

Estimation of Saving Behaviour in Pakistan Using Micro Data

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Abstract

The role of savings in investment and therefore in the development of a country cannot be exaggerated. In poor countries like ours most of the savings is done by households. In this paper the saving behaviour of Pakistan households, broken down to rural-urban, is examined. Using HIES 1998/99 and utilising OLS, it has been shown that saving behaviour in Pakistan is influenced by various factors including wealth, employment status, education, age and dependency ratio. But the most important role in influencing saving behaviour is played by household income.

Introduction

Saving is an important variable in the theory of economic growth. Several studies have been conducted to estimate saving behaviour. These studies differ from each other in terms of both the method of estimation and the set of data used. Some studies have used cross-country data, some have utilised single country time series data and still some others have used micro data obtained from household income and expenditure surveys.

These studies include Bergen (1967), Kelley *et al.* (1968), Gupta (1970), Qureshi (1981), Giovanni (1983), Ali (1985), Akhtar (1986), Khan (1988), Deaton (1989), Haque and Saleem (1991), Burney and Khan (1992), Siddiqui (1993), Kazmi (1993), Khan and Rahim (1993), Iqbal (1993), SADF (1994), Azhar (1995), Hussein (1996), Kochar (1996), Kennickell and Meclure (1997), Kim and Zang (1997), Qureshi (1997), Khan and Nasir (1998), Khan and Nasir (1999), Hamilton and Clemens (1999), Loayza and Sharkar (2000), Loayza, Habel and Serven (2000), and Ayub (2000). Most of these studies have analysed saving behaviour in overall Pakistan and then broken it down to the rural/urban level. They have tried to examine the effects of income, real and nominal rate of interest, rate of inflation, rate of growth of income, output rate, lagged output per capita, lagged population growth rate, foreign and domestic saving ratio, degeneracy ratio, age, education, employment

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status, earning status, occupation, purchase of jewelry, assets, imports, exports, foreign aid, bank credit, prime interest rate, workers' remittances, private capital outflows, expected inflation rate, development of financial institutions, residence location, secondary earner, sex, consumption pattern etc. Some studies have tested the Absolute Income and Permanent Income Hypothesis. The majority of the studies have used Ordinary Least Squares (OLS) to estimate the effects of various variables. Few studies have even gone for non-linear models to estimate their functions.

This study also analyses the household saving behaviour in Pakistan. Beside investigation of the nature of the income saving relationship, the study also examines the impact of various socio-economic and demographic factors on household saving. In particular, the effects of income, dependency ratio, wealth, education, employment status, age and sex. In order to highlight the differences in saving behaviour of rural and urban households, separate estimates are obtained for each type of household and for overall Pakistan.

The main difference between our study and the previous studies is that we have utilised the latest micro data available on tapes, that is HIES 1998/99. Moreover, we have selected some different independent variables which we believe are also important in determining saving behaviour in Pakistan.

Importance of Savings

Saving is that amount of current income which is not spent on consumption. Saving is important to help maintain a higher level of investment, which is a key determinant of economic growth. Higher investment rates, mainly financed by domestic savings are necessary to guarantee the sustained rates of economic growth required for the alleviation of widespread poverty in developing countries. Low rates of savings are associated with increased vulnerability to macro-economic crises. Over the last three decades, saving rates have fallen sharply in many countries contributing to the emergence of large current account imbalances in these countries.

In Pakistan, due to deficiency in savings, Gross Total Investment (GTI) declined from 17.7% of GDP in 1996-96 to 14.7% in 2000-01. Similarly Gross Fixed Investment (GFI) declined from 16.2% to 13% during the same time period (see Table 1). In the past external resource inflow used to be the major source of funds to finance local investments. But now the situation has changed over the past few decades. Net External Resource Inflow (NERI) has fallen from 6.1% of GDP in 1996-97 to only 2.94% in

2001-2002. The National Savings as percentage of GDP, however, have gone up from 11.2% in 1996-97 to 12.2% in 2000-01. Within national savings, private and household saving has gone up from 9.3% and 8.2% of GNP in 1996-97 to 15.1% and 13.9% in 2000-01 respectively (see Table 2).

