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Rural-Urban Saving Differentials in Pakistan: Investigation from Primary Data

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ABSTRACT

The present study examines rural-urban saving differentials in Multan district of Pakistan. For the purpose, primary cross sectional data were collected by the authors from district Multan. 113 respondents from urban areas and 180 from rural areas are randomly interviewed. Study interprets results at two stages, first at preliminary level using Mean and Standard deviation. At second stage, estimates are calculated using multivariate regression analysis. Results suggest that rural households are less likely to save due to children's educational expenditures, family size, value of house and liabilities to be paid. While, spouse participation, total dependency rate, total income of households and size of landholdings are the factors that enhance saving level of rural households. The findings of this study indicate that urban household savings increase due to age of household heads, total income of households, and size of landholdings. Urban savings appeared to be negatively affected by children's educational expenditures and liabilities to be paid by household head. Finally, study suggests that there is a need to lay more emphasis on industrial development and well-reputed educational institutions in rural areas.

KEY WORDS: Saving, Pakistan, Economy, Rural House Hold, Urban House Hold.

Introduction

National Saving is an important feature for achieving high growth in the economy. More saving rates bring out more investment. This will ultimately lead to industrial growth, improvement in quality of products, employment generation, stable prices and finally higher growth. Household savings are the largest component of National savings in developing and developed countries. The willingness to save by households significantly influences the rate of savings, sustainability of capital accumulation and economic growth in developing countries. Agriculture plays vital role in enhancing saving level in low income or agriculturist countries. In underdeveloped countries like Pakistan, it significantly appeared that saving rates of rural people are higher than the national average (Azhar, 1995). It may be due to less living expenditure in rural areas. They do not save after doing necessary needs but they save by cutting down their basic needs.

Classicals regard capital accumulation as the key to economic progress. They, therefore, lay emphasis on larger savings. They are of opinion that only capitalists and landlords are capable of saving. The working class is incapable of saving because it gets wages equal to the subsistence level. Keynes regarded saving as a social vice as excess of saving that leads to a decline in aggregate demand. Again, this idea is not applicable to underdeveloped countries because saving is the panacea for their economic backwardness. Capital formation is the key to economic development, and capital formation is possible through increased saving on the part of the people.

While the situation of Pakistan's economy regarding National Savings is changing very rapidly during last decade. It is evident that during the years when foreign savings were negative, Pakistan's national savings were at its maximum up to 20.8 percent of GDP. As foreign savings became positive, National savings started to decline. When foreign savings were at its maximum up to 8.5 percent of GDP, National savings were least up to 13.5 percent of GDP in 2007-08. It brings up the need to examine the key determinants of household savings especially at micro level for the stable rate of national savings at an appropriate level.

The intention of this expose is to discover saving differentials among rural and urban households. This paper is organized as follows: In section II, we discuss a number of past studies on household savings behaviour at micro as well as at macro level. We have focused on data sources, methodology, description of variables and model specification in section III. Section IV is composed of Preliminary as well as Econometric analysis. Finally, concluding remarks are given in section V.

Literature of the Review

Determinants of Household Savings can be investigated at macro as well as at micro level. Several Economists have explored determinants at macro but few have shown their interest at micro level. Many researchers have analyzed the major determinants of household savings and have reached different conclusions. Some of these studies are discussed below.

Khan *et al.* (1992) analyzed the impact of socio-economic and financial variables on national saving rates of Pakistan. They employed OLS method for estimating the relationship between national savings rate and their determinants in the context of Pakistan economy. The results indicated that per capita income, real interest rate, GDP growth rate, terms of trade, and trade balance/ trade openness were positively affecting and dependency ratio, foreign capital inflows and foreign aid were found to be negatively affecting the saving rates of Pakistan. The results suggested that a more open economy would raise the saving rates of Pakistan.

Siddiqui and Siddiqui (1993) studied saving behavior by type of assets and determined the sensitivity of different components of savings to change in its determinants. Household Integrated Economic survey (HIES) data was used for the analysis from 1968-69 to 1987-88 using WLS (Weighted Least Square). They concluded that Income, Employment status, Inverse of Income, Log of Income and log of square of Income were positively influencing Household Savings Dependency ratio was negatively influencing it.

