

# Savings Dynamics of Low-Income Households: Evidence from Chattogram, Bangladesh

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**Abstract:** Saving is one of the most imperative rudiments in a developing country's ability to advance that needs to be more developed. The goal of this research is to inspect the influential factors that have a dynamic connection with the savings behavior of a sample of individuals who were randomly chosen in a low-income group in Chattogram District, the commercial capital of Bangladesh. For this purpose, data were collected from 2000 people selected on a simple random basis, both rural and urban families, of Chattogram district, Bangladesh to determine the saving habits of lower-income groups. To better understand household savings behavior among low-income groups, we used various regression analytic methods to estimate the values of the slope and intercept coefficients of the regression model. According to the results, the samples that answered the questionnaire had the following features in common: Men and females were ranging in age from 31 to 40 years old, married or not, and with just a primary level of education; the majority of them are non-service holders with incomes less than or equal to 10,000.00 Tk. The inferential statistics revealed that the factors of income and the function of financial institutions are significant in the connection between saving behavior and every component of the economy, excepting other independent variable such as age, marital status, domicile, employment status, education, family size, financial knowledge, saving institutions, motivators of saving which also affects savings behavior but these were statistically insignificant.

**Keywords:** Factors Savings Behavior, Household Savings, Lower-income group, Components, Chattogram district.

## I. Introduction

Economic growth and development are facilitated by saving, which is essential in any country's process of economic growth and development. Industrialized countries mainly depend on income and savings. Moreover, economic theories have highlighted the importance of savings and investment in the economy, stating that economic development is heavily reliant on these two factors. Economic growth, according to the Harrod-Domar growth model, is mainly dependent on an increase in the capital production ratio, savings rate, or investment. In any nation, a higher savings rate indicates good economic development, which in turn leads to a rise in per capita income. The saving rate and economic growth have been the subjects of the majority of research conducted in the past. A growing body of research contends that fast economic development has a beneficial effect on the economic growth of emerging nations, thus contributing to the rise in per capita income. However, nations with a low savings rate, on the other hand, tend to see stable growth.

Saving is a significant macroeconomic variable that should be investigated in both an individual and a household context under the protection of the economic territory. Adam Smith stated that "saving is an important determinant of economic growth".

By Keynes (1936), the word "saving" was defined as "the surplus of income over that which is spent on consumption. Further, savings may also be described as a portion of disposable income that remains after increased consumption of consumer goods is accounted for. {Keynes. J.M. (1936)}.

According to Maps world of finance, saving behavior is described as the ability to comprehend how a person may save money in a certain nation to understand the economic situation of that particular country. It is common knowledge that when individuals accumulate more wealth, their discretionary income levels rise in tandem. People's quality of life rises as a result of this phenomenon. The most popular ways for people to save their money are to put it in common kinds of accounts such as savings accounts, credit markets, installments of deposits, and savings bonds, amongst others.

The low-income households are those whose income is less, compared to other families of the same size. If a family is usually classified as low income, and its income is less than double the poverty threshold, then certain types of government assistance may be eligible.

According to the Bangladesh Bureau of Statistics in 1995-96, households with lower incomes are defined as those whose total expenditures on food and non-food items combined are equal to or less than the Federal Food Poverty Line (the quantities in the basket are scaled according to the nutritional requirement of 2122 k. cal per person per day).

For low-income families, saving may be more essential than spending from the viewpoint of a life cycle. Savings may be utilized to spread the expense throughout a family's life cycle, allowing them to weather tough economic times in the future. If income decreases in an individual year, a possible life of low-income families can be a threatening situation because there is no provision for basic needs. Savings can help families to avoid extreme costs Shock at the time of unemployment, disability, or retirement. If peoples save more, their disposable income levels are also increasing. It also means that the standard of living of people increases.

