

Socio-Economic Determinants of Urban Informal Sector Employment: A Case Study of District Bahawalpur

Durdana Qaiser Gillani^{} and Rana Ejaz Ali Khan^{**}*

Abstract

The present study analyses socio-economic factors that motivate the workers to participate in urban informal sector employment. The study focuses on the urban area of District Bahawalpur. The authors collected their data by conducting a household survey during 2012. A sample of 506 participants of formal and informal sectors is selected in the urban areas of District Bahawalpur. By using logit model, the study results indicate that education, gender, marital status, skill training, parents' education, household size and rural-urban migration are the main factors which influence urban informal sector employment in District Bahawalpur.

Introduction

The concept of the informal sector was introduced by International Labour Organization (ILO) more than 25 years ago. It was found in ILO (1972) employment mission report on Kenya that migration from the countryside to the city not merely resulted in urban unemployment, but when the formal sector is incapable to provide enough job opportunities, rural migrants as well as urban dwellers tend to be occupied in small-scale and micro-level production and distribution of goods and services. So, these mostly unrecognized, unrecorded and unregulated small-scale activities make up the informal sector.

The International Labor Organization (ILO) reports accredited the specific characteristics of informal sector:

- *ease of entry;*
- *reliance on indigenous resources;*
- *family ownership of enterprises;*
- *labor-intensive, using adapted technology;*
- *skills acquired outside the formal school system;*

^{*} Durdana Qaiser Gillani, Ph.D Student, The Islamia University of Bahawalpur, Bahawalpur.

^{**} Rana Ejaz Ali Khan, Associate Professor, Department of Economics, The Islamia University of Bahawalpur, Bahawalpur.

- *unregulated and competitive markets, and*
- *lack of support and recognition from the government.*

It was concluded in the ILO Kenya report that the informal sector has the potential for employment creation and its growth is faster than the formal sector and that the size of informal sector employment far-off from being only slightly productive is economically well-organized and profit giving.¹

Heterogeneous economic activities define the nature of the informal sector. The only common thing is that they are free from government regulations in an environment where similar activities are being made.² The self-employment (home production and petty trading) as well as wage employment (casual labour, contract labour, and piece work) are considered employment in informal sector. The informal sector is distinguished by small competitive firms, petty retail and services, labour intensive methods, free entry, and market determined factor and product prices.³

In Pakistan, the growth in GDP for year 2011-12 has been estimated 3.7 per cent against 3.0 per cent in the previous fiscal year 2011. The growth of agriculture sector is recorded 3.1 per cent against 2.4 per cent in last year. The growth of large scale manufacturing (LSM) is observed 1.1 per cent during July-March 2011-12 as compared to 1.0 percent in last year. According to *Labour Force Survey 2010-11*, Pakistan has experienced an increase of 0.9 million in labour force which is more than the last year. The employed are about 53.8 million during 2010-11 year, which is 0.6 million more than the last year.⁴

The purpose is to highlight the socio-economic factors that motivate the workers to participate in urban informal sector employment. Informal sector plays an imperative role in the economy of Pakistan. It is important to study this issue because informal sector employs 73.8 per cent of Pakistan's total labour force. The ratio of employment in the rural informal sector (76.5 per cent) is higher as compared to in urban

¹ ILO, *Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya* (Geneva: ILO, 1992).

² M. Castells and P. Alejandro, 'World Underneath: The Origins, Dynamics and Effects of the Informal Economy', in *The Informal Economy: Studies in Advanced and Less Developed Countries*, A. Portes, M Castells, and L. Benton (eds.), (Baltimore: John Hopkins University Press, 1989), pp.11-40.

³ See: M.P. Todaro, *Economic Development*, 7th ed. (Mass.: Addison Wesley Longman, Inc., 2000), and United Nations, *The World's Women 1995: Trend and Statistics* (New York: United Nations, 1995).

⁴ Government of Pakistan, *Pakistan Economic Survey* (Islamabad: Ministry of Finance, 2012).

informal sector (71.2 per cent). In general, the percentage of participants in the informal sector has increased in both rural (76.5 per cent) and urban areas (71.2 per cent). In Pakistan, up to 63.1 per cent of female labour force participants are working in informal sector especially in urban areas.⁵

The study is organized as follows: After providing a comprehensive introduction the review of the pertinent studies are specified in the part II. In part III, preliminary analysis of the data and methodological issues are explained. The result and discussion are presented in part IV. Part V gives some conclusions and policy implications.

