

YOUTH POPULATION AND THE LABOUR MARKET OF PAKISTAN: A MICRO LEVEL STUDY

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Abstract. The main purpose of this paper is to analyze the youth labour market participation in Pakistan. Based on micro data of LFS (2006-07), the strength of analysis presented in this paper is twofold; first, it presents a descriptive analysis of youth labour market activities by a single year of age, secondly, the econometric analysis describes the determinants of youth employment probabilities in Pakistan. Results of our study show that a significant number of youth starts their career early which can be costly for productivity and earnings later in life. In general, these young people face higher unemployment rate at the start of their career which gradually decreases with increase in age. It was also noted that there does exist a significant difference between male and female youth labour market outcomes in different regions of the country. In general, unemployment rate among female youth is much higher than that of male youth in all regions of country. An important finding of the study is about the youth in Balochistan which are more willing to work but least likely to get employment as compared to youth in other provinces. Results of Logistic Regression analysis suggest that age, sex, marital status, migration, training, location, education level and characteristics of household have significant impact on employment probabilities of youth in Pakistan. It has also been concluded that youth is a diverse social group with different characteristics and attitudes about work in different regions of Pakistan. It is necessary for policy makers to avoid considering youth in Pakistan as a homogenous group. It is to be pointed out that unemployment in Pakistan derives from several causes. The heterogeneity of jobless people must be taken into account in our labour employment policies. To create youth employment opportunities; there is a need for integrated approach comprising supportive economic policies that take into account issues pertaining to both labour supply and demand.

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I. INTRODUCTION

Since 1960, the global composition of population has changed dramatically; some developed countries are facing the problem of ageing population while in most of the developing countries, share of working age population is increasing. This process of demographic transition has opened a window of opportunity for potential demographic dividend¹ in future. Different researchers (Bloom *et al.*, 2001; Mason 2001; Lee *et al.*, 2006; Nayab, 2008) have already claimed that developing countries can use this demographic dividend for their economic development. However, this demographic dividend can only be utilized for the well-being of the country if effective and timely policies are formulated and implemented to convert this working age population into a productive labour force (Bloom *et al.*, 2001).

In Pakistan, youth² constitutes a major share of our working age population. This type of composition of population presents both potential risks and benefits. On one hand, young people are more energetic, mobile and flexible while, on the other hand, these young people can present a great threat³ to the society if proper economic opportunities are not provided to them. Youth in Pakistan face number of challenges in their way to work, early start to work, failing to enter the labour market and difficulties in moving across the jobs. Besides, lack of education, skill and experience are some of major issues of youth in the labour market. About 52.4 percent of young people are not part of the labour force and those who are in the labour force face significant difficulties in finding work; their unemployment rate⁴ is twenty two percent which is much higher than the adult unemployment

¹A country with high proportion of working age population and low proportion of dependant population may enjoy a boost in economic growth. This phenomenon of high proportion of working age and low proportion of dependant population is known as the demographic dividend. (Bloom *et al.*, 2001).

²Youth is an age group of 15-24 years as defined by ILO and United Nations Statistical Convention, 1992. For detail discussion on definition of youth, *see* Global Employment Trends for Youth (ILO, 2006).

³This has been evident in Pakistan as most of the suicide attacks in recent years have been carried out by young people of age 15 to 24 years; number of studies has already shown that majority of suicide attackers belong to the age group of 15-24 years of age. [*See*, for example, studies by Cutler *et al.* (2001) and Rakhra (2008)].

⁴Unemployment rate calculated in this paper is based on 'Usual Status Approach'. This approach used usual status of people during the reference period of one year instead of just one week. For detail discussion, *see* section III of the paper.

rate in Pakistan. Moreover, those who are employed are more vulnerable⁵ in the labour market as compared to adult labour (Figure 1). If we look at the education of youth, we find that about 32.5 percent of youth are illiterate while seventy three percent of youth are not enrolled as student. Moreover, 30.5 percent of these out-of-school youth are also not taking part in any kind of economic activities (inactive). Some of statistics are summarized in Table 1.

