Assessing the Household Saving Pattern of Urban and Rural Households in District Muzaffarabad
Saleem Abid and Ghulam Sadiq Afridi
Technology Transfer Institute of SSD, Pakistan Agricultural Research Council (PARC), Muzaffarabad, AJK, Pakistan

Abstract
In this paper an attempt has been made to analyze saving behavior of household in urban and rural areas of District Muzaffarabad, AJ&K. For the empirical analysis, we have constructed an econometric model to study the effect of income, family size, locality and education on saving behavior of households of District Muzaffarabad. The analysis concludes that there is a strong relationship exists between saving behavior of households and proposed variables. Further the results indicates that income and locality have positive effect on saving behavior of household whereas, education and family size have negative effect on saving behavior of the household in District Muzaffarabad. It means that if income of the peoples increases the savings will be increases and people in rural areas save more as compare to urban areas. On the other hand, large family size and more educated peoples have less saving. At the end, we made some policy recommendations to the government of AJ&K that the government should create job opportunities and also subsidized the general price levels.

Key words: Saving, Households, Income, Urban and Rural, Education

Introduction
Saving can be defined as the income which can not be spent on current consumption. Total savings come from individuals save out of their personal incomes, business retain and thereby save some of their profits and government save when they run a budget surplus. The ratio of household saving to investment has followed the pattern of private savings. According to the life-cycle hypothesis is that the people save largely to finance retirement. The evidence on requests suggests that some saving is done to provide inheritances for children. There is also growing amount of evidence to support the view that some saving is precautionary, undertaken to guard against rainy days. In other words savings are used as a buffer-stock, added to when times are good in order to maintain consumption when times are bad. One piece of evidence for these other motives is that old people rarely actually dis-save, the older they are, the more they fear having to pay large bills for medical care and therefore, the more reluctant they are to spend.

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).

Saving is an important variable in the theory of economic growth. Several studies have been conducted to assess saving behaviour. These studies include Qureshi (1981), Giovanni (1983), Ali (1985), Akhtar (1986), Khan (1988), Haque and Saleem (1991), Burney and Khan (1992), Siddique and Siddique (1993), Iqbal (1993), Sadaf (1994), Azhar (1995), Kazmi (1996), Hussein (1996), Khan and Nasir (1998), and Ayub (2001). Most of these studies have analyzed saving behaviour in overall Pakistan and then broken it down to the rural/urban level. In all these studies the effects of different variables like 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 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 have been studied over saving pattern. The majority of the studies have used Ordinary Least Squares (OLS) to estimate the effects of all above different variables on saving behaviours. Few studies have even gone for non-linear models to estimate their functions. Keeping in view the importance of the saving we conduct a research study to determined the effect of household savings. The main objectives of this study are to analyze the savings pattern of urban and rural population of Muzaffarabad District and also analyze the saving behavior of household with respect to education, family size, locality and different income levels.

Materials and Methods
The study was conducted to assess the households savings pattern of urban and rural areas of District Muzaffarabad, AJK. A sample of 120 households, 60 from rural areas (Garhi Dupatta, Langer pura, Rabani, Bandi, Kotkomi, and, Saran) and 60 from urban areas (Upper Chatter, Lower Chatter, Gharipan, Khawaja Mohala, Nalochi and Balapeer) 10 households from each locality were randomly selected.

Keeping in view the objectives of the study a comprehensive questionnaire was developed. The questionnaire was pretested in the study area and modified according to the feedback. Single questionnaire was used to collect data on all aspects, regarding socioeconomic characteristics, consumption and saving pattern of the households. Savings calculated was being obtained by the first definition of saving i.e. total monthly income minus total monthly expenditure.

For descriptive statistics and econometric analysis Statistical Package for Social Sciences (SPSS) was executed. To capture the effect of various factors affecting the savings of the households the following econometric model was used.

\[ \ln \text{Sav} = \beta_0 + \beta_1 \text{ID} + \beta_2 \text{TFS} + \beta_3 \text{Edu} + \beta_4 \text{Loc} + \mu \]  (1)

Where
- \( \text{Sav} \) is the saving of the household,
- \( \text{ID} \) is the disposable Income,
- \( \text{TFS} \) is the Total Family Size,
- \( \text{Edu} \) is the education of the household
- \( \text{Loc} \) is the locality. A dummy variable with 1 for rural and 0 for urban respondent has been used.
- \( \beta_1 \) to \( \beta_4 \) are the coefficients to be estimated.

The above model has been employed according to these economic theories. Keynesian theory (1936) stated as there is positive relationship between income and saving. Duesenberry (1949) presented that consumption and saving is not only just related with absolute income but also related with relative income.

