.07)	-0.760*** (0.07)	-0.762*** (0.07)	-0.760*** (0.07)
<i>Age</i>		0.153*** (0.01)	0.154*** (0.01)	0.154*** (0.01)	0.154*** (0.01)	0.154*** (0.01)	0.154*** (0.01)	0.154*** (0.01)
<i>Caste</i>								
ST			-0.069 (0.05)	-0.049 (0.05)	-0.097 (0.05)	-0.139* (0.05)	-0.144** (0.05)	-0.145** (0.05)
SC			0.066 (0.03)	0.098** (0.04)	0.032 (0.04)	0.000 (0.04)	-0.004 (0.04)	-0.003 (0.04)
OBC			0.089*** (0.03)	0.094*** (0.03)	0.038 (0.02)	0.027 (0.03)	0.027 (0.03)	0.027 (0.03)
<i>Religion</i>								
Muslim				0.090*** (0.03)	0.040 (0.03)	0.024 (0.03)	0.025 (0.03)	0.024 (0.03)
Christian				0.051 (0.08)	0.072 (0.09)	0.094 (0.08)	0.091 (0.08)	0.092 (0.08)
Others				-0.052 (0.07)	-0.067 (0.07)	-0.053 (0.07)	-0.052 (0.07)	-0.051 (0.07)
<i>Father's education</i>								
Primary					-0.071 (0.05)	-0.052 (0.05)	-0.052 (0.05)	-0.051 (0.05)
Secondary					-0.084* (0.03)	-0.046 (0.04)	-0.046 (0.04)	-0.045 (0.04)
Higher Secondary (HS)					-0.194*** (0.04)	-0.146*** (0.04)	-0.145*** (0.04)	-0.145*** (0.04)
More than HS					-0.345*** (0.04)	-0.266*** (0.05)	-0.267*** (0.05)	-0.267*** (0.05)
<i>Mother's education</i>								
Primary						-0.107** (0.04)	-0.107** (0.04)	-0.105** (0.04)
Secondary						-0.077* (0.03)	-0.078* (0.03)	-0.076* (0.03)
Higher Secondary (HS)						-0.179*** (0.04)	-0.178*** (0.04)	-0.176*** (0.04)
More than HS						-0.162** (0.05)	-0.162** (0.05)	-0.159** (0.05)
<i>Father's Self employm</i>							-0.022 (0.02)	-0.023 (0.02)
<i>Dependency Burden</i>								0.001 (0.00)
Wald test for Rho Chi2(	1.71	0.059	0.181	1.74	0.96	1.37	0.793	0.703
Durbin (score) chi2(1)	2	0.031	47	2.13	5.35**	7.12**	7.08**	7.13**
Wu-Hausman F	2	0.031	0.47	2.13	5.34**	7.12**	7.08**	7.13**
Observations	9176	9176	9176	9176	9176	8900	8900	8900
*, ** and *** stands for significance at 10, 5 and 1 per cent level respectively								

Table 3.2 (d)								
Recursive biprobit estimation results (Marginal effects)								
Area of Residence	Urban							
	Long term Migration							
Specifications	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
<i>Migration of the household member</i>	-0.011 (0.06)	-0.091 (0.08)	-0.042 (0.07)	0.018 (0.07)	0.016 (0.07)	0.023 (0.07)	0.009 (0.08)	0.004 (0.08)
<i>Own education</i>								
Primary	-0.027 (0.07)	0.016 (0.08)	0.013 (0.08)	0.024 (0.08)	0.065 (0.08)	0.065 (0.08)	0.064 (0.08)	0.063 (0.08)
Secondary	-0.307*** (0.04)	-0.266*** (0.05)	-0.262*** (0.05)	-0.242*** (0.05)	-0.180** (0.06)	-0.162** (0.06)	-0.162** (0.06)	-0.160** (0.06)
Higher Secondary (HS)	-0.580*** (0.05)	-0.662*** (0.06)	-0.654*** (0.06)	-0.625*** (0.06)	-0.515*** (0.06)	-0.485*** (0.06)	-0.487*** (0.06)	-0.484*** (0.06)
More than HS	-0.535*** (0.05)	-1.005*** (0.06)	-0.993*** (0.06)	-0.953*** (0.06)	-0.793*** (0.07)	-0.752*** (0.07)	-0.753*** (0.07)	-0.751*** (0.07)
<i>Age</i>		0.158*** (0.01)	0.159*** (0.01)	0.158*** (0.01)	0.158*** (0.01)	0.157*** (0.01)	0.157*** (0.01)	0.157*** (0.01)
<i>Caste</i>								
ST			-0.048 (0.04)	-0.020 (0.05)	-0.081 (0.05)	-0.120* (0.05)	-0.125* (0.05)	-0.126* (0.05)
SC			0.091** (0.03)	0.122*** (0.03)	0.049 (0.03)	0.020 (0.03)	0.017 (0.03)	0.017 (0.03)
OBC			0.086*** (0.02)	0.095*** (0.02)	0.036 (0.02)	0.024 (0.02)	0.023 (0.02)	0.023 (0.02)
<i>Religion</i>								
Muslim				0.105*** (0.02)	0.045 (0.03)	0.031 (0.03)	0.030 (0.03)	0.029 (0.03)
Christian				0.039 (0.07)	0.060 (0.07)	0.086 (0.07)	0.085 (0.07)	0.086 (0.07)
Others				-0.012 (0.06)	-0.022 (0.06)	-0.013 (0.06)	-0.012 (0.06)	-0.010 (0.06)
<i>Father's education</i>								
Primary					-0.048 (0.05)	-0.033 (0.05)	-0.034 (0.05)	-0.033 (0.05)
Secondary					-0.097** (0.03)	-0.063 (0.03)	-0.063 (0.03)	-0.063 (0.03)
Higher Secondary (HS)					-0.204*** (0.04)	-0.154*** (0.04)	-0.154*** (0.04)	-0.154*** (0.04)
More than HS					-0.386*** (0.04)	-0.300*** (0.04)	-0.302*** (0.04)	-0.301*** (0.04)
<i>Mother's education</i>								
Primary						-0.086* (0.04)	-0.085* (0.04)	-0.084* (0.04)
Secondary						-0.079** (0.03)	-0.079** (0.03)	-0.078** (0.03)
Higher Secondary (HS)						-0.173*** (0.04)	-0.172*** (0.04)	-0.170*** (0.04)
More than HS						-0.180*** (0.05)	-0.179*** (0.05)	-0.177*** (0.05)
<i>Father's Self employment</i>							-0.013 (0.02)	-0.014 (0.02)
<i>Dependency Burden</i>								0.001 (0.00)
Wald test for Rho Chi2(1)	14.31***	0.001	0.036	0.663	0.9043	1.8	1.746	1.96
Durbin (score) chi2(1)	2	0.031	0.474	2.13	5.35*	7.12**	7.08**	7.13***
Wu-Hausman F	2	0.031	0.473	2.13	5.34*	7.11**	7.07**	7.11***
Observations	10740	10740	10740	10740	10740	10397	10397	10397
*, ** and *** stands for significance at 10, 5 and 1 per cent level respectively								

In urban area the jobs are often not in proximity to home and are mostly associated with monetary returns however, this may not be case for rural area. Therefore, one educated mother in urban area is more likely to work and earn more than one educated mothers does in rural area. This not only eases the credit constraint but also has clear indication towards more flexibility in the financial resource allocation decision with educated mothers in the urban households compared to the rural households. The impact of existence of land possession (land possession) in the rural area is significant in this context of both types of migration. With a movement from small to larger land possession probability of labour force participation decreases significantly. Comparing the marginal effects we find that decrease in the labour force participation is larger with a movement toward average land possession compared to that toward more than average land possession.

3.4.2 Impact of migration by different male members to different destinations

In the previous section we have analysed the impact of migration of at least one male member on the household's decision regarding the labour force participation of the left behind youth. Unlike the earlier one in this section we explore how the probability of labour force participation among the left behind varies with respect to migration by different male members from the household. That is we look into the issue whether father's or any other male member's migration appear as a stronger avenues of financial resources in turn lowering the probability of early labour force participation among the left behind youth. We argue that the absence of the father from the household to impart a stronger impact than that is by any other male member toward the household's decision to send the left behind youth to the labour force. Adding to this we also explore how different destinations of migration exhibit significant variation in their association with the likeliness of the left behind youth's labour force participation. We expect to observe migration to urban area and another state to exhibit a stronger association in this regard. This becomes more prevalent with growing inter regional inequalities in economic opportunities within the country especially in the context of rural–urban divide. This argument owes its support from early empirical analysis that pointed out extent and impact of internal migration across the states and from rural to urban area in large diversified communities like India is likely to be greater (UNDP 2009, p.22; Lucas, 1997).

The execution of the stated analysis called for estimation of four sets of equations for both rural and urban area for short-term and long-term migration respectively. Each equation has four specifications incorporating four major explanatory variables exhibiting relationship of the

migrant with left behind and the migration-destination respectively. Following the 64th round NSSO survey data on employment, unemployment and migration particulars on India we observed that the information on the migration destination is available only for temporary migrants. In case of long-term migrants we do not possess such information. For long-term migrant we get the information on the origin of the last UPR. Therefore, migration destination details are relevant in the context of temporary migration not for long-term migration. This leads to incorporation of information on migration destination for the short-term migrants and on the origin of migration for long-term migrants respectively. There are six destinations (origin-UPR) within and across the states. Rural and urban areas of same district and different districts within the same state and rural and urban areas of different states respectively. We have initially grouped the destination (for temporary migrant) and origin (of the long-term migrant) in two categories- within and across states. This is followed by formation of four groups- rural area within same state, urban area within same state, rural area across the states and urban area across the states respectively.

At first in order to differentiate the varying impact of migration by different family members on the likeliness of labour force participation by the left behind we divide the migrated persons in two groups- father and any other male member. This is followed by the estimation of the varying association of the destination (and the origin) of the migration for short-term and long-term respectively. In the first specification we replace our major explanatory variable- 'existence of at least one male member from the household by the relationship status of the particular male member with the non-migrant left behind youth. It necessitated incorporation of one dummy-the variable assuming the value 0 if none is migrated, 1 if the father is migrated and 2 if any male member other than the father is migrated. The second specification allows for variation in the probability of non-migrant left behind youth's labour force participation with respect to the destination of the migrant within state and across the states. In this specification also the dummy variable assumes three values -0 if none is migrated, 1 if migration is within state and 2 if migration occurs across the states. Then we analyse the impact of father and any other male member's migration within and across the state by interacting relationship dummy of the migrant with the destination (origin) of migration. Here the major explanatory variable of interest assumes five values. It takes value 0 if none is migrated, assumes value 1 and 2 if the father is migrated within and across the state respectively. It assumes the value 3 and 4 if any other male member from the household is migrated within and across the states. Up to these three specifications we do not expect any conflict between

the interpretation of the migration-destination and the migration-origin variables. Since migration here either has occurred within or across the states that is both the origin and destination happens to be either within the state or across the states for both temporary and long-term migrants¹². In our last specification we disaggregate the migration destinations of the father and other male member within and across the states by rural and urban divide. This specification has been considered for the temporary migrants only since the long-term migrants are evaluated at their origin so interpretation of these two types of migration no longer remain consistent. The major explanatory variable in the last specification for the temporary migration assumes nine values. It assumes the value 0 if none is migrated. Values 1, 2, 3 and 4 stand for father's migration in rural and urban areas within and across the states respectively. Values 5, 6, 7 and 8 stand for any other male members' migration in the same destinations as stated above. All the specifications have been controlled individual as well as background factors along with district specific heterogeneity. In order to keep the results simple and interpretable, we reported the marginal effects and standard deviations of the above discussed variables only.

In each equation for all the specifications we are aware of the fact that the pool of migrants may not be a random sample. However, the instrument –percentage of male migrant from the district excluding the respective household members remain same for both father and any other male migrant. Therefore, this single instrument is unable to exhibit any variation with respect to migration by different family members of the household. Hence, we have not instrumentalised the explanatory variables. In this analysis we simply wanted to explore if there exist any observable variation in the association of the probability of labour force participation by left behind youth and the relationship status of the migrant and his destination respectively.

The following four tables stand for the four equations and the four major columns in each table represents the results obtained from the estimation of specifications we mentioned above. Column (1) of Table 3.3 (a) reports marginal effects obtained from the estimation of the first specification in the first equation with the major explanatory variable being short-term migration of the father and any other male member from the household in the rural area. All the other control variables (individual and household characteristics) are incorporated in a way similar to our earlier analyses. The result in this case suggests that temporary migration by father as well as any other male member exerts a significant negative impact on the probability

¹² Therefore, it hardly matters whether we are evaluating the migrant at the destination or the origin. The interpretation explains what happens if migration occurs within the state for both temporary and long-term migrant.

of labour force participation by the left behind. However, looking at the magnitude we find strength of father's migration to be weightier compared to that of any other member's migration on the decision of the left behind youth's labour force participation.