Husain (1995) reviewed trend developments in the private saving behavior in Pakistan. The author estimated long-run coefficients by using Engle-Granger co-integration approach by using time series data from the period 1970 to 1993. The Study found that Population Growth rate, ratio of money to Private Disposable Income and ratio of monetary assets to income had positive impact on Private Savings.

Muradoglu and Taskin (1996) attempted to investigate issues relating to the differences in effectiveness of non-consensus variables in explaining household saving for developing versus industrial countries. The authors collected time series data of 19 developing countries and 11 industrial countries from 1975 to 1989. They found that effect of income growth, trend income and deviation of income from trend on savings was significantly positive; impact of real interest rate and inflation rate were significantly negative; real balance, foreign savings and dependency ratio had no impact in industrial countries. Trend Income, real balance and dependency ratio had negative parameter coefficients in saving equation. Income growth, deviation of income from trend, real interest rate, inflation rate, and foreign savings had no significant relationship with saving in developing countries.

Wakabayashi and Mackellar (1999) estimated standard life cycle hypothesis based on saving functions using panel data at the province level in China for the period 1993 to 1998. Impact of Income on saving appeared to be positive and

dependency rate was estimated to have negative impact on saving in rural and urban areas of China. It was concluded that MPS for urban area was 0.2528 and 0.4538 for rural area.

Loayza *et al.* (2000) described main findings and contributions of the recently completed World Bank research project "Saving across the world". They identified determinants of private saving rates; and examined relationship between growth and savings based on the research of various economists. They concluded that Income had positive and insignificant impact on private saving rate. Rates of returns had negative and insignificant impact. In addition, they found that uncertainty had negative, positive as well as insignificant impact; domestic borrowing constraints had positive as well as negative impact; foreign borrowing constraints had negative impact; financial depth had positive, negative as well as insignificant impact; fiscal policy had negative as well as insignificant impact; pension system had negative as well as positive impact; demographics had negative as well as insignificant impact; distribution of Income and wealth had no impact on private savings rates. They had also reviewed previous studies by country and region wise.

Salam and Kulsum (2000) found determinants of savings by analyzing saving behaviour in India using time series data for the period 1980-89 for India. They concluded that an increase in income was bound to cause an increase in household savings, private savings, public savings and total savings. The Value of MPS was 0.2362, 0.0572, 0.0078 and 0.3012 for household sector, private sector, public sector and for whole economy respectively. It was also concluded that rate of interest had a net positive affect on Gross Domestic savings and household savings.

Ozcan *et al.* (2003) explained effects of a number of policy and non-policy variables on private savings rates using time series data for the period 1968-94 for Turkey. They concluded that previous year savings, Broad Money, Inflation rate, and terms of trade had positive relationship with private savings. Life expectancy and dummy for crisis years were negatively affecting private savings. Credit to private sector, income, growth of income, old dependency ratio, young dependency ratio, urbanization ratio, real interest rate, political instability, and current account deficit were found to have no impact on private savings in Turkey.

Ahmad and Asghar (2004) analyzed the household saving behavior due to different socio-economic and demographic factors in Pakistan using micro data collected by Household Integrated Economic Survey in 1998-99. The authors used Ordinary Least Square Method to estimate and choose data of 8933 rural households and 5374 of urban households. Results of the study revealed that income, employment status, square of age and Sex of household head were found to have positive effect on saving rates; wealth, dependency ratio, education levels and age of household head were negatively affecting household savings of rural as well as urban areas. MPS values were found 0.886 in overall Pakistan, 0.794 in urban Pakistan, and 0.940 in rural Pakistan.

Kibet *et al.* (2009) adopted a microeconomic approach in investigating the factors that influence savings among teachers, entrepreneurs and farmers. Cross sectional primary data of 359 households for 2008 were collected through multistage sampling technique. The study concluded that income had positive effect on savings of teachers, businessmen and farmers. Credit access, age, and dependency ratio were found to have negative impact on saving of all household; age and transport cost of teachers, age of businessmen, and credit access of farmers caused a reduction in savings. It was also concluded that the values of MPS were 0.1577, 0.0605, 0.2558 and 0.1936 for all households, teachers, businessmen and farmers respectively.

