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Factors Affecting Women Contribution in Household Budget in Urban Informal Sector: An Analysis

Prof. Dr. Abdul Ghafoor Awan ^α, Dr. Muhammad Zahir Faridi ^σ & Muhammad Mujahid Abbas ^ρ

Abstract- Woman share in formal and informal labor market has gained much importance at national and international level. It has become the main agenda of national and international organizations for last three decades. Data collected for those women whom are contributing in the household budget through their informal economic activities is a Herculean task. The raison d'être of our research work is to measure those factors which are affecting woman's contribution in the household budget, particularly in the urban informal sector. Primary data were collected from urban councils of district Dera Ghazi Khan. By applying Ordinary Least Square Method, we have analyzed that women's education, woman's profession; woman's working hours, woman's outside (home) work permission, number of dependents and poverty status of household positively and significantly affect their support (contribution) to the household budget. The factors like husband's education, his earned income, number of infants (0-5 year age), and household participation (in economic activity) rate (including both male and female) and husband's employment status negatively affects the women's contribution. Thus, it is recommended that government should focus on women's education, technical training and help them through the provision of assets to increase their contribution.

Keywords: women support to family, OLS method, women education, women profession, poverty status, number of dependents, household participation rate, women working hours, district dera ghazi khan.

I. INTRODUCTION

For growth of any country, labor and capital are the most important factors. The present economic thoughts about development and progress have evolved since 1950s. At that time, the relationship between physical capital and growth in the form of output was supreme. The concept of human capital as a major variable like physical capital came in front in 1960s. Later in 1970s oil price shocks, exposed the weakness of large economies to abrupt distortion in micro and macroeconomic policies. The concept of good governance with economic management,

democratic values, equality and environmental protection was introduced in 1990s. Resultantly, structural adjustments gain very importance for long term development and growth of the economy (Hussain, 2000).

In the developed countries share of working women is equal in labor force, whereas, in developing countries situation is different and unsatisfactory. In developing countries like Pakistan women are not only deprived of basic amenities of life but also handicapped. They are facing poverty, low income, least equal opportunities, lack of resources, both in rural and urban areas of Pakistan. The incidence of poverty is more criminal in urban areas of Pakistan as compared to rural areas, particularly among women.

Woman labor force participation rate in Pakistan is exhaustively low. But in informal sector sixty five percent of women are economically active in order to support their families (LFS 2012-13). Many economic studies have focused rural informal sector. Few studies have focused on the factors which affects woman's contribution in the household budget. The main feature of our work is to measure urban woman's contribution in the household budget in informal sector. Self-employment and wage-employment both are included in the informal sector. But in developing countries like us, informally employed persons have no social, legal protection, job security, employment benefits and proper representation. Therefore, in least developed countries, many informally employed workers, particularly women as compare to formally employed workers are poor. In addition, that factor which affects their contribution requires the utmost attention to make policies to enhance their contribution. Thus, woman support of her family (household) makes a proxy for her efforts for family survival and up-gradation of lifestyle, which still has not been examined in Pakistan.

In countries like Pakistan women's labor force participation is largely explained by culture, norms, established by society, rising population, burden of daily life, unskilled occupations, gender differences, and hurdles on woman's outside work, male headship and many other factors. Now a day, it is very difficult for a single (male) bread earner to fulfill all amenities of household, therefore, the role of women for their survival has gained much importance. In addition, it is earnestly

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needed to give equal opportunities to women like men in education, technical training, advanced skills and professional approach.

According to latest (revised) data collection techniques, women involved in dress making, beauty parlor, embroidery, sewing, marketing, knitting, preparation of food, poultry breeding are considered as labor force. In fact, income from such informal types of works done by women as a source of household income (contribution) is not counted as part of GDP in Pakistan. Thus, the informal sector has a greater margin of employment, particularly for female *vis-à-vis* male, in least developing countries.

The main objective of the study is to explore the factors that affect the women contribution in family budget. The rest of the chapter is arranged as follows. Second section provides the review of the past studies. Data sources and methodology is discussed in the third section. Section four discusses the results of the study. Concluding remarks are offered in the last section.

II. LITERATURE REVIEW

Chen *et al.* (2014) explored the factors that influenced the labor force participation of female workers in rural and urban areas of China. National Survey database of the employment of married women in 2006 was used by the author. The Probit regression was used to estimate empirical evidences. This study proved that the individual factors, age have no significant association with women's laborious work both in rural and urban areas of China. Whereas, education proved to be significant for both rural and urban women. On the other hand, family factors like husband work and child care has a significant effect on urban female's participation in economic activity. But family scale has an insignificant association with urban female participation in labor work. Thus, the study concludes that both individual (age, education) and family factors (husband work, child care and family scale) played a more important role in determining female labor force participation in china.