Results and Discussion

Socioeconomic Characteristics of Households
The objective of this study is to analyze the household saving behaviour given the effects of various socio-economics factors along with income on household savings. The factors, whose impact on saving will be examined in this study are, education, family size, income and locality.

Education Level
Education can be defined as the process of developing knowledge, wisdom, and other desirable qualities of mind, character and general competency, especially by a source of formal instruction. Table 1 shows education level of the sampled households of urban and rural areas of Muzaffarabad. The results indicate that out of 120 respondents only 4 were illiterate, 22.5 percent of the respondents were primary, 20 percent were middle, 15.8 percent were educated up to Matric, 14.2 percent were intermediate and 24.4 percent were graduated or above graduated. The results also tell that the education rate in the rural households was better than their urban counterparts whereas the higher education in urban households (38 percent) was more than rural households (10 percent) because most of the colleges and universities were available in urban areas.

Family Size
According to Pakistan Demographic Survey a family or household can be defined as all those persons who usually live together and share their meal. The family size in the research area was 6.83 persons per household which is less than the average family size of the country (6.96). The average family size in the rural area was 7.25 persons per household which is less than the average family size of the country (6.96). The average family size in the urban area was 6.42 persons per household.

Primary Source of 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. Table 2 shows primary or basic source of income of the sampled households of district Muzaffarabad. The result indicates that majority of the sampled respondents were involved in services/pension (73.3 percent) and in business (24.2 percent).

Table 2 Primary Source of Income of the sampled households

<table>
<thead>
<tr>
<th>Sources</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service/ Pension</td>
<td>39 (65)</td>
<td>49 (81.7)</td>
<td>88 (73.3)</td>
</tr>
<tr>
<td>Business</td>
<td>18 (30)</td>
<td>11 (18.3)</td>
<td>29 (24.2)</td>
</tr>
<tr>
<td>Daily wages</td>
<td>2 (3.3)</td>
<td>0 (0)</td>
<td>2 (1.7)</td>
</tr>
<tr>
<td>Others</td>
<td>1 (1.7)</td>
<td>0 (0)</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60 (100)</strong></td>
<td><strong>60 (100)</strong></td>
<td><strong>120 (100)</strong></td>
</tr>
</tbody>
</table>

Figures in parentheses are percentages
Source: Survey Data, 2009

Secondary Source of Income
Most of the households got their income from many other sources rather than primary or main sources. Table 3 represents the secondary source of income of the sampled households. The result shows that 71 percent household received income from services and business. About 15 percent respondents of rural area got their income from agriculture, 35 percent from services/pension and 12.5 percent from business.

Table 3 Secondary Source of Income of the sampled households

<table>
<thead>
<tr>
<th>Sources</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service/ Pension</td>
<td>14 (35)</td>
<td>28 (62.2)</td>
<td>42 (48.6)</td>
</tr>
<tr>
<td>Business</td>
<td>5 (12.5)</td>
<td>14 (31.1)</td>
<td>19 (22.4)</td>
</tr>
<tr>
<td>Agriculture</td>
<td>6 (15)</td>
<td>1 (2.2)</td>
<td>7 (8.2)</td>
</tr>
<tr>
<td>Daily wages</td>
<td>2 (5)</td>
<td>0 (0)</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>Remittances</td>
<td>4 (10)</td>
<td>0 (0)</td>
<td>4 (4.7)</td>
</tr>
<tr>
<td>Others</td>
<td>9 (22.5)</td>
<td>2 (4.4)</td>
<td>11 (12.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40 (100)</strong></td>
<td><strong>45 (100)</strong></td>
<td><strong>85 (100)</strong></td>
</tr>
</tbody>
</table>

Figures in parentheses are percentages
Source: Survey Data, 2009

Saving sources of the sampled households
The role of savings in investment and therefore in development of a country can not be exaggerated. In developing country like Pakistan most of the saving is done by household. Table 5 represents the saving sources of the sampled households. The results show that most of the saving (75.3 percent) in the research area was through banks and non-formal (committees). Source of saving in the rural areas through committees were 52.2 percent which is higher than urban area (17 percent). On the other hand, 53.2 percent peoples of urban areas save the money through formal banks. The results also shows that 8.6 percent people saved the money through insurance and their percentage is approximately equal in rural as well as in urban areas.