Literature review

There is small theoretical and empirical literature available on urban informal sector at national and international level. But there is not any significant study on the issue of informal sector employment especially in urban areas at the national level. However, few studies are existing at the international level. We review some important studies here.

House⁶ focused on Nairobi's informal sector by collecting data from the survey of informal sector enterprises in Nairobi conducted in mid -1977 in Kenya. The study used the percentage distribution. The results indicated that it was easy to enter in the informal sector because the skill levels were low and the amount of the money required to start the business was insignificant. Moreover, the sector was reserved by recent migrants of the city. In conclusion, the informal sector offered a coherent way to urban existence, even if at a bare subsistence level.

Kazi⁷ marked out the origins of the informal sector to the rising urbanization which was the result of rural to urban migration, and low rates of employment expansion in the modern sector. For this research, data was based on a small sample of skilled workers, entrepreneurs and employees in Rawalpindi and Lahore in Pakistan. Findings showed that skilled self-employed in the informal sector earned more than the formal sector workers. Moreover, it was suggested that the informal sector contributed to skill learning process in the economy by informal

⁵ Government of Pakistan, *Labor Force Survey* (Islamabad: Ministry of Finance, 2012).

⁶ W.J. House, 'Nairobi's Informal Sector: Dynamic Entrepreneurs or Surplus Labor?', *Economic Development and Cultural Change*, 32:2 (1984), pp.277-302.

⁷ S. Kazi, 'Skill Formation, Employment and Earnings in the Urban Informal Sector', *The Pakistan Development Review*, XXVI:4 (1987).

apprenticeship, which was important for both the employer as well as the apprentice.

Funkhouser⁸ examined the employment patterns and the earnings structure by utilizing household surveys in five Spanish-speaking countries of Central America. The author adopted the probit model to estimate the informal sector employment. The results revealed that return to complete year of education in the informal sector in each country was higher than in most developed countries and the male female differential was to a great extent larger in the informal sector. There were higher returns to experience in labour market. Results also found that married were less likely to participate in urban informal sector employment. Having male children less than 10 years of age was negatively associated with informal employment. The findings also indicated a positive relationship between female children under 10 years and informal sector employment but negative relationship in Nicaragua in 1993 and in Costa Rica in 1980, 1985 and 1991. The study results concluded that level of development was supposed to be an essential determinant of informal sector employment.

Hout and Rosen⁹ studied the importance of family background and race in self-employment by using data from *General Social Survey* (GSC). The results indicated that the self-employment status of parents motivated the individuals to become self-employed. By using a logistic regression analysis, result found that the self-employment rate among American and Latin American Africans whose fathers were self-employed was below that of the average man from a European ancestry whose father was not self-employed. In addition, ancestry and immigration also affected self-employment.

Das¹⁰ focused on the other side of employment.¹¹ Data was drawn from the *Indian National Sample Survey* 50th round (1993-94). The results pointed out that those educated and high status workers did not prefer the non-form self-employment. The results indicated that individuals with low human capital preferred self-employment in

⁸ E. Funkhouser, 'The Urban Informal Sector in Central America: Household Survey Evidence', *World Development*, 24:11 (1996), pp.1737-751.

⁹ M. Hout and H. Rosen, 'Self-employment, Family Background, and Race, *The Journal of Human Resources*, 35:4 (Autum, 2000), pp.670-92.

¹⁰ B.M. Das, 'The Other Side of Self-Employment: Household Enterprises in India', *Social Protection Discussion Paper Series*, No. 0318, September 2003, pp.1-34.

¹¹ The same study was made by W.H Hout and H. Rosen, *op.cit.*

household enterprises as a survival strategy in urban areas.¹² Results also showed that Muslims, upper caste individuals and men were more among the self-employed groups. In addition, married women with large household size reduced the probability of participation in self-employment in household enterprises.