Our second specification (column –(2)) shows temporary migration of the family member across the states to impart a stronger negative impact on the probability of the labour force participation of the young male member in the household. The next column exhibits that if the father is temporarily migrated across the states instead of within a state the son is more likely to be in the education instead of being in the labour force. However, migration by any other male member within the state found to be associated with a larger fall in the likeliness of labour force participation by the left behind compared to that across the states. The following specification witnesses that even though temporary migration of the father across the state is significantly associated with fall in the probability of labour force participation but such effect remains significant only if the migration happens to be in the urban area of different state instead of that in the rural area. Father's migration to both rural and urban area impart significant effect within the same state. The result suggests migration of the father is undoubtedly more effective in the rural area compared to that by any other family member in reducing the early labour force participation by the left behind young member. The magnitude is even powerful if the destination urban area (especially of different state). This result is not only implicit of the rural urban disparity of economic opportunity but also inequality of economic opportunity across the states.

All the other control variables have their expected signs and consistent in their effects.

Long-term absence of both father and any other male migrant appears with a negative sign which is in contrast to what we have observed in our earlier investigation in section 3.4.1. That is when we have instrumentalised the long-term migration of at least one male member from the household we observed a significant positive association of such migration with the decision of labour force participation by the left behind. In order to address the probable reasons for this contradiction we checked the correlation between the instrument and migration status of different family members. The instrument exhibits an inverse and significant association with the long-term migration by any other male member from the household. This instrument has a positive and significant association with the father's long-term absence from the household. So the contradiction that we have observed in our results can be reconciled in the following way. As the migration from the locality increases any other male member from the

particular household is less likely to be migrated. The migration network disseminates the information on availability of opportunity in the destination. It may well happen that information on the tight labour market conditions in the destination crates a sense of discouragement among the other male members in the family and instead of migrating outside they join the family enterprise to substantiate family's income and backed by the same reason the younger male member of the family also joins the labour force. Therefore, we observe a negative association between migration of any male member from the household and probability of labour force participation by the youth. Initially this effect is likely to dominate the labour force participation choice by the left behind. On the other hand, father's migration has a strong positive association with migration from the locality. Though it initially appears with a negative sign but after considering migration across and within the state we find if the father is migrated across the states for a long-time period son is more likely to join the labour force early. It draws its support from the literature that the negative labour market shocks (Hanson and Woodruff , 2003) experienced by adult migrant also requires the youth to work instead of continuing education.

In the third specification we find the father's long-term absence across the states to be associated with an increase in the labour force participation whereas such migration within the state is inversely associated with the probability. Migration by any other family member for long-term period also exhibits a significant negative association with the probability of labour force participation. That is in rural area long-term migration by any other family member unambiguously associated with a fall in labour force participation of the left behind but that by the father may be associated with increase in such probability. Observing the marginal effects we find long-term absence of the other family member to be more powerful in terms of its impact on labour force participation by the left behind.

In case of urban area we observe a similar association between temporary migration of the father and any other male member from the household with the probability of labour force participation. In contrast to rural area we observe that temporary migration within the state to exert a stronger effect compared to that across the states. From the following two specifications we find that if the father is migrated to another urban area across the states then the son is more likely to join the labour force. On the other hand, migration by any other male member is always associated with fall in the probability of labour force participation by the left behind youth except it happens to be in rural area of other state.

We do not find long-term migration to exert any significant impact on the probability of labour force participation in the rural area.

3.5 Concluding remarks

This chapter studied the diverse effect of internal migration of working age family member in determining the labour market choice of the left behind youth from the same household using a simple empirical framework after controlling for all possible sources of variation. We find that the short-term and long-term internal migration to exert differential impact on the probability of labour force participation by the left behind young male member. Short-term internal migration by the male member of the household significantly decreases such probability in both the areas while long-term absence of the working age member makes the youth more likely to be in the labour force. Further we observed short-term absence of the father in rural area to exert a stronger impact on the left behind youth's probability to continue their education compared to that by any other male member. In case of long-term absence however, we find any other male members absence to increase such probability. In contrast we also observed the incidence where father's migration for long-term to any other state increases the probability of labour force participation by the youth in the household. The result also demonstrates the significance of own as well as parental education in this regard. Though percentage of such internal migration out of total population is small, it has strong implications for the financial constraints and inter-regional inequality that the households are exposed to. Our results help to resolve the ambiguity in the relationship between migration and wellbeing of family members left behind that observed at the beginning of our study. In India the intermittent flow from the temporary migration has the potential to ease the credit constraint on the part of migrant sending households. However, this also indicates strong inter-regional inequality of the economic opportunity youth are indirectly victims of. Adding to this the significant rise in the labour force participation among the left behind youth for long-term migration of the father from the household to any other state is alarming in the sense that such migration often requires the son to join the labour force early as well. The disparity of economic opportunities along with the long-term absence of the father from the household may make the youth's labour market condition even deplorable. Further analysis should aim to assess the inter-regional disparity in the context of labour market opportunities accessed in the local economy and impact of employment guarantee schemes undertaken by the government on this in the context of such migration.

Table 3.3 (a)															
Probit estimation results (Marginal effects)															
Area of Residence	Rural														
	Short term Migration														
Father migration	-0.149	***	0.034												
Any other male migration	-0.060	*	0.034												
Within state					-0.071	**	0.028								
Across states					-0.123	***	0.039								
Father_Within state								-0.136	***	0.044					
Father_Across states								-0.161	***	0.051					
Male member_within state								-0.009		0.034					
Male member_within state								-0.099	*	0.053					
Father _rural within state											-0.135	**	0.064		
Father_urban_within state											-0.137	**	0.059		
Father_rural across states											-0.077		0.077		
Father_urban across states											-0.182	***	0.061		
Male member_rural within state											0.142	***	0.053		
Male member_urban_within state											-0.056		0.038		
Male member_rural across states											-0.014		0.101		
Male member_urban across states											-0.109	*	0.058		
Number of observations	20518				20518			20518			20518				
Pseudo R^2	0.4295				0.4295			0.4295			0.4295				
Log likelihood	-18120855				-18120855			-18120855			-18120855				
*, '**' and '***' stands for significance at 10, 5 and 1 per cent level respectively															
All the specifications are controlled for district specific macroeconomic effect.															

Table 3.3 (b)										
Probit estimation results (Marginal effects)										
Area of Residence	Rural									
	Long term Migration									
Father migration	-0.040		0.030							
Any other male migration	-0.108 *		0.056							
					-0.056 *	0.034				
Within state					0.031	0.051				
Across states										
Father_within state								-0.058 *	0.034	
Father_across states								0.030	0.051	
Male member_within state								-0.111 *	0.056	
Male member_within state								-0.287 **	0.126	
Observations	18901				18901			18901		
Pseudo R ²	0.4364				0.4363			0.4366		
Loglikelihood	-17139872				-17139872			-17139872		
*, '**' and '***' stands for significance at 10, 5 and 1 per cent level respectively										
All the specifications are controlled for district specific macroeconomic effect.										

Table 3.3 (c)													
Area of Residence	Probit estimation results (Marginal effects)												
	Urban												
	Short term Migration												
Father migration	-0.111		0.096										
Any other male migration	-0.111		0.071										
Within State					-0.171 **	0.077							
Across State					-0.020	0.082							
Father_within state								-0.178	0.122				
Father_across states								0.012	0.133				
Male member_within state								-0.164 *	0.094				
Male member_across state								-0.041	0.098				
father_rural within state											-0.250		0.183
father_urban_within state											-0.142		0.153
Father_rural across states											-0.385		0.162
Father_urban across states											0.075		0.137
Male member_rural within state											-0.283 *		0.159
Male member_urban_within state											-0.143		0.105
Male member_rural across states											0.393 ***		0.063
Male member_urban across states											-0.053		0.100
Observations	8703			8703			8703			8703			
Pseudo R^2	0.4823			0.4824			0.4824			0.4826			
Log likelihood	-4478668.8			-4478669			-4478669			-4478669			
*, '**' and '***' stands for significance at 10, 5 and 1 per cent level respectively													
All the specifications are controlled for district specific macroeconomic effect.													

Table 3.3 (d)												
Probit estimation results (Marginal effects)												
Area of Residence	Urban											
	Long term Migration											
Father migration	-0.015		0.029									
Any other male migration	-0.084		0.060									
Within state					-0.024	0.032						
Across states					-0.030	0.040						
									-0.019	0.033		
Father_within state									-0.025	0.040		
Father_across states									-0.043	0.109		
Male member_within state									-0.313	0.182		
Male member_within state												
Observations	10207				10207				10207			
Pseudo R ²	0.4863				0.4863				0.4865			
Log likelihood	-5560715				-5560715				-5560715			
*, '**' and '***' stands for significance at 10, 5 and 1 per cent level respectively												
All the specifications are controlled for district specific macroeconomic effect.												

Chapter 4

Labour market transition among the youth: Evidence from ten developing countries

4.1 Introduction

We ask what makes the youth's transition in the labour market of a developing country more difficult than their adult counterpart in terms of stability in the labour market. Is it skill mismatch? Or does it about something else that they continue job search even when they are employed in majority of these developing countries? For the possible answers we get back to the extensive literature studying job market behaviour of youth in both developing and developed countries.

There is a growing consensus that, the opportunity to benefit from favourable demographic transition in most of the developing regions may disappear with persistent deplorable condition of youth in the labour market. Undoubtedly skill mismatch, high unemployment, underemployment and dearth of education are the major challenges associated with youth's successful labour market transition (Global Employment Trends for Youth – Geneva: ILO 2013). The problems of youth in the labour market accentuates further with obstacles to job search, dearth of social insurance and limited access to capital. This leaves them entirely dependent on their own labour for acquiring all the job related information (Abebe et al, 2018). Literature provides corroborating evidences that often getting employment also is not sufficient to ensure stability among the participants. Larger likeliness of employment exit, job to job transition among the developing economies are implicit of the greater instability among the employed group. On an average these likeliness are 2 to 3 times higher in developing countries (Donovan et al, 2018). Hence, highly uncertain and unstable job prospect of these regions leaves youth's economic potential under-utilised. Thus realization of demographic dividend remains a farfetched dream. Under the backdrop of unique labour market feature of the developing economies our dissertation provides integrated and detailed empirical analysis explaining the current labour market transition of youth with respect to their non-employment (unemployment and inactive) and quasi-employment (identified with increasing intention to 'change or quit the current job) across ten developing countries. This issue may have enormous policy relevance in the context of the countries that are on verge of unveiling potential

demographic dividend but by and large lack productive opportunity among the younger generation.

The empirical evidences also add that such job quit intentions in poor countries has its implication for learning more about match quality (it is linked to matching mechanism to overcome possible job mismatch) on the job but less of a job ladder effect (Donvan et al, 2018). This conjecture gain prominence from the fact that labour force participation at early age is often driven by poor financial condition and larger drop out in these regions (Global Employment Trends for Youth – Geneva: ILO 2013). Besides, spells of unemployment in general is costly for future job prospect in terms of forgone wage and experience. In absence of well-functioning labour market institutions, they also lack proper information on a suitable match even after longer spells of active job search. Therefore, driven out of little or no option many youngsters end up with working in poor quality employment, with larger intention to quit from their current situation. Hence, this is in close proximity to the potential instability among the workers. Inexperienced workers with inadequate information, inappropriate utilisation of skill and poor background may enhance their learning potentials and information base from the current job and gets ready to quit current job for a newer and better employment relation (Donovan et al, 2018).

Among the many, inappropriate utilisation of skill can be a possible explanations for high turnover intention among the group of young workers. Self-employed being the dominant status of employment among youth in these regions are also identified as the group of workers to be most likely to switch to wage work and hence recognised as quasi-employed (Donovan et al, 2018). Along with this group of quasi employed, quit intention among the wage workers can vary further in presence of high job search cost (Elder, 2014; Elder et al, 2015; González et al, 2012; ILO, 2015). Young participants often possess limited experience and information as new comer in the labour market. The situation is even difficult among those from disadvantaged backgrounds especially in the developing countries where informal methods (such as personal contacts) are the dominating mode of job search process (Mazza, 2012). Such process frequently involve strong social networks and ties with the business sector. Here, quit intention and quasi-employment may also be linked to a matching mechanism to overcome possible mismatches and might lead to a better and efficient use of the existing resources. This argument is stronger for the youth since the junior workers are more likely to enter the job that require little skill. Hence, along with searching mechanism such intentions can be regarded as

the process of gathering experience for a progressive career. This argument receives mixed reaction in the literature. Larger turnover often symbolizes loss of economy's potential along with workers' inefficiency and results in a negative growth (Topel and Ward, 1992).