Oginni *et al.* (2013) provided evidence that in Nigeria male headed families are poorer than female household. The author estimated, odd ratios by using Binary Logistic Analysis, of gender differentials of household poverty, age, education, residence and six regions (geographical location) in Nigeria, which proves to be significant. Male headed households are poorer than female headed household, unlikely as proved by Nigerian Demographic and Health survey (2008). The study concludes that without neglecting female headed families, focus of poverty reduction interventions should be more on male headed household to reach out more of the poor in order to reduce poverty in Nigeria.

Bano *et al.* (2012) investigated rural women's contribution in the family budget. Primary data were

collected through field survey in District Layyah. The study concluded that per month wage rate, education level, poverty, significantly influence rural women, whereas; women's income per month, expenditures, number of persons at home and the number of children negatively impacts her contribution in the family budget. Empirical findings suggested that availability of scholarships, easy loans, monetary incentives and increase in per month wage rate can enhance women's contribution in the family budget.

Faridi (2011) focused rural women's efforts for family subsistence. This study was based on primary data source. Ordinary least square method was used for estimation. The main objective of the study was to explore the factors which determine the women's contribution in the family budget. Study concluded that age of working women, hourly wage, poverty status, women as head of household, permission for outside household are strongly associated with women's contribution in the household budget whereas; an increase in the number of children, hurdles to educational access, long working hours of spouse decreases the female contribution. The study suggests that a decrease in family size, control over population, increase in health facilities, permission for outside work and education, social security and old age benefits can increase women's participation in household earning.

Yasin *et al.* (2010) explored the determinants of gender wage discrimination in Pakistan. The study used primary data collected from four districts of Punjab. Ordinary least square regression analysis was adopted to estimate the parameters. Geographical location, experience, vocational education, level of schooling, occupational groups and marital status proved to be significant in effecting gender wage discrimination. The study concluded that current empirical results show that low literacy ratio, low level technical education, professional incompetency are more important deficiencies of the labor force in Pakistan, even more seriously prevalent in rural areas. Similarly, employer's preferences, socioeconomic and cultural values discourage women to participate in the labor market.

Rafi and Mallick (2010) investigated, are female-headed households more food insecure in Bangladesh within particular ethnic groups. Author used village-level survey to estimate food insecurity between male-headed families and female-headed families. The generalized threshold model was used to calculate elasticity. No social and cultural hurdles among ethnic groups were found and informal redistributive mechanism attributed low food insecurity among these ethnic groups. Food security was desegregated into four categories, severe (chronic), occasional (transitory), break even (food shortage), and food surplus. To clarify the household head, criteria of hardship were based on gender of household and main decision maker in the household. Descriptive analysis shows that Bengali was

the only group that had a higher percentage of food insecure among female headed households. Gender of household, age of household head, years of schooling, occupation (form, non form), demographic dependency ratio, land ownership, production from land, location of the household were taken as independent variables, whereas; saving and asset accumulation were not used as independent in order to avoid endogeneity within the model. The study concludes that (on the basis of data collected through direct interview) there is no significant difference in food security between female headed and male headed household because of the absence of social and cultural restrictions on female to participate in the labor force secondly, informal redistributive mechanism. It also shows that non-economic variables have a significant impact on economic outcome such as food security.

Khan and Khan (2009) analyzed that how many women are struggling for family survival. The study focused that how socioeconomic factors that influenced women's contribution in the household budget in urban informal setting. Applying the OLS method to 937 observations, to get the estimates, primary data source was used. Household expenditure approach (ratio of women monthly expenditures to total monthly expenditures) was taken to measure the dependent (women's contribution to the household budget) variable. Unemployment, poverty and lower educational status of husband strongly encouraged women to participate. For these reasons, women through her informal work are contributing to meet family budget. On the other hand, the presence of adult male lessened women's contribution towards household budget. Whereas, woman age has a nonlinear relationship with women's involvement in household earning. The study concluded to prove that factors like family size, education, ownership of assets, head of family status, family size positively contributed to the household budget.