Calves *et al.*¹³ analyzed the changing pattern of youth employment in the labor market in Burkina Faso. The study was based on National Representative Survey Data collected in Burkina Faso in 2000. The author used the descriptive technique. Results found that the basic education motivated the people to work in informal economy. Furthermore, due to lack of vocational and technical training, urban informal sector was increasingly providing employment to school leavers or young people having basic education. Finally it was concluded that because of urbanization, migration and unemployment, the young migrants participated in the labour market for economic reasons which deteriorated the competition in labour market.

Using primary data, Marshall and Oliver¹⁴ determined the impact of the sources of human, financial and social capital on an entrepreneurs' participating in a start up in Indiana. A binomial logistic model was used to analyze the data. In addition to the personal characteristics such as age, gender and ethnicity, results found that human capital (knowledge, experience, and skill) was indeed essential to the success of entrepreneurs. Study revealed a significantly positive effect of graduate degree on participation in a start up in the entrepreneurial activity. Results also indicated that those having lower net worth were faced with more difficulties in securing financial capital to begin the actual start up. On the other hand, those with medium and higher levels of net worth were more likely to be entrepreneurs.

Gasparani and Tornarolli¹⁵ discussed the labor informality in Latin America and the Caribbean based on the patterns and trends by using micro data from household surveys and socio-economic data base for

¹² See, E. Funkhouser, *op.cit.*

¹³ A. Calves and B. Schoumaker, 'Deteriorating Economic Context and Changing Patterns of Youth Employment in Urban Burkina Faso', *World Development*, 32:8 (2004), pp.1341-354.

¹⁴ M.I. Marshall, and W.N. Oliver, 'The Effects of Human, Financial, and Social Capital on the Entrepreneurial Process for Entrepreneur for Indiana'. Paper prepared for presentation at the Allied Social Science Association's Annual Meeting, Philadelphia, 7-9 January 2005.

¹⁵ L. Tornarolli and L. Gasparini, 'Labor Informality in Latin America and the Caribbean: Patterns and Trends from Household Survey Micro Data', *CEDLAS Universidad Nacional de La Plata*, 2007.

Latin America and the Caribbean (SEDLAC). The study used log hourly wage regression using Heckman maximum likelihood. Results pointed out that low education and low skill levels motivated the workers to work informally.¹⁶ Result also found that informal wage workers without a secondary education on average earned 30% less than their formal counterparts. They worked in low productivity jobs in marginal, small scale, and often family based activities. The rate of creation of quality employment in the region was low as compared to other growing economies in the rest of the world.

Attia and Moawad¹⁷ examined the importance of informal economy to reduce poverty and development in Egypt. The authors illustrated that productivity and wages in the informal sector were low. The sector was characterized by poor working conditions and long working hours. Results found that jobs observers in the informal sector provided the society with the goods and services at high level. The decision to participate in informal sector for some was a choice, although, for others was an indispensable option. The study concluded that mostly poor in Egypt were occupied in the informal sector.

Above studies discussed the different aspects of urban informal sector but still it requires more attention. Appropriate policy implications are missing. No specific research is conducted in the Pakistan especially in Southern Punjab to measure the, size, nature and determinants of urban informal sector employment.

Data sources and methodological issues

Data collection

Primary data was collected for the present study by conducting household's survey in the age group of 18-64 years randomly in urban areas of District Bahawalpur. For a sample consisting of 506 formal and informal sector participants, a comprehensive questionnaire was developed and face to face interviews were taken from households. Furthermore, samples have been drawn randomly from each stratified location. Simple random and stratified sampling technique has been used in this study.

The District Bahawalpur is bounded on the north by Multan, Lodhran and Vehari districts, on the east are south by India and on the

¹⁶ Study results regarding low education and skill support E. Funkhouser's (1996) findings, *op.cit.*

¹⁷ Attia and S. Moawad, 'The Informal Economy as An Engine for Poverty Reduction and Development in Egypt', *MRPA Paper No. 13034*, posted 27 January 2009, pp.1-31.

west by Rahimyar Khan and Muzaffargarh districts. The total area of the District is about 24,830 sq.km. It Desert is land locked from all sides. In the south and southeast, the Cholistan reaches the Indian border while in the north it turns parallel to the southern part of Punjab plains and river Sutlej makes a common border with Lodhran and Muzaffargarh districts. The District is in three parts: the riverain area, the plain area and the desert area.