The issue becomes more debatable when we come across higher turnover intention among the more educated youth, considering a future of stable well paid employment rare a find (Elder et al, 2015; González et al, 2012; ILO, 2015). Adding to these, higher quit intentions sometimes can also be seen as a proxy for availability of alternatives among the workers (Freeman, 1977). However, this dimension of school to work transition has received little attention in the context of developing regions. The data limitations might be a probable cause in this regard.

International comparative studies on youth's labour market transition from such a perspective is almost non-existent. Under this background using the information available in School to Work Transition Survey (SWTS) data for the age group 15-29 we mark a young worker as 'transited' if he does not have any 'job quit intention'. He is marked as 'not-transited' if he is either 'quasi employed (employed with a job quit intention)', or NEET (Not in Education, Employment and Training). Therefore, non-transition or existence of quit intention reflects the possibility of potential instability (Jovanovic, 1979) among the youth even when they are employed. We document how transition varies for male youth in Madagascar, Tanzanian, Zambia (Sub Saharan Africa), Cambodia, Nepal, Bangladesh (South and East Asia), Kyrgyzstan (Europe and Central Asia), El Salvador (Latin America and Caribbean), Palestine and Egypt (Middle East and North Africa) for individual and background characteristics. In some of these countries rate of transition is even lower than 30 per cent.

We also observed how the rate of transition is associated with respect to the different spells of unemployment before finding the current job. We have documented rate of transition across different status of employment and occupation as well. We find that in most of the countries longer spells of unemployment is associated with fall in the rate of transition. This has an indication that that even after larger spells of job search they are identified as quasi-employed with their current engagement. Transition is considerably higher among the workers of the high skilled occupation. In our finding we observed that self-employed is that group of workers with least willingness to change their current job even after being identified as 'subsistence-entrepreneurs' in most of the empirical literatures of the developing countries.

Finally we have estimated the impact of education, early work experience, father's occupation and financial status of the household on the probability of transition.

The result shows, transition inclination decreases in levels of education in most of these countries except in Madagascar, Tanzania and Nepal. In these countries education does not bode any significant impact. Early work experience significantly increases the probability of transition among the working youth of Zambia and Nepal. A strong association between father's network and rate of transition is observed in most of these countries except Zambia, Tanzania, Nepal and Cambodia. There exists considerably large influence of family's financial status on the probability of working youth's transition in all the countries.

Rest of the chapter is organised as follows. Section 4.2 gives a brief review of existing literature on youth's labour market behaviour with special focus on transition, quit intention, job-satisfaction, quasi-employment, unemployment and inactivity. Section 4.3 describes the country context. Section 4.4 introduces source of the data and uses the data for descriptive analysis. Section 4.5 provides the estimation methodology and estimation result. The last section summarises conclusion of this chapter.

4.2 Literature review

Following the recent development in the labour market issues of developing countries we observe there exists a re-orientation of the labour market status. In absence of organised labour market the different labour market status cannot be mutually exclusive to each other in the developing regions. In developing countries much higher share of inactive people are found to be marginally attached to the labour force. Thus the difference between the two states (unemployment and inactivity) becomes blurrier. Labour market analysis in the context of developed countries conventionally abstract unemployment and inactivity. There is generally a clear distinction between those who want work and those who do not. However, literature points to some observations that cyclical variation in labour market outcomes such as the unemployment rate are often affected by movements in and out of the labour force (Elsby et al, 2015) in the developing countries. The youth unemployed in the developing countries may not be clearly distinguished from those who are inactive. Especially when most of the unemployed are not eligible for any unemployment insurance and assistance programs for the unemployed are less generous or absent (Clark and Summers, 1982; Ellwood, 1982).

In the context self-employed, another state in the labour market, empirical studies find that this group is dominant among the other states of employment. The significant reason behind the dominance of this status of employment in the developing countries is often lack of better choices for work rather than a good business opportunity. Therefore, this evidence has given rise to a literature that identifies self-employment as being a closer substitute for missing unemployment insurance than for wage work (Poschke, 2013) and exists as “subsistence entrepreneurs” (Poschke, 2019). Job market frictions among this group of workers are further prevalent from the fact that they are more likely to switch to wage work compared to that in the developed countries. This status of employment in most of the developing countries often identified as the status of ‘quasi-employment’ and ‘quasi-search activity’ (Donovan et al, 2018). Along with the subjective probability of the ‘job quit intention’ this ‘quasi-employment’ activity status is immediate precursor of actual quits. Such situations are perceived as ‘on the job search activity’. This intention can also be very high among the young wage workers. Since youth in developing countries often end up with unproductive, less-skilled, low-paid and least-secured jobs (Mitra et al, 2013) as own account worker, unpaid family labourer, casual employees or temporary labourers. Here employed youth competes with their unemployed counterparts and may shift from one job to another without intervening actual spells of unemployment (Parsons, 1991). Hence the set of job searchers often cannot typically be equated to the stock of unemployed in poorer countries with non-existent unemployment benefits, job search subsidies and sufficient job opportunities (Donovan et al, 2018; Franklin, 2018) etc. This prevailing nature of labour market in the developing countries is implicit of the instability that often the youth are exposed to.

Literature maintains that the issues of quasi-employment, large job-quit intentions are largely associated with lack of information, experience, in appropriate qualification, time preferences, conflict between family and work, dis-satisfaction, insufficient wages, adverse working conditions, temporality of work, location, etc (Parsons, 1991; Van, 1991; Freeman, 1977; Farber, 1999).

It is only when individual’s job match their specific need, preferences, aspiration and abilities they are likely to be settled with their present job and treated as transited to work (Kalleberg, 2008). On the other hand, if there is a mismatch or lack of fit ‘on the job search’ or ‘quit intentions’ or ‘quasi-employment’ is likely to rise. Under the present circumstances with

increasing job turnover intention or being quasi employed along with being non-employed the youth is considered to be more contentious than their elder counterpart.

Even though international comparative studies on employment-unemployment situation of youth has received a renewed attention with the recent demographic transition in most of the developing regions, labour market transition among this group from the perspective of quit intention and quasi-employment is almost non-existent. Instead of certain common labour market features, developing countries may show greater variation in terms of the instability among the young workers within and between the regions.

The ILO (2015) definition perceives an individual worker as transited not only with respect to the criteria of their job quit intention but also with respect to the job specific characteristics (like availability of contract, duration of such contract). However, in the developing countries (that we have considered for our analysis) where formal and permanent employment is rarely found, higher unemployment rate along with larger 'job quit intentions' or quasi-employment, are implicit of the challenges to find a good quality 'formal' employment. Hence, instead of analysing transition in reference to the nature of the job we choose to study their current labour market status (unemployed, inactive) along with the 'job-quit intension' of the employed group regarding their current job (identified as on the job searchers or 'quasi-employed').

We can broadly group the probable factors responsible for lack of transition among the youth (in the form of higher unemployment, job quit intention or quasi-employment) in the labour market in two categories- individual and job specific (for the group of employed). These factors influencing larger quit-intention and quasi-employment are almost in line with those influencing higher unemployment rate among these group. These factors can be further grouped into supply, demand and wage, non-wage respectively.

Age as one of the supply side factors has shown to be positively correlated with the probability of transition (Royalty, 1998; Kidd, 1991, 1994). The main argument for this observation is that younger workers are less likely to have significant financial commitments than their adult counterpart, making non-employment and job changes a costly affair at higher age. Besides the viable time to assess the cost associated with job change diminishes with age. Family background is another significant supply side factor. With poor background, the newcomers may not be able pursue a proper job search process, ends with higher intensity to change their current job.

The demand side factors related to labour market can be internal or external ((Bell & Blanchflower, 2011; Jovanovic, 1979; Parsons, 1991).

Among the internal factors worker's human capital or skill level is one of the widely discussed determinants. In this context we choose to highlight two types of human capital. One that emphasizes role of general education and the other talks about firm specific skills. The issue of skill mismatch in youth labour market (Bell & Blanchflower, 2011) has become a persistent and ongoing trend in the context of general education. There are two major forms of this mismatch that we may encounter at the time of analysing the relation between worker's skill level and lack of transition. These are the following. 'Vertical mismatch'- the level of qualification of the concerned person is either less or more than what is required for a particular job. The problem is more likely among the overqualified. 'Horizontal mismatch'- the type or field of skill or qualification of participant is different from what is required for the particular job. We hypothesize that, levels of education has a positive association with the 'lack of transition'. Since higher education often provides individual better labour market alternatives (Royalty, 1998) giving an opportunity to solve the initial mismatch if any. Although most studies do not reveal a significant association between the two.

Existence of employer specific human capital is another obvious explanations for existence of long-term employment relationships and lesser quit intentions among the wage workers. However, the task of testing the specific human capital model is very difficult because such capital is not observed directly. Hence, tenure is the best possible proxies for accrued firm specific capital. The intentions to quit should decline with increase in tenure because longer current tenure is consistent with longer implicit search process and stronger employee employer relationship (Farber, 1999). In addition, past labour market experience also help in obtaining larger coefficient for such tenure. Such experience is expected to be associated with a greater probability that current match between a worker and firm is best among the available in the labour market (Munasinghe et al, 2004).

Since we are considering the issue of transition among the youth for the age group 15-29 in reference to their quit intention, quasi-employment and non-employment (unemployment and inactivity) it is very unlikely that they will get the scope of acquiring larger levels employer specific human capital or have worked for a longer tenure (Ryan, 2001).

Along with these internal factors there are the external causes like experience, information etc. The orthodox interpretation in the context of larger unemployment, quit intention and quasi-employment points to asymmetric information. Workers and employers are assumed to have perfect information on their own attributes, but they are imperfectly informed about the same for each other. It is cost worthy to obtain information about those attributes by search and matching, respectively. In the quality dimension, therefore, a trial match is required, in which a job-worker match is tried out. According to the result, a match is either continued indefinitely or abandoned in favour of a randomly chosen alternative match. As young workers lack experience, the return to their investments in information is greater, and quit intention is higher than for adults (Jovanovic 1979;Parsons, 1991).

As an alternative to this interpretation, role of labour market structure is emphasised to result in such higher quit intentions. In reality the labour market is often segmented: efficiency wage strategies and insider power lead to large non-compensating differentials in pay by employer and sector (Katz and Summers 1988). In a segmented labour market, all workers apply to high wage employers, who use age and experience as a hiring criterion, expecting mature workers to be more productive than young ones. Low wage firms hire the rejects, including young workers. Young people must therefore wait, working in low wage, secondary jobs until high wage, primary ones become available to them. While they wait, low job rewards encourage job changing.

The two interpretations of instability among the employed youth differ normatively. The informational approach sees high turnover as efficient (having job-ladder effect), given information costs; the segmentationist one, as inefficient, given the waste of youth potential. However, it is not easy to distinguish empirically between these two views (Ryan, 2001). All these individual specific factors may jointly constraint a proper job match among the workers of this age group.

Apart from these individual specific factors, most celebrated job specific determinants receiving the largest attention in this regard is wage. The intention and actual quit is found to be inversely related to the wage received from the current job. Following the extensive literature on job market behaviour of youth, we find job quit intentions are often guided by a strategy that incorporates searching ‘costs’ and a multiple ‘reservation wage’ alogarithm (Parsons, 1991). The probability of ‘lack of transition’ or ‘quit intentions’ or ‘quasi-employment’ increases with fall in current wage relative to the alternative distribution of

wages. If it is very low an individual ultimately quits and choose to be unemployed. However, estimating the effect of wage on the issue of transition may suffer from misreporting and endogeneity bias.

There are other non-wage factors in determining the probability of job switch (Farber, 1999) which are no less important in this regard. Working hours may influence mobility from one job to another since lesser working hours is often associated with irregular and part-time employments implying lesser integration of a young worker with the firm (Serrano, 1998). Hence, we can expect positive association between working hours and probability of transition. However, longer working hours (often in the form of involuntary overtime) may also increase the desire to change the present job. Thus we can expect a non-linear relationship between working hours and the probability of job quit intentions (Sousa et al, 2004).

Being member of the labour union often leads to fall in turn over intention, hence expected to increase the probability of transition among the working youth. Union provides the members with an institution which upgrades their work place and increases the cost of job change (Sousa et al, 2004).

Other job and employer characteristics like ‘working conditions’, ‘high performance work practices (team work)’, ‘plant size’, ‘industry are without a doubt a very important attribute of the job match. If the wages do not sufficiently compensate for adverse working conditions workers can increase their utilities by job switches (Bockerman and Ilmakunnas, 2009).

Apart from all these individual and firm specific attributes the prevailing opportunities in the job market also appears to play a decisive role. Such condition often reflects in growth of the economy, adult and youth to adult unemployment rates in the locality etc.