Table-1: Structure of Saving and Investment in Pakistan (Percentage of GDP)

Description	1996-97	1997-98	1998-99	1999-2000	2000-01
Gross total investment	17.7	17.3	15.6	15.6	14.7
Changes in stock	1.6	2.6	1.6	1.6	1.6
Gross Fixed Investment	16.2	14.7	13.9	14.0	13.0

Table-2: Saving Trends in Pakistan (Percentage of GNP)

Year	National Savings	Foreign Savings	Public Savings	Private Savings	Household Savings	Corporate Savings	GNP at Market Price (Billion Rs.)
1995-96	11.6	7.17	1.5	10.1	8.9	1.2	2158
1996-97	11.2	6.10	1.0	9.3	8.2	1.1	2385.5
1997-98	14.6	3.03	1.0	13.6	12.0	1.6	2744.4
1998-99	11.10	3.82	1.0	13.98	12.34	1.5	2913.5
1999-00	12.20	2.62	1.91	14.00	13.51	1.8	3173.7
2000-01	12.20	2.94	1.62	15.1	13.9	1.2	3466.4

To sustain a higher level of investment and growth Pakistan needs to increase its national savings. The most promising way to boost national savings is through increasing public savings because the government has been a major dis-saver for quite some time. This requires strong improvement in the fiscal balance, particularly the revenue balance. Another promising way to increase national savings is to concentrate on household savings, which accounts for roughly three-fourths of national savings. These include pension schemes, life insurance and mutual funds. This is consistent with the fact that household savings are usually the largest component of private/domestic savings in developing countries, especially in the lower-income predominantly agricultural developing countries [Ayub (2001)].

The household saving rate has risen considerably in recent years (see Table 2). An important policy question concerns the identification of the factors responsible for this trend. Is the rise in household saving due to changes in saving patterns of rural or urban households? How has it responded to the performance of the agricultural sector, in view of the

apparently close association between growth in agriculture and the overall saving rate? To answer these questions, the proposed work will go beyond the use of aggregate data and will employ information from household surveys, which are readily available in Pakistan. The Federal Bureau of Statistics conducts periodically (lately on annual basis) nation-wide Household Income and Expenditure Surveys (HIES). In addition, Pakistan Integrated Household Surveys (PIES), which include information on items such as borrowing and lending by households, have been conducted in recent years with World Bank support. Surveys of rural saving have also been carried out in recent years.

Background of Study

Various consumption/saving hypotheses have been developed ever since the Absolute Income Hypothesis (AIH) was postulated by Keynes in economic theory. Income has been regarded as the chief determinant of the saving function. The saving function represents the difference between income and consumption expenditure. Different forms of the functional relationship between saving and income have been tested. Some studies found a statistically significant effect of income on saving, and other studies found non-significant effects of income. Some studies analysed the saving functions by including different socio-economic factors, while some others estimated kinds of savings such as savings in the form of assets, etc. However, no study has estimated the household saving function by using the latest available micro-level data HIES 1998-99. Our objective here is not to test these contending consumption/saving hypotheses with household data. But we wish to find out a saving function which is simple, and at the same time, has been widely used in analysing household saving behaviour.

Estimation Technique and Model Specification

The estimation of the household saving function for this study is obtained by using the Ordinary Least Squares (OLS) method. The package used for estimation is SPSS. The objective of the study is to analyse household savings with respect to the characteristics of the households. The study analyses the household saving function by using the dummy variable approach.

The difference between the household income and expenditure is taken as household saving. Symbolically the household saving may be expressed as below:

$$S = Y - C \quad (1)$$

where,

S = Household saving

Y = Total income

C = Total household consumption expenditure

We begin our analysis with the Absolute Income Hypotheses which relates household saving behaviour with household income and other socio-economic variables.

$$S = a_0 + a_1Y + Z + E \tag{2}$$

where

S = Saving

Y = Income

Z = Other socio-economic variables

E = Error term

In assessing the relative significance of various socio-economic and demographic factors on household saving behaviour, the above model has been estimated by using a randomly selected sample of households. The description of the profiles has been restricted to the estimates based on the variables including total income, wealth, dependency ratio, educational level, age, employment status and sex. The sample included households for rural and urban areas of Pakistan. The household saving behaviour has also been estimated for Pakistan as a whole. By including the socio-economic variables in the equation (2) we get

For Pakistan:

$$S_p = a + \beta_1Y + \beta_2Dw + \beta_3Ddep + \beta_4Demp + \beta_5Ded + \beta_6Dage + \beta_7Dage-s + \beta_8Dsex + e \tag{i}$$