Although there is a fair advantage accumulating through wealth disciplined savings, some economists argue that there is not much encouragement to save low-income consumers. Most low-income people save in some forms, although periodically and in small amounts. Low-income individuals save for a variety of reasons, which may be divided into two main categories: particular, typically short-term objectives or saving for anticipated expenses; and to offer a financial safety net. Many individuals with modest earnings desire to save for long-term requirements, such as their children's future needs, yet in certain practices, saving for current necessities takes precedence over saving for long-term goals. The way individuals save tends to be consistent with a long-standing pattern of behavior, regardless of their income level.

In today's world, savings in both rural and urban areas are comprised of assets such as animals, gold coins, and land. Additionally, people are encouraged to save from time to time because they are aware of the various saving institutions that are available nearby and can choose the rate of interest that they want to earn on their savings. Family income sources are considered diversified. The sole source of income for the majority of households comes from nontraditional sources. Because of the diverse range of revenue produced, a part of the income is set aside for savings to a certain degree.

Household saving contributes a lot to the economy of a country, including the behavior of conservation of a large number of people with financial resources. An individual's contribution to a country's national income computation is based on his or her family income. The performance of Bangladesh related to savings is not very extraordinary. As per Bangladesh Bureau of Statistics data In June 2016, the data reached an all-time high of 30.8%, and in June 2018 of the year, the lowest recorded was 27.4%. It is a matter of great sorrow that Personal saving rates have decreased over time, and consumers are concerned about their adequate savings. Saving money and securing a decent lifestyle are hindered by a lack of financial literacy and knowledge. There are a lot of initiatives being implemented by the government of Bangladesh to boost total savings and investments, however, the government is having difficulty reaching this objective owing to low income, the unsuitable character of people, and the ineffective implementation of laws in the country.

However, the majority of the research is macroeconomic; even the few microeconomic studies among them, which focused on family savings, are macroeconomic. Therefore, this paper focuses on the low-income people of the Chittagong district. And it will focus on the savings of low-income people by describing their pattern of savings behavior.

### **1.1. Research Objectives**

In this research, the following goals are pursued:

1. To identify the savings habits of low-income families.
2. To determine the effect of different factors concerning household savings of lower-income groups.
3. Following the results of the research, to offer suggestions and recommendations

### **1.2. Limitations of the Study**

There are several significant limitations to this research. These are the ones to look out for:

1. Various individuals have varying viewpoints, embrace varying beliefs, and engage in varying saving practices.
2. Only the Chattagram division provided the information used in this report. As a result, it cannot possibly reflect the real saving behavior of a human being in practice.
3. Some individuals are found adamant about not providing accurate information.
4. The study has been completed in a limited period.

### 1.3. Disposition

This article is divided into six sections, the first of which provides a snapshot of the savings behavior of low-income families. The other chapters are arranged as follows. And the specific objective of the study was also included. Chapter two comprises the Literature Review which makes a review of previous relevant literature on the topic. Data & Methodology are discussed in chapter three. Chapter four illustrated the results of the analysis and also represented the interpretations of the results. Finally, in chapter five, we get to the point of the paper, the conclusions.

## II. Review of Literature

Saving is a proportion of current income which is being set aside for future consumption. People save their money to spend it on their rainy days. Several studies that were related to saving have been conducted by many researchers & policymakers to assess saving behavior. Some of them have been addressed and summarized in the preceding part of this document.

Most of the studies related to saving were conducted by Qureshi (1981), Gioranni (1983), Khan (1988), Burney & Khan (1992), Siddique & Siddique (1993), Khan & Nasir (1998), and Ayub (2001). Several studies have been carried out to study saving behavior from the viewpoint of Pakistan, and then they have been divided into two groups: urban and rural. Among all of these research, the impact of many factors such as income, interest rate, rate of inflation, age, education, and so on, have been investigated concerning saving patterns and behavior.

Heckman, Stuart, and Hanna, Sherman D (2015) analyzed the influence of non-economic & institutional factors that were related to low-income households saving behavior. To examine the effects of variables the researchers used two logistic regression models on saving behavior: It was decided to use the life cycle hypothesis for the first model and non-economic variables for the final model. It was decided to use the life cycle hypothesis for the first model and non-economic variables for the final model. Working alongside financial advisors, getting access to financial institutions, and also having a purpose to save were all shown to be effective ways of encouraging low-income families to increase their savings behavior.