Adding to these, literature (Freeman, 1977; Kristensen et al 2004) also highlights the role of subjective factors based on individual’s perception. ‘Appropriateness of existing qualification’ and ‘job satisfaction scores’ are two of the means of job quits. Studies on job satisfaction find that dissatisfied workers are more likely to quit their current matches. In other words, the self-reported level of job satisfaction is a good individual based predictor for job mobility beyond the effect of wages and other job specific characteristics. Researchers also show that job changes lead to an increase in job satisfaction (Akerlof et al, 1988) and present evidence that job switches leads to more satisfactory working hours (Altonji and Paxson, 1988). Thus the

direction of the relation between satisfaction and quit intention may not be unique in determining the latter, leading to the issue of endogeneity.

Here in order to specify the group of youth not being transited in the labour market in the context of developing countries we pool the group of unemployed and inactive into a single category of non-employment and think about self-employed and wage workers with quit intention as quasi-employment, involved in quasi-search activity.

In this chapter our concept of transition among the youth in reference to their quit intention is not in contrast but a broader concept with respect to the definition by ILO (2015). The ILO definition perceives an individual worker as transited not only with respect to the criteria we have accounted for but also with respect to the job specific characteristics (like availability of contract, duration of such contract). Instead of analysing transition in reference to the nature of the job we choose to study their preferences regarding their current job (desire to change the job) following the extensive literature on mobility among the workers. This issue also in close proximity to the potential instability among the workers.

In any case, much remains to be learned about the determinants of youth labour market transition. This piece of work deviates from the earlier studies in this fields of research in some important aspects. First of all we choose to analyse youth's transition in developing countries with respect to the criteria mentioned above. Adding to this we have the opportunity to use a unique data set entirely focusing on the School-to Work Transition among the youth aged within 15-29 years. This survey has been conducted by the International Labour Organization from 2012-2016 for 30 developing countries and contains all possible retrospective information on individual's labour market activity, educational activities, parental, socioeconomic characteristics, allowing us to take the advantage of this rich data base in studying transition behavior of employed youth. A drawback of the data set is that it is a single cross section. We can add up to the existing literature on youth labour market behavior by analyzing their inclination of transition with respect to their skill levels, early work experience, financial status, spells of unemployment, occupations and status in employment for different developing countries.

4.3 Country context

In this analysis we use data from ten developing countries of five regions - Sub Saharan Africa (SSA), South and East Asia (SEA), Europe and Central Asia (ECA), Latin America and Caribbean (LAC), and Middle East and North Africa (MENA). The selection of countries is based on their similar ranks in HDI in a particular region and availability of ‘School to Work Transition Survey’ data from ILO. Table 4.1 provides demographic, geographic and labour market information of these countries.

Table 4.1: Country context – demographic, geographic and labour market indicators

	Regional HDI value	Countries	HDI		Surface Area (Sq km)	Population density (/sq km)	GNI (PC PPP)	GDP (PC PPP)	% of Urban population	EPR	% of employment in Services	Regional Youth Labour market indicators			
			Value	Rank								YLFPR	YEPR	YTAUR	YUR
Sub Saharan Africa (SSA)	0.518	Madagascar	0.51	154	5,87,295	42	1400	1369	35	85	16	57	50	2	11
Sub Saharan Africa (SSA)	0.518	Tanzania	0.521	151	9,47,300	60	2620	1718	28	86	19	57	50	2	11
Sub Saharan Africa (SSA)	0.518	Zambia	0.586	139	7,52,610	22		2800	41	69	21	57	50	2	11
South Asia (SA)	0.607	Nepal	0.548	145	1,47,180	199	2500	2173	18	81		55	52	4	10
East Asia (EA)	0.71	Cambodia	0.555	143	1,47,180	88	3290	2944	21	82	37	57	51	3	13
South Asia (SA)	0.607	Bangladesh	0.57	142	1,48,460	1,237	3550	2853	30	68		55	52	4	10
Europe and Central Asia (ECA)	0.748	Kyrgyzstan	0.655	120	1,99,949	31	3300	3110	36	62	45	48	40	3	16
Latin America and Caribbean (LAC)	0.748	El Salvador	0.666	116	21,040	296	8220	7515	66	58	58	62	55	3	11
Middle East and North Africa (MENA)	0.686	Palestine	0.677	113				5002	75	32	62	47	39	4	25
Middle East and North Africa (MENA)	0.686	Egypt	0.69	108	10,01,450	96	10690	10,733	44	43	47	47	39	4	25
Abbreviation used: EPR= Employment Population Ratio, YLFPR= Youth Labour Force Participation Rate, YEPR= Youth Employment to Population Ratio, YTAUR= Youth To Adult Unemployment Rate, YUR= Youth Unemployment Rate															
Sources: Human Development Report (2015), World Development Indicators; ILO, 2015. Cambodia belongs to East and Bangladesh and Nepal belong to South Asia respectively.															

In the above table the countries are arranged in the ascending order of their HDI values in respective regions. The second column of this table reports HDI value of the corresponding region. Among these countries Madagascar, Tanzania, Nepal, Cambodia and Bangladesh are low income and rest of the five are lower middle income countries respectively. Except Tanzania, Zambia and Egypt all the countries we considered are below average performers of their regions (in terms of HDI value). Employment to population ratios are very high in SSA and SEA countries. Majority of the population in these countries live in rural area except in Palestine. Contribution of service sector in the employment is highest in Palestine followed by El Salvador, Egypt and Kyrgyzstan. However, the contribution of this sector in Madagascar and Tanzania is considerably lower.

All these countries of the developing regions appear with some unique and many diverging features of the youth labour market. In SSA, SEA and LAC human capital deficiencies and limited labour market information reduce the opportunities of many new entrants to access good-quality jobs instead of positive growth and increased investment in education (Elder, 2014 ; González et al, 2012). However, this is not the case for ECA. Here the stagnant growth

does not bode well for the well-educated young people hoping to enter the labour market each year (Elder et al, 2015). There is a wide variation among these regions in terms of both EPR and YEPR. These two ratios are the indicators of current labour market conditions of the regions. Following the existing labour market situation of youth in these five regions a declining trend of YLFP and EPR except in SSA has been witnessed (Global Employment Trends for Youth – Geneva: ILO 2015). Lower YLFPR has been closely linked to increasing trends in educational attainment. However, EPR and YEPR still very high in both SSA and SEA. Principally low household incomes and limited access to education and information likely to drive majority of the youth to work at early ages in LAC, SSA and SEA, leaving YUR in these regions comparatively lower. The scenario in MENA is slightly different. With lower EPR, YEPR and higher YUR, the youth bulge has been very much turned from a blessing into a problem. Though education and skills can always improve, this is not the primary reason that holds back job creation and productivity growth in the Arab world. In many respects, at least in some Arab states job seekers are over-educated for the kind of jobs that are being created by the economy. In MENA the youth to adult unemployment rate is also highest among the regions under consideration. Youth in this region is 4 times more likely to be unemployed compared to their adult counterparts. This figure is higher than the world average (3). The incidence is lowest in SSA (Global Employment Trends for Youth – Geneva: ILO 2015).

The prevailing situation ultimately boils down to the fact that, even though human capital deficiency is undoubtedly one of the main but not the only obstacle in finding a suitable work. The lesser educated always remain disadvantaged in term of wages and access to stable employment, with higher education also they find noticeable difficulty in finding a proper match. This fact often is reflected in the higher percentage of unemployment and larger turnover intention among the higher educated youth. The problem seems to be most prominent in MENA with almost 40% of the youth labour market participants unemployed. However, in rest of the countries with lower open unemployment this instability may reflect in higher quit intention among the employed counterpart. The problem of insufficient education is also not ignorable especially in SSA followed by MENA, LAC and ECA. Under this premise (based on the reports published by ILO) we can clearly say that despite of continuous increase in educational attainment, labour market settlement and successful transition still remain a lofty goal among the youth. Absence of well-functioning labour and capital market along with emergence from disadvantaged background may restrict their smooth transition to labour market .Ultimately far too few youth are able to match their aspirations to reality and left with

an unstable labour market situation. Inability to prove oneself a productive member of the society at early stage of economic life may overshadow their future or create a sense of frustration and negativity during a time which is meant to be full of hope.

Under this premise we set the objective of our study to provide a rigorous analysis of labour market transition among the male youth of selective countries from these regions. We emphasize on their quasi employment status ('intentions to change current job') along with non-employment that often originates from number of labour market mismatches. Trying to answer the question of what makes the youth settled in their present job, we make an effort to explore the probable determinants of stability among them. Hence, forming a policy platform directed towards young worker's freedom from the problems of uncertainty, mismatches, instability and working poverty often associated with the jobs they find.

4.4 Data and descriptive

Our empirical estimates are based on the School-to-Work transition surveys of the ILO for the ten developing countries of five developing regions as indicated at the outset of this chapter. The ILO's Youth Employment Programme (YEP) has designed this "school-to-work transition survey" in order to assist member States in building a knowledge base on employment situation of youth aged within 15-29 years. Presently the SWTS has been conducted for 30 developing countries. This survey provides a greater scope to analyse the nature of transition faced by young people from school to a job that meets the basic criteria of "decency", "permanency", "security", "aspiration" and "personal satisfaction"(ILO,2015). It contains number of questions related to individual's demographic, family-background information along with retrospective and current details on their education, work status and subjective views regarding the job they are doing. After retaining the information on male youth for the purpose of our analysis the data set contain 2 358, 992, 1 728, 1 657, 1 645, 4 171, 1 909, 1 715, 2 124 and 2 975 individuals for Madagascar, Zambia, Tanzania, Nepal, Cambodia, Bangladesh, Kyrgyzstan, El Salvador, Palestine and Egypt respectively. Further details on the youth population's distribution in the sample is provided in the appendix.

4.4.1 Transition across the countries

Guided by the information available for the age group 15-29 we mark a young male person as 'not-transited' if he belongs to any of the following status 'inactive', 'unemployed' or 'quasi-employed (employed with job quit intension)' otherwise the person in the labour market is

perceived to be ‘transited’ with no job ‘quit intension’. In our descriptive analysis we report the transition rate with respect to individual (age, experience, enrolment status) and background factors like financial status and area of residence.

Transition rate is considerably lower in Zambia (14 %) (Table 4.2) followed by In Tanzania, Nepal, El Salvador, Palestine, Egypt and Kyrgyzstan. Highest rate is observed in Bangladesh (59 %). This is followed by Madagascar (51%).

Youth in the age group of 25-29 are observed to be comparatively more likely to be transited from Bangladesh, Madagascar, Cambodia, Nepal, Kyrgyzstan, Palestine, and ElSalvador. This observation draws its support from the existing literature as well.

A movement from no formal education to more than secondary is associated with lower rate of transition in most of the countries except Nepal, Cambodia, Bangladesh and Kyrgyzstan. Movement toward post-secondary education from elementary education improves the rate among the working youth only in Tanzania, Cambodia and Kyrgyzstan. A general observation in most of these countries is that consecutive levels of education is often associated with deterioration in the transition rate. We find a little exception in Tanzania and Kyrgyzstan where successive educational attainments from elementary to secondary and post-secondary is associated with rise in the rate of transition.

A young worker without any formal education is most likely to be transited in El Salvador followed by Tanzania, Egypt and Madagascar. This high rate is implicit of the constraint youth are exposed in the labour market. With only elementary education this rate is highest in Bangladesh. Another observation worth mentioning is that even if the rate of transition is higher in Bangladesh and Madagascar the rate declines among the highest qualified workers.

Transition is lowest among the young workers with post-secondary education in Zambia followed by Egypt, ElSalvador and Tanzania.

Focusing on the rate of transition across current status of enrolment we find, transition is lower among those who have completed education in Madagascar, Egypt, El Salvador, Tanzania and Zambia. There is also evidence of higher transition among the working youth with completed education compared to incomplete educational achievement in Nepal and Cambodia respectively. The probable explanations is that it is very likely that completing education enables the youth to get initial better match of their aspiration compared to those who have left

the education before completion. Or it may well happen that, the job market conditions are so tight that individual can hardly think of quitting hence settled under constraint situation. In other countries where the situation is opposite as new comers, youth often lack the proper information and experience, consider their current job as a stepping stone of gathering these two hence show lesser transition rate. In some of these countries (Madagascar, Tanzania, Zambia, Palestine, Elsalvador, Egypt) we also find transition rate to be higher among the enrolled. This may be indicative of the ease that the young worker find at the current job to pursue work and study simultaneously.