Bendig *et al.* (2009) analyzed impact of remittances, risk exposure, shock experience on household savings of rural Ghana in 2008. Authors selected 2 villages of Ghana and surveyed 350 villages. The results of household size, schooling, assets, remittances, death in family, and other shocks were significantly more likely to save. Female head, self-employed, not employed, risk assessment, and Brakwa region were negatively related to savings. It was also concluded that age, square of age, land and illness had no impact on savings.

Data Sources and Methodological Issues

The present study is based on life cycle hypothesis presented by Ando and Modigliani in 1963. For this study micro data has been used that is collected through stratified simple random sampling. Sample is gathered from rural and urban areas of District Multan. From 50 union councils of urban areas and 48 from rural areas of Multan district, we have randomly chosen 113 respondents from urban and 180 respondents from rural areas. Survey contains information about households' income, expenditures, savings, age, sex, education, dependency rate etc. The collected data is analyzed using descriptive statistics (Mean and Standard Deviation) at the first stage. At the second stage, ordinary least square multiple regression analysis is used as quantitative technique. It also includes t-test, F-test, prob. value and coefficient of determination. All the econometric problems like Multicollinearity and heteroskedasticity are detected and then removed using appropriate tests. Multicollinearity is removed by dropping one of the multicollinear variables. Heteroskedasticity is removed by applying Heteroskedasticity – Consistent Standard Errors & Covariance test [Heij *et al.* (2004)].

To highlight Rural-Urban saving differentials in Pakistan, we begin our analysis with rural and urban models that are specified below:

$$UHS = \begin{bmatrix} \alpha_0 + \alpha_1 AGE + \alpha_2 SQA + \alpha_3 EDU + \alpha_4 EEX + \alpha_5 FMR + \alpha_6 FSZ + \alpha_7 LAB \\ + \alpha_8 MAR + \alpha_9 SPT + \alpha_{10} TDR + \alpha_{11} TYH + \alpha_{12} SLH + \alpha_{13} VHS + \alpha_{14} NLS + \mu_i \end{bmatrix}$$

$$RHS = \begin{bmatrix} \beta_0 + \beta_1 AGE + \beta_2 SQA + \beta_3 EDU + \beta_4 EEX + \beta_5 FMR + \beta_6 FSZ + \beta_7 LAB \\ + \beta_8 MAR + \beta_9 SPT + \beta_{10} TDR + \beta_{11} TYH + \beta_{12} SLH + \beta_{13} VHS + \beta_{14} NLS + \upsilon_i \end{bmatrix}$$

Where $\alpha's$ and $\beta's$ are coefficients of urban and rural equations. μ_i and υ_i are stochastic error terms. AGE, SQA, EDU, EEX, FMR, FSZ, LAB, MAR, SPT, TDR, TYH, SLH, VHS, and NLS are explanatory variables and are defined as follows.

Rural Household Savings (RHS) and Urban Household Saving (UHS)

A household can be a single person or can be a group of two or more than two persons; who struggle for the provision of food, clothing, and education etc. Household savings are calculated by subtracting total monthly expenditures from total monthly income of household. It is measured in local currency (Rupees). Rural and Urban Household savings are used as dependent variables in our study.

Urban household saving (UHS) is also calculated by subtracting total monthly expenditures of urban households from their total monthly income. Rural household saving (RHS) is also taken as dependent variable and it can be calculated by subtracting total monthly expenditures of rural households from their total monthly income.