Methodology and model specification

After data collection, a logit analysis of the factors that influence the urban informal sector employment is made. In our model, dependent variable is of qualitative nature which is included into the regression model as a dummy variable. Here, value '1' specifies that a person is working in urban informal sector, whereas, the value '0' shows the person is not working in urban formal sector. We have used binary logit model. Commonly, linear probability models (LPM), probit and logit model are used to estimate such models. The model is as follows.

$$Y_i = \beta_0 + \beta_1 X_i + \mu_i$$

It is expected that the use of linear probability models in a binary choice dependent variable has problem of generating predicted values which may fall outside 0-1 interval thereby violating the basic tenets of probability. The heteroscedasticity and generally lower R^2 values are also the result of such models. Consequently the probit and logit models are used to decrease these problems. The models use Maximum Likelihood Estimation (MLE) procedures. The logit model is based on cumulative logistic probability function. Both logit and probit are transformation such that a cumulative distribution is estimated with LPM. The logistic cumulative probability function is shown by

$$P_i = f(y_i) = \frac{1}{(1 + e^{-y_i})}$$

Where P_i is the probability that the i th person will be an informal sector employed, $Y_i = \beta_0 + \beta_1 X_i + \dots + \beta_n X_n$ (x_i is the vector of attributes linked with the i th person in the vector of parameters to be estimated) and e is the base of natural logarithm which is approximately equal to 2.718. Y_i can range from positive infinity to negative infinity in the equation. The probability of an individual participating in the informal sector lies between 0 and 1.

By multiplying both sides of the equation by $1+e^{-Y_i}$ we get

$$(1 + e^{-Y_i})P_i = 1$$

Dividing by P_i and subtracting 1

$$e^{-Y_i} = \frac{1}{P_i} = \frac{1 - P_i}{P_i}$$

However, $-e^{Y_i} = 1/e^{Y_i}$ so that the equation turns into

$$e^{-Y_i} = \frac{P_i}{1 - P_i}$$

Now by taking the natural logarithm of both sides;

$$Y_i = \log\left(\frac{P_i}{1 - P_i}\right)$$

Or

$$\log\left(\frac{P_i}{1 - P_i}\right) = Y_i = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n$$

This is the logit probability model. The logistic model defined in the equation is based on the logits of y_i which is the stimulus index. While, comparing the logit model with linear probability model, the advantage of linear probability model is that the probability of occurrence increases with ' y_i ' but never steps outside the 0-1 interval and relationship between the variables is non-linear. To interpret the coefficients of our model is difficult since these coefficients give only information on the effects of explanatory variables (x_i) on the odds ratio. Partial derivatives are used to estimate the impact of explanatory variables on the probability of urban informal sector employment. The probability derivatives are shown by the following equation:

$$\frac{\partial p}{\partial y_i} = p_j(1 - p_j)\beta_i.....$$

Where, ‘p’ is the probability of the urban informal sector employment.

Model specification

Based on the above mentioned methodology, our sample model is as follows:

ISE= f (AGY,EDY, SEX,
MRS,SKLT,FED,MED,HSIZ,DRN,FSP,MPC,FPC,SPN, VAT,RMG)

In the model, the dependent variable is urban informal sector employment. The independent variables are age, complete years of education, sex, marital status, formal training, parent’s education, and household size, family set up, dependency ratio, number of adults, male prime children, female prime children spouse participation in economic activities, household value of assets and rural-urban migration.

Variable description

The variables for logit estimates of the determinants of urban informal sector employment are elucidated in Table 1. The theoretical expected signs of variables are outlined here. The expected relationship between urban informal sector employment and age, marital status, number of adults, value of assets can be positive as well as negative. It is hypothesized that probability of being employed in urban informal sector and formal skill training, education, parents’ education, male prime children and spouse participation in economic activities is negative. Theoretically, the expected relationship between urban informal sector employment and household size, family set up, dependency ratio, rural-urban migration and female prime children is positive.