TABLE 1
Summary Statistics of Youth in Pakistan

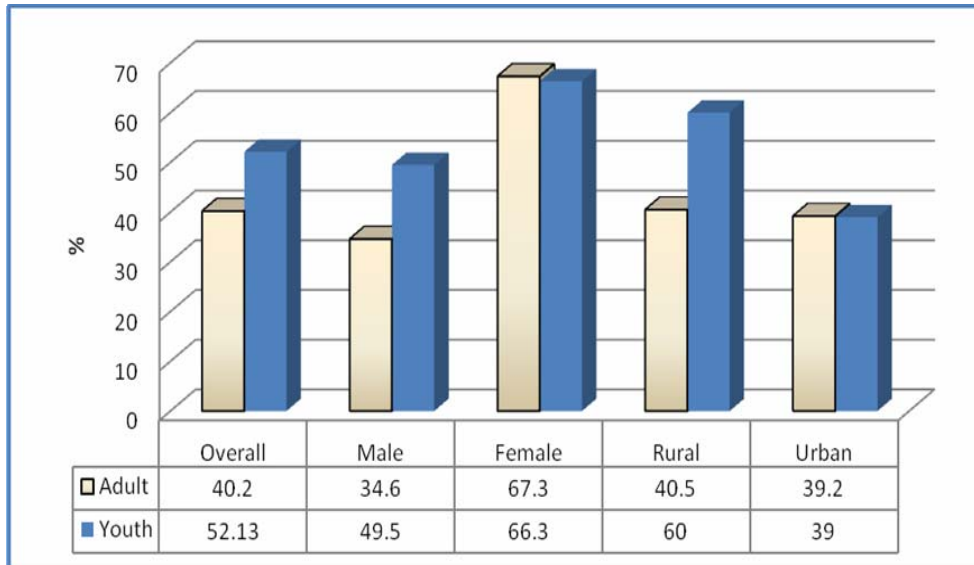
Labour Force Participation Rate	47.6%
Enrolled as a Student	27%
Combine Work with School	1.2%
Inactive (neither in labour force nor enrolled as student)	30.5%
Have Formal Training	0.8%
Unemployment Rate	21.7%
Unpaid Family Helpers	38.5%
Hours of Work:	
● less than 35 hours a week	12.8%
● more than 48 hours a week	42%
Married (Both Sexes)	20.8%
Male Married	10.8%
Female Married	31.3 %

Source: Calculated from LFS 2006-07.

⁵Own account workers and unpaid family helpers are considered as vulnerable in the labour market as they do not have any job security or social protection.

FIGURE 1

Share of Vulnerable Employment as Percentage of Total Employment



Source: Calculated from LFS (2006-07).

Given the importance of youth as being a demographic dividend, this study analyzes the position of youth in the labour market. Our main findings show that youth in Pakistan is not a homogenous group; there are great variations in youth labour market involvement on the basis of their personal, household and regional characteristics. Appropriate policies are required to take advantage of this demographic dividend to improve the well being of the country, for that, labour force policies must be tailored according to the prevailing conditions, types of unemployment and requirements of the provinces in the country.

Remaining article is organized as follows. Section II discusses the literature on youth labour market; Section III presents a descriptive analysis of youth labour market participation and involvement by a single year of age. Section IV contains data and methodology, Section V presents econometric analysis of employment probabilities of youth in Pakistan, while the last two sections give our conclusions and policy recommendations.

II. LITERATURE REVIEW

Youth population and the labour market has been a topic of considerable interest and debate among researchers. Different researchers have analyzed

the impact of early start of career on educational achievements, for example, studies by Heady (2000), Rosati and Rossi (2003) and Gunnarson *et al.* (2005) have shown that school performance of young people can be affected due to early start of work.

Early start of career is more often a phenomenon that exists in developing countries like Pakistan where children leave the school early and start working at early age. For example, Fares and Dhushyanth (2006) indicated that in 65 countries, 21 percent of children under age 15 are economically active. Similarly, Faizunnisa (2005) found that, in Pakistan, 50 percent of young male in lowest income quintile start working before the age of 15 which leads to fewer opportunities and earnings later in the life. Sultana (2005) also found that young male and female in rural areas of Pakistan are twice as likely as their urban counterparts to start working before the age of 15.

Similarly, in Brazil, Ilahi *et al.* (2005) found that the boys, who entered the work force before the age of 12, earned 20 percent less and were 8 percent more likely to be in the lowest income quintile than boys who started working after age 12. Among others, Emerson and Andre (2006) also found that those who entered the labour market before the age of 12 earned 20 percent less than those who started working after the age of 12.

On one hand, many young people start their work early in life while many fail to enter the labour market and get employment. A study by Fares and Dhushyanth (2006) showed that young people in general, spend 1.4 years in intermittent work and joblessness. Among others, Mroz and Timothy (2006) examined the long-term effects of youth unemployment on labour market earnings; they found that unemployment experience could affect earnings adversely as long as ten years.

Determinants of unemployment for youth in the labour market have been investigated by quite a large number of economists. For example, Clark and Summers (1982) analyzed the dynamics of youth unemployment and found that shortage of attractive jobs, instability and frequent turnover are major sources of teenage unemployment. In India, Visaria (1998) found that the main reason of unemployment among Indian youth were lack of education and experience.

In the recent past, this topic was probed and analyzed by some researchers for Pakistan. Akhtar and Lubna (2005) found that youth unemployment appears to be an urban phenomenon as compared to rural areas due to disguised unemployment in rural areas of Pakistan. Probability

of youth unemployment decreases in case of large family size both in rural and urban areas. Probability of youth being unemployed is higher in the KPK Province and increases if the head of household is employed in informal sector. Qayyum (2007) found that educated young people are facing higher unemployment rate in Pakistan.