For Urban:

$$S_u = a + \beta_1Y + \beta_2Dw + \beta_3Ddep + \beta_4Demp + \beta_5Ded + \beta_6Dage + \beta_7Dage-s + \beta_8Dsex + e \tag{ii}$$

For Rural:

$$S_r = a + \beta_1Y + \beta_2Dw + \beta_3Ddep + \beta_4Demp + \beta_5Ded + \beta_6Dage + \beta_7Dage-s + \beta_8Dsex + e \tag{iii}$$

where

$A, \beta_1, \dots, \beta_8$ are co-efficients to be estimated

E = error term

S_p = savings in overall Pakistan

S_r = savings for rural households

S_u = savings for urban households

Variable included in the above equations are

Y = Income

D_w = Dummy for wealth (since we cannot measure wealth easily so we are using house-ownership as a proxy for wealth)

D_w assumes the value of 1 if household is an owner of a house

0 otherwise

D_{dep} = Dependency ratio

where the dependency ration is measured as

$$D_{dep} = \frac{HS - NE}{HS}$$

where

HS = Household size

NE = Number of earners

D_{emp} = Dummy for employment status. It assumes the value of

1 if the household head is employed

0 otherwise

D_{ed} = Dummy for educational years of the household head.

D_{ed-1} = Dummy for middle level. It assumes the value of

1 if the individual is middle pass

0 otherwise

D_{ed-2} = Dummy for intermediate level. It assumes the value of

1 if the individual is intermediate level pass

0 otherwise

D_{ed-3} = Dummy for graduate level. It assumes the value of

1 if the individual is a graduate

0 otherwise

Ded-4 = Dummy for above graduate. It assumes the value of

1 if the individual is above graduate

0 otherwise

Ded-5 = Dummy for middle level in rural areas. It assumes the value of

1 if the individual is middle pass in rural areas

0 otherwise

Ded-6 = Dummy for above middle level in rural areas. It assumes the value of

1 if the individual is above middle level pass in rural areas

0 otherwise

Dage = Age of the household head

Dage-s = Age square. It is used to check the rate of change of saving with respect to increasing age of the household head.

Dsex = Dummy for the household sex. It assumes the value of

1 if the head of household is a male

0 otherwise

Data Description

The Pakistan Integrated Household Survey 1998-99 has the sample size of 14307 households. Of this total, rural households are 8933 and urban sample included 5374 households. To estimate the econometric model, data is obtained from the Federal Bureau of Statistics (FBS) Islamabad. It is based on micro-level data of the Pakistan Integrated Household Survey, PIHS 1998-99.

Variables and Theoretical Expectations

The objective of this study is to analyse the household saving behaviour given the effects of various socio-economics and demographic factors along with income on household savings. The factors, whose impact on saving will be examined in this study, are income, wealth, dependency ratio, employment status, education level, age and sex.

Income:

Income has been considered the most important factor in the determination of the saving behaviour of an individual. More income means, normally, more saving and vice versa.

Wealth of Household:

Apart from income, wealth has been taken as another determinant of saving behaviour. Since it was difficult to get data on wealth, ownership of house was taken as a proxy for wealth. If a household head owns a house then the dummy takes a value equal to 1 and if the household head does not have his own house, the dummy variable takes the value equal to 0. Here wealth is taken as an explanatory variable because wealth plays an important role in influencing saving behaviour of people.

Dependency Ratio:

The dependency ratio is defined in the literature as the percentage of the population aged 14 and below plus the percentage of the population aged 65 and above. On the basis of cross-country evidence Leff (1969) is the first to have obtained an inverse relationship between the dependency ratio and household saving. Leff's paper generated considerable interest and since then several studies have been undertaken to violate or contradict his findings.

It is argued that the inconclusiveness that prevails in the literature regarding the direction and magnitude of the relationship between the dependency ratio and household savings is due to the way that the dependency ratio is defined. In defining dependency ratio it has been implicitly assumed that the population aged 14 and below plus 65 and above adds to household consumption and contributes nothing towards production. In developing countries, where 70 percent of the population lives in the rural areas and where children are considered an asset because of their contribution to household activities, the above assumption appears to be rather strong. The impact of the dependency ratio on household savings can be more meaningfully examined if, instead of putting a restriction on the age of the household member, their earning status is explicitly taken into account. Following Burney and Khan (1992) we define dependency ratio as:

$$DR = (HS - NE) / HS$$

Where DR is the dependency ratio, HS is the household size and NE is the number of earners in a household. Using HISE 1984-85, Burney and Khan

(1992) found a strong negative relationship between household savings and dependency ratio. The impact was relatively stronger for the rural households.