Table 1: List of variables used in urban informal sector employment equation

Variables	Description of Variables
Dependent variable	
UISE	=1 if the participant is urban informal sector employed =0 otherwise

Independent variables	
AGY	= Age of the participant (in years)
EDY	= Complete years of education
SEX	1 = if the participant is male 0 = otherwise
MRS	=1 if the participant is married =0 otherwise
SKLT	= 1 if the individual working in urban labor market has some training skill =0 otherwise
MED	=1 if participant's mother is educated =0 otherwise
FED	=1 if the participant's father is educated =0 otherwise
FSP	=1 if the participant belong to joint family =0 otherwise
HSIZ	=Size of the household or total member of the family
DRN	= Dependency ratio or total numbers of dependents of family
TAD	= Total number of adults in the family
MPC	= if the participant has male prime children =0 otherwise
FPC	= if the participant of labour market has female prime children =0 otherwise
SPN	=1 if the workers' spouse participates in economic activities =0 otherwise
VAT	Value of assets
RMG	=1 if the worker is rural-urban migrant =0 otherwise

Results and discussion

The present study is based on statistical analysis as well as an empirical analysis of factors influencing people to work in urban informal sector employment by using the binary logit model.

A: Statistical analysis

We reveal the statistical analysis here.

Table 2: Summary Statistics of Some Selected Variables

Variables	Mean	S.D.	Skewness	Kurtosis
AGY	40.4734	10.3998	-1.58	-0.756
EDY	10.55	4.0514	-0.668	0.144
SEX	0.6134	0.4874	0.467	-1.789
MRS	0.7061	0.4560	-0.908	-1.181
SKLT	0.4931	0.5004	0.028	-2.007
FED	0.4181	0.4937	0.3333	-1.897
MED	0.3043	0.4606	0.853	-1.278
HSIZ	6.9231	2.4583	1.150	3.536
DRN	0.4422	0.2358	-0.269	-0.545
FSP	0.5779	0.4984	-0.268	-1.808
MPC	0.6391	0.8608	1.272	1.169
FPC	1.0059	1.0807	0.667	-0.724
SRN	0.3550	0.4790	0.608	-1.637
VAT	1177519	947777.5	0.899	2.480
RMG	0.2268	0.4192	1.309	-0.289

Table 2 portrays the basic statistics of some explanatory variables. The table includes the mean value, the standard deviation, skewness, and kurtosis of some personal socio-economic and demographic variables. These variables affect the urban informal sector employment of both (male and female) in district Bahawalpur. The participants have 40.47 average age and the variability about mean is 10.40. The average education is 10.55. The variability about mean is 4.05. In the analysis, the male workers are 0.61 on average. The married participants are 0.71 on average. About 0.17 per cent has some kind of skill training. The average size of household is 6.92 persons.

B: Empirical analysis

We display the results in this section. Mainly impact of personal, socio-economic and household variables is observed on urban informal sector employment by using logit model.

Table 3: Binary Logit Estimates of Urban Informal Sector Employment in District Bahawalpur.

Explanatory Variables	Coefficients	Z-Statistic	Marginal Effects
CONSTANT	0.6634	0.7964	-----

AGY	0.0106	0.7350	0.0024
EDY	-0.1550*	-3.9862	-0.0357
SEX	-0.4239***	-1.5359	-0.0977
MRS	0.3877	1.1446	0.0893
SKLT	0.2648	1.0858	0.0610
FED	-0.7259*	-2.7613	-0.1672
MED	-0.8697*	-3.1172	-0.2004
HSIZ	0.2461*	3.3456	0.0567
DRN	0.4571	0.7926	0.1053
FSP	0.5740**	2.1332	0.1322
MPC	-0.6438*	-3.7952	-0.1483
FPC	0.6327*	4.0649	0.1458
SPN	-0.7348**	-2.4861	-0.1693
VAT	-3.43E*	-2.5182	-0.0000
RMG	0.5554**	1.8450	0.1297
Sample Size (N) 506		McFadden R	
Square = 0.33			
Log Likelihood -219.4763		P-value= 0.000	

Source: Estimated by author using Eviews statistical software.

Note: The Z- statistic is that of the associated coefficients from the logit model, where

employment in formal sector is the base category.

* Significant at 1% level of Significance

** Significant at 5% level of Significance

*** Significant at 10% level of Significance

The binary logit estimates regarding urban informal sector employment in District Bahawalpur is presented in the Table 3. The intercept term is found to be positive and has statistically insignificant effect. In the present study, table includes four columns which elucidate explanatory variables, the estimated parameters, their asymptotic Z-statistic and marginal effects correspondingly. The insignificant impact of the constant term on urban informal sector employment decision describes that the independent variables existed in the model are adequate to determine the probability of urban informal sector employment. Logically, it is vague.