There is also a debate over the gender differences in labour market participation among researchers, for example, in Hungary, Audas *et al.* (2005) found that at the start of career, females are more likely to be unemployed than their male counterparts. In Pakistan, Naqvi and Lubna (2002) found that the main reason of low labour force participation rate among female in Pakistan is the social attitude of people towards appreciation of working women. Similarly, in Pakistan, Sathar (2005) investigated women work at home and found that at every age between 15-24, women work more hours than men but their work is largely unpaid and hidden.

III. YOUTH IN LABOUR MARKET: DESCRIPTIVE ANALYSIS OF DATA

This section provides an in-depth analysis of youth activities in labour market by a single year of age. Age-wise analysis is helpful in many ways, it provides a comparison of youth in different years of their life, it will also give us an idea about the age when young people face more difficulties in finding employment in the labour market. An important feature of this analysis is that it is based on Usual Status (status during most of the last 12 months) approach. Officially, in Pakistan, a person is considered as employed who has worked at least for one hour during the reference period of one week (preceding the date of interview). In other words, working for one hour is sufficient enough to be excluded from the group of unemployed people no matter whatever the usual status may be during most of the last 12 months. Similarly, a person is considered as unemployed only, if he or she during the reference period of last week was without work and also available for work. Reference period of just one week is too short for many people who may not be available during last week but may be available during most of past few months. For example, females are generally more likely than men to exit and re-enter the labour market due to their household affairs and childcare. They often need to make personal arrangements before entering the labour market. Using one week reference period may exclude them from labour force and hence from the definition of unemployed. Exclusion of people from the definition of unemployed who are not available for work during last week may greatly undercount the extent of unemployment in the

country. To encounter this shortcoming and present the true picture of labour market we calculate unemployment and labour force participation rates on the basis of usual status (status during most of the past 12 months) instead of just last one week. Our analysis reveals that on the average, in Pakistan, labour force participation rate of youth is 47.7 percent while 21.7 percent of youth in labour force are unemployed (Table 2).

TABLE 2
Activities of Youth in Labour Market (Pakistan)

Age (in Years)	Labour Force Participation Rate (%)	Unemployment Rate (%)	Inactivity Rate (%)
15	33.07	37.65	20.72
16	40.53	31.55	25.16
17	39.33	26.99	26.52
18	49.26	22.33	28.45
19	48.74	19.45	31.41
20	51.29	18.90	35.74
21	52.21	15.44	34.62
22	55.89	15.32	37.22
23	58.09	15.94	35.29
24	59.20	13.74	38.36
Youth (15-24 Years)	47.62	21.72	30.54

Source: Calculated from LFS 2006-07.

This unemployment rate shows the difficulty level that young people face at the start of their career. Early unemployment at the start of career may have the telling affect later in life and may induce young person to leave the

labour force and become discouraged worker. This is evident from inactivity rate⁶ given in Table 2 which shows the unwillingness of youth to participate in economic activities or education. It also shows a deep rooted social problem of our society where so many young people wander around and waste their time without being involved in any productive or useful activity. It is also clear from Table 2 that in general, as age increases labour force participation rate increases and unemployment rate decreases. This shows that at the start of career, young people face more difficulties in finding work. For example, unemployment rate at the age of 15 is about 24 percentage points higher than that at the age of 24 years. The main reason may be the lack of experience, education, vocational training and knowledge of the labour market.

IV. REGIONAL AND GENDER DIFFERENCES IN LABOUR MARKET ACTIVITIES

There are great variations in labour market activities of male and female youth both in rural and urban areas of Pakistan. For example, labour force participation rate of male youth is much higher than that of female youth in Pakistan. The difference goes to 44.6 percentage points at country level (Appendix Table (AT) 2). In general, as age increases, labour force participation rate also increases for both sexes not only in urban areas but also in rural areas (AT 3). In general, female youth face more difficulties in finding work in the labour market as compared to male youth. About 47.8 percent female are unemployed while male youth unemployment rate is just 13 percent. It means there is difference of about 35 percentage point among the unemployment rate of male and female youth in Pakistan. Similarly, about 56.6 percent women are not engaged in any kind of labour market or educational activities (inactivity rate) while this rate is just 6 percent in case of male youth which gives a gender difference of 50.6 percentage points in inactivity rate (AT 2).