Age of Household Head (AGE)

If there lives only a single person in household, he/ she is supposed to be household head. But if household is composed of two or more than two members, household head will be the person who is selected by all other members in house. We have considered age of household head in our study that is expected to be positively related with household savings [Bendig *et al.* (2009)]. While Ahmad and Asghar (2004) and Kibet *et al.* (2009) found this relationship negative. According to Life Cycle Hypothesis, as age of household head increases, his savings will increase in the middle age. As household becomes old, his savings would decrease. To capture effect of Life Cycle Hypothesis/ non linearity, we have included square of age as well, that is expected to be negatively related because in old age, household is net dis-saver. Bendig *et al.* (2009) discovered negative impact of Age Square with Savings while Ahmad and Asghar (2004) concluded positive relationship of Square of Age.

Education of Household Head (EDU)

To capture effect of education, we have used completed years of education of household head in our study. Education is main determinant of higher earnings and savings as well. It can have positive influence on household savings. But on the other side, educated parents pay more attention on the quality of education of their children. They spend more on their education and save less. Household savings may also be expected to be negatively affected by education level of household

head [Ahmad and Asghar (2004)]. A continuous variable is used to demonstrate the effect of education in this study.

Total Income of Household (TYH)

Total Income of household is the sum of all monetary income. It is calculated by following Income approach to calculate GDP which includes wages of the workers, rent from land, and profit of a firm. It also includes income from farming, live stocks, remittances, bonuses, pensions, and social security payments as well. Absolute Income Hypothesis and Permanent Income Hypothesis both indicate positive effect of household income on savings. Overall, total income of household is expected to enhance saving level and it is the most important factor that augment saving level of households [Siddiqui and Siddiqui (1993), Muradoglu and Taskin (1996), Wakabayashi and Mackellar (1999), Salam and Kulsum (2000), Ahmad and Asghar (2004)].

Marital Status of Household Head (MAR)

Marital Status of household head is also an important factor that has very significant effect on household savings. When household head is un-married, he has no responsibility regarding family. He has less expenditures and more money to save for future needs. But after marriage, he has to look after his family, children, relatives, and have more domestic expenditures than past. Theoretically, household saving is expected to be negatively affected by Marital Status. We have exercised dummy variable to distinguish between un-married and married status.

Liabilities (LAB)

Liabilities to be paid by household head have negative impact on saving level of household. We have used quantitative variable to trace out the effect of liabilities and calculated in rupees. Savings are expected to be negatively influenced by more liabilities to be paid by household head.

Female to Male ratio (FMR)

Female to male ratio is also an important variable that has influence on saving level of household. It can be calculated by following formula;

$$\text{Female to Male ratio} = \frac{\text{Total Females}}{\text{Total Males}}$$

In 20th century, Discrimination of sex was ignored in our society. Females are also actively taking part with their counterparts and they are earning very handsome amount of income. Normally, females are interested to save maximum portion of their incomes, particularly, females working in rural areas with their partners, brothers, fathers etc. help to generate more income. Ultimately, more

income leads to more savings. That's why; female to male ratio has positive impact in producing more savings.

Spouse Participation (SPT)

Spouse Participation in economic activities is also an important variable. If spouse is contributing financially with the partner, income and savings of household will definitely increase. This motivation to participate with their partners can clearly be seen especially more in rural community and now in urban areas as well. It is expected to have positive influence on household savings. We have used dummy variable to mark out the effect of Spouse participation in household savings.

Children's Educational Expenditures (EEX)

Expenditures on Children's education is another important determinant of household savings. These expenditures mainly include monthly fees of institutes, monthly pocket money, dues for tuition, and stationary charges as well. These expenditures are supposed to have negative contribution in household savings. Quantitative variable is used to gauge these expenditures in this study.

Family Size (FSZ)

Family size is another variable which affects household savings. There are men, women, young, and old people in household. It is not necessary that every member of household is taking part in economic activity. In some families, maximum members of family are working but most of the times, only single person is participating actively and rest of the members are dependent. In such circumstances, family size is hypothesized to be negatively affecting household savings [Bendig et al. (2009)].