Khan *et al.* (2005) discussed the hazardous nature of women, children involved in a home based activity in Karachi. It was estimated that how a rise in household income brought changes in family health, nutrition and education level. For estimation, binary logistic model was used. The main research question was either female are engaged in home-based economic work or not. Three hundred households were surveyed where women were involved in making pawn peeling, carpet weaving, agar batti (incense stick) making and such stitching. In order to estimate women decision making power either to participate or not, the size of the household and living condition index was entertained. Estimates revealed that there was a strong positive association between household size and women participation decision. Similarly, schooling of children was analyzed through ratio of children to school going children age.

Eapen (2004) investigated the problem of female sex segregation for employment and its evolution with the passage of time as unfavorable for her work. Area of study was Indian state of Kerala and data was taken from several rounds of NSSO. The present study revealed that due to sex segregation mostly women, are involved in lower earning jobs, i.e., in urban areas, mostly female doing jobs as teaching, medical profession, clerical work and machine workers. On the other hand, mostly female are employed in informal works like, cooking, beauty parlor and house maids. Similarly, the author surveyed that in some particular areas 90 PC girl-children helped their mother at home-based activity for earning and also perform child care, which significantly affects their schooling. Finally, there are strong evidences to suggest that through the provision of child care centers and community based programs sex segregation can be mitigated to some extent.

Naqvi and Shahnaz (2002) identified the factors of women's participation in economic activities in case of Pakistan. The study was based on cross-sectional data obtained from the Pakistan Integrated Household Survey (1998-99). The study followed two methods of estimation; the normal probability model and multinomial logit model. The Probit model was used to estimate the relationship between women's participation and other social, economic and demographic variables. The multinomial logit model was used to capture the effects of social, economic and demographic variable on women's decision making regarding their own paid employment. The empirical findings revealed the significant link between women's economic participation and the variables like age, marital status, education, number of male family members, children age between 0-5 and the employment status of the head of the household. In a similar fashion, the findings argued a significant relationship between women decision making about paying employment and the variables like family size, financial status of the family, residential area, education and marital status.

Eapen (2002) analyzed Kerala's women's status and its correlation with her education, participation in the labor force, and structure of the family. Data were taken from a population census of India. Author found that women in Kerala are more literate as compare to other Indian states. But here in Kerala, these women fell in prey of social problems like the custom of dowry, gender based discrimination and mental health problems. These problems were increasing hurdle in women's outcomes. Even improved enrollment ratios (a measure of literacy) and higher education could not prove fruitful for weakened women's to get control over inherited resources and up rise women to defy gender role pretensions. In addition, the study found that there is clear cut indication that family structure significantly

impacts the decision of women about her education and motivation towards marriage ability.

Mehrtotra and Biggeri (2002) surveyed five Asian countries, Pakistan, India (lower income) Philippine, Thailand and Malaysia (middle income) which constitutes a scattered home-based worker. Most workers living below and some of them slightly above the poverty line. The dichotomous dependent variable, i.e., health status of women worker was measured by Ordered Logit Model. Similarly, ordinary least square method was used to measure household production. Her age, education, health status, years of experience, provision of electricity and organizational membership were taken as independent, having significant impact on women's productivity whereas; woman earned income was dependent variable. The study concluded that such home based workers are working under substandard environment and especially peace rate workers are being exploited with meager wage rate and long working hours because they are scattered across the length and breadth of the country without having unanimous action. Thus, this study suggests that competition among subcontractors, provision of training and loans from government to these home based workers can increase women's productivity.

Azid *et al.* (2001) examined the impact of poverty status of female labor supply in a cottage industry in the case of district Multan (Pakistan). The authors collected primary data and applied ordinary least square technique for estimation. The authors gathered the information of three different characteristics of the family; workers' characteristics, family characteristics and social characteristics and estimated the impact of all these characteristics on female labor supply hours in a week. The results confirmed the presence of strong positive association between family status (below poverty line) and female labor supply hours. Similarly, age structure, education, income of the family, number of children below 5 years and family structure were also found positively linked with female labor supply. Besides this positive association; number of male adults, market distance and income of household head were found negatively related. The study suggested the need to review the public policy in order to provide better guidance and awareness to rural female workers.