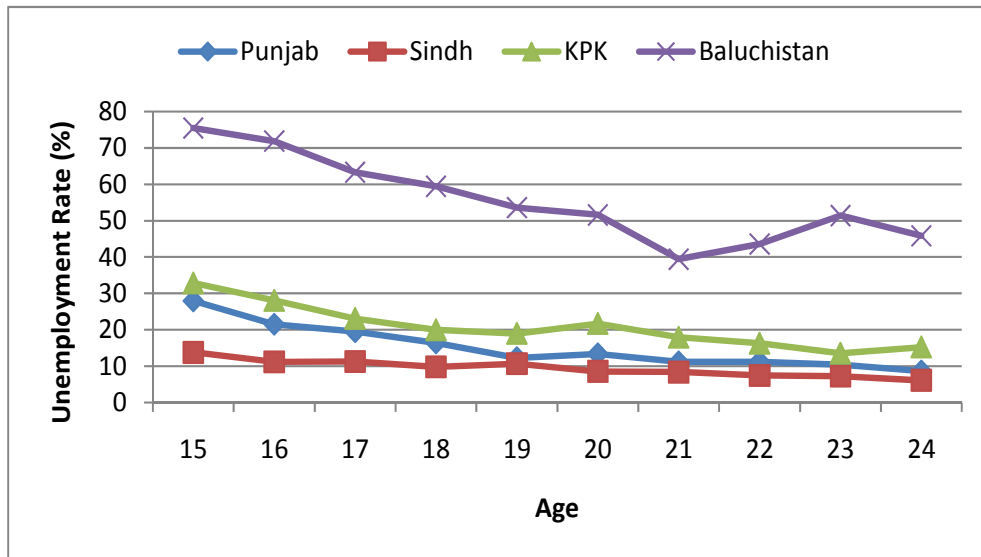
Difference between rural and urban areas of Pakistan in youth labour market involvement can be observed in AT 1 which shows that youth living in urban areas are facing higher unemployment rate than those living in rural areas of Pakistan. This difference is higher at early stage of youth and declines with increase in age.

⁶Inactivity rate here defined as the percentage of youth which are neither in labour force nor enrolled as a student.

PROVINCIAL DIFFERENCES IN UNEMPLOYMENT RATE

Balochistan is the province where unemployment rate is highest both in urban and rural areas and remains highest throughout the age of youth. At the age of 15; about 76 percent of youth is unemployed. An important point here is that even at the age of 24, youth in Balochistan face lot of difficulties in finding work, their difficulty level at the age of 24 is even much higher than the difficulties which youth face in other provinces at the age of 15 (Figure 2). Sind is the province where unemployed youth do not face many difficulties in finding work. At the age of 15; youth unemployment rate is just 24 percent and 11 percent in urban and rural areas, respectively. By the age of 24, unemployment rate in Sind declines substantially as compared to other provinces.

FIGURE 2
Provincial Unemployment Rate



Source: Calculated from LFS 2006-07.

An enormous gender difference also exist between male and female unemployment rate within and between all provinces of Pakistan. For example, highest gender difference is among the male and female of Balochistan and Khyber Pakhtoonkhwah (KPK) provinces, where difference between unemployment of male and female is 53 percent and 47 percent, respectively (AT 4). Lowest unemployment rate is among the male youth of

Sind while female youth of Punjab have comparatively low unemployment rate than the female youth in other provinces.

V. DATA AND METHODOLOGY

The micro-level data for this study was obtained from Labour Force Survey (LFS) of Pakistan 2006-07. Micro-level data enabled us to use information collected from 32,744 households from all over Pakistan. The data set contains information about 224,280 individuals about their age, sex, marital status, literacy, level of education, migration and number of other variables related to employment situation, principal activities and household composition. After excluding AJK and FATA, we are left with total sample of 224,280, from this, a sample of 44,902 young people between the age of 15-24 were selected to be used in our analysis of youth labour market in Pakistan.

VI. ESTIMATION TECHNIQUES

To estimate the probabilities of being employed, Logistic Regression Analysis with maximum likelihood estimation,⁷ was used to obtain the results, dependent variable takes the value of 1 when the respondent is employed and 0 otherwise. The independent variables are classified into three categories, *i.e.* personal characteristics of youth, household characteristics and regional dummies. Personal characteristics include, age, age squared (to show experience), training, marital status, migration, being the head of household, gender, and education level. Household characteristics include household size, female headed household, and number of siblings present in household, employment status of household head and education level of household head, while regional dummies include location of respondents, *i.e.* rural or urban and a province dummy to capture the impact of provincial differences. Our logistic model is defined as:

$$\log\left(\frac{P_{emp}}{1-P_{emp}}\right) = \alpha + \beta_1x_1 + \beta_2x_2 + \dots + \beta_kx_k = \alpha + x\beta \quad (1)$$

Here P_{emp} is the probability of being employed, while $\frac{P_{emp}}{1-P_{emp}}$ shows the odds ratio. α is constant and x are vector of independent variables, β are the logistic coefficients.

⁷Logit and Multinomial Logit models described here are drawn from Green (2008).

Sometimes it is easier to interpret the model in terms of probabilities, *i.e.* odds ratios. Value of odd ratio greater than 1 indicates the increase the probability of being employed while less than one indicates the decrease in the probability of being employed.

We obtained estimates of the relative odds (odd ratios) associated with a particular category of a covariate of interest such as:

$$\text{Prob}(Y = 1 | x) = \exp \frac{\alpha + x\beta}{1 + \exp(\alpha + \beta x)} = \Lambda(x'\beta) \tag{2}$$

Here $\Lambda(\cdot)$ indicates the logistic cumulative distribution function.