Employment Status:

The employment status of the household head has received considerable attention as a source of differences in saving across households in developing countries. Ramanathan (1969) and Kelly and Williamson (1968) respectively have found that self employed person save the most in India and Indonesia. Snyder (1974) on the other hand does not find support for his results in the case of West Africa. In our study, the impact of employment status on household savings is analysed by considering whether a person is employed or not. If a person is doing some kind of job the dummy variable assumes the value of 1, otherwise it is zero.

Education:

Kelley (1980) and Akhtar (1987) have examined the impact of the level of education on household savings. According to Burney and Khan (1992) their findings are ambiguous. The ambiguity stems from the fact that, on the one hand, for various reasons, educated households have relatively higher consumption expenditure; while, on the other hand, educated people are likely to earn more. Further more, while household consumption is influenced by the tastes and preferences of all the household members, it is difficult to define a composite index of household education level. Since the head of the household generally takes the decision of how much to save, the level of education of the household head appears to be the relevant variable. Moreover, education level of head of the household not only determines the level of education but also the amount and pattern of expenditure which in turn determine savings. In our study, the level of education of the head of the household is described by the five categories i.e. primary and below, middle pass, intermediate pass, graduate, and above graduate. These categories are represented in the regression by the set of four dummy variables taking vales (0,1).

Age of the Household Head:

The life-cycle models suggest that there exists a relationship between age and saving rates. In this study, the age of the household head and its square is included to establish the relationship. Burney and Khan found that savings increase with the age crossing a certain limit.

Sex:

Sex of household head is also considered as an important variable to determine the saving behaviour of a household. If the head of household is male, dummy assumes the value of 1, otherwise 0.

Table 3: Ordinary least Square Estimates of the Saving Equations for Overall Pakistan

Variable	Coefficients
Income	.886 (169.919)*
Wealth	-.021 (-4.270)*
Dependency ratio	-.036 (-7.121)*
Employment status	.035 (5.789)*
Ded -1	-.013 (-2.642)*
Ded -2	-.069 (-14.192)*
Ded -3	-.085 (-17.564)*
Ded -4	-.168 (-32.738)*
Age	-.133 (-4.995)
Age-square	.109 (3.999)
Sex	.010 (1.861)*
Constant	1392.044 (5.087)*

Note: t-statistics are given in parentheses
*indicates significance at 5 percent level.

$$N = 14307$$

$$R^2 = .682$$

$$F = 2784.784$$

$$D.W = 1.761$$

Results:

Table-3 shows overall (Pakistan) household saving behaviour with different socio-economic variables. It can be seen that household saving is affected by income. The coefficient of income is positive and thus compatible with prior theoretical expectations that there is a positive and causal relationship between saving and income. It is statistically significant at the 5 percent level of significance, suggesting that household saving is significantly affected by the income of the household. This shows that large and rapid increase in income tends to raise the rate of household saving because households' capacity to save increases with household income.

Using cross-sectional data, Leff (1969) was first to detect the existence of an inverse relationship between the dependency ratio and household savings. In this study, the dependency ratio is found to have a strong negative influence on household savings for overall Pakistan. The coefficient of dependency ratio is statistically significant at the 5 percent level of significance. The results suggest that as the number of the dependent population increases, household saving tends to decline because the expenditure on them increases accordingly. The dependency ratio is of two kinds, young-age-dependency, and old-age-dependency. As the birth rates decline (from 3.1 to 2.9 in 2001), and life expectancy at birth increases, the main source of dependency burden moves from young to old dependents. In this way, the overall negative influence of dependency ratio on household income and then on household savings remains. The negative effects of the dependency ratio on household savings in Pakistan are in line with the findings of Leff (1969), and Burney and Khan (1992). Further, Siddique (1993) has also found a similar relationship between dependency ratio and household savings from time-series data analysis.

The coefficient of employment status is found to be positive and statistically significant at the 5 percent level, for overall Pakistan. This suggests that the heads of household who were employed have positive saving in the case of overall Pakistan. This is understandable as one can only save if he/she has some income. Normally one earns income if he/she has some kind of job. Similarly, the unemployed are not expected to save unless they have some other source(s) of income.