Mohammad Kamrul Ahsan (2015), stated that human saving behavior was influenced by some important components. The main data was collected from the various banks in Sylhet City, Bangladesh, using a well-structured questionnaire developed by the researcher. Several methods, including descriptive statistics, factor analysis, and multiple regression, have been used by the researcher to determine the underlying causes of human saving. He discovered one dependent variable, which was saving, and fifteen distinct independent factors, which included becoming a wealthy individual, purchasing durable things, providing children with an education, traveling in the future, and so on. According to the findings of this research, human saving behavior was affected by five key components: having adequate social security, earning a profit, having some dependent people, being a wealthy individual, and planning to travel in the future.

Burney, N. A. and Khan, A.H. (1992), the researchers explained that while the impact of household income, dependency ratio, education, job status, secondary income, and age are all positive for the preservation of the head square in urban and rural households, the impact of household income, earning status, occupation, and head of the family is negative for the preservation of the head square.

Beverly, S. (1997) discussed the saving behavior of poor & low – income households by exploring the fact that whether the poor were able to save or not. Among the findings of the study were that poor and low-income families were significantly associated with socioeconomic and demographic factors, as well as expectations and motives, access to resources, and the institutional environment.

By using the institutional theory of saving behavior, Stuart J. Heckman and Sherman D. Hanna investigated the savings behavior of low-income families. This research showed that there were statistically significant disparities in asset levels between saving and non-saving families. This study also explored some factors that were related to saving behavior and the effects of using different saving measures. Using empirical data, the researchers demonstrated that the institutional explanation of saving behavior does have explanatory value.

Burns, J. and Dwyer, M. (2004), Savings are affected by the age structure of the population, which has a significant impact on the growth of a nation via investment. It has been shown that individuals between the ages of 30 and 50 years old are more interested in investing than those in other age groups.

Yoonkyung Yuh, Sherman D. Hanna (2010), household saving was investigated in the context of a prescriptive model. Yuh and Hanna discovered that young and self-employed families were more likely than other households to save. Households headed by single women were less likely than married couples to save money.

Nayak, Subhashree (2013) examined the causes and trends of saving behavior among rural households in the Sundergarh region of Western Odisha. Personal interviews were used to gather primary data for this cross-sectional research, which was performed using a cross-sectional design. A linear regression technique was used to conduct an empirical investigation into the factors that influence saving. According to the findings of their research, low-income communities have the highest marginal propensity to consume, which results in the lowest marginal propensity to save when compared to other occupational groups in the study. Their research also showed that the majority of the rural families had poor educational levels which was leading to less knowledge of the people regarding the advantages of saving.

Annamaria Lusardi (2008), addressed the savings habits of households in the context of financial literacy, information, and educational programs. According to the findings of this research, poor literacy and a lack of fundamental financial knowledge limit people's capacity to save. Financial education initiatives must be implemented to encourage people to save more.

Jeanne M. Hogarth and Chris E. Anguelov (2003), using a probit model, researchers in Egypt examined the variables that influence household saving. For this study, data from the Egypt Labor Market Panel Survey (ELMPS), which was conducted in 2012, were utilized. Specifically, they looked at the effect of obtaining loans on informal and formal savings. According to the findings of this research, the drivers of unofficial saving are very different from those of formal saving.

Imane Abdel Fattah Helmy (2015) & Beverly, S.G. & Sherraden, M. (1999), produced a significant piece of work in the area of low-income savings. Savings are calculated as a result of demographic, social, emotional, and institutional factors in their model. Their work does not include evaluation of ongoing initiatives [moore, A., Beverly, S., Sherraden, M., Sherraden, M., Johnson, L., & Schreiner, M. (2000); Beverly, S., Moore, A. & Shreiner, M. (2001); Schreiner, M., Clancy, M., & Sherraden, M (2002)] as well as the development of comparative theory with resource addition strategies for low-income families [Beverly, S., Moore, A. & Shreiner, M. (2001)].