Total Dependency rate (TDR)

In literature, total dependency rate is defined as number of household members less the number of earners divided by total household size [Burney and Khan (1992), Ahmad and Asghar (2004)]. It shows the number of dependent household members out of total household size. If this dependency ratio increases, household savings will decrease. There is negative relationship between total dependency rate and household savings [Khan et al. (1992), Siddiqui and Siddiqui (1993), Muradoglu and Taskin (1996), Wakabayashi and Mackellar (1999), Ahmad and Asghar (2004), Kibet. et al. (2009)]. It can be calculated as:

$$TDR = \frac{HS - NE}{HS}$$

Where HS is household Size, NE is total number of earners in a house, and TDR is total dependency rate.

Table 1
List of Variables Used in Household Savings Analysis

Variables	Description of Variables
Dependent Variables	
UHS	A continuous variable used for Urban household savings
RHS	A continuous variable used for Rural household savings
Explanatory Variables	
AGE	A continuous variable used for completed years of age of household head
SQA	Square of age in completed years of age.
EDU	A continuous variable used for Completed years of education of household head.
MAR	A dummy variable to represent marital status of household head =1 If household head is married. =0 If household head is un-married.
LAB	A continuous variable for Liabilities to be paid by household head.
FMR	It is ratio of total female members in house to total males.
SPT	A dummy variable for spouse participation. =1 If spouse is actively participating in economic activity =0 If spouse is not actively participating in economic activity
TYH	A continuous variable for total income of household
EEX	A continuous variable for children's educational expenditures by household head
FSZ	A continuous variable for household/ family size
TDR	It is ratio of total dependents to total household size
SLH	A continuous variable for size of land holdings
VHS	A continuous variable for value of house
NLS	A continuous variable for number of live stocks in household

Value of all Physical Assets (VAS)

Value of all Physical Assets is one of the main determinants of household savings. It is calculated by adding value of houses, shops, total agriculture land, and total number of live stocks. Theoretically, it is positively correlated with household savings [Bendig et al. (2009)]. Value of all physical assets may be multicollinear with total income of household. Being very important variable, we cannot drop it. To solve the multicollinearity problem, we have transformed value of all Physical Assets into three sub-categories as follows:

- Size of Land Holdings (SLH)
- Value of House (VHS)
- Number of Live Stocks (NLS)

Livestock and land size have significant impact on Household Savings. Agricultural land and Live Stocks are kept for Earnings purposes. Higher will be Size of land holdings and number of livestock, higher will be the income of

household and ultimately more savings. So Size of land holdings and number of live stocks are expected to have positive relationship with Household Savings. While House is used for Living purposes usually, more will be the value of House needs more amount of money to maintain it and hence savings will reduce. Value of house is expected to be negatively related with Household Savings.

Results and Discussions

Preliminary Analysis

To grasp knowledge about features of our respondents, Mean and Standard Deviations are intended for both urban and rural households. The preliminary results of the study indicate that there is not much variability in age of rural as well as urban areas. Average age of urban households are 45.88 years and that is of rural households are 39.24 years. Average completed years of education is 12.39 in urban and 6.75 in rural areas. There is less variability in completed years of education about the mean in urban households and more variability in rural areas. Average children's educational expenditures are more in urban households i.e. Rs. 6755.88 and Rs. 3509.98 in rural households. Variability in children's educational expenditures is more in rural households then in urban households. Average female to male ratio, family size, liabilities, size of land holdings, number of live stocks, total dependency rate, value of house are respectively 1.13 points, 5.93 members in house, Rs. 891.15 per month, 3.79 acres of land, 0.39 animals, 0.42 points, and Rs. 4434071 among urban households. On the other side, in urban areas, average female to male ratio is 1.01 points, 7.06 members in the family, Rs. 818.76 liabilities to be paid per month, 8.1 acres of land, 3.54 numbers of live stock, total dependency rate is 0.44 and Rs. 2315556 on the average value of house. 93 and 91 percent household heads are married in urban and rural areas respectively. 13 percent wives are doing jobs in urban areas while 51 percent wives are actively participating with their counter parts in growing crops and feeding animals in rural areas. Average per month total income of households is much higher in urban households (Rs. 54689) than rural households (Rs. 43601). There is more variability in rural households as compared to urban households in cases of female to male ratio, family size, marital status, size of land holdings, numbers of live stock, total income of households and spouse participation. Urban households have much variability in case of liabilities in comparison with rural households. Total dependency rate is almost the same in both regional locations.