Handa (1994) analyzed the expenditure (on alcohol, adult wear, tobacco) behavior and children (on health) welfare of female headed households in Jamaica. The study is based on primary data (household survey of 3500 families on over 100 goods). First, OLS regression analysis was used to measure point estimates of the former (expenditures on alcohol, adult wear, tobacco) in the presence of female household's head. Point estimates of children wear and adult wear proved to be significant (first hypothesis). Female headed households (un-partened) spent more

on adult wear and relatively less on children wear. Secondly, the author estimated alternative hypothesis of female's allocation of resources; more on preventive care for children (aged, 8-14 years) in order to prove that female headed households allocate less budget for family (particularly children). The Probit model was used to measure the behavior. Where, coefficients of residuals (include demographic composition, region of residence, whether household rents, gender of the oldest household member and gender highest educated household member) proved to be significant. The study concludes that, female headed household in Jamaica allocate less to adult goods (alcohol and tobacco share decreases 50 PC and 115 PC respectively) and more for children wear, in addition, study also explores that female headed household spent less on health. Thus, for Jamaica, individual preference among household members can have a significant effect on the allocation of resources.

III. DATA SOURCE AND METHODOLOGY

In the present study, data were collected through a survey of district D. G. Khan. A sample of 224 women (a household where minimum single women were found, engaged in informal economic activity) is randomly drawn from eight Urban Councils of D. G. Khan., Namely Urban Council No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7 (from Tehsil, D. G. Khan) and single urban council of Tehsil Taunsa, named as Urban Taunsa.

The stratified random sampling technique was adopted. Every urban council was declared as strata. The Sample size, " $n = 224$ " was equally divided on all urban councils. Therefore, $n_1, n_2, n_3, \dots, n_k$ ($\sum n_i = n$), were drawn from independently from the strata, $1, 2, 3, \dots, k$ respectively. The reason behind such sampling technique was better coverage and accuracy in our empirical analysis. The main characteristics of such sampling isequal allocation or equal number of sampling units is selected from every stratum. Thus, 'n' is equally divided among all the 'k' strata. Thus, our stratum sample size " n_i " is allocated as:

$$n_i = n/k, \text{ for } i = 1, 2, 3, \dots, k$$

Considering it as a simplest way of the sampling.

A survey was conducted by direct interview of female workers at their homes. All information was collected with the aid of an open ended questionnaire, including some multiple choice questions about, personal information, demographics of the household, family characteristics, fertility status and husband characteristics. Questions were asked in Urdu and Saraiki. The observations were noted on the spot.

a) Methodology

Many researchers used different methods and models to estimate factors affecting women's

contribution in the household budget. Some of them used OLS model. For instance, Mehrotra and Biggeri (2002), Azid et al (2201), Handa S. (1994) have used ordinary least square method to determine women's productivity at home based work. Recently, Khan and Khan (2009) used the OLS method to analyze different factors of women's in their household budget. In the same way, in our regression analysis (of cross sectional data), we have adopted Ordinary Least Squares Method, which is attributed to the name of Carl Friedrich Gauss (1777-1855), a Mathematician, from Germany and Markov (1856-1922), based on linear estimation. The main characteristics of this method are finding the causal relationship and minimization of the sum of squares of squares of deviations.

By taking linear relation (for OLS) as:

$$E(Y) = \alpha + \beta x_i$$

Here α and β are unknown parameters, and 'y' is the random variable. Then the values of α and β are obtained by that minimizing the sum of squares of residuals as,

$$\sum [Y_i - (\alpha + \beta x_i)]^2$$

In our analysis, women's support for the family (WSF) is the function of many controlled, exogenous, explanatory socio- economic variables affecting their contribution.

By taking the function as:

$$Y_i = f(X_1, X_2, X_3, \dots, X_k)$$

The function is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k + \mu_i$$

β_1, \dots, β_k the coefficients are known as the partial regression coefficients, μ_i is error term and α is a constant term showing the impact of all excluded or omitted variables.

b) *The Specified Model*

Our specified model is illustrated by the following function:

$$WSF = f[WGE, WAS, WED, WMS, WOP, WWH, NOA, HHS, HED, HEY, ICH, PAC, POS, NOD, HPR, OWP, HES]$$

$$WSF = \alpha + \beta_1 WGE + \beta_2 WAS + \beta_3 WED + \beta_4 WMS + \beta_5 WOP + \beta_6 WWH + \beta_7 NOA + \beta_8 HHS + \beta_9 HED + \beta_{10} HEY + \beta_{11} ICH + \beta_{12} PAC + \beta_{13} POS + \beta_{14} NOD + \beta_{15} HPR + \beta_{16} OWP + \beta_{17} HES + \hat{\mu}_i$$

The variable description is given in the following table1:

Table 1: *Definition of Dependent and Explanatory Variables*

Variables	Definitions
Dependent variable	
WSF (woman's support for the family)	Ratio of woman's monthly income for household to the total household income
Independent Variables	
WGE {woman's age}	Her age in completed years
WAS {woman's age square}	Square of a woman's age
WED {woman's education}	Her education in completed years
WMS {woman's marital status}	1 if she is married, 0 otherwise
WOP {woman's profession}	1 if performing beautician / embroidery work, 0 others
WWH {woman's working hours}	Number of hours worked per day
NOA {Number of adults}	Number of adults present in the household
HHS {Household size}	Number of all members of household
HED {Husband's education}	Husband's education in completed years
HEY {Husband's earned income}	Husband earned income in Rs. Per month
ICH {Infants, children}	Number of children (0-5years)
PAC {Prime-age children}	School going children (5-15 year age)
POS {Poverty status}	1 if household per head income equals Rs.6000, 0 otherwise
NOD {Number of dependents}	Number of dependents, includes infants (0-5years) and above 60 years age old household members
HPR {Household participation rate}	Ratio of number of working male and number of working females to the household size
OWP {Outside work permission}	1 if the woman has outside work permission, 0 otherwise
HES {Husband's employment status}	1 if employed, 0 otherwise

IV. RESULTS AND DISCUSSION

a) Descriptive Analyses

b) Table 2 Descriptive Statistics of Selected variables

	HED	HES	HEY	HHS	HPR	ICH	NOA	NOD	OWP	PAC	POS	WAS	WED	WGE
Mean	7.04	0.396	14668.890	7.133	1.434	0.711	1.742	1.164	0.480	2.387	0.178	1544.249	6.809	38.116
Media	8.000	0.000	10000.00	7.000	1.182	0.000	1.000	1.000	0.000	2.000	0.000	1444.000	8.000	38.000
Std. Dev.	5.251	0.490	15382.920	2.740	0.735	1.165	2.452	1.416	0.501	1.933	0.383	772.972	5.450	9.584
Skewness	-0.158	0.427	2.827	0.901	3.082	3.596	1.732	2.622	0.080	0.685	1.686	0.873	0.029	0.380
Kurtosis	1.859	1.183	13.798	4.739	15.922	23.939	5.378	16.078	1.006	3.307	3.842	3.230	1.650	2.514
Maximum	18.00	1.00	100000.00	20.00	6.12	9.00	11.00	11.00	1.00	9.00	1.00	3844.00	16.00	62.00
Minimum	0.00	0.00	0.00	2.00	0.125	0.00	0.00	0.00	0.00	0.00	0.00	324.00	0.00	18.00

Table 2, shows that the mean value of husband's education (HED) is 7.04, with maximum 18 year of education, and minimum zero value of education. Whereas; standard deviation, the deviation of education from its mean is 5.25. In addition, the value of Skewness is, -0.15 proving series to be negatively skewed, with Kurtosis having the value of 1.85 which is Platykurtic Distribution. Similarly, household size (HHS) has a mean value of 7.13. Here, maximum value of household size is 20, with a minimum value of 2.00, having Standard deviation, deviation from its mean value is 2.74, Skewness' value is 0.90, which shows that the series is positively skewed, whereas, the value of Kurtosis is 4.73 which is proving that distribution is Leptokurtic. In the same way, the numbers of adults (NOA) have 2.45 values of dispersion from its mean of 1.74 in the series. With a maximum value of 11 and minimum value of zero. The value of Skewness is 1.73 which is positive, showing positively skewed series. Here the Kurtosis' value is 5.37 which is greater than 3,

proving the leptokurtic distribution. Prime age children (PAC) showing the dispersion value of 1.93 from its mean value of 2.38. Its value of median is 2.00, having maximum value of 9.00 and minimum value of zero. The table shows the value of Skewness is 0.68, which is positive, showing positive distribution of the series. The value of Kurtosis is 3.30 which is larger than 3, indicating the Leptokurtic distribution. The mean value of women age (WGE) is 38.11, whereas, value of standard deviation is 9.58 in the series. Maximum age of working women was found to be 62.00 with a minimum value of female worker as 18.00. Here, Skewness is 0.38 which is positive. But the value of Kurtosis is 2.51 which is less than 3 showing Platykurtic distribution. For women working hours, the value of Skewness is 1.08 which is positive, showing that series is positively skewed. For women age square (WAS) value of Skewness is estimated at 0.87 which is positive. Here the value of Kurtosis is 3.23, which is greater than 3, showing the Leptokurtic distribution.