Since equation (2) is non-linear and standard OLS technique cannot be applied, Maximum likelihood estimation is used to calculate the coefficients for each independent variable.

Coefficients in this model are difficult to interpret; they only provide information on the effects of the independent variables on odds ratios. For categorical variables, a positive coefficient indicates an increase in the log odds for the particular category relative to a reference category, while a negative coefficient indicates decreased log odds. To interpret the effect of independent variables on the probability of being employed we also calculate marginal effects of explanatory variables on dependent variable. These marginal effects can be derived as probability derivatives which show the instantaneous rate of change in dependent variable due to per unit change in independent variable of interest. The marginal effects are given as:

$$\frac{\partial E[y | x]}{\partial x} = \Lambda(x'\beta)[1 - \Lambda(x'\beta)]\beta \tag{3}$$

We used Likelihood Ratio (LR) Chi-Square test to test the null hypothesis that all the slope coefficients in the model are zero.

VII. DETERMINANTS OF EMPLOYMENT PROBABILITIES

Table 3 summarizes the results of logistic regression analysis that identify demographic, household, and personal factors associated with probability of being employed among youth in Pakistan. To model the employment probabilities of youth a sample of 21,362 individuals was selected who were a part of labour force (either employed or unemployed). On this sample, we ran a logistic regression analysis by taking unemployed as our reference category.

TABLE 3
Logit Estimates of Being Employed

Covariates	Subgroups	Coefficients	Odds Ratios	Marginal Effects
Personal Characteristics				
Age		0.847*	2.33	0.096
Age square		-0.016*	0.98	-0.002
Sex	Male (Ref)	—	—	—
	Female	-2.290*	0.10	-0.376
Married	No (Ref)	—	—	—
	Yes	-0.690*	0.50	-0.091
Migrated	No (Ref)	—	—	—
	Yes	0.827*	2.29	0.069
Training	No (Ref)	—	—	—
	Yes	0.579*	1.78	0.053
Head of the household	No (Ref)	—	—	—
	Yes	1.112*	3.04	0.086
Educational level	Below Primary (Ref)	—	—	—
	Primary	-0.083	0.92	-0.01
	Middle	-1.057*	0.35	-0.153
	Matric	-0.855*	0.43	-0.120
	Inter	-1.220*	0.30	-0.199
	Degree or above	-0.356*	0.70	-0.046
Household Characteristics				
Household Size		0.004	1.00	0
Number of siblings		0.016	1.02	0.002
Head activity	Unemployed (Ref)	—	—	—
	Formal	0.242*	1.27	0.026
	Agricultural	1.112*	3.04	0.112
	Informal	0.580*	1.79	0.062
Female Head	No (Ref)	—	—	—
	Yes	0.247*	1.28	0.026
Head education	Below Primary (Ref)	—	—	—
	Primary	-0.343*	0.71	-0.042
	Middle	-0.513*	0.60	-0.068
	Matric	-0.584*	0.56	-0.078
	Inter	-0.792*	0.45	-0.116
	Degree or above	-1.275*	0.28	-0.213

Regional Characteristics				
Region	Urban (Ref)	—	—	—
	Rural	0.081	1.08	0.009
Province	Punjab (Ref)	—	—	—
	Sindh	0.172*	1.19	0.019
	KPK	-0.857*	0.42	-0.122
	Balochistan	-2.416*	0.09	-0.437
Constant		-7.433*		
Log Likelihood		-7317.63		
LR Chi ²		7723.43		
Pseudo R-Squared		0.3454		
No. of Observations		21360		

Note: * indicates significant at five percent level and ** indicates significant at ten percent level. Omitted category is unemployed.

Our result suggests that age has an important impact on the employment probabilities of youth in Pakistan. Estimated coefficients of age and age squared show a concave profile peaking at 26 years of age. More specifically, as age increases, the probability of being employed increases but at a decreasing rate. This is also evident in our descriptive analysis which shows that young people face higher unemployment at the start of their career. Our results coincide with results reported by other researchers, for example, in Pakistan, Arif *et al.* (2002), Kingdon and Soderbon (2008) found that participation in economic activities increases with age in Pakistan. Results of Naqvi and Lubna (2002) also show that women participation in economic activities increase with age in Pakistan. As expected, results show a higher incidence of unemployment among female youth in Pakistan. For example, a young female is about 38 percent less likely to be employed than their male counterparts. These findings also coincide with findings of earlier studies. For example, Durrant (2000) and Sathar (2005) also depict in their studies that mostly females in Pakistan are not economically active and their work is largely unpaid and hidden.

Two other significant variables used in our analysis are being the head of household and married, which show the responsibility of young person as a head of household or a married person. The coefficient of head shows that being the head of a household increases the chances of employment by 9 percent, while in case of married, the probabilities of being employed decreases. These results are not surprising, the reason being that in Pakistani culture; women are usually supposed to stay at home and leave school or

abandon economic activities after getting married, while young male usually takes the responsibility of financial arrangements of household. Probability of being employed of young persons is also significantly affected by migration from rural to urban areas to earn his or her living. A young person who migrates to earn his or her living is about two times more likely (as shown by odds ratio of migration) to be employed as compared to a person who does not migrate to earn his or her living.