Education attainment seems to exercise a negative influence on household saving behaviour. The negative influence of education on household savings has been found significant at the 5 percent level of significance for overall Pakistan. The Table shows that the negative influence of education increases as the household moves from lower level of education

to higher level of education. This trend is reversed at graduate plus education of the head of the household. Our results confirm the earlier results found by various studies including Burney and Irfan (1991) and Burney and Khan (1992). This negative relationship between savings and education level of the head of household could be due to the fact, as explained by Burney and Irfan (1991), that educated heads like to educate their children more and more to make sure that they follow their parents in their future career. As a result saving is expected to decline as more and more money is spent on educating the future generation of educated parents.

The coefficients of Age and Age Square of the household head are, as expected with negative and positive signs, respectively. The coefficient of age is near the significance level of 5 percent but that of the age square is insignificant. This shows that age of the household head has little impact on household savings. The results suggest that savings decrease with age, but at a decreasing rate and tend to increase as the age crosses a certain limit.

Sex of the head of household also affects the saving behaviour of households. Male headed households have a coefficient with the positive sign and its size is reasonable for overall Pakistan. It is significant at the 5 percent level of significance. This shows that male headed households save more than female headed households. Generally, it is considered that female headed households save more. But this is not confirmed by our results as female heads seem to spend their money on the purchase of jewelry, clothes, and crockery etc., or their income is so small that they have nothing to save. The earnings of such households are no more than what is needed for survival.

The value of the constant is 1392.044. This means that when income is zero with all other variables stated above, households have this amount of savings. The value of R² is 0.682 which even though not very high is quite reasonable given the fact that the data used is cross-sectional and not the time series one.

The value of F shows the overall significance of the relationship between the dependent and independent variables. It represents the relationship between explained variations and unexplained variations in the dependent variable. Large F-value means that unexplained variation is small. From that point of view large F-value is a positive sign for our estimated regression. The Durban-Watson (D.W) test is used to detect the serial correlation in the estimated regression function. The results of this study suggest that the Durban –Watson value is in acceptable limits and that there is no serial correlation.

Table-4: Ordinary Least Squares Estimates of the Saving Equation for Urban Households in Pakistan

Variables	Coefficients
Income	.794 (76.102)*
Wealth	-.011 (-1.191)*
Dependency ratio	-.037 (-3.729)*
Employment status	.053 (4.517)*
Education	
Ded -1	-.012 (-1.187)*
Ded -2	-.046 (-4.460)*
Ded -3	-.068 (-6.854)*
Ded -4	-.135 (-12.470)*
Age	-.140 (-2.603)*
Age square	.130 (2.365)
Sex	.019 (1.836)*
Constant	1550.059 (2.720)*

Note: t- statistics are given in parentheses.

* indicates significant at the 5 percent level

N = 5374

R² = 0.551

F = 598.543

DW = 1.761

The results corresponding to the urban and rural households are documented in Tables 4 and 5. Here again saving is regressed on household income, wealth, dependency ratio, employment status, education, age and sex variables.

The coefficients of income for urban households, though a little smaller than those for overall Pakistan, has a positive sign and is statistically significant at the 5 percent level. Whereas the income coefficient for rural households (Table 5) is bigger than overall Pakistan but much bigger than urban households indicating income as a very important and perhaps only determinant of saving in rural areas. However, in both cases there is a direct positive relationship between household income and savings. This result is consistent with the overall saving behaviour of Pakistan.

The coefficient of wealth for urban households is negative and statistically significant at the 5 percent level of significance. The coefficient being not very big shows that it has a low negative effect on household savings for urban households. In the case of rural households (Table 5), the coefficient is still negative and significant at the 5 percent level of significance, though bigger than that for urban households, and this indicates negative influence of ownership of house on saving behaviour. These results confirm the overall Pakistan results.

The coefficient of dependency ratio for urban households in Table 4 is negative and statistically significant at the 5 percent level. The coefficient is quite big indicating a strong negative effect on household savings. As the number of dependent population increases the amount of consumption expenditure on them also increases and hence, the rate of saving decreases. The same is true for rural households (Table 5). In fact here a negative coefficient is bigger than that of urban households. The results for urban and rural households confirm the overall Pakistan results in Table 3.