Generally, Multicollinearity is assumed to be very severe problem in Ordinary least square method. Existence of Multicollinearity is confirmed if coefficients of correlation among every two explanatory variables are in excess of 0.80. We have made use of correlation matrix for this purpose. Values for correlation coefficients reckoned for rural as well as urban households that are less than 0.70. It reveals that there is no problem of Multicollinearity in our selected model.

Table 2
Descriptive Statistics of Some Variables

	URBAN HOUSEHOLDS		RURAL HOUSEHOLDS	
Variables	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**
AGE	45.88	11.98	39.24	11.38
EDU	12.39	4.70	6.75	5.11
EEX	6755.28	7795.91	3509.98	8366.88
FMR	1.13	0.84	1.01	0.87
FSZ	5.93	2.31	7.06	3.58
LAB	891.15	3128.86	818.76	2611.10
MAR	0.93	0.26	0.91	0.29
SLH	3.79	12.70	8.16	26.92
SLS	0.39	2.56	3.54	11.74
SPT	0.13	0.34	0.51	0.50
TDR	0.42	0.22	0.44	0.22
TYH	54689.09	53162.60	43601.44	101254.90
VHS	4434071	4875189	2315556	3450100.00

Econometric Analysis

The multivariate saving regression estimates of the rural as well as urban household saving functions are conferred in Tables 3 and 4. For reliability of our estimates, two tailed t-test is used and values are furnished in 4th column which determines whether we may reject or may not reject null hypothesis at some level of significance (1%, 5%, 10%).

The results of this study show that Age of household head (AGE) has inverse relationship with rural household savings (RHS) [Kibet *et al.* (2009)]. It indicates that in rural community/ areas, usually people are involved in agricultural or cultivating activities due to lack of employment opportunities. Normally elders of the household actively participate in growing crops. Younger people of rural areas do not participate much because they don't want to involve themselves in agriculture sector. This means rural households have negative savings in their younger age. But as their age increases above 46 they participate in economic activities and have positive savings as we have found sign of square of age (SQA) positive [Ahmad and Asghar (2004)]. But the relationship is not significant in case of rural households. In comparison with urban households, results are totally opposite in age of household head (AGE). Results suggest that urban households save more in their early age. The reason may be that there is a lot of opportunities

available in urban areas as compared to rural areas. Most of the urban population is employed in public sectors in prime age. But as they become old their savings will start declining. Age of urban households has strong positive impact on household savings (UHS). Household heads can save Rs. 1141.31 per month on the average. But after 50 years of age, their savings decrease by about Rs. 11.41 per month on the average, in case of urban households. Age and Age square of urban households are significantly affecting their savings. Our results in this regard are consistent with Bendig *et al.* (2009).

In both the cases of rural and urban households, education of household heads (EDU) has turned out to be negatively related to household savings (UHS, RHS). The negative sign suggests that more educated households are much worried about their families. They desire to educate their children in well established institutions. For that purpose they forgo their present saving for future higher savings through investing in their children. They also pay more to have their consistent quality of life. The study concludes that urban educated household heads are less saver than rural household heads. It may be due to highly harmonized and costly life and due to relatively expensive educational institutions in urban areas. Our study supports Ahmad and Asghar (2004)'s findings.

Children's educational expenditures (EEX) have found to be strongly negatively related to households savings (UHS, RHS). It is significant at 1 percent level of significance. Household savings (UHS, RHS) decline by Rs. 1.29 and Rs. 1.26 each month, if household head spends one more rupee on their children's education in rural and urban areas respectively.