From the above literature review it is found that no direct research on Savings Behavior of Low Income Households & role of Financial Institutions in Bangladesh has been conducted earlier (so far our knowledge goes) which is the main motivation of conducting present research.

### **III. Methodology**

This part covers the research strategy, study region, sample size, sample technique, data collecting procedures, and data analysis.

#### **3.1. Research Design**

It was decided to use a survey research strategy for this investigation. It was decided which survey to use based on the reason for which it was chosen, which describes the pattern of savings among the lower-income households. The survey can be defined as a sample of separate units from the population of the known population and the associated survey data collection techniques such as question preparation and survey responses and the definition of procedures for improving accuracy.

#### **3.2. Data Collection Procedures:**

The research was conducted entirely based on primary data. The primary data was collected in different areas of Chattagram by contacting the head of the family through face-to-face contact during the interview. Using a set of predetermined questions and highly standardized techniques of recording, data was collected through personalized interviews.

During the interview, personal, demographic, social status, income, savings, financial institution-related information were asked and filled in by the surveyor.

#### **3.3. Sampling & Analytical Techniques:**

The rural & urban area of the Chattagram district was purposely selected for the study. Chattagram district is situated in Bangladesh's southernmost area, in the country's south-eastern region. It is a division of the Chattagram corporation. A population of 76,16,352 people was recorded in this district in the 2011 census, which makes it the second-most populous city in Bangladesh after Dhaka.

The total number of low-income families in the Chattagram district could not be identified due to the limitations. We selected a sampling size of 200 people from the population by using a simple random selection method.

To better understand household savings behavior across low-income groups, we used various regression analysis methods to estimate the values of the intercept and slope coefficients of the regression models. The issue of multicollinearity is avoided by providing a correlation matrix amongst every set of variables and by removing one of the multicollinear variables from the

equation. The presence of autocorrelation is not a significant issue when dealing with cross-section data sets. The SPSS statistical program was used to examine the data gathered for the study (version 20).

### 3.4. Model Specification

The model for household saving that was utilized was

$$S = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 D_1 + \beta_9 D_2 + \beta_{10} D_3 + U_i$$

Where,

S = A continuous variable that is used to save money in the household

X<sub>1</sub> = Income level of the Household.

X<sub>2</sub> = Education Level of the Household Head.

X<sub>3</sub> = Household/ Family Size.

X<sub>4</sub> = Years of the age of Household Head.

X<sub>5</sub> = Institutions of saving.

X<sub>6</sub> = Role of financial institutions.

X<sub>7</sub> = Motivators of saving

D<sub>1</sub> = Domicile. 1= If Household belongs to Urban Area. 0= If Household belongs to Rural Area.

D<sub>2</sub> = Marital Status of Household Head. 1= If Household Head is Married. 0 = If Household Head is Single.

D<sub>3</sub> = Financial Knowledge of Household Head. 1= if the household Head has financial knowledge. 0= if the household Head has no financial knowledge

U<sub>i</sub> = Error Term.

And  $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}$  are co-efficient of estimation

### 3.5. Description of the variables

$$LHS = f[AGE, EDU, DOM, MAR, TIH, HSZ, FKW, SIN, FIN, MOT]$$

The factors that influence household savings may be studied at both the micro and macro levels. Several academics have discovered Determinants at the macro-level, but they have also shown an interest in certain micro-level factors. We have included certain factors in our research that are discussed in more depth below since we recognize the significance of micro drivers of savings:

Table no. I: List of Variables used in Lower Household Savings Analysis

Variables	Description of the variables
	<b>Dependent Variable</b>
<b>LHS</b>	A continuous variable used for Low Income Household Savings
	<b>Explanatory Variables</b>
<b>AGE</b>	A continuous variable used for Completed years of age of Household Head
<b>EDU</b>	A discrete variable used for Completed years of Education of Household Head
<b>DOM</b>	A Dummy variable for Domicile =1 If Household belongs to Urban Area