Table 4. 2- Transition rate among youth (%)

	Variables	Madagasc	Tanzania	Zambia	Nepal	Cambodia	Banglades	Kyrgyzstar	ElSalvado	Palestine	Egypt
	All	51	23	14	33	42	59	48	34	38	39
Age group	15-19	49	25	17	30	39	49	44	32	35	48
	20-24	48	19	12	29	39	57	45	31	36	30
	25-29	57	27	12	39	50	68	54	40	42	43
Own Education	No formal	55	63	19	17	44	30	45	67	41	56
	Elementar	53	19	20	34	43	61	41	35	38	48
	Secondary	43	21	7	31	37	53	47	30	40	31
	Post Seco	40	33	16	31	65	49	53	30	34	29
Current status of enrollment	Enrolled	49	41	24	27	40	51	51	38	40	43
	Left educ	52	40	12	32	41	59	17	34	37	49
	Completed	46	16	8	48	46		50	31	39	32
Experience	No	49	17	12	25	38	59	50	31	38	37
	Yes	50	30	18	43	42	57	45	37	38	39
Area of Residence	Rural	53	16		34	42	58	46	38	37	41
	Urban	44	29		30	40	65	53	29	44	35
	Mixed		22								
Financial Status	Poor	48	19	11	30	31	56	33	30	14	33
	Non_Poo	56	25	16	34	44	60	49	38	42	40
Observations	Transited	1004	132	198	306	574	1927	627	513	509	739

Transition is higher with any early work experience. However, all these are unconditional probabilities.

These observations are implicit of few facts. Always higher rate of transition may not be a good indication of the young workers settlement in the labour market as happened to be in Bangladesh and Madagascar. In these countries higher education is associated with lower rate of transition. The observations are also indicative of the problem of skill mismatch. This observation is also prominent in El Salvador, Egypt and Palestine. A situation where a younger participant with highest qualification and insufficient information finds either his current job less suitable or choose to be non-employed and waits for better match and thus results in lesser

transition. This also may imply availability of alternative choices in the economy for the young people with better qualification after a possible initial mismatch.

Despite of this looking at the percentages rigorously we find in some cases a little improvement in the rate with a movement from secondary to post-secondary (Tanzania, Zambia, Cambodia and Kyrgyzstan). Though sometimes this rate still remains lower than that under no or elementary education. Any ways in this case we get the flavour of improvement of the transition situation beyond a certain level of education. This implies availability of better initial match for the higher educated. Being more eligible at higher education they are informed about the prevailing job market requirements and end with choosing the right occupation. However, all these conjectures are very much contingent upon the prevailing labour market opportunity for the youth.

Rural youth are most likely to be transited except in Madagascar, Nepal, Cambodia, El Salvador and Egypt. Comparing the association between financial status of the household and rate of transition we find that young workers from the poorer households are less likely to be transited in most of these countries.

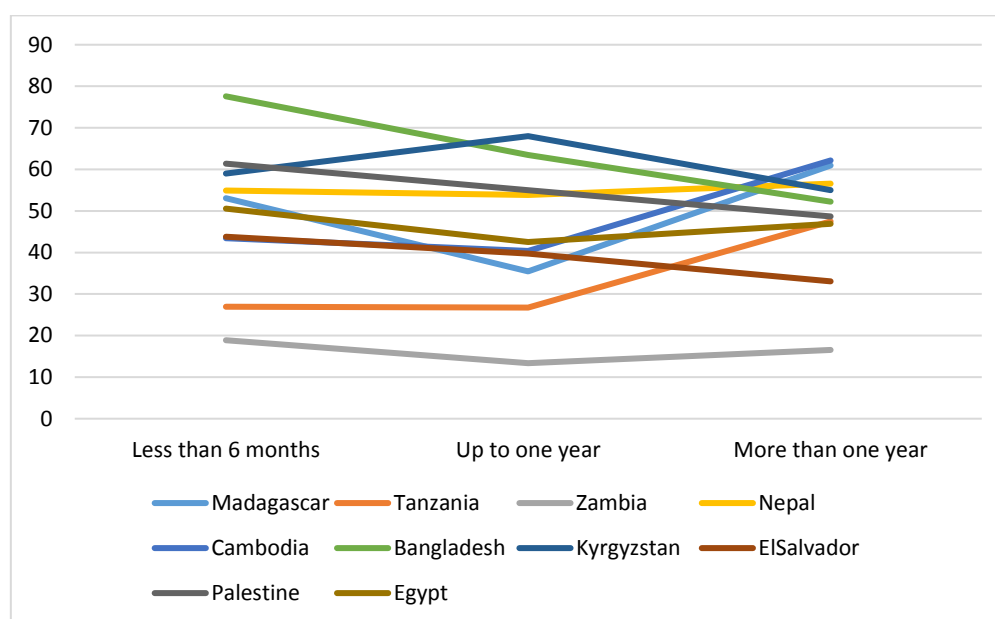
4.4.2 Transition with respect to different spells of unemployment before the current job

We have also documented the association between the duration of seeking job or unemployment spells before current job and quit intention (or the quasi employment status). For the group of employed we construct three unemployment spells following all the possible answers to the question ‘How long were you available and actively looking for work before finding your current job (or establishing your current business)’ as available in SWTS. Low spell covers the following five durations - ‘less than a week’, ‘one week- less than one month’, ‘one month-less than three months’ ‘three months-less than six months’ and ‘six months- less than one year’ respectively. Medium and large spell incorporates the duration of ‘one year-less than two year’ and ‘two year and more’ respectively. In case of Bangladesh the duration spells are different. In this case the low spell incorporates ‘not seeking’. Medium and large spell incorporates ‘less than a week’, ‘1-4 weeks’, ‘1-2 months’, ‘3-6 months’ and ‘6 months to one year’ respectively. Graph-4.1(Table-4b) shows the distribution of transition across different spells of unemployment.

In Bangladesh and El Salvador youth are most likely to be transited with a smaller spell of unemployment. In these two countries medium and large spell is associated with lower

transition rate (that is larger turnover-intentions). We do not find any variation in transition rate for different spells of unemployment in Nepal. In Kyrgyzstan transition is lower for a spell beyond medium. In rest of the countries duration of the spell shows a v pattern implying that junior workers with a shorter spells of unemployment are more likely to be transited compared to those with a medium spell. Again transition rate improves for a larger spell.

Graph-4.1 Transition with respect to different spells of unemployment

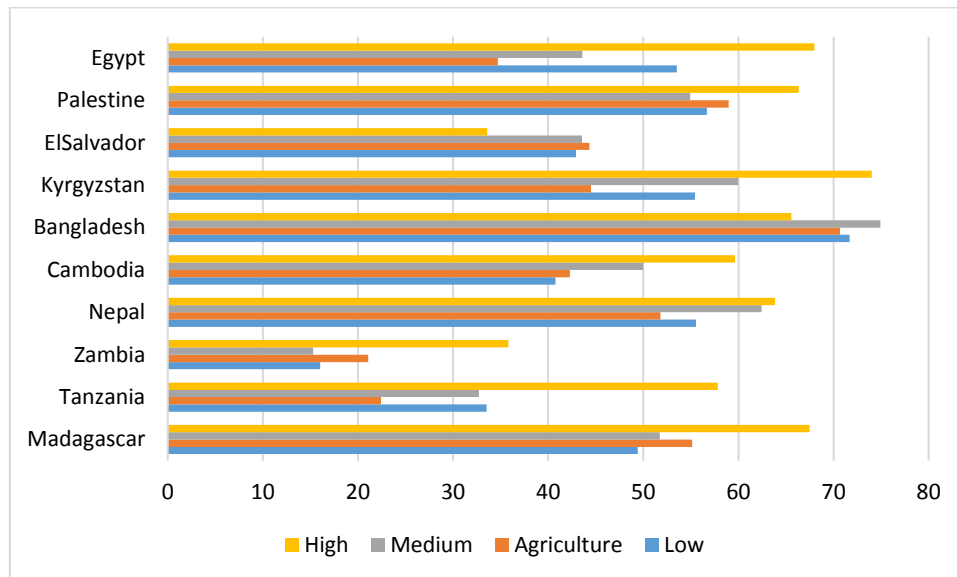


Higher transition for smaller spell may be indicative of the constraints rather than choice that youth face in the labour market of the developing regions. This conjecture is motivated by the fact that often early entry in the labour market is poverty driven and associated with higher drop outs making junior participants less suitable for alternative opportunities prevailing in the economy. Lesser transition for the larger spell is implicit of the scar effect where the longer spells of unemployment incurs the cost of forgone experience and wage leaving the worker dissatisfied with the job ultimately found. However, in some cases positive association between higher spells of unemployment and transition may be a result of fall in the reservation wage after a longer spell. Or it may be the case that with larger spells an individual becomes better informed and surveyed all possible alternatives and have ultimately found one that matches their aspiration utmost. Lower transition with shorter spell may result from the fact that larger spells of unemployment often considered as ‘scar’ in one’s professional career, hence the new entrants in order to avoid the potential scar accept whatever job is available, but continue their on-the-job searching and show lower inclination of transition.

4.4.3 Transition across the occupations

Looking at the percentage of transition across different occupations (graph-4.2, Table-4c) we find that the rate is highest among high-skilled workers in all the countries except Bangladesh and El Salvador. In Madagascar, Nepal, Cambodia, Bangladesh and Kyrgyzstan the medium skilled are more likely to be transited compared to the low-skilled.

Graph-4.2 Transition across the occupations (%)



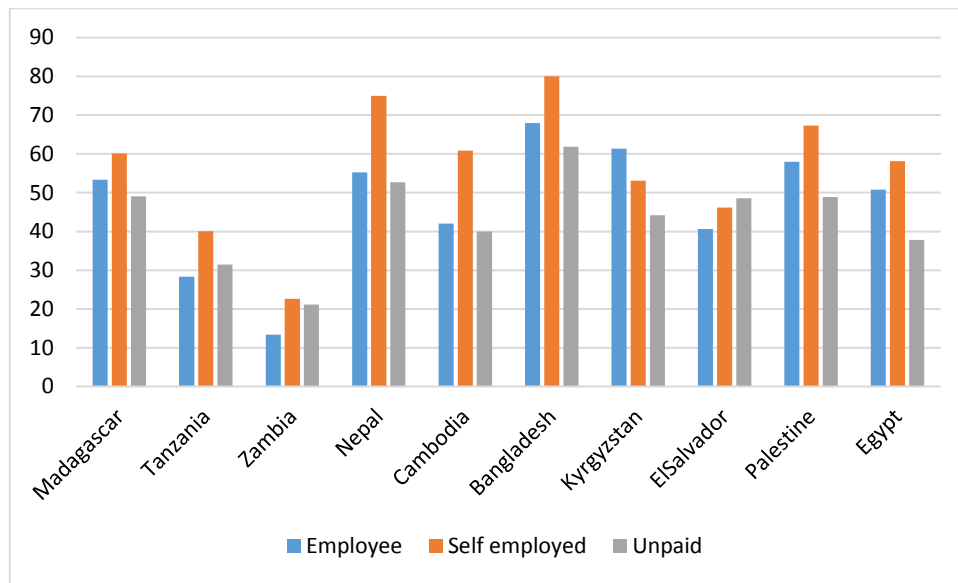
Therefore, we find that in most countries skill levels show a positive association with the probability with which the young worker is willing to continue his current job. Agricultural workers also exhibit moderately higher rate of transition compared to the low skilled workers of Madagascar, Zambia, Cambodia, El Salvador and Palestine.

4.4.4 Transition across different status of employment

Graph-4.3 (Table-4d) present the rate of transition with respect to the status in employment among these working male youth.

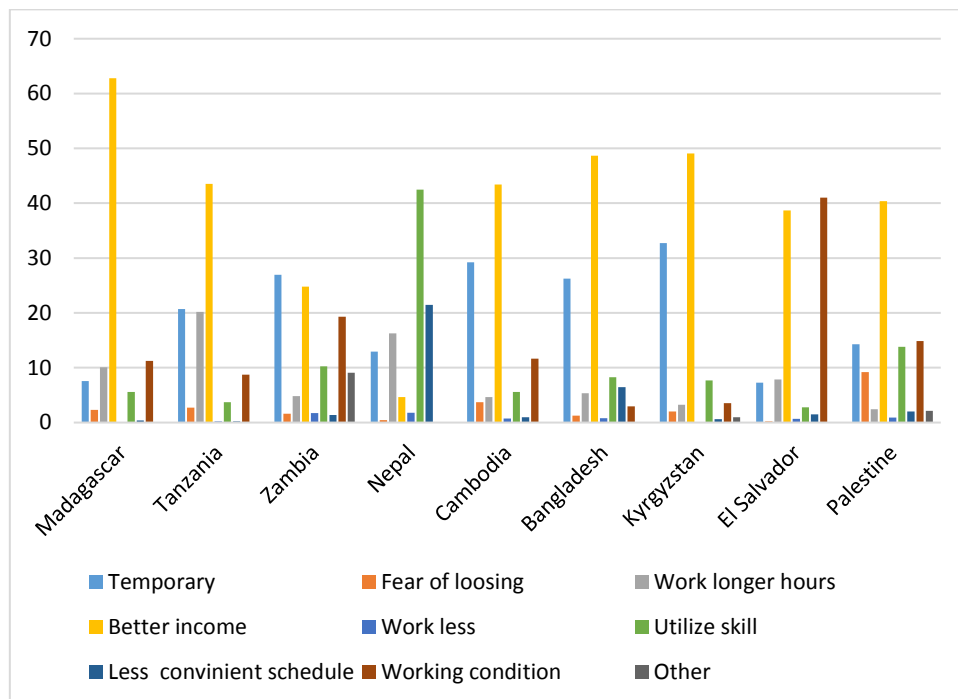
Surprisingly here we observe that with a little exception in Kyrgyzstan and El Salvador youth in most of the countries are not willing to change their current job status if they are self-employed (employer and own account worker and member of producers' co-operative). This is in contrary to the literature that we have surveyed at the outset of this chapter. In Madagascar, Nepal, Cambodia, Bangladesh, Palestine and Egypt youth are more likely to retain their job if they are wage worker.