b) Correlation Matrix

Table 3 : Pair Wise Coefficients of Correlation Matrix

	HED	HES	HEY	HHS	HPR	ICH	NOA	NOD	OWP	PAC	POS	WAS	WED	WGE	WMS	WOP	WWH
HED	1.00																
HES	-0.23	1.00															
HEY	0.42	-0.07	1.00														
HHS	-0.13	0.09	-0.03	1.00													
HPR	-0.07	0.15	0.02	0.38	1.00												
ICH	0.01	0.00	-0.11	0.16	0.01	1.00											
NOA	-0.13	0.04	0.02	0.58	0.48	-0.02	1.00										
NOD	-0.04	0.02	-0.15	0.33	0.05	0.81	0.11	1.00									
OWP	0.09	-0.03	0.07	-0.01	-0.19	-0.10	-0.02	-0.04	1.00								
PAC	-0.01	0.04	0.04	0.38	-0.13	-0.07	-0.32	-0.07	-0.01	1.00							
POS	0.43	-0.11	0.63	-0.31	-0.08	-0.05	-0.14	-0.15	0.04	-0.13	1.00						
WAS	-0.26	-0.14	-0.01	0.19	0.10	-0.18	0.33	-0.09	0.03	0.04	-0.11	1.00					
WED	0.51	-0.04	0.22	-0.05	0.09	0.02	0.03	0.00	0.03	-0.17	0.27	-0.35	1.00				
WGE	-0.27	-0.14	-0.02	0.20	0.08	-0.18	0.321	-0.10	0.03	0.08	-0.12	0.99	-0.38	1.00			
WMS	0.08	-0.08	-0.03	-0.20	-0.19	-0.05	-0.28	-0.08	0.07	0.13	-0.02	-0.11	-0.14	-0.10	1.00		
WOP	-0.06	-0.05	-0.02	-0.08	-0.03	-0.04	0.01	0.00	0.10	-0.12	0.02	0.05	-0.01	0.05	-0.05	1.00	
WWH	-0.02	-0.08	-0.03	-0.01	-0.12	-0.09	-0.07	0.03	0.06	0.13	-0.01	-0.06	-0.02	-0.04	0.06	-0.15	1.00

Source: Calculated by author from sample using E Views.

In the present study, table 3, shows that there is no perfect pair wise correlation among all explanatory variable. It confirms that there is no problem of Multicollinearity with our model. So, variables used in our model are not exactly correlated.

c) Econometric Analysis

Table 4, is indicating the results regarding the OLS model of the factors affecting the women's contribution in the household budget in the urban

informal sector. The two tailed t- statistics were applied. For analysis, 1 %, 5%, and 10%, levels of significance were used. The intercept term is positive and insignificant which indicates that the intercept term has less value. The intercept term shows the average, impact of all excluded or omitted variables, which affects the dependent variable.

Above table provides us the estimate of the factors affecting women's contribution in the household budget in the urban informal sector. The solidarity of our model mainly depends upon the measurement of variables, economic and statistical significance, consistency of data is included in our model. The F-statistic is used to see the overall significance of the model, which shows that our model is significant at the 1 % level of significance. Though, low value of R^2 and adjusted R^2 (0.44 and 0.40) is a typical phenomenon in cross sectional studies.

Education of woman, in the completed years of education, has a positive association with the women support to the household budget. The coefficient of WED is positive and statistically highly significant at the 1% level of significance. It shows that increase in woman education by 1 year, contribution or support of an urban woman in the household budget will be increased by 0.0126 rupees. The objective of including this important variable was to reach out policy recommendations to increase the support of an urban woman by positively increasing all facilities regarding education. Among all other individual characteristics of women, education is supreme. From the point of view of the Structuralist school (Benham,1980), that education causes an increase in labor force supply and its return from economic activities, particularly for women. Our analysis is consistent with neo- classical approach (Becker, 1980). In addition, Naqvi and Shahnaz (2002) estimated that more education increased the share of women in the labor.

Therefore, our results are justified by the theory. It proves that by the increase in woman's education, training and skill, she can be more productive. In addition, education enlightens the efficiency of women. It minimizes the time allocated in home productions and enables a woman to earn more, and perform paid work and support her family budget for their survival. Education improves quality of life. It enhances her control over income and gives her courage and confidence to perform better. Education motivates women to improve the health status of her family. It also gives her inspiration to spend more of her income on children's education. Our results are consistent with Khan and Khan 2009. In a nutshell, education improves women's productivity and her support to the family budget.

Woman's profession (occupation) is an important variable that affects urban women time allocation for the labor market, self or household

enterprise. In an urban setting, profession of a woman very much explains her contribution in the household budget. Therefore, we included this binary variable in our analysis. The coefficient of WOP (woman profession) is positive and significant at the 10% level of significance. Thus, significant result proves that, this variable is important.