	=0 If Household belongs to Rural Area
<b>MAR</b>	A Dummy variable to represent Marital Status of Household Head  =1 If Household Head is Married.  =0 If Household Head is Single.
<b>TIH</b>	A discrete variable for Total Income of Household
<b>HSZ</b>	A discrete variable for Household/ Family Size
<b>FKW</b>	A Dummy variable to represent Financial Knowledge of Household Head  =1 if the household Head has financial knowledge  =0 if the household Head has no financial knowledge
<b>SIN</b>	A discrete variable for institutions of saving.
<b>FIN</b>	A discrete variable for the role of financial institutions.
<b>MOT</b>	A discrete variable for motivators of saving

#### IV.Result & Discussions

Our objective was to measure the effect of different factors concerning household savings of lower-income groups. We considered eleven variables as explanatory variables (age, marital status, domicile, employment status, education, family size, the total income of the households, financial knowledge, saving institutions, the role of financial institutions, motivators of saving) and another as dependent variable (Lower-income household Savings). In our analysis, some variables are string and some variables are numeric.

#### 4.1. Descriptive Statistics:

Table No II:Personal Profile of the Respondents

SL. No	Demographic Profile	Frequency	Percentage
1.	<b>Domicile</b>		
	Rural	86	43.0
	Urban	114	57.0
	Total	200	100.0
2.	<b>Gender</b>		
	Male	95	47.5
	Female	105	52.5
	Total	200	100.0
3.	<b>Age</b>		
	20 to 30	41	20.5
	31 to 40	80	40.0
	41 to 50	61	30.5
	51 &Above	18	9.0

	Total	200	100.0
4.	Marital Status		
	Married	140	70.0
	Single	60	30.0
	total	200	100.0
5.	Education		
	1 to 5	84	42.0
	6 to 10	51	25.5
	11 to 12	16	8.0
	No education	49	24.5
	total	200	100.0
6.	Family size		
	Small	93	46.5
	Medium	86	43.0
	Large	21	10.5
	Total	200	100.0
7.	Occupational status		
	Service holder	77	38.5
	Others	123	61.5
	total	200	100.0
8.	Monthly income		
	0 to 10000	140	70.0
	10001 to 200000	60	30.0
	Total	200	100.0

Table II represents that 86 respondents (43%) were from the rural area of Chattagram district & the rest 114 respondents (57%) were from the urban area of Chattagram district.

Males accounted for 47.5 percent of the respondents, with 95 individuals reflecting that percentage, while females accounted for 52.5 percent of the respondents. As a consequence of this finding, it is evident that the proportion of female respondents among the chosen respondents was 5 percent greater than the distribution of male respondents. Given that there was no indication of bias in the sampling system, this was a completely random selection process. Therefore, it shows that females save more than men.

We may be supposed from this table that peoples who were married (70%) saved more than single people were between 31-40 years (40.0%) & most of them were educated at the primary level (42.0%).

From the above table, we may find that 93 respondents (46.5%) were from a small family, 86 respondents (43%) from a medium family, and 21 respondents (10.5%) from a large family.

Among them 123 respondents (61.5%) were non-service holder & their monthly income were within 0 to 10000 tk (70%).

**4.2. Inferential Statistics:**

Table 4.2 in this section depicts five columns based on the results of a survey. The titles of the independent variable are provided in the first column, the values of coefficients are specified in the second column, and standard errors are specified in the third column. The two-tailed t-test is performed to determine the reliability of our estimations, and the results are shown in the fourth column. In the fifth column, we have added probability values to indicate the degree of importance. In saving functions, the constant represents the value of the intercept.