Graph-4.3 Transition across different status in employment (%)



4.4.5 Reasons behind not being transited in current job

Graph-4.4 Reason not being transited (in%)



Next we look in to the reasons for why they want to change, we find that most frequently observed reason for wanting to change the job is ‘better income’. This is followed by ‘temporary nature of their job’, ‘to find better working condition’ and ‘to make better utilization of one’s qualification’. However, the frequencies of the response differ from country to

country. Better income is the most dominating response of all, however Nepal and Egypt is exception in this case with largest emphasis on the issue of skill utilization. In Zambia and El Salvador the reasons that motivate one to change the jobs are ‘temporary nature of the job’ and ‘demand for better working conditions’ respectively.

From the descriptive we conclude that in most of the countries successive levels of education is associated with a lower rate of transition with an exception in Tanzania, Zambia, Cambodia and Kyrgyzstan. Skill mismatch becomes evident in the observations like lower rate of transition among the group with completed levels of education. Further any early experience is found to overcome the problem of potential mismatch and bridge the gap of requisite information which the youth as new entrant often lack. Contrast to the literature in our empirical finding we observed the subjective probability of the job-quit among the self-employed to be considerably lower in most of these developing countries. We find transition to be higher among the high-skilled workers and agricultural workers with lower job quit intention. Transition is found to exhibit a nonlinear relationship with the spells of unemployment in most of the countries with lower quit intention among the workers with medium spells of unemployment. Reasons reported for quasi-employment in most of the cases is expectation of better income and better utilisation of the skills possessed.

4.5 Methodology and estimation results

Transition is a binary response variable takes the value 1 if the person is employed and without any quit intention. It assumes the value 0 if belongs to any of the following categories - quasi-employed (employed with a quit intension) or NEET. We use a simple probit model to estimate the impact of own and background variable on the probability of transition. Here the key individual and background factors are age, education, work experience, current enrolment status, father’s occupation (proxy for parental network), and area of residence and financial status of the household.

Our empirical specification is

$$\begin{aligned} Transited = & \beta_0 + \beta_1 age + \beta_2 experience + \beta_3 left_{edu} + \beta_4 completed_{edu} \\ & + \sum_{i=1}^3 \beta_{4i} education + \beta_5 father_{agricultural} + \beta_6 father_{medium-skilled} \\ & + \beta_7 father_{high-skilled} + \beta_8 nonpoor + \beta_9 urban + u_1 \end{aligned}$$

We distinguish between four levels of education- ‘No formal’, ‘Medium or Elementary’, ‘Secondary’ and ‘Post-Secondary/ Higher’ education. As the name suggests the first category comprises of not having any education. The second category incorporates education ‘up to eighth standard’. Our third category comprises of those who have completed secondary or equivalent qualification or are pursuing any ‘Secondary’ qualification. The fourth category includes those who have qualification beyond secondary level or any vocational training or internship or apprenticeship equivalent to it. Rural and Urban area are described as area of residence.

We also account for the role of acquired ‘work experience’ as early labour market experience. Formal on job training is only relevant for public and private salaried employment and number of such observation is very little so we have not chosen this category. Following the SWTS questionnaire we define experience as binary response variable, taking the value one if the respondent acquired any experience while studying. Any early experience supposed to be positively related to rate of transition.

We have controlled our estimation for financial status of the household. We hypothesize this relation in line with the existing literature where poverty, lack of well-functioning credit market and low returns to education (Ranjan, 1999; Bacolod et al, 2008) are often being linked to higher rate of labour force participation among the younger members of the household. Using SWTS questionnaire we have grouped the information on financial status in two categories as ‘poor’ and ‘non-poor’ (comprising of average, rich and very rich people)¹³.

We use parental occupational status with the hypothesis that parental education may not have any direct influence over preference of a particular job but father’s occupation may have indirect influence through role-model effect.

The decision regarding the current labour market status can vary directly through transfer of social, physical, financial capital and investment in offspring’s human capital by the parents (Solon, 1992). Parent’s occupational outcomes are assumed to play the ‘role model’ effect where the off-springs often try to imitate their parents’ educational and occupational achievements. Such decision may be also influenced by gaining valuable skill, experience by observing parents at work. Successful parents often transfer reputation and a rich social network (as social capital) to their children which in turn increases the rate of transition among

¹³ Table-A6 in the appendix reports construction of the relevant variables for our analysis.

the group of workers. In other words the information revealed by the parental choices (and their outcomes) can influence youth's labour force market outcomes (Manski 1993; Streufert, 2000). In this way the background factors are most likely to have effect on youth's labour market activity significantly.

In order to take into account for the above stated network and role model effect, we incorporate parents' occupation and educational level. We distinguish between 'high-skilled', 'medium-skilled', 'agriculture' and 'low-skilled' occupations (using ISCO-2008) of the father. Given the fact that majority of the mothers in these countries do not work in their working life span we have not considered their occupational status.

Considering the results obtained from the estimation of transition equation we find that youth becomes more likely to be transitioned with the age in most of the countries significantly. This finding owes support from the literature where we find that lower age comes with significantly lower financial obligation and may result in lower transition.

In line with our descriptive finding the estimation results also suggest that having any early work experience is associated with increase in the probability of transition in most of the countries (significant only in Zambia and Nepal).

We observe youth are less likely to be transitioned if they have not completed their education. This is observed significantly in Zambia, Kyrgyzstan and Palestine. In Nepal and Bangladesh the rate is higher with completed levels of education.

Consecutive levels of education is often found to be a factor inversely influencing the rate of transition. Nepal and Bangladesh being exceptional in the regard. With increase in the level of education rate of transition falls significantly in Palestine, Egypt and Kyrgyzstan. If not all the levels but the Secondary levels of education are associated with such significant fall. Looking at the sign and magnitude of the marginal effects we find they are not only negative but the strength increases with rise in the educational level with. In Bangladesh we can see elementary education becomes a significant factor in determining the probability of transition. However, education does not exert any significant impact on the transition among the youth in Madagascar, Tanzania and Nepal. Thus observing education as one of the determinants of transition we find more educated are less likely to be transitioned in the labour market. However, we observe a huge variation in the relationship between the levels and the probability of transition from one to another country.

In Madagascar, Palestine and Egypt we find occupational hierarchy of the father to influence positively the rate of transition. We also observe the son of agricultural workers often to be significantly transited in Madagascar, Kyrgyzstan, El Salvador and Bangladesh. This is indicative of transfer of rich social network from the father to the son. This is also reflected in the context of agricultural workers among which group we find transition rate to be moderately higher.

Improvement in the financial status is a significant factor in increasing the probability of transition among the working male youth. Being in Urban area is positively associated with probability of transition.

Table 4.3- Estimation results

Country	Madagascar			Tanzania			Zambia			Nepal			Cambodia		
Marginal effects	ME	S.Error		ME	S.Error		ME	S.Error		ME	S.Error		ME	S.Error	
Age	0.007 **	0.004		0.009	0.008		0.001	0.003		0.012 **	0.006		0.011 ***	0.004	
Experience	0.006	0.030		0.042	0.063		0.050 **	0.025		0.220 ***	0.038		0.056	0.042	
Left Education	0.029	0.047		-0.242	0.165		-0.093 ***	0.036		0.040	0.052		0.049	0.043	
Completed Education	-0.008	0.051		-0.299 **	0.144		-0.096 **	0.045		0.191 ***	0.076		0.059	0.055	
Own education															
Elementary	-0.022	0.071		-0.067	0.186					0.139	0.197				
Secondary	-0.115	0.077		-0.042	0.195		-0.072 **	0.036		0.047	0.201		-0.123 ***	0.034	
Post Secondary	-0.164	0.113		-0.001	0.200		-0.039	0.039		0.005	0.198		0.112	0.084	
Father's Occupation															
Agriculture	0.080 **	0.040		-0.060	0.071		-0.026	0.027		-0.058	0.049		0.010	0.042	
Medium	-0.068	0.071		0.016	0.090		0.002	0.031		0.056	0.064		0.066	0.060	
High	0.128 *	0.077		-0.061	0.092		-0.011	0.027		0.017	0.062		0.074	0.061	
Nonpoor	0.074 **	0.031		0.082	1.4 0.059		0.061 ***	0.021		0.069	0.047		0.140 ***	0.037	
Urban	-0.054	0.034		0.169 ***	0.065					-0.073 **	0.037		-0.029	0.045	
Mixed				0.035	0.056										
Log likelihood	-1478376			-2116383.2			-342837			-928057			-1151666		
Pseudo R^2	0.022			0.0808			0.0792			0.0596			0.0306		
Observations	1610			582			953			784			1284		
Note: All specifications include district fixed effects.															
*, **, *** stand for 10%, 5%, and 1% significance respectively.															

Table 4.3- Estimation results (continued)

	Bangladesh			Kyrgyzstan			Elsalvador			Palestine			Egypt		
Marginal effects	ME	S.Error		ME	S.Error		ME	S.Error		ME	S.Error		ME	S.Error	
Age	0.026 ***	0.004		0.027 ***	0.006		0.013 **	0.005		0.012 ***	0.005		0.013 ***	0.004	
Experience	0.017	0.042		-0.038	0.043		0.057	0.045		0.006	0.037		0.019	0.028	
Left Education	0.006	0.035		-0.482 ***	0.073		-0.102	0.080		-0.133 **	0.061		-0.043	0.057	
Completed Education				-0.106	0.067		-0.090	0.072		-0.017	0.061		-0.005	0.063	
Own education															
Elementary	0.316 ***	0.119		-0.081	0.101		-0.252	0.176		-0.060	0.045		-0.122 ***	0.044	
Secondary	0.187	0.123		-0.157 **	0.085		-0.316 *	0.174		-0.144 **	0.064		-0.375 ***	0.064	
Post Secondary	0.125	0.123		-0.160 **	0.079		-0.299	0.204		-0.252 ***	0.065		-0.431 ***	0.065	
Father's Occupation															
Agriculture	-0.041	0.030		0.107 **	0.047		0.088 **	0.046		-0.013	0.063		0.036	0.035	
Medium	0.006	0.044		-0.033	0.062		0.175 **	0.080		0.081 *	0.045		0.000	0.046	
High	-0.046	0.059		0.023	0.054		-0.109	0.072		0.081 *	0.048		0.055 *	0.029	
Nonpoor	0.069 **	0.033		0.158 **	0.074		0.141 ***	0.045		0.292 ***	0.033		0.152 ***	0.028	
Urban	0.071 **	0.030		0.105 **	0.041		-0.082 ***	0.045		0.069 *	0.039		-0.013	0.026	
Log likelihood	-7964327			-281863.92			-366972			-260277			-5058899		
Pseudo R ²	0.0495			0.0531			0.0502			0.059			0.0526		
Observations	2653			1178			1158			1456			1818		
Note: All specifications include district fixed effects.															
*, **, *** stand for 10%, 5%, and 1% significance respectively.															

4.6 Conclusion

Along with the study of other youth labour market indices, study of labour market instability with respect to their quasi-employment status and being in the group of NEET appears alarming in the context of developing regions. Using the school to work transition survey (carried out between 2012-2016) data from the Work for Youth project of the International Labour Office (ILO) for Madagascar, Tanzania, Zambia, Nepal, Cambodia, Bangladesh, Kyrgyzstan, El Salvador, Palestine and Egypt, we address the unique issue of transition. Here our dissertation provides an extended cross national analysis of the stated incidence among the employed male youth (15-29). Only 40% of the youth in the sample from most of these countries are likely to be transited in the labour market with their current job. The descriptive and estimation analysis show that always higher rate of transition may not be a good indication of the young workers settlement in the labour market as happened to be in Bangladesh and Madagascar. It is the background factors (financial status, fathers' occupation) in most of the developing countries under consideration that strongly influences the rate of transitions. Using probit model we estimated the impact of education, experience and financial status of the family on the probability of transition after controlling for current enrolment status and area of residence. Results show that with improvement in educational level, rate of transition significantly falls. This is indicative of larger incidence of skill-mismatch among the employed. It is a situation where the skill acquired is often different from what is required or it may also be attributed to dearth of information. This may be a result of lack of well-functioning labour market institutions or productive opportunity in the economy as a whole. Belonging to poor families have a negative impact on the probability of transition. Apart from this we also provide the descriptive analysis where we find a negative association between the spells of unemployment and rate of transition. Skilled and salaried workers are more likely to be transited compared to unskilled and unpaid counterparts. We observed strong association of transition of the son with father either being in agriculture or in high-skilled occupation where there is a larger possibility of transmission of active social network. Therefore, increasing the level of education in isolation is insufficient in presence of strong background factors like financial status, parents' occupation etc. In absence of well-functioning credit and labour market institutions the problem accentuates further.