For urban households too the coefficient of employment status is positive and significant at the 5 percent level of significance. The coefficient of employment status for urban households is bigger than for overall Pakistan. This indicates that saving by urban households heavily depends on their employment status i.e. whether they are employed or not. The coefficient of employment status for rural households is also positive and significant at the 5 percent level of significance. But the coefficient is much smaller than those of overall Pakistan and urban Pakistan. This indicates that rural households savings are less dependent on employment.

Various categories of education are found to have a significant negative influence on households savings for urban households (see Table 4). The important point to note here is that like in the case of overall Pakistan, the size of the parameters of various categories of education increase with the level of education. In other words, the more educated the head of the household, the more he spends on education and therefore, the less he saves. In the case of rural households (see Table 5) it is not the same. Here education has a positive effect on saving behaviour. The values of positive coefficient increase as one moves into higher and higher levels of education. In other words, in rural areas the more educated household head will save more compared with the less educated household head.

In the case of urban households, the coefficients of age of the household head and its square appear again, with negative and positive signs respectively. The coefficient of age of household is statistically significant at the 5 percent level of significance. Whereas in the case of rural households the coefficients of household age and its square are statistically significant, with negative and positive signs respectively (see Table 5). The signs of coefficients for urban and rural households confirms those of the overall Pakistan.

In the urban areas the coefficient of sex variable representing the male head of household is positive and statistically significant at the 5 percent level of significance (see Table 4). The coefficient is bigger than for overall Pakistan indicating that, in the urban areas male headed households are more important in influencing saving behaviour than in overall Pakistan. In the case of rural areas, the coefficient is negative but very small suggesting that in the rural areas the male head of household has a negative impact on saving behaviour even though this negative impact is very small.

The values of constants represent the same thing as for all Pakistan. In this case the value of constant is 1650.059 i.e. savings is 1650.059 when the values of all independent variables, including income, is zero. The value of R^2 is .551 for urban households. This seems all right. The calculated F-value is much higher than F-tabulated which suggests that this model is overall significant (see Table 4). The value of Durban-Watson i.e. 1.761 is satisfactory and suggests that there is no serial correlation in this model. For rural areas, the value of the constant is 679.501. The value of $R^2 = .861$ is quite high. This shows goodness of fit. The calculated F-value is much higher than the table value. This confirms overall significance of our model (see Table 5). The value of Durban Watson 1.766 is quite reasonable indicating non-existence of serial correlation among variables.

Table-5: Ordinary Least Square Estimates of the Saving Equation for Rural Households of Pakistan

Variables	Coefficients
Income	.940 (232.452)*
Wealth	-.018 (4.580)*
Dependency ratio	-.045 (-10.343)*
Employment status	.016 (3.017)*
Education	
Ded -5	.06 (3.491)*
Ded -6	.051 (10.675)*
Age	-.133 (-6.071)*
Age-square	.095 (4.235)*
Sex	-.004 (-.759)*
Constant	679.501 (3.057)*

Note: t - statistics are given in parentheses.

* indicates significance at the 5 percent level.

N = 8933

R² = .861

F = 6148.608

DW = 1.766

Conclusion

Domestic savings play a dominant role in the economic growth and stability of any country. Economic growth requires investment and it can be financed through domestic savings or from abroad through foreign capital inflows. However, in the long run a nation has to rely on domestic savings. Economic revival primarily depends on investment through both domestic savings and capital accumulation. In the process of economic revival, domestic savings are crucial. Our study shows that the saving scenario in Pakistan is not ideal indeed.

Having estimated three models of saving behaviour in Pakistan, we found the following:

- i. Income is the most important variable which has a positive effect on household saving behaviour in Pakistan (including rural and urban).
- ii. Wealth (ownership of house) has a negative impact on saving behaviour of Pakistan (including rural-urban) households as house owners are less inclined to save.
- iii. The dependency ratio caused by the rapid increase in population has been the most important factor causing the saving rate to remain depressed. It has a strong negative influence on household savings in Pakistan (including rural-urban).
- iv. In case of employment status only employed persons have positive savings.
- v. Various categories of education have been found to have a negative influence on household saving behaviour for overall Pakistan as well as for urban Pakistan. In the case of rural areas, opposite behaviour has been observed as people save more with more education
- vi. In case of age and age square negative and positive signs respectively indicate that saving decreases with age and that it decreases at a decreasing rate.
- vii. The coefficients of variable representing male headed households have been found positive for urban and for overall Pakistan but negative for rural households. This shows that the male headed households are more likely to save in overall and in urban Pakistan but not in rural Pakistan.

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