Table no.III: Sign of coefficients and their meaning:

<b>Coefficients<sup>a</sup></b>								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
(Constant)	-.335	.240		-1.397	.164			
AGE	.060	.072	.041	.837	.404	.751	1.331	
MAR	-.001	.134	.000	-.010	.992	.806	1.240	
DOM	-.053	.132	-.020	-.398	.691	.711	1.406	
EDU	-.065	.053	-.057	-1.231	.220	.849	1.177	
ESH	.029	.126	.011	.233	.816	.806	1.241	
HSZ	-.001	.087	.000	-.010	.992	.910	1.099	
TIH	.273	.132	.093	2.063	.040	.894	1.118	
FKW	-.011	.129	-.004	-.088	.930	.758	1.320	
SIN	.101	.082	.055	1.231	.220	.908	1.101	
FIN	.919	.050	.825	18.442	.000	.902	1.108	
MOT	.096	.131	.036	.729	.467	.755	1.324	

a. Dependent Variable: LHS

**AGE:** For lower-income groups, the age of the household head has a positive relationship with household savings. It indicates that the age factor is beneficial in terms of increasing the amount of time that everyone has left in their lives. One possible explanation for the upward trend is that families in the lower-income category need more incomes to survive in the country's current difficult economic conditions. The Co-efficient for the lower-income group is statistically insignificant which is  $\alpha = 40.4\%$ .

**Marital Status:** According to our estimated results, we may conclude that the marital status of lower-income individuals has a positive relationship with the behavior of lower-income people. Married people save more for their future than unmarried people. The significance level of MAR is 99.2% which is  $\alpha = 99.2\%$  which means that this result is not statistically significant even at  $\alpha = 10\%$ .

**Domicile:** From the table, we found that the co-efficient of DOM is -.020 which is negative. Again the significance level of the result is .691% which is  $\alpha = 69.1\%$ . which means this result is statistically insignificant.

We may conclude by saying that for a lower-income group of people, saving does not significantly relate to domicile (DOM).

**Education:** Education has no positive relationship with the savings behavior of lower-income people. The co-efficient of EDU is -.057 which is negative & the significance level of the result is .220% which is  $\alpha = 22\%$ . That means this result is statistically insignificant.



**Employment Status:** The occupational status of the family head has a favorable relationship with the savings behavior of lower-income groups, according to the findings. The passage of time allows every industrious individual to find a new, better, and well-compensated employment that corresponds to their position and experience. The co-efficient of ESH is .011% which is positive & the significance level of the result is .816% which is  $\alpha = 81.6\%$ . This result is statistically insignificant even at  $\alpha = 10\%$ .

**Household Size:** Though household size and savings behavior are supposed to be negatively related, in our study we got a positive relation. Which is highly insignificant ( $\alpha = 99.2\%$ ). That may be due to the poor number of respondents of high family size.

**Total Income of the Households:** From our estimated results, it is found that the co-efficient of TIH is 0.093 which is positive. The saving behavior of lower-income people is positively related to their income. If income increases, the level of savings of lower-income people also increases. On the other hand, the significance level of the result has got as .040% which is  $\alpha = 4\%$  which means that this result is statistically significant.

**Institutions of saving:** Low-income people's savings activity is positively related to the presence of savings institutions in their lives. The co-efficient of SIN is .055 which is positive & the significance level of the result is .220% which is  $\alpha = 22\%$ . That means this result is statistically insignificant.

**Role of financial institutions:** Savings organizations can enhance the saving capacity of lower-income people by providing proper & accurate information about their saving policies. From our estimated results, it is found that the co-efficient of FIN is .825 which is positive. The saving behavior of lower-income people is positively related to the financial support of the institutions. Again the significance level of the result has got as .000% that is  $\alpha = 0\%$  which means that this result is statistically significant.

**Motivators of saving:** From the table, we found that the co-efficient of MOT is .036 which is positive & the significance level of the result is .467% that is  $\alpha = 46.7\%$ . That means this result is statistically insignificant.

**Multicollinearity Test:**

The researcher has also attempted to determine whether or not there is an issue with multicollinearity in the regression model. Multicollinearity test was run by Tolerance and VIF factor and we have got that VIF was always less than 10. As a rule of thumb, if  $VIF > 10$ , then multicollinearity is present (Kutner et al, 2004). So in our model, we can say that there has no multicollinearity problem.

