

# KEY DETERMINANTS OF SAVINGS AMONG RURAL HOUSEHOLDS IN MORIGAON DISTRICT OF ASSAM

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## INTRODUCTION

The development of rural economy in particular and the aggregate economy at large depends heavily on the amount of savings and their transfer into the hands of more enterprising investors. Role of savings as a determinant of economic growth has been emphasized by the economists since classical times. In rural sector, people have tremendous saving potential which have not been considered seriously by the policy makers and hence, measures have not been chartered to mobilize these huge savings. Without improving the developmental status of rural areas, the attainment of expected goal of overall development of a nation especially in case of poor nation is not possible.

In Indian economy, household saving is of crucial importance due to the limit set by this sector to the growth of other sectors. Household saving data for the period 1950 to 2000 showed that household savings constituted between 68 percents to 82 percents of the gross national savings, confirming that household savings are an important part of the total national savings. In Assam, in spite of lower per capita income compared to the other states, the rate of saving is high. This is reflected in the total deposits mobilized by the commercial banks, co-operative banks and regional rural banks. The aggregate deposit with schedule commercial banks in Assam, which was Rs. 31666 crores in March 2008, has increased to Rs. 67455 crores in March 2012. Besides, the aggregate deposits of RRBs has increased from Rs. 4653.08 crores in 2011 to Rs. 5180.33 crores in 2012. The insurance penetration of Assam for the year 2012-13 was 0.98 percent as compared to 0.66 percent in all India level. Similarly, the insurance density in Assam has increased from Rs. 336.4 in 2006-07 to Rs. 449.9 in 2012-13. This indicates that the rural sector in Assam has been contributing considerable amount towards financial saving in the state. But in spite of huge figure of deposits mobilized in the state, the capital formation in the different sectors has been very low which is reflected by the falling credit-deposit ratio. The credit deposit ratio which was 55.5 in 1990, declined to 37.3 in 2012. The credit-deposit of Assam is far below when compared to the national level of 78.1 in 2012 which clearly indicates the poor capital formation in the state. Since the development is always constrained by the low level of capital formation, therefore it becomes to understand the determinants of household saving. No studies have been conducted in this area and hence there is a huge research gap. Thus based on the above background this study attempts to find the major determinants of household savings in Assam, specially the rural areas of Morigaon district.

## METHODOLOGY

The area of the study covers the Morigaon district of Assam. A sample of 112 households is selected by using random sampling method. In the first stage, one development block is selected purposively out of five development block of the district. Accordingly Bhurbandha development block is selected and then three villages (one village from each community dominated) are selected from the block with the help of construction of community concentration index. 20% population has been taken as random sample and thus a total of 112 households are selected. A well structured questionnaire is used to obtain information on the socio-economic characteristics such as households' income, age of the respondent, educational status, occupation and so on. Multiple regression models are employed to analyze the factors influencing savings of the rural households. The model expressing the relationship between the variables is expressed as:

$$S = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + u_i$$

Where

S = Amount of rural household savings

$\beta_0$  = Constant term

$\beta_1, \dots, \beta_8$  are coefficients

$X_1$  = Age of household heads

$X_2$  = Non-food expenditure

$X_3$  = Years of schooling of the household head

$X_4$  = No of earners in the household

$X_5$  = Caste of the household head

$X_6$  = Size of land holdings

$X_7$  = Occupation of the household head

$X_8$  = Sex of the household head and  $u_i$  = Error term

**OBJECTIVES**

Based on the above discussions, the main objectives of the present study are:

- (i) To find out the quantum of savings of rural households.
- (ii) To evaluate the determinants of saving of the rural households.

**HYPOTHESIS OF THE STUDY**

Saving behavior has socio-economic variations.

**ANALYSIS AND RESULTS*****Different Age groups and size of Saving and Income***

The data shows the average income, average saving of household heads of different age groups and their saving income ratios. From the age group 30-40 onwards saving income ratio is increasing, reaches the peak when attaining the age group 50-60 and coming down after that. With the exception of the youngest age group (below 30), saving follow the hump shaped pattern as proposed by the life cycle theorists. The possible reason for the high saving income ratio of the younger group is that most of these groups are engaged self-employed activities in non-agricultural sector or in services and the consumption expenditure of households with younger head is low because the children of these households have not started going to school and therefore expenditure related to education will be lower.

**Table1: Age-wise distribution of savings (Rs. per annum)**

| Age of groups | % of Households | Average Income | Average Saving | Saving Income Ratio |
|---------------|-----------------|----------------|----------------|---------------------|
| Below 30      | 3.57            | 138934         | 47305          | 0.34                |
| 30-40         | 19.64           | 136423         | 31965          | 0.23                |
| 40-50         | 44.65           | 133728         | 36456          | 0.27                |
| 50-60         | 27.68           | 206163         | 78605          | 0.38                |
| Above 60      | 4.46            | 188647         | 47058          | 0.24                |

*Source: Survey data*

***Number of Dependents and the size of Average Saving and Income***

The data reveals that the saving income ratio of the households having no dependents is 0.38. The saving income ratio decreases to 0.31 as the number of dependents increases to 1 and again increases to 0.32 and 0.36 respectively as the number of dependents increase to 2 and 3. Generally, the increase in the number of dependents in a family results in low level of savings due to more burden of expenditure with a given level of income. But it is clear that overall savings shows no considerable relationship between dependents per worker and savings. The possible explanation is that the age structure of the additional dependents i.e. newly born babies does not show effect on savings. Thus, dependents per worker have mixed impact on savings.