It was found that woman working hours and has a positive relationship with woman support to the family budget. The WWH has positive sign. It indicates that increase in working hours of urban women by 1 hour, her support to family budget increase by 0.019 rupees, considering the effect of other variables constant. The coefficient of woman working hours (WWH) is significant at the 1% level of significance.

Husband's education is an important factor which affects her contribution to the family budget. In our model, husband's education (HED) was taken in completed year of education, the results indicates that HED is significant at the 1% level of significance, showing HED negatively associated with the dependent variable. It clearly indicates that an increase in the level of education definitely increases the income of the person. Because a rise in the level of education is compatible with law of increasing return. In contrast, in our study, negative sign of HED points out that rise in husband's education negatively impacts the dependent variable, women support to family budget; and decreases her share in family income.

Another variable included in our model is monthly husband's income. The coefficient of husband earned income (HEY) is negatively related with women support to the family budget. It is statistically highly significant at the 1% level of significance. The coefficient of HEY is negative, which shows that as the monthly income of husband increases by 1 rupee, the women support to the family budget decreases by 6.34 rupees.

Presence of children in different age group, differently effects woman support to the family budget, particularly infants, 0-5 year's age children negatively impacts woman's contribution. The coefficient of ICH is significant at the 5% level of significance with negative sign indicates that an increase in infants by 1 children, contribution of woman decreases by -0.036 rupees. Similarly, in reality, women busy in child rearing and other different tasks of childcare devote less time to paid activities. There are empirical evidences to suggesting that in this phase, infants need much mother care, so, it is less likely for a mother from urban area to contribute to the family budget.

The poverty status of the household is an important factor that forces a woman to participate in the household budget for their survival, and allocate more time for earning through her participation in the labor market, self-employment or self-enterprise. In our analysis, during the survey it was observed that many families are highly vulnerable. So, poverty is the main

reason which leads women to work in the informal sector to earn some money in order to fulfill basic needs of the household. In our analysis, we used poverty status of household as a binary variable. The coefficient of POS has a positive relationship with WSF. It is significant at the 5% level of significance. The families having per head income less than Rs.6000/- were considered as poor, and woman belonging to these households contribute more in the family budget in urban areas. Our results are consistent with Azid *et al.* (2001).

Another variable included in our analysis is number of dependents (NOD). It is positively related with women support (WSF), the dependent variable. The coefficient of NOD is significant at the 10% level of significance. An increase in numbers of dependent, as old and infants, household member in urban areas, forces women to generate income for their subsistence. An increase in the number of dependent by a 1 member will increase woman's contribution by 0.026 rupees.

The coefficient of household participation rate is negative and significant at the 10% level of significance. The relationship of HPR is negative with the dependent variable. In urban areas like our study area, when more persons of the household are involved in economic activity, it leads to decrease in female participation for earning at household level and outside, paid work. Women, particularly daughters and daughter-in-laws are not allowed to work outside home. The negative result shows that with an increase in 1 working person at home, female participation in household budget is decreased by 0.030 rupees.

Another important variable included in our analysis is outside work permission (OWP) which affects women's contribution in the household budget. Those women who have permission to go outside for paid work, contribute more to the family budget. We used a

binary variable to estimate the relationship. The coefficient of OWP is positively related with women support to family and statistically highly significant at the 1% level of significance. Many social, cultural, religious and personal barriers create hindrance in the outside work permission, particularly in backward areas. Those women who observe veil are not permitted to go outside the home for earning. The results indicates that outside work permission is highly significant because it increases woman mobility and helpful in getting high wages. Our analysis proves that in our study area outside homework permission is a major factor which affects women's contribution in the household budget. If women are allowed to go outside home, it will definitely increase their participation in the labor market.

We used another binary variable, as husband employment status (HES) which affects women support to the family budget. The relationship of husband employment status negatively impacts women's contribution in the family budget. The coefficient of HES significant at 10% percent level of significance in our model.

Women age (WGE) and woman age square (WAS) are insignificant, having positive and negative sign respectively. The negative sign of WAS indicate that women's contribution declines after prime age. It shows a non-linear relationship. Similarly, our finding indicates that women's marital status (WMS), and prime age children (PAC) are insignificant but having positive sign. Woman marital status (WMS), shows that if WMS increases by one unit, her contribution in household budget will increase by 0.01rupees. Whereas, the number of adults (NOA) and household size (HHS) remained insignificant, but their sign is negative, respectively, proving that an increase in numbers of adults and household size reduces women's contribution in the household budget.