Having technical training also affects the economic participation and employment probabilities of youth in the labour market. For example, training improves the chances of being employed by 5.3 percentage points. These results coincide with earlier study by Arif *et al.* (2002) who found positive and statistically significant impact of training on the probability of making transition from unemployment to employment. However, the result from other researchers like Freeman and David (1982) found that vocational training at high school is unrelated to employment probabilities later in the career. Noted however that only 0.8 percent of youth have some sort of technical training; due to this limitation of limited data points we cannot differentiate the training on the basis of different types which could be very useful for policy recommendations.

Education plays an important role in defining the youth activities. Surprisingly, increase in the level of education reduces the probability of being employed in the labour market. It implies that youth with lower level of education are more likely to engage in economic activities and with higher education they are more likely to be classified as frictionally unemployed (looking for better jobs). These results show the incidence of higher unemployment among educated youth in Pakistan.⁸ It also shows us the attitude of educated and uneducated youth towards education and work. Those who are less educated are engaged in economic activities while those who are educated are not engaged in economic activity. One reason of this higher unemployment among educated people may be the lack of skills and training among educated people in Pakistan. In Pakistan, education system does not provide required skills and training needed in labour market. Therefore, lack of proper skills among educated people, higher expectations

⁸Similar figures can be traced in other countries of South Asia. For example, in UNDP's report on Human Development in South Asia (2003) it is mentioned that unemployment rate among those with secondary and higher secondary education was 17.9 percent as compared to just 1.9 percent among those with primary education. Similarly, in India, it was found that among those with higher secondary education, 41 percent were unemployed.

of job and earnings by educated people, predominance of informal economy (which is highly biased towards unskilled low wage labours) may be the main factors that contribute to the higher unemployment among educated people in Pakistan.

Two variables, namely, household size and number of siblings (under the age of 15 years) present in the household were also included to capture the effect of dependency on youth activities. These two variables are either insignificant or do not have much effect on youth activities as shown by their odds ratios which are close to one. These results however, do not agree with earlier studies in Pakistan. For example, Akhtar and Lubna (2005) found that youth unemployment chances decrease in case of large family size.

Characteristics of the head of household can affect the youth activities in labour market. For this purpose, the variables included are being the head of the household, the education level of household head, employment sector of the head, *i.e.* is it formal sector, informal sector, or agricultural sector and whether the head is female or not. Our findings show that youth with higher level of education of the head of household are less likely to be employed. These results are however, not consistent with earlier finding⁹ which show that having educated parents improves the chances of getting employment in the labour market.

Employment of head by sector can also affect the activities of youth. Informal and agricultural sectors are considered less beneficial than formal sector. Working in informal or agricultural sectors provides less protection and social security benefits than formal sector. In our study, we considered unemployed or out of labour force head as a comparison group with other three categories. Results show that the probability of being employed increases by 11 percent if the head is working in agriculture sector and by 6 percent if the head is working in informal sector. These results suggest that female and male youth usually work in fields with their family as unpaid family helpers at the start of their career. Another variable related to the head of household is the gender of the head. Taking male head as our reference category our result indicates that in case of female-headed household, the chances of being employed by a young person increase by 2.6 percent. It

⁹For example, a study by Rees and Gray (1982) analyzed the determinants of employment for out-of-school youth in USA. They argued that much of education of young people takes place in house, so having educated parents who have been exposed to books and serious discussions while growing up may have advantages in finding and holding jobs over other youths who have same amount of formal schooling.

may be due to the fact that youth living in female-headed household feel more responsibilities to take care of financial matters of household. Earlier study of Meyer and Wise (1982) has also shown that expectations of families can influence the decision of young people to work.

To capture the geographical effect on economic activities of youth we have included two categorical variables, province and region in our models. Results show that youth living in rural areas are more likely to be employed. This may be so because in rural areas people usually engage in agricultural related or informal activities. Akhtar and Lubna (2005) also concluded that unemployment rate in rural areas is less due to disguised unemployment. Our analysis also reveals significant difference at provincial level. The Punjab province was used as a comparison group with other provinces. Results suggest that Balochistan is the province where youth are 43.7 percentage points less likely to get employment. Results also showed that contrary to common belief in Sind province unemployment rate is less than that of the Punjab.

VIII. CONCLUSIONS

Some important findings that emerge from this study are described below.