Table 3
Rural Household Savings Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	167.25	10493.68	0.01	0.98
AGE	-153.92	593.3921	-0.25	0.79
SQA	3.31	7.028712	0.47	0.63
EDU	-177.54	177.7861	-0.99	0.31
EEX	-1.29	0.134939	-9.57	0.00
FMR	889.18	1009.485	0.88	0.37
FSZ	-1182.29	252.3862	-4.68	0.00
LAB	-1.47	0.343912	-4.29	0.00
MAR	-5458.40	3760.222	-1.45	0.14
SPT	4092.58	1787.627	2.28	0.02
TDR	7278.92	4484.033	1.62	0.10
TYH	0.68	0.043970	15.51	0.00
SLH	562.73	142.3607	3.95	0.00
VHS	-0.0009	0.000566	-1.64	0.10

NLS	26.18	112.8284	0.23	0.81
R-squared	0.98	**F-statistic**		595.73
Adjusted R^2	0.97	**Prob (F-statistic)**		0.00
Observations	180			

Source: **Estimates are calculated by authors using Eviews-5 software**

With regards to Female to male ratio (FMR), very interesting results emerged. Rural savings (RHS) are in positive direction and in contrast, urban savings (RHS) are declining due to more female to male ratio in our study area. Reason may be that in rural areas, in the survey, 51 percent rural females are very actively participating with their counterparts in agriculture sector as well as in live stocks sector so positive trend of saving is seen in rural areas due to more female to male ratio. During the survey, on the other side, due to backwardness of our study area, in urban areas, mostly parents/ husbands do not allow their daughters/ wives to involve in economic activities. On average 13 percent wives are found allowed to be part of labor market in our study area. Dependency burden is much higher in urban household. So saving (UHS) falls due to more female to male ratio (FMR).

Table 4
Urban Household Savings Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	-22913.71	11636.28	-1.96	0.05
AGE	1141.31	567.8745	2.00	0.04
SQA	-11.41	5.811957	-1.96	0.05
EDU	-323.23	259.4922	-1.24	0.21
EEX	-1.26	0.223678	-5.63	0.00
FMR	-106.16	883.2118	-0.12	0.90
FSZ	144.20	441.6501	0.32	0.74
LAB	-1.02	0.323684	-3.16	0.00
MAR	-6554.76	4962.838	-1.32	0.18
SPT	2460.28	2723.428	0.90	0.36
TDR	1.28	5424.339	0.00	0.99
TYH	0.55	0.064975	8.52	0.00
SLH	831.40	253.6140	3.27	0.00
VHS	-0.0002	0.000310	-0.67	0.49
NLS	-653.80	600.8158	-1.08	0.27
R-squared	0.93	**F-statistic**		99.88
Adjusted R^2	0.92	**Prob (F-statistic)**		0.00

Observations	113

Source: Estimates are calculated by authors using Eviews-5 software

Family size (FSZ) is found to have strong negative impact on rural savings (RHS). Due to less economic opportunities available in rural areas, people of rural areas do not have appropriate jobs. So, most of them are jobless in rural areas. Large family size is burden on household heads, so rural saving decreases due to large family size. The results show that due to an increase of one family member in rural areas, household savings lower by Rs. 1182 per month on average. On the other hand, family size has direct impression on urban household savings. The rationale is that there are relatively more jobs available in urban areas. In urban areas, substantial family (FSZ) leads to proportionate more savings (UHS). It is statistically insignificant in case of urban households. Our results are consistent with the study of Bendig *et al.* (2009).

Liabilities to be paid by household heads (LAB) is another cause of low savings (UHS, RHS) in rural as well in urban areas. Household savings decline to Rs. 1.47 and 1.02 due to an increase of liabilities by one rupee in rural and urban areas respectively. Dis savings are found to be more in rural households than in urban households. It may be justified that urban households have more earning opportunities which means they can earn more and can pay for their liabilities in time and can have lesser dis savings than in rural areas.

Looking upon, marital status of household head (MAR), rural as well as urban households are less likely to save (UHS, RHS) if they are married. Since after marriage, households' overall expenditure increases due to more family responsibilities. They have to spend more to take care of their families. Fascinatingly, urban households dissave more than rural household after marriage due to excessive payments to maintain same standard of living in urban areas. But values of coefficients are not reliable due to insignificant results.