Age motivates the participants to work in urban informal sector employment. We included this independent variable in completed years. Results indicate that the age (AGY) exerts a positive and statistical insignificant effect on urban informal sector employment (about 0.2 %). This may be accounted for that formal sector cannot absorb all the

persons with basic education. Generally, participants take this sector as permanent activity and engage themselves in this sector in old age.

Theoretically, it is argued that education has a fundamental effect on the decision regarding sector of employment. The highly educated persons enter into the formal labor market while the urban informal sector absorbs those who have low level of education. It is found that the education is inversely linked to informal sector employment. The study results also show this decreasing trend. The study included completed years of education (EDY) as an explanatory variable. Results reveal that education reduces the probability of urban informal sector employment. The coefficient of completed years of education (EDY) is found to be negative and highly significant. The probability of urban informal sector employment diminishes by 3.57 percentage points due to an increase of one year in education. The study results highlight that people with high human capital are less likely to participate in urban informal sector of District Bahawalpur.

Generally, marital status (MRS) affects the decision to participate in sector of employment. The present study found a positive and statistically insignificant relationship between urban informal sector employment and marital status. The probability of urban informal sector employment has an increasing tendency of 8.93 percent because of an increase of one married worker. This observable fact is that couples with low education are inclined to join urban informal sector employment in order to meet up their requirements due to insufficient jobs in the formal labor market.

The sex (SEX) is an important factor which compels people to join the urban labour market. The sex (i.e. being male) of the participants of urban informal sector has significantly negative influence on informal sector employment. The probability of being employed in urban informal sector decreases by 9.8 percent respectively because of an increase of one additional male informal worker. It becomes harder for men to find job in urban informal sector because of sex discrimination in urban informal labour market. One argument is that urban informal sector employment does not commensurate their high level of education. So, the male workers are switching off from the urban informal sector and moving towards the formal sector, which is an important and lucrative source of earning. In addition, the level of jobs more relates to less educated employers more available as females.

The results point out a positive relationship between skill training (SKLT) and urban informal sector employment. The coefficient of skill training puts forth a positive and insignificant impact on urban

informal sector employment in Bahawalpur. Training increases the efficiency.

Parent' education plays a role in deciding better work in the labour market. In theory, it is predicted that the workers are less likely to participate in informal labour market whose parents are literate. The findings of the study corroborate the hypothesis. The coefficient of (FED) is found to be negative and highly significant. The probability of urban informal sector employment reduces by 16.7 percentage points in result of one unit increase in father's education. The probability of mother's education decreases by 0.20 percentage points due to an increase of one unit in (MED) respectively. It can be justified that the educated parents guide their children in attaining higher education and deciding for better utilization of their skills in appropriate sector of employment.

Household size (HSIZ) usually shows dependence on the head of household. The supply of labor working as family helpers endorsed the participation in urban informal sector employment. It has been recognized that household size has a positive impact on urban informal sector. The coefficient of (HSIZ) is found to be positive and has significant influence on urban informal sector employment. The probability of urban informal sector employment increases by 5.67 percentage points due to an increase of one more family member. The economic rationale of this positive trend is that household heads with their low human capabilities due to household financial pressure are lean to work in urban informal labour market.

Labour supply theory indicates that the family labour supply decisions are interdependent. The coefficient of dependency ratio (DRN) seems to be positive and statistically insignificant for urban informal sector employment in Bahawalpur. It may be concluded that persons having more dependents are more likely to be employed in urban informal sector to support the household ever-increasing expenditures.

Influence of joint family structure (FSP) on the decision to work cannot be neglected. It is noted that spirit to work is low in the joint family system because of strong substitution effect of leisure. However, our results are different. The result point out that joint family setup has a positive and significant impact on urban informal sector employment. The probability of urban informal sector employment increases by 13.2 per cent point due to one additional increase of family member. Almost family members due to lack of quality education and family financially pressure are opt to work in urban informal sector employment.

Hypothetically, the spouses' participation in economic activities (SPN) is found to be negatively interlinked with the choice of work.