- A large percentage of youth in Pakistan start their career early. In general, these young people face higher unemployment rate at the start of their career which gradually decreases with increase in age.
- A significant percentage of young people in Pakistan are inactive. It indicates that neither they are enrolled as student nor they are taking part in any economic activity. This inactivity rate is higher among female youth and those living in rural areas of Pakistan.
- There is higher incidence of unemployment among educated youth in Pakistan. Similarly, youth living with educated parents are also facing higher probability of unemployment. This may be due to the reason that youth with lower level of education of themselves or their parents are more likely to be engaged in economic activities, they are less choosy while, on the other hand, youth with higher education are more likely to be unemployed because they are in search of better jobs, perhaps they are more choosy and constitute a major part of frictional unemployment.
- There also exist major differences in youth labour market involvement for both sexes in rural and urban areas of Pakistan. In general, youth living in urban areas face higher level of unemployment than the youth living in rural areas. Similarly, female youth are more likely to be

unemployed and have less participation in the labour market as compared to their male counterparts.

- Balochistan is the province where unemployment rate is highest both in urban and rural areas and remains highest throughout the age of youth (15-24) when compared with other provinces. Moreover, youth in Balochistan are more likely to participate in labour force and are least likely to be inactive. This shows that youth of Balochistan are more willing to work but are unable to find work as compared to other provinces.

IX. RECOMMENDATIONS

The analysis presented in this paper shows that youth is a diverse social group with different characteristics and attitudes about work in different regions of Pakistan. It is necessary for policy makers to avoid considering youth in Pakistan as a homogenous group. Various types of labour market outcomes within and between different regions of Pakistan show the difference in needs of young people to provide better employment opportunities. Employment policies cannot be truly effective if youth is not considered as an asset to the society. The needs of youth must be addressed in a comprehensive manner keeping in view the educational, social and labour market requirements in different regions of the country. To create youth employment opportunities; there is a need for integrated approach comprising supportive economic policies that take into account issues pertaining to both labour demand and supply. Such policies should be integrated into the overall job creation policies of the country. The authorities concerned should design and implement enterprise based youth employment policies according to their regional demand and supply conditions and type of the industry existing there. All provinces of the country should formulate and implement policies and programmes for promoting youth and female employment in their respective provinces. The objective should be to guide the needy ones to set up their own business (self-employment), enterprise creation and small enterprises rather than to go for government jobs which are limited.

In order to boost employment growth in the country, the government should finance short-term contracts for young researcher at universities and subsidize the posting of researchers to small and medium size firms and institutions. Furthermore, employment policies should be aimed to foster the creation of small firms and self-employment schemes which will give chance to young people. Besides, the government should provide tax allowance for

youth segment of the population and other categories of workers who wish to be self-employed. This could be in the shape of fiscal incentives for new firms and bonuses for new hiring which would lead to rise in young people employment opportunities. Labour supply policies should aim at reducing unemployment by lowering skill mismatch. If funds are available, new projects should be started to create enterprises in agriculture, industry and services sector to reduce unemployment level in the country. Promote environmental projects to absorb new entrants into the job market. Main focus of such policies should be all depressed areas of the country with high unemployment rates. To improve employability of the young labour force we have to improve 'human capital' through the reform of educational and vocational system. It is also imperative to encourage and facilitate female labour force participation in the labour market, females are about 51 percent of the entire population of the country and they must be educated and given vocational training to absorb them in the labour market to improve the overall standards of living of the country. Last but by no means the least, the government must come up with policies to encourage emigration of our young talented professionals to foreign countries be it middle east or European countries — most of the European countries will be facing severe shortage of labour force in the near future because of their rapidly aging population — to earn desperately needed foreign reserve for the country. For that, the ministry concerned should negotiate and sign contracts with foreign governments and companies and request them to let us know the type of professionals they need. All hurdles in the way of sending people abroad to earn foreign exchange for the country must be removed and bogus and fraudulent agents involved in manpower export must be brought to justice to make this operation smooth, easy and fearless.

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APPENDIX

AT 1

Rural/Urban Difference¹⁰ in Labour Market Activities

Age (in Years)	Labour Force Participation Rate (%)	Unemployment Rate (%)	Inactivity Rate (%)
15	9.18	-19.08	9.85
16	11.86	-16.93	9.81
17	9.03	-11.40	9.92
18	10.84	-9.50	6.81
19	9.42	-8.31	8.16
20	8.41	-8.51	5.12
21	8.97	-1.84	3.32
22	5.40	-3.48	2.56
23	0.31	-2.61	6.57
24	0.73	-0.16	1.82
Youth (15-24 Years)	7.68	-7.24	6.34

Source: Calculated from LFS 2006-07.

¹⁰Difference is calculated by subtracting the respective labour market indicator (labour force participation rate, unemployment rate and inactivity rate) in rural areas from that in urban areas.

AT 2

Gender Difference¹¹ in Labour Market Activities

Age (in Years)	Labour Force Participation Rate (%)	Unemployment Rate (%)	Inactivity Rate (%)
15	21.75	-29.63	-32.73
16	31.02	-32.05	-41.11
17	33.96	-34.39	-41.67
18	45.48	-35.47	-49.24
19	47.76	-30.52	-49.14
20	52.87	-37.00	-57.74
21	53.66	-33.29	-55.99
22	59.93	-35.74	-62.69
23	59.57	-33.66	-62.32
24	62.77	-36.84	-64.27
Youth (15-24 Years)	44.60	-34.87	-50.60

Source: Calculated from LFS 2006-07.