Table 4: OLS results for, factors affecting women's contribution in the household budget in the urban informal sector

Variable	Coefficient	Std. Error	t- statistics
Constant	0.255593	0.184282	1.386966
WGE	0.004538	0.008935	0.507924
WAS	-3.15E-05	0.000110	-0.287960
WED	0.012661*	0.002536	4.991818
WMS	0.010425	0.016338	0.638107
WOP	0.013789***	0.007536	1.829789
WWH	0.019323*	0.004630	4.173022
NOA	-0.007393	0.009181	-0.805316
HHS	-0.011108	0.009107	-1.219674
HED	-0.008689*	0.002763	-3.144988
HEY	-6.34E-06*	1.02E-06	-6.213456
ICH	-0.036961**	0.017127	-2.158036
PAC	0.001758	0.010611	0.165677
POS	0.085436**	0.040370	2.113641
NOD	0.026855***	0.015336	1.751158
HPR	-0.030630***	0.017832	-1.717687
OWP	0.056556*	0.022528	2.510454
HES	-0.045157***	0.023895	-1.889809

Source: estimates are obtained by the author using E-Views

R-Square 0.448245 F-statistic 9.844373 Adjusted R-Squared 0.402712 Prob (F- statistic) 0.00000 Sample Size 224
 *, **, *** indicates a significant level at 1 percent, 5 percent and 10 percent respectively.

d) *Diagnostic statistics*

Table 5

Test	Statistics	Value	Probability
Heteroscedasticity: test: white	LM=n.R ²	182.94	0.1746
Ramsey RESET Test	F.statistics	22.038 (1,202)	0.1865

Above table 5, Provides diagnostic analysis of the study, we have used White LM test in order to examine the Heteroscedasticity in the model, the value of the statistics based on the probability indicates there is no sign of Heteroscedasticity. Secondly, we have applied Ramsey RESET Test for model specification; the finding shows that the model is correctly specified.

V. CONCLUSIONS AND POLICY RECOMMENDATIONS

The above summary of results (table 5) and our analysis concludes that financial support of the household in the shape of woman's contribution (particularly those who are engaged in the informal sector, for earning) is increased only because of household poverty. Husband unemployment, large household size, number of dependents, woman marital status puts a burden on the woman and forced her to share the family budget, in order to lessen unmet household budget. In the present era, woman's involvement in economic and earning activities in order to support her household budget has gained much importance. In a society like ours, male is considered as a main bread earner for the household. But now a day, an increase in family expenditure, inflation rate, high cost of living in urban areas, high educational expenditures for the child's education, poverty status demands higher share of women in household budget particularly in urban areas. Policy recommendations are discussed below.

To enhance the women support to the family budget, the government should take following measures:

- It is suggested that, women should be given equal employment opportunities in all spheres of employment.
- Many informally employed women (in the lower strata of urban areas) are bound to work because of the burden of poverty, unemployed spouse and low education, these women have no resources to start economic activities at household level, particularly in urban areas, therefore, it is recommended that through the provision of assets, their contribution can be positively increased. This is only possible through public private partnership programs.

- The Women's profession has been proven to absorb more of the women for their contribution in an urban household, for that reason women should be given more chances of training, skill, and provision of basic facilities/ resources to start their own enterprise. Therefore, the government should start new training and educational institutions for adult women.
- Large number of family members have also been identified as an important indicator, for an increase in contribution of female in the family budget. These types of families must be given social and health safety nets. Role of Department of Labor and Social Welfare is important in this regard.
- Government should keep the record of those women, who are engaged in informal work for earning. These women should be given benefits in form of employee's old age pension. It is the responsibility of The Department of Labor & Manpower, and Department of Employee's Old age Benefits (EOBI).
- The government should revise the policy of minimum wage rates, especially for women.
- Mother workers should be given benefits, during pregnancy and especial scholarships for infants, for their better health safety. Establishment of child home can increase women working hours, which has been proven important for enhancing their due share in the household budget.
- Outside work permission came in front as an important obstacle in the way of female labor force participation. For this, a lot hard work is required to change the mindset of family head/ husbands and society like ours. The role of mass media, religious scholars and social workers is important for changing broadening the mind of family heads. This problem can also be tackled by providing easy loans and grants to those females who are attached to home- based (informal) economic activity. In this way, these women can be brought on the same line as like outside workers and play their role in the growth of GDP.

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