Table no.IV:

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	223.486	11	20.317	33.310	.000 <sup>b</sup>
	Residual	114.669	188	.610		
	Total	338.155	199			
a. Dependent Variable: LHS						
b. Predictors: (Constant), MOT, SIN, ESH, HSZ, TIH, EDU, FIN, MAR, AGE, FKW, DOM						

**A NOVA Table:**

NOVA results show that the regression model is predicting a statistically substantial amount of the variability in the dependent variable based on the variability of the independent variables, according to the results of the analysis. This table also demonstrated that the regression analysis is statistically very significant (the F test is extremely significant,  $p=0.000$ , which is  $p < 0.05$ ), as shown by the  $p=0.000$  value in the table. As a result, the ANOVA results confirm the research hypothesis that there is a highly significant association between the set of dependent variables and the set of independent variables.

Table no.V:

<b>Model Summary<sup>b</sup></b>
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Model	R	R Square	Adjusted R Square	Std.error of the Estimate	Durbin-Watson
1	.813 <sup>a</sup>	.661	.641	.781	1.159
a. Predictors: (Constant), MOT, SIN, ESH, HSZ, TIH, EDU, FIN, MAR, AGE, FKW, DOM					
b. Dependent Variable: LHS					

**Autocorrelation Test:**

Autocorrelation was Tested by Durbin Watson Test Statistic, d.It is possible to conclude that there is no first-order linear autocorrelation in these multiple linear regression models since the value of  $d = 1.159$  falls between the two crucial values of 1.0 and 2.0.

That is, our model is also free from the Autocorrelation problem.

**Overall Significance of the Model:**

From our estimated results, though most of the co-efficient have got satisfactory and the estimated model was free from autocorrelation and multicollinearity problems, the overall significance of the model was got poor satisfaction as the R square value was .661. Maybe some of the relevant & important independent variables have been omitted from the model.

Based on the above discussions, we can say that the savings behavior of lower-income people significantly ( $\alpha$ less than 10%) depends on income level and the role of financial institutions.

If the income is comparatively high and the respondents receive accurate and positive information and financial support from financial institutions, then the savings of low-income people will be relatively high.

On the other hand, we got that there are some other variables i.e.age, marital status, domicile, employment status, education, family size, financial knowledge, saving institutions, and motivators of saving which also affect savings behavior but not significantly ( $\alpha > 10\%$ ).

Again in our study, it is also found that the size of the house positively affects the behavior of saving, which is in contrast to a priori.

**V.Conclusion & Recommendations**

**5.1. Conclusion**

One of the primary goals of this research was to identify and analyze variables that influence the savings behavior of lower-income individuals in the Chattagram division of Bangladesh.Furthermore, the purpose of this research is to explain the variables that have a connection with the saving habit of 200 randomly chosen individuals.To gather information, a questionnaire was utilized, which was divided into two sections: general information and specific information.Descriptive statistics are concerned with frequency and percentage, while inferential statistics are concerned with coefficients, standard errors, two-tailed t-tests, and probability values when analyzing the data.Multicollinearity was tested through Tolerance and VIF factor, and Autocorrelation was tested by Durbin Watson Test Statistic.

The results showed that the samples who answered the questionnaire had the following traits in common, as shown in the findings: Men and women ranging in age from 31 to 40 years old, married or in a relationship, and with just a primary education level were present; the majority of them are non-service providers earning less than or equal to 10,000tk in annual income.

Other independent variables such as age, marital status, domicile, employment status, education, family size, financial knowledge, savings institutions, and motivators of saving were found to be statistically insignificant in their relationship with saving behavior in all dimensions. This was true even for other independent variables such as marital status, domicile, employment status, income, and role of financial institutions.

Saving is one of the most important elements in a developing country's ability to progress and become more developed.In this study, we attempted to determine the underlying reasons behind human conservation behavior.We have discovered a profusion of factors that influence human behavior. However, not all factors are relevant to every situation.

As a result, we have limited ourselves to just 11 variables. However, these 11 factors were insufficient, as they explained only 66.1 percent of the changes seen in the data. As a result, there is a research gap. There should be much more factors to consider while attempting to explain the reason for human survival.