¹¹Difference is calculated by subtracting the respective labour market indicator (labour force participation rate, unemployment rate and inactivity rate) of male youth from that of female youth.

AT 3

Cross Tabulation (Activity, Gender, Location and Age)

Age (in Years)	Labour Force Participation Rate (%)				Unemployment Rate (%)				Inactivity Rate (%)			
	Rural		Urban		Rural		Urban		Rural		Urban	
	M	F	M	F	M	F	M	F	M	F	M	F
15	49	24	36	19	24	47	37	79	5	46	5	26
16	62	26	45	21	19	44	30	73	6	56	6	34
17	61	25	50	18	15	42	22	68	7	55	4	38
18	74	27	62	20	13	42	18	66	7	62	6	46
19	79	27	64	21	11	32	15	59	7	64	9	49
20	84	28	71	21	8	37	12	65	6	67	7	59
21	84	30	74	20	8	35	7	51	6	65	7	60
22	89	29	81	21	6	35	8	59	6	68	6	69
23	90	29	85	26	8	36	9	51	5	69	4	64
24	94	32	90	24	4	35	5	53	4	67	6	73
Youth (15-24 Years)	74	28	64	21	12	39	15	64	6	61	6	50

M = Male, F = Female

Source: Calculated from LFS 2006-07.

AT 4

Cross Tabulation (Unemployment Rate, Province, Gender and Age)

Age (in Years)	Punjab		Sind		KPK		Balochistan	
	M	F	M	F	M	F	M	F
15	19.8	40.1	6.9	46.2	25.6	69.7	65.0	95.6
16	15.6	32.7	6.8	36.8	18.1	72.9	58.7	96.7
17	12.6	33.2	4.7	45.8	16.5	59.3	45.6	97.2
18	10.1	32.8	4.3	50.0	14.1	59.6	45.6	97.2
19	8.3	22.7	4.2	54.2	12.6	50.0	36.8	91.6
20	5.5	30.4	4.3	35.1	11.5	67.1	31.7	91.6
21	5.1	26.5	4.2	40.0	10.3	52.9	18.6	86.5
22	4.5	28.3	4.0	32.0	8.9	58.6	21.6	90.5
23	3.7	28.2	4.5	24.3	10.4	39.1	29.3	94.5
24	2.3	24.4	2.1	31.0	7.8	55.0	15.6	88.4
Youth (15-24 Years)	8.2	30.5	4.6	39.5	13.1	60.0	41.0	93.8

M = Male, F = Female

Source: Calculated from LFS 2006-07.

AT 5

Cross Tabulation (Unemployment Rate, Province, Location and Age)

Age (in Years)	Punjab		Sind		KPK		Balochistan	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
15	38.5	22.5	23.5	10.5	22.6	37.4	87.6	66.5
16	31.9	16.2	16.0	9.2	14.9	33.2	86.1	61.7
17	25.0	16.3	13.8	9.5	19.0	24.8	74.0	53.6
18	21.6	13.9	9.4	10.0	18.4	20.6	69.8	50.8
19	18.8	8.0	8.8	12.7	16.3	20.2	61.9	45.3
20	18.4	10.4	10.9	7.0	19.9	22.6	59.8	44.1
21	13.5	9.5	9.2	7.1	16.9	18.3	41.1	38.1
22	15.4	8.6	8.7	6.3	13.3	18.0	43.9	43.3
23	12.5	9.0	8.4	5.7	18.4	10.2	45.0	57.9
24	9.9	7.6	6.7	5.3	12.5	16.7	44.3	47.1
Youth (15-24 Years)	19.65	12.15	10.58	8.43	17.0	22.1	65.4	52.5

Source: Calculated from LFS 2006-07.

AT 6

Cross Tabulation (Education Level, Employed, Unemployed and Gender)

Education Level	Employed as percentage of Labour Force		Unemployed as percentage of Labour Force	
	Male	Female	Male	Female
Below Primary	94.3%	56.5%	5.7%	43.5%
Primary	90.6%	54.6%	9.4%	45.4%
Middle	77.8%	31.0%	22.2%	69.0%
Matric	82.5%	43.9%	17.5%	56.1%
Inter	75.1%	46.5%	24.9%	53.5%
Degree or above	80.4%	73.9%	19.6%	26.1%

Source: Calculated from LFS 2006-07.

AT 7

Cross Tabulation (Marital Status, Employed, Unemployed and Gender)

Marital Status	Employed as percentage of Labour Force		Unemployed as percentage of Labour Force	
	Male	Female	Male	Female
Unmarried	85.7%	53.8%	14.3%	46.2%
Married	94.7%	48.7%	5.3%	51.3%
Total	87.0%	52.2%	13.0%	47.8%

Source: Calculated from LFS 2006-07.