5. Concluding remarks

Literature finds youth transitions in the labour market are markedly different and debatable issue in the outset of the recent demographic transition mostly witnessed by the developing economies. These are also the economies with immense poverty and persistent socio economic inequality. Only a meagre fraction of the youth with completed education (school-leavers and university graduates) immediately manage to find a stable and satisfactory job. Most of them initially face unemployment. However, these regions where early employment often backed by the consequences of larger dropout and poverty, youth cannot afford to be unemployed or inactive for long. They frequently end up with the jobs with ease of entry (with some influence on the hiring process) and often less satisfactory in nature. Experience trap, dearth of education and information and fear of unemployment scarring lead to larger job quit intension among them. Being quasi employed here young workers continue to compete with their unemployed counterparts with an objective of getting a better match for them. However, youth employment tends to be unstable even when education, skills and other characteristics match the employer's requirements. With an urge to enquire into some of these youth specific labour market outcome we analysed the incidence of high degree of intergenerational persistence in employment in India and the issue of labour market transition among them in several developing regions respectively. We have also witnessed how the household decision of youth labour force participation alters in presence of a migrant in the family. Our entire analysis has enormous policy implications. Most of the issues discussed here focussed on the supply side of youth labour market. Our finding emphasises- in presence strong unequal socio economic background, intergenerational linkages and credit market imperfection any attempts directed toward enhancing vocational educational training or employer specific skill formation fails to mitigate youth's labour market destitution. Family background, informal mode of job-search practices significantly influences hiring process. With almost non-existent unemployment benefit, job search subsidies youth often end up with the job that fails to match their skills and aspiration. Findings are suggestive of the fact that in absence of well-functioning credit market and strong influence of parental network youth slips to avail larger opportunity in the job market. In the context of labour market transition also we witnessed a strong association of parental network and financial status with the rate of transition. With increase in the educational attainment we find the rate to fall in most of the countries. This again is implicit of the absence of proper labour market institutions and persistent socioeconomic inequality where access to job related information tends to be limited in the informal circuits. We have also witnessed that

the youth labour force participation which is mostly backed by financial reasons (higher labour force participation among the poorer households) further increases with persistent inter-regional inequality in economic opportunity with long-term absence of the father to any other state from the family. In this premise inter-regional migration for short-term identified with the potential to act as one of the avenues of financial capital flow to the households increasing the affordability of youth's higher education. To sum up with we should maintain that- prerequisite of any attempt in improving youth's labour market condition should be directed toward ensuring the labour market as level playing field for all its participants.

A prior to investment towards skill formation of the youth, attempts should be directed towards establishment of well functioned and well monitored unemployment exchanges. Development of employable skill and productive opportunities should be targeted to economically disadvantaged regions and the group of the society. Further in order to ensure labour market a land of opportunity, simultaneous initiatives should be directed toward removal of the impediments of transmission of job related information and maintenance of fairness in the recruitment process so that skilled workers are not deprived of their potential.

References:

- Adams Jr, R. H., & Page, J. (2005) "Do international migration and remittances reduce poverty in developing countries?" *World development*, 33(10), 1645-1669.
- Abebe, G. T., Caria, S., Fafchamps, M., Falco, P., Franklin, S., & Quinn, S. (2018). Anonymity or distance? Job search and labour market exclusion in a growing African city.
- Akerlof, G. A., Rose, A. K., Yellen, J. L., Ball, L., & Hall, R. E. (1988). Job switching and job satisfaction in the US labor market. *Brookings papers on economic activity*, 1988(2), 495-594.
- Altonji, Joseph G., and Christina H. Paxson. 1988. "Labor Supply Preferences, Hours Constraints, and Hours-wage Trade-offs." *Journal of Labor Economics* 6:254-276.
- Bacolod, M. P., & Ranjan, P. (2008) "Why children work, attend school, or stay idle: the roles of ability and household wealth" *Economic Development and Cultural Change*, 56(4), 791-828.
- Banerjee A, Duflo E. (2007) "The economic lives of the poor" *Journal of Economic Perspectives*, 21(1): pp 141–167.
- Basu, K., & Van, P. H. (1998) "The economics of child labor" in *American economic review*, 412-427.
- Becker, G.S and Tomes, N. (1986). Human capital and the rise and fall of families, *Journal of Labour Economics*, Vol. 4(2), pp.S1-S39.
- Behrman, J.R. 1997. Intrahousehold Distribution and the Family. In Mark R. Rosenzweig and Oded Stark, eds., *Handbook of Family and Population Economics*, Amsterdam: North-Holland.
- Bell, D. N., & Blanchflower, D. G. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, 27(2), 241-267.
- Binzel, C., & Assaad, R. (2011) "Egyptian men working abroad: Labour supply responses by the women left behind" *Labour Economics*, 18, S98-S114.

- Black, S. E. and Devereux, P. J. (2010). "Recent development in intergenerational mobility," *Working Paper 15889*, National Bureau of Economic Research.
- Blau, P. M. and Duncan, O. D. (1967). *The American Occupational Structure*. 605 Third Avenue, New York, N.Y. 10016: John Wiley & Sons, Inc.
- Bowles, S. and Gintis, R. (2002). The inheritance of inequality, *Journal of Economic Perspective*, Vol. 16(3).
- Böckerman, P., & Ilmakunnas, P. (2009). Job disamenities, job satisfaction, quit intentions, and actual separations: Putting the pieces together. *Industrial Relations: A Journal of Economy and Society*, 48(1), 73-96.
- Calero, C., Bedi, A. S., & Sparrow, R. (2009) "Remittances, liquidity constraints and human capital investments in Ecuador" *World Development*, 37(6), 1143-1154.
- Clark, K. B., & Summers, L. H. (1982). The dynamics of youth unemployment. In *The youth labor market problem: Its nature, causes, and consequences* (pp. 199-234). University of Chicago Press.
- Coark, M. and Heisz, S. (1999). The intergenerational earnings and income mobility of Canadian Men: Evidence from longitudinal income tax data, *Journal of Human Resources*, Vol.34 (3), pp. 504-533.
- Démurger, S., & Xu, H. (2011) "Return migrants: The rise of new entrepreneurs in rural China" *World Development*, 39(10), 1847-1861.
- Donovan, K., Lu, J., & Schoellman, T. (2018, July). Labor market flows and development. In *2018 Meeting Papers*, Society for Economic Dynamics (Vol. 976).
- Edwards, A. C., & Ureta, M. (2003) "International migration, remittances, and schooling: evidence from El Salvador" *Journal of development economics*, 72(2), 429-461.
- Elder, S. 2014. *Labour market transitions of young men and women in Asia and the Pacific*, Publication Series No. 19 (Geneva, ILO).

- Elder, S.; Barcucci, V.; Gurbuzer, V.; Perardel, Y.; Principi, M. 2015. *Labour market transitions of young women and men in Eastern Europe and Central Asia*, Work4Youth Publication Series No. 28 (Geneva, ILO).
- Ellwood, D. T. (1982). Teenage unemployment: Permanent scars or temporary blemishes?. In *The youth labor market problem: Its nature, causes, and consequences* (pp. 349-390). University of Chicago Press.
- Elsby, M. W., Hobijn, B., & Şahin, A. (2015). On the importance of the participation margin for labor market fluctuations. *Journal of Monetary Economics*, 72, 64-82.
- Emran, M. Shahe. and Shilpi., F. (2011). “Intergenerational Occupational Mobility in Rural Economy: Evidence from Nepal and Vietnam”, *Journal of Human Resources*, Vol. 46 (2), pp.427-57.
- Epstein, G. S., & Kahana, N. (2008) “Child labor and temporary emigration” *Economics Letters*, 99(3), 545-548.
- Farber, H. S. (1999). Mobility and stability: The dynamics of job change in labor markets. *Handbook of labor economics*, 3, 2439-2483.
- Franklin, S. (2018). Location, search costs and youth unemployment: experimental evidence from transport subsidies. *The Economic Journal*, 128(614), 2353-2379.
- Freeman, R. B. (1977). Job satisfaction as an economic variable. *The American Economic Review* 68:135-141.
- Freeman, R.B. and Wise, D.A. (1982). *The youth labor market problem: Its nature, causes and consequences*, University of Chicago Press, ISBN: 0-226-26161-1.
- Ghatak, M. and Ziang, N. (2001). A simple model of inequality, occupational choice, and development, *Journal of Development Economics*, Vol. 69, pp. 205 –1 226
- González-Velosa, C.; Ripani, L.; Rosas_Shady, D. 2012. *How can job opportunities for young people in Latin America be improved?*, Labor Markets and Social Security Unit, Technical Notes No. IDB-TN-345 (Washington DC, Inter-American Development Bank).

- Greene, W.H. (2008) *Econometric Analysis*. 6th Edition, Pearson Prentice Hall, Upper Saddle River.
- Hanson, G. H., & Woodruff, C. (2003). Emigration and educational attainment in Mexico. Mimeo., University of California at San Diego
- Hnatkovska, V., Lahiri, A, and Paul, S. (2012). “Castes and Labor Mobility” *American Economic Journal: Applied Economics*, Vol. 4, No.2: 274-307.
- ILO (2013). “Global Employment Trends for Youth 2013: A generation at risk”, International Labour Office - Geneva.
- (2015). “Global Employment Trends for Youth 2015: Scaling up investments in decent jobs for youth”, International Labour Office - Geneva.
- Jovanovic, B. (1979). Job matching and the theory of turnover. *The Journal of Political Economy*, 972-990.
- Kalleberg, A. L. (2008). The mismatched worker: When people don't fit their jobs. *The Academy of Management Perspectives*, 22(1), 24-40
- Katz, Lawrence F. and Lawrence H. Summers. (1988). “Industry Rents: Evidence and Implications” *Brookings Pap. Econ. Activity* 3, pp. 209-75.
- Kidd, M. (1991). An econometric analysis of interfirm labour mobility, *Canadian Journal of Economics*, 24, pp. 517-535.
- Kidd, M. (1994), Some Canadian Evidence on the Quit/Lay-off Distinction, *Canadian Journal of Economics*, 27, pp. 709-733.
- Kristensen, N., and Westergård-Nielsen, N. (2004). Does low job satisfaction lead to job mobility?. Discussion Paper No. 1026, IZA
- Laband, D. N., and Lentz, B. F. (1983). Occupational inheritance in agriculture. *American Journal of Agricultural Economics*, 65(2), 311-314.
- Lahiri, S., and Nandi, T. K. (2021). Intergenerational Occupational Persistence: Recent Evidence from Indian States. *Journal of Asian Development Research*, 2633190X20973535.

- Lahiri, S. (2020). Impact of internal migration on left behind youth's labour force participation in India. *Economics Bulletin*, 40(3), 2165-2178.
- Lambert, S., Ravallion, M. and Walle, D. (2011). "Is what You Inherited or What You Learnt?" World Bank Development Research group & poverty Reduction and Economic Management Network Gender group, *Intergenerational Linkage and Interpersonal Inequality in Senegal Policy Research Working Paper* No: 5658.
- Labour Bureau, Government of India (2013). Report on Employment –Unemployment Scenario, Ministry of Labor and Employment, Chandigarh.
- Lucas, R. E. B. (1997) "Internal migration in developing countries" *Handbook of Population and Economics*, Amsterdam: North Holland, Vol. 1.B, Chapter 13, pp 721-98.
- Lucas, R. E., & Stark, O. (1985) "Motivations to remit: Evidence from Botswana" *Journal of political Economy*, 93(5), 901-918.
- Mahendra, S., and Venkatanarayana, M. (2012). Youth Employment and Unemployment in India, *Working paper - 2011-009*, Indira Gandhi Institute of Development Research.
- Majumder, R. (2010). Intergenerational Mobility in Educational and Occupational Attainment A Comparative Study of Social Classes in India. *Margin: The Journal of Applied Economic Research*, 4(4), 463-494
- Manski, C. F. (1993). "Dynamic Choice in Social Settings: Learning from the Experience of Others", *Journal of Econometrics*, VOL. 58, PP.121–36.
- Mazza, J. (2012). "Fast Tracking Jobs: Advances and Next Steps for Labor Intermediation Services in Latin America and the Caribbean", Technical Note No 344. Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank.
- Mendola, M., & Carletto, C. (2012) "Migration and gender differences in the home labour market: Evidence from Albania" *Labour Economics*, 19(6), 870-880.
- McKenzie, D., & Rapoport, H. (2006) "Can migration reduce educational attainment? Evidence from Mexico". The World Bank.