Table 5 Saving Sources of the sampled household

<table>
<thead>
<tr>
<th>Sources</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non formal/Committees</td>
<td>24 (52.2)</td>
<td>8 (17)</td>
<td>32 (34.4)</td>
</tr>
<tr>
<td>Bank</td>
<td>13 (28.3)</td>
<td>25 (53.2)</td>
<td>38 (40.9)</td>
</tr>
<tr>
<td>Insurance</td>
<td>4 (8.7)</td>
<td>4 (8.5)</td>
<td>8 (8.6)</td>
</tr>
<tr>
<td>Livestock</td>
<td>5 (10.9)</td>
<td>2 (4.3)</td>
<td>7 (7.5)</td>
</tr>
<tr>
<td>Others</td>
<td>0 (0)</td>
<td>8 (17)</td>
<td>8 (8.6)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46 (100)</strong></td>
<td><strong>47 (100)</strong></td>
<td><strong>93 (100)</strong></td>
</tr>
</tbody>
</table>

Figures in parentheses are percentages
Source: Survey Data, 2009

Income, Expenditure and Saving
Table 6 shows the monthly average income, expenditure and saving of the sampled households. The average income, expenditure and saving per household in district Muzaffarabad were 38869, 25342 and 13527, respectively. The results also show that monthly average income, expenditure and savings of the household in urban areas were more than the rural areas of district Muzaffarabad.

Table 6 Average Monthly Income, Expenditure and Savings of the sampled households

<table>
<thead>
<tr>
<th>Locality</th>
<th>Income</th>
<th>Expenditure</th>
<th>Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>30093</td>
<td>21120</td>
<td>8973</td>
</tr>
<tr>
<td>Urban</td>
<td>47645</td>
<td>29564</td>
<td>18081</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>38869</strong></td>
<td><strong>25342</strong></td>
<td><strong>13527</strong></td>
</tr>
</tbody>
</table>

Source: Survey Data, 2009

Econometric Analysis
To capture the effect of different variables like income, total family size, locality and education of the household on saving pattern, model (1) was reproduced with the following results:

\[
\ln(\text{Sav}) = -32.5 + 4.16(\text{ID}) - 0.4(\text{TFS}) - 0.11(\text{Edu}) + 1.4(\text{Loc})
\]

(Figures in parenthesis are t-ratios)

F-statistic = 27.79, \( R^2 = 0.68 \), Durban Watson = 1.91
The above results stated that signs of the coefficients (variables) are according to prior expectations. The positive and highly significant relationship between saving and disposable income reveals that as income of the people increases their saving also increases. According to Keynesian theory of consumption, there is positive relationship between income and saving. Our results matches with Keynesian theory of income and saving, as we can see in the above model that income has positive relationship with saving of the household. It is statistically significant at the 1 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. Negative and significant relationship between family size and saving is obviously stand true as family size increases most of the income would consume and less would be saved. Our results were found statistically significant at the 1 percent level of significance and conclude that if there is increase in household size then saving will be low and if the size of household is small then the saving will be high. Though education and saving exhibit negative relationship in our case but it is insignificant. Education is an important predictor for household behavior toward saving. The results tell us that education has negative effect on saving as educated household have higher consumption because they have to maintain a certain standard of living and usually spend more on children’s education, health, clothing, food and necessary luxury goods. Our results confirm the earlier results found by 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 Khan (1992) 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 results show that locality has positive effect on saving, means that if the people move from urban to rural areas their savings will increases due to low consumption as in rural areas relative income and consumption decreases as compare to posh/urban areas.

Conclusions and Recommendations

In this study we have analyzed the saving behavior of household in urban and rural areas of District Muzaffarabad, AJ&K. For the empirical analysis, we have constructed an econometric model to study the effect of income, family size, locality and education on saving of households. From the analysis we see that overall model is significant at 1 percent level of significance and conclude that saving is strongly effected by the above proposed variables. Further the results indicates that income and locality have positive effect on saving behavior of household whereas education and family size have negative effect on saving of the household in District Muzaffarabad. From the results we conclude 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. The estimate of total family size indicates that size of the household has negative relationship with saving of households, which means that if there is increase in household size then saving will be low and vice versa. The results show that locality has positive effect on saving of households, which means that if the people move from the urban to rural areas the savings of the people will also increases. We also conclude that education has negative effect on saving as educated household have higher consumption because they have to maintain a certain standard of living and usually spend more on children’s education, health, clothing, food and necessary luxury goods.

Savings are essential component of growing economy. From our analysis it is found that household savings are discouraged in study areas and there is need to improve household savings, which is possible by the government support. Government can increase saving in the study area through following steps:

- By creating job opportunities to individuals of rural areas as well as the educated persons in District Muzaffarabad
- By subsidizing the general price level at its optimal level.
- By providing free educational facilities to the people of the area.

References

Akhtar, Dependency, Urbanization, Education and Household Saving; Some Preliminary Evidence from Pakistan Saving and Development, 1986. 11.


Kazmi, A. National Saving Rates of India and Pakistan: The Macro econometric Analysis.