**Table 2: Distribution of Savings according to dependent per worker (Rs. per annum)**

| Number of Dependents | % of Households | Average Income | Average Saving | Saving Income Ratio |
|----------------------|-----------------|----------------|----------------|---------------------|
| 0                    | 0.9             | 89300          | 33750          | 0.38                |
| 1                    | 4.5             | 125673         | 38679          | 0.31                |
| 2                    | 29.6            | 124896         | 40653          | 0.32                |
| 3                    | 34.4            | 151767         | 56362          | 0.36                |
| 4                    | 24.2            | 148269         | 49893          | 0.33                |
| 5 and above          | 6.4             | 193721         | 47586          | 0.24                |

*Source: Survey data*

***Level of Education and Size of Average Income and Saving***

Table 3 shows that there is a considerable positive relationship between savings and the level of education except the illiterate household's heads. 4.4% of households headed by illiterates get an average annual income of Rs. 89937 and saving ratio of these households is 0.27 which is more than the saving income ratios of all other households' heads. The probable reason behind this is that there may be presence of salaried earners in those households or may be accumulated savings acquired as hierarchical property.

**Table 3: Education of the Head of Household, Average Income and Saving**

| Level of Education | % of Households | Average Income | Average Saving | Saving Income Ratio |
|--------------------|-----------------|----------------|----------------|---------------------|
| Illiterate         | 4.4             | 89937          | 24597          | 0.27                |
| Primary            | 36.6            | 98987          | 17895          | 0.18                |
| Secondary          | 52.8            | 158301         | 54302          | 0.34                |
| Degree and above   | 6.2             | 282485         | 128432         | 0.45                |

*Source: Survey data*

**Occupation groups and the size of Average Saving and Income**

Table 4 shows that the saving income ratio of the cultivator households is the lowest among all the occupational groups. This may happen due to the reason that more than 90% of the cultivator households depend upon small scale, non-commercial and traditional agricultural practices. Another reason is that there may be the existence of high dependency in cultivators' households. Similarly the saving income ratio of the agricultural labour group is only 0.19. This is due to the reason that the employment of these workers is quite irregular. Moreover, the fall in prices of agricultural commodities has led to fall in the number of working days of these labors which made it difficult for them to make a surplus.

**Table4: Income and saving of different Occupational Groups (Rs.)**

| Occupation groups | % of Households | Average Income | Average Saving | Saving Income Ratio |
|-------------------|-----------------|----------------|----------------|---------------------|
| Cultivators       | 32.1            | 109769         | 14453          | 0.13                |
| Agri.Labour       | 14.3            | 78452          | 15285          | 0.19                |
| Non-Agri labour   | 16.1            | 89986          | 19764          | 0.22                |
| Salaried          | 19.6            | 317574         | 156423         | 0.49                |
| Self-employed     | 16.9            | 124523         | 26653          | 0.21                |

Source: Survey data

**Table 5: Regression estimates for determinants of rural household saving**

| Variables          | Coefficient  | T-Value |
|--------------------|--------------|---------|
| Age                | 246.309      | .598    |
| Land Holding       | 301.261      | .506    |
| Family Size        | - 5472.07**  | - 2.254 |
| Occupation         | 137601.7***  | 15.62   |
| Sex                | 47551.03***  | 3.506   |
| Years of Schooling | 2302.53**    | 2.452   |
| Earners            | 33867.57***  | 6.442   |
| Caste              | -19711.67    | -3.312  |
| Constant           | -91842.17*** | -3.44   |
| F-test             |              | 52.94   |
| R <sup>2</sup>     |              | 0.61    |

Source: Authors own calculation

Note: \*\*\*, \*\* and \* indicate significant at 1, 5 and 10 percent level.

The relationship between savings and its determinants is estimated using OLS. The result of the F-test is significant at 1 percent in all areas. The study shows the positive relationship between age and household saving, however it is not significant meaning that the Life Cycle Hypothesis may not be a very strong phenomenon in the surveyed area. The similar result is found in the study of Burney and Khan (1992), Rehman et.al (2010) that age structure is positively related to household saving. In case of size of land holding, the result is insignificant for all households. On the other hand, the number of income earners is found to be significant at 1% level of significant which means that the rise of one income earner in a particular household is associated with the increase in household saving of Rs. 33867 in the study area. The educational attainment of the household is found to be significant at 5% level meaning that one more year of schooling will increase household saving by Rs. 2302. Family size is found to be negative at 5% level and it means that an increase of one member in the household is associated with a decline in saving by Rs. 5472. The rest of the variables like caste and marital status are found insignificant in explaining saving level of all households in the study area. Thus, from the table the significant determinants are number of earners, years of schooling, sex, family size and occupation of the household head. The R<sup>2</sup> of 0.61 indicates how well the regression line fits the data and shows that our explanatory variables are explaining 61% of the variations in the dependent variable. For detecting the multicollinearity, the Variance Inflation Factor (VIF) is used which is less than 5 and confirms that there is not the problem of multicollinearity.

**Conclusion**

The study has made an attempt to find out the key determinants of savings of rural households in Morigaon district of Assam. The findings exhibit both positive and negative influence on saving behavior of rural households. The saving follows the hump shaped pattern as proposed by the life cycle theorists except the youngest age group. The dependents per worker have shown mixed impact on savings. Moreover, there is considerable positive relationship between savings and the level of education except the illiterate household's heads. The significant determinants of savings of rural households are family size, number of earners, occupation, sex and years of schooling. Moreover, the findings also reveal that the average saving among the people significantly differs depending on the socio-economic background of the individual especially among different age category, educational attainment and occupation which substantiate the hypothesis of the study.

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