- Mitra, A. and Verick, S. (2013). Youth employment and unemployment: An Indian perspective, *ILO Asia-Pacific Working Paper Series*.
- Munasinghe, L., & Sigman, K. (2004). A hobo syndrome? Mobility, wages, and job turnover, *Labour Economics*, 11(2), 191-218.
- Nandi, T. K. (2016). Intergenerational persistence of Industry in India. *The European Journal of Development Research*, 28(3), 495-511.
- Nandi, T. K., & Kar, S. (2015) "Short-term Migration and Intergenerational Persistence of Industry in Rural India" CTRPFP Working Paper No. 1. CSSS, Calcutta.
- National Sample Survey Organization (2004-05). Employment and Unemployment Situation in India, Report No. 515(61/10/1)
- (2009-10). Employment and Unemployment Situation in India, Report No. 537 (66/10/1)
- (2011-12). Employment and Unemployment Situation in India, Report No. 554(68/10/1)
- (2010). Migration in India, Ministry of Statistics and Program Implementation" Govt. of India.
- Parsons, D. O. (1991). The job search behavior of employed youth. *The Review of Economics and Statistics*, 597-604.
- Pieters, J. (2015). *Youth employment in developing countries* (No. id: 7291).
- Poschke, M. (2013). 'Entrepreneurs out of necessity': a snapshot. *Applied Economics Letters*, 20(7), 658-663.
- Poschke, M. (2019). Wage employment, unemployment and self-employment across countries.
- Ranjan, P. (1999). An economic analysis of child labor. *Economics letters*, 64(1), 99-105.
- Royalty, A. B. (1998). Job-to-job and job-to-nonemployment turnover by gender and education level. *Journal of Labor Economics*, 16(2), 392-433.
- Ryan, P. (2001). The school-to-work transition: a cross-national perspective. *Journal of economic literature*, 39(1), 34-92.

School to Work Transition Surveys micro data files:
https://www.ilo.org/employment/areas/WCMS_234860

Serrano, C. G. (1998). Worker turnover and job reallocation: the role of fixed-term contracts. *Oxford Economic Papers*, 50(4), 709-725.

Solon, G. (1992). Intergenerational income mobility in the United States. *The American Economic Review*, 393-408.

Sousa-Poza, A., & Henneberger, F. (2004). Analyzing job mobility with job turnover intentions: An international comparative study. *Journal of Economic Issues*, 38(1), 113-137.

Srivastava, R. (2011). "Internal migration in India" Background paper prepared for the Migrating out of Poverty Research Programme Consortium, University of Sussex.

Stark, O., & Levhari, D. (1982) "On migration and risk in LDCs" *Economic development and cultural change*, 31(1), 191-196.

Streufert, Peter. (2000). "The Effect of Underclass Social Isolation on Schooling Choice", *Journal of Public Economic Theory* 2(4):461-82.

Topel, Robert H. and Michael P. Ward. (1992). "Job Mobility and the Careers of Young Men" *Qtl. Jnl. Econ.* 57:2, pp. 439-80.

UNDP, U. (2009). Human development report 2009: Overcoming barriers: Human mobility and development. United Nations Development Programme

UNDP, U. (2015). Human Development Report 2015: Work for human development. United Nations Development Programme

Van Ophem, H. (1991). Wages, nonwage job characteristics and the search behavior of employees, *The Review of Economics and Statistics*, 145-151.

Appendix A

Table 3a- Instrumental Variable Estimation Results

Area of Residence	Rural						Urban					
	Short term			Long term			Short term			Long term		
	ME		S.error	ME		S.error	ME		S.error	ME		S.error
Migration of the household member	-0.411	***	0.113	0.219	***	0.054	-0.187	***	0.057	0.107	***	0.025
Dependency Burden							0.001		0.001	0.001		0.001
Age	0.096	***	0.001	0.098	***	0.001	0.098	***	0.002	0.101	***	0.001
Own education												
Primary	0.022		0.019	0.004		0.015	0.031		0.027	0.039		0.026
Secondary	-0.136	***	0.014	-0.163	***	0.011	-0.140	***	0.019	-0.115	***	0.019
Higher Secondary (HS)	-0.361	***	0.016	-0.386	***	0.013	-0.355	***	0.021	-0.326	***	0.020
More than HS	-0.494	***	0.018	-0.516	***	0.013	-0.515	***	0.021	-0.486	***	0.020
Caste												
ST	0.037	**	0.015	0.030	**	0.011	-0.033		0.020	-0.051	***	0.019
SC	0.014		0.013	0.032	***	0.010	0.006		0.014	0.009		0.013
OBC	0.008		0.010	0.016	**	0.008	0.000		0.010	0.004		0.009
Religion							-0.515	***	0.021	-0.738	***	0.034
Muslim	0.019		0.013	0.000		0.010	0.025	**	0.011	0.034	***	0.010
Christian	-0.057		0.026	-0.111	***	0.013	-0.055	**	0.022	-0.039	*	0.020
Others	-0.029		0.022	-0.056	***	0.013	-0.052	**	0.021	-0.027		0.019
Father's education												
Primary	-0.010		0.013	-0.005		0.010	-0.008		0.018	-0.023		0.017
Secondary	-0.050	***	0.010	-0.038	***	0.008	-0.049	***	0.013	-0.062	***	0.012
Higher Secondary (HS)	-0.096	***	0.016	-0.078	***	0.012	-0.127	***	0.016	-0.138	***	0.015
More than HS	-0.174	***	0.020	-0.158	***	0.014	-0.169	***	0.017	-0.192	***	0.015
Mother's education												
Primary	-0.010		0.014	0.008		0.010	-0.032	*	0.016	-0.032	**	0.015
Secondary	-0.019		0.012	-0.019	**	0.009	-0.020		0.012	-0.024	**	0.011
Higher Secondary (HS)	-0.087	***	0.026	-0.073	***	0.019	-0.059	***	0.017	-0.068	***	0.015
More than HS	0.013		0.039	-0.053	*	0.028	-0.085	***	0.019	-0.079	***	0.017
Land Possession												
Average Land possession	-0.040	***	0.011	-0.038	***	0.009						
More than average	-0.017		0.011	-0.010		0.009						
Father's Self employment							-0.001		0.008	0.016	**	0.008
Observation	20735			19002			8900			10397		

*, ** and *** stands for significance at 10, 5 and 1 per cent level respectively

Table-4a Distribution of youth (%) in the sample

	SSA			SEA			ECA	LAC	MENA	
	Madagascar	Tanzania	Zambia	Nepal	Cambodia	Bangladesh	Kyrgyzstan	El Salvador	Palestine	Egypt
Background Characteristics										
15-19	46	46	43	44	41	34	40	41	39	40
20-24	30	36	36	31	33	36	32	31	34	32
25-29	24	19	21	25	26	30	29	27	27	28
Male	47	51	48	46	44	47	48	48	48	52
Female	53	49	52	54	56	53	52	52	52	48
Rural	77	21		80	20	77	41	66	84	58
Urban	23	27		20	80	23	59	34	16	42
Mixed		52								18
N	5,044	1,988	3,225	3,584	3,335	9,197	3,930	3,604	4,141	5,758
Status of employment										
Only Working	70	39	40	28	64	36	44	36	21	29
Working& studying	8	4	16	10	19	2	15	7	5	2
Unemployed	2	10	9	4	1	3	2	8	11	8
Unemployed & studying	0	2	1	6	1	1	1	2	2	0
Studying	16	22	18	44	9	20	26	23	38	35
Idle	4	22	17	8	6	38	13	25	23	26
N	5,039	1,963	3,225	3,584	3,335	9,193	3,926	3,604	4,140	5,758
Male										
Only Working	70	45	43	23	64	60	49	50	39	47
Working& studying	9	5	19	10	23	4	12	12	8	4
Unemployed	2	8	8	4	1	3	7	7	14	6
Unemployed & studying	0	2	2	6	1	1	3	3	3	0
Studying	17	26	16	43	9	22	22	22	29	35
Idle	2	14	13	14	2	9	8	7	7	8
N	2,358	992	1,728	1,657	1,465	4,171	1,909	1,715	2,124	2,975
Female										
Only Working	70	33	37	33	65	14	36	23	6	10
Working& studying	7	4	13	10	16	1	14	3	1	1
Unemployed	2	12	9	4	2	3	2	8	8	9
Unemployed & studying	0	2	1	5	0	1	0	1	1	0
Studying	15	19	20	45	8	18	27	24	48	35
Idle	7	30	21	4	10	63	21	41	36	45
N	2,681	971	1,497	1,927	1,870	5,022	2,017	1,889	2,017	2,783
Source: School to Work Transition Survey - Micro data										
Madagascar:5, Tanzania: 25, Bangladesh:4, Kyrgyzstan : 4, Palestine:1										
observation neither have any information on employment-unemployment nor have on enrollment										

Table-4b Transition rate for different unemployment spells

Unemployment spells	Less than 6 months	Up to one year	More than one year
Madagascar	53	35	61
Tanzania	27	27	47
Zambia	19	13	17
Nepal	55	54	57
Cambodia	43	40	62
Bangladesh	78	63	52
Kyrgyzstan	59	68	55
ElSalvador	44	40	33
Palestine	61	55	49
Egypt	51	43	47

Table-4c Transition rate across the occupations

Occupational Categories	Low	Agriculture	Medium	High
Madagascar	49	55	52	68
Tanzania	34	22	33	58
Zambia	16	21	15	36
Nepal	56	52	62	64
Cambodia	41	42	50	60
Bangladesh	72	71	75	66
Kyrgyzstan	55	45	60	74
ElSalvador	43	44	44	34
Palestine	57	59	55	66
Egypt	54	35	44	68

Table-4d Transition rate across different status in employment

Categories of employment	Employee	Self employed	Unpaid
Madagascar	53	60	49
Tanzania	28	40	31
Zambia	13	23	21
Nepal	55	75	53
Cambodia	42	61	40
Bangladesh	68	80	62
Kyrgyzstan	61	53	44
El Salvador	41	46	49
Palestine	58	67	49
Egypt	51	58	38

Table-4e Reason for not being transited among the group of employed (reasons for quasi employment)

Reasons	Temporary	Fear of losing	Work longer hours	Better income	Work less	Utilize skill	Less convenient schedule	Working condition	Other
Madagascar	8	2	10	63	0	6	0	11	
Tanzania	21	3	20	44	0	4	0	9	
Zambia	27	2	5	25	2	10	1	19	9
Nepal	13	0	16	5	2	42	21		
Cambodia	29	4	5	43	1	6	1	12	
Bangladesh	26	1	5	49	1	8	6	3	
Kyrgyzstan	33	2	3	49	0	8	1	4	1
El Salvador	7	0	8	39	1	3	1	41	
Palestine	14	9	2	40	1	14	2	15	2
Egypt	22	6	0	24	0	25	1	16	6

Table 4f- Variable Description

Variable	Description
Age	Respondent's age
Experience	Dummy=1 if the respondent obtained any work experience while studying
Non-poor financial status	Dummy=1 if the respondent obtained any work experience while studying
Urban	Dummy=1 if the respondent lives in Urban area
Post secondary	If the respondent has completed post secondary
Secondary	If the respondent has secondary education
Elementary	If the respondent has completed elementary
No education	If the respondent does not have any formal education
Left education	If the respondent has left education before completion
Completed	If the respondent has completed education
Continuing	If the respondent is currently enrolled
Father_high skilled	Father's profession is in professional categories: 1-4 in the ISCO-08 group definitions
Father_medium skilled	Father's profession is in medium skilled occupational categories: 4-5 in the ISCO-08 group definitions
Father_agriculture	Father's profession is in skilled agriculture and fishing occupational category: 6 in the ISCO-08 group definitions
Father_agriculture	Father's profession is in low skilled manual and elementary occupational categories: 7-9 in the ISCO-08 group definitions
Father's post-secondary	If respondent's father has post secondary qualification
Father's secondary	If respondent's father has completed secondary education
Father's elementary	If respondent's father has completed elementary education
Father's no education	If respondent's father has completed primary
Mother's post-secondary	If respondent's mother has post secondary qualification
Mother's secondary	If respondent's mother has completed secondary education
Mother's elementary	If respondent's mother has completed elementary education
Mother s no education	If respondent's mother has no education