As expected, study concludes that spouse participation (SPT) influence directly the savings of both rural and urban households (UHS, RHS). Actively participating spouses save more amounts of Rs. 4082.58 and Rs. 2460.28 per month on average in rural and urban areas which means savings of rural spouses are more than urban spouses. It reveals that in rural areas spending on daily routines are less, life styles of the people are not much standardized than urban households. So they consume less and save more amount of money. On the other hand, in our study area, it is found that approximately 51 percent spouses are actively working in rural areas in growing crops and feeding animals with their husbands and other family members while in urban areas there are only 13 percent wives working in the labour market.

Total dependency rate (TDR) is significant at 10 percent level of significance in rural case but it is insignificant in urban households' case. The results for total dependency rate are very strange in our study area. The underlying principle is that having more dependency rate (TDR) induces household heads to save (UHS,

RHS) more amount of money to finance their children to educate them in better way and to take care of their old ones as well. Due to insignificance of total dependency rate in urban households' case, value of coefficient is not reliable but rural household savings expand by Rs. 7278.92 per month on the average if total dependency rate rises by one unit.

It is noted that household savings (UHS, RHS) are directly affected by Income level (TYH). There is causal relationship between savings and income. A one rupee rise in total income of households leads to Rs. 0.68 and Rs. 0.55 savings per month for rural as well as urban households respectively. MPS is higher for rural households than urban due to cheaper life style and more earnings from agriculture sector in rural areas. Our findings are in line with Siddiqui and Siddiqui (1993), Muradoglu and Taskin (1996), Wakabayashi and Mackellar (1999), Salam and Kulsum (2000), Ahmad and Asghar (2004).

Several categories of total physical assets of households are utilized in our analysis. The findings suggest that size of land holdings of household heads (SLH) is inducing household savings (UHS, RHS) in both the areas (rural as well as urban) and it is highly significant as well. It proposes that household heads having one more acre of land can enhance their savings by Rs. 560.73 and Rs. 831.40 per month in rural as well as in urban areas. Amusingly it is discovered that value of house (VHS) exerts inverse impression on household savings (UHS, RHS) in both regions demonstrating that value of house does not give any income and savings but households need some amount of money to maintain their houses. Household savings trim down on average by Rs. 9 per month if value of house is boosted by Rs. 10000 in rural areas but in case of urban, value of house has not significant result. Remarkably, coefficients for number of live stocks in the household (NLS) are positive in rural areas and negative in urban case illustrating that owing to more overheads of feeding animals in urban areas, urban savings are inversely associated with more number of live stocks where as rural savings are optimistically positive due to more number of live stocks.

R^2 gives us an idea about explained variation in household savings and presents that 98 and 93 percent variation in household savings are explained by our selected explanatory variables in rural and urban areas respectively. F statistic offers us that the overall model is significant at 1 percent level of significance.

Conclusion and Policy Recommendations

The study examines various demographic and socio – economic factors affecting rural – urban saving differentials in Pakistan. For that purpose 113 respondents from urban areas and 180 respondents from rural areas are randomly chosen. Results show that in case of rural households, children's educational expenditures, family size, liabilities to be paid by household head and value of house have significantly negative influence on household savings of rural areas. Spouse

participation, total dependency rate, total income of household, size of land holdings exerts significantly positive effect on household savings of rural households. Age of household head, square of age, education of household head, female to male ratio, marital status and number of live stock seems to have no significance in case of rural households. Marginal propensity to save is 0.68 in rural case.

Results from urban households are significantly associated with life cycle hypothesis. As age of household head has positive coefficient value and square of age has negative coefficient. Threshold level of age is calculated as 50 years. Up to age of 50 years, household savings are more likely to increase after that it seems to be declining gradually. Children's educational expenditures, liabilities to be paid by household head, and value of house tend to have negative effect on savings of urban households. Total income of household and size of land holdings are positively correlated with savings while education of household head, female to male ratio, family size, marital status, spouse participation, total dependency rate and number of live stocks have no impact on savings of urban households. Value of MPS is recorded as 0.55 for urban areas of Multan.

It is suggested that there should be more emphasis on industrial development especially in rural areas so that more opportunities may be created for every member of household. Standardized educational institutions should also be established in rural areas. There should be developed infrastructure in rural areas for easy mobility of all resources.

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