Hence, it reduces the probability of working in urban informal sector employment. The coefficient brings to bear a negative and significant effect on urban informal sector employment. The economic reason is that parents or household heads have to work more to put up with escalating expenditures of the dependents.

Theoretically, an increase in the value of assets (VAT) has enlarged effect on choice of sector of employment. With the increasing value of assets, people prefer leisure to work and strong substitution effect is greater than the low income effect. In this way, they are reluctant to work in urban informal sector. Results point out that the coefficient of the value of assets (VAT) is negative and has highly significant influence. Another argument may be the illiteracy of the individuals of not investing more resources in side business.

The Presence of male prime children (MPC) has an influence on urban informal sector employment. The coefficient of male prime children is found to be negative and has statistical significant effect. The probability of urban informal sector employment diminishes by 14.8 percent due to one additional male prime member in home. It is postulated that households if they have male prime children don't get involved into urban informal sector employment because family labor supply decisions are interdependent. Male prime children can affect the decision to work in informal or formal labour market to support family. The strong substitution effect of better-paid labor time for that of male prime children stimulates workers to have less participation in urban informal labour market.

In labour supply theory, it is argued that households having female prime children (FPC) prefers to join labour market because family labour supply decisions are interdependent. Findings highlight that the coefficient of female prime children is positive and statistically significant in urban informal sector employment. The probability of being employed in urban informal sector increases by 14.6 per cent points in result of an increase of one additional female prime child in the family. The prime age females have the low opportunity to work due to societal and religious constraints. As a result, parents have to fulfill female prime children's requirements. This phenomenon encourages them to join the informal labour market in urban areas of Bahawalpur.

Under the dualistic approach for informality, rural-urban migration is one more significant variable and has large impact on the probability of participation in urban informal sector. The probability of urban informal sector increases by 13 percentage points for an addition of one worker in the urban area. These results of the study conclude that

the informal employment is high in urban areas of District Bahawalpur. This urban informal sector absorbs the influx of rural-urban migrants.

Conclusion

Urban informal sector plays the most important role in the economy. We have analysed the determinants of urban informal sector employment. A binary logit model is used in the present study. The analysis of study is based on simple random sampling and stratified random sample. The study has examined the socio-economic factors which compelled people to join the urban informal sector based on data collected through sample survey in 2012 in the urban areas of district Bahawalpur. The results pointed out that age of the respondents (AGY), their marital status (MRS), the skill training and household dependency ratio (DRN) have insignificant effect on urban informal sector employment in Bahawalpur. The findings indicates that education (EDY), sex (SEX), marital status (MRS), father's education (FTD), mother's education (MTD), household size (HSIZ), joint family set up (FSP), male prime children (MPC), female prime children (FPC), spouse participation in economic activities (SPN) and rural-urban migration (RGT) are the factors that influence the workers to participate in urban informal sector employment of Bahawalpur District.

Results conclude that urban informal sector of District Bahawalpur is sector of people with low education. It is a major female sector. Moreover, the sector has workers of uneducated parents. The urban informal sector is also a sector of those participants who have large family size and those belong to the joint family set up. The sector absorbs the rural-urban migrant workers also. Furthermore, the workers have less participation in urban informal sector with spouse participation in economic activities. The workers have less participation in urban informal sector with male prime children and with an increase in value of assets. The results are similar as hypothesized by approaches of the urban informal sector and by the neoclassical theory of labor supply.

The study purposed that government should increase the education level of the workers in urban informal sector. For this, mobilization policy should be good. The formal as well as informal credit facilities should be provided to the participants of urban informal sector employment especially. Hence, efforts must be directed towards improving literacy status of the participants of the urban informal sector. The government should provide more jobs in the urban formal sector and provide more educational and training facilities to its participants with their basic education. Moreover, the labor intensive and small industries should be established in the urban areas of District Bahawalpur. There is

a need to establish more vocational and technical training institutes for the participants in rural as well as urban areas of Bahawalpur. Females' participation in urban informal sector is high, thus, public policy should support women in this choice by improving their opportunities in the informal sector. Policy must be formulated to mobilize to invest more in private public partisanship to increase the growth potential of urban informal sector. Rural-urban wage differentials must be eliminated.