Based on their saving habits, it was discovered that lower-income individuals had some kind of savings account with a commercial bank as well as with non-governmental organizations (NGOs). Also, it was found from our study that the majority of lower-income people save in their piggy bank most. The main reason for saving was to meet a specific purpose in their life. To get financial protection, most low-income people prefer to save their money in commercial banks.

Most of the lower-income people who save in the NGOs, their main reason for saving was to get a loan from the NGOs. During our research, we also found that majority of the low-class people were cheated by some financial institutions. This is the main negative factor for prospering saving culture in our country among the low-class people. In addition, due to a lack of financial understanding, lower-income individuals were not aware of all of the savings opportunities made accessible to them by financial institutions.

## 5.2. Recommendations

Based on the main results of the study, the following implications may be made: increasing the ability of lower-income individuals to save is one way to improve their financial situation.

- ❖ Based on the findings, it is suggested that the government provide employment opportunities and a healthy working environment for both men and women.
- ❖ Financial firms could implement incentive programs and persuade individuals to recognize the value of saving by offering them tax breaks.
  - Informing individuals about the need for family income-expense accounting for them to be able to see their financial situation and plan for their future financial goals.
  - Making additional revenue from regular labor for individuals to earn more money.
- ❖ Every individual above the age of sixty-five should be eligible for old-age benefits, and this should apply to everyone.
- ❖ Financial institutions can establish new policies (projects) to achieve security objectives as well as raise interest rates. As a consequence, individuals will be able to save more money than they did in the past.
- ❖ Industries should be established in rural regions since they have access to lower-cost labor resources.

## References

1. Annamaria Lusardi (2008). Household Savings Behavior: The Role of Financial Literacy, Information, and Financial Education Programs. National Bureau of Economics.
2. Burns, J. and Dwyer, M. (2004). Households' attitudes to Saving, Investment, and Wealth. Reserve Bank of New Zealand: Bulletin, 70, 25-38.
3. Beverly, S., Moore, A. & Shreiner, M. (2001). A framework of asset-accumulation stages and strategies.
4. Beverly, S. (1997). How can the poor save? Theory & evidence on saving in low-income households.
5. Beverly, S.G. & Sherraden, M. (1999). Institutional determinants of savings: Implications for low-income households & public policy. *Journal of socio-Economics*, 28(4), 457-473.
6. Burney, N. A. and Khan, A.H. (1992). Socioeconomic Characteristics and Household Savings: An analysis of the Households' Saving behavior in Pakistan. *The Pakistan Development Review*, 31(1), 31-48.
7. Faisal, Turgut Tursoy & Nil Günsel Resatoglu (2016). Do Savings and Income Affect Energy Consumption? An Evidence from G-7 Countries.
8. Heckman, Stuart and Hanna, Sherman D., Individual and Institutional Factors Related to Low-Income Household Saving Behavior (April 4, 2015). *Journal of Financial Counseling and Planning*, Vol. 26, No. 2, 2015.
9. Imane Abdel Fattah Helmy (2015). Understanding The Saving Behavior of Poor Households : Evidence from Egypt.
10. Jeanne M. Hogarth and Chris E. Anguelov (2003). Can The Poor Save? *Financial Counseling and Planning*, 14 (1), 1-18
11. Mohammad Kamrul Ahsan (2015). Influencing Components of Human Savings Behavior in Sylhet City. *Global Journal of Management and Business Research: B Economics and Commerce*.
12. Moore, A., Beverly, S., Sherraden, M., Sherraden, M., Johnson, L., & Schreiner, M. (2000). How do low income individuals save, deposit, and maintain financial assets?



13. Nayak, Subhashree (2013). Determinants and Pattern of Saving Behavior in the Rural Households of Western Odisha.
14. Schreiner, M., Clancy, M., & Sherraden, M (2002). Final report: Saving performance in the American dream demonstration.
15. Stuart J. Heckman, Sherman D. Hanna. Factors Related to Saving Behavior among Low – Income Household in the 1995 – 2007 Survey of Consumer Finances.
16. Yoonkyung Yuh, Sherman D. Hanna (2010). Which Households Think They Save? The Journal of Consumer Affairs, 44 (1), 70 – 97.