Determinants of Individual Outcomes and the Behavior of the Albanian Family in Household Savings

Assoc/Prof. Dr. Marsida Ashiku
Head of Finance-Accounting Department
“A. Xhuvani” University, Elbasan, Albania
Lecturer of Corporate Finance, Public Finance
E-mail: marsidaranxha@yahoo.it; marsida.ashiku@uniel.edu.al

Msc. Dorina Olldashi
“A. Xhuvani” University, Albania
E-mail: olldashi.dorina@gmail.com

Doi:10.5901/ajis.2016.v5n3s1p424

Abstract

The savings are a very important tool for the future of security, because there are moments in everyone’s life when money is urgently needed, when it becomes the present future than ever. Saving does not mean to restrict spending or not spending, you save means rationalization of expenditure, while well-used funds available, so it is important to create a savings plan. The main purpose of this study is to analyze the impact that certain domestic determinants have in the level of domestic savings. In this study we take factors such as: monthly family income, number of persons in the household (family size), the number of persons that provide income for the family, the family business impact for those families who have a family business, and if the family has a saving plan. Relationship between the level of household savings and these internal factors is tested using a multiple linear regression model as small squares method (OLS) Analysis is based on a survey of 270 families in the city of Elbasan. After analyzing the data through econometric model it shows that the factors affecting the level of household savings are: the level of monthly household income, having a savings plan, the level of the monthly household income and having a saving plan. Also, from this survey we have managed to realize the importance that families give their family savings, the main reasons that push them towards saving and the place where they keep their savings.

Keywords: household savings, internal factors family, monthly family income, savings plan, regression

1. Introduction

The savings are a very important tool for the future of security, because there are moments in everyone’s life when money is urgently needed, when it becomes the present future than ever. Saving does not mean to restrict spending or not spending, you save means rationalization of expenditure, while well-used funds available, so it is important to create a savings plan. It is not necessary to have more money to spare, is enough to set aside regularly small amounts of money. It is known that the higher the amount saved is, the higher will be their profit in the future. Reasons to save can be varied, but the 3 main reasons that emerged out of the study showed that the majority (31%) of the respondents save by uncertainty for the future, 18% to pay the university for children and 14% of them to cover the costs for treatment.

As for saving reasons may be diverse factors that determine and influence the family savings can be varied, ranging from macroeconomic to microeconomic ones. It should be said that microeconomic factors include a wide range of factors, given that his family and its micro environment is quite complex. In our study we included some of these factors, estimated by us as the most important, and which are most suitable for Albanian household. Factors such as the following will examine are: family income, family size, the number of persons that provide income, the impact of the family business, and follow a savings plan. To reach such an analysis were surveyed only 300 families in the city of Elbasan (270 surveys were assessed as valid), the impossibility in this study to involve other families, though not from other cities of Albania.

By analyzing the conclusions drawn from the survey made by the families of the city of Elbasan, as other studies on family savings, evidence the monthly household income as the main factor that affects monthly household savings. But, apart from income to savings should theoretically affect the number of persons who constitute a family, because the
more members of a family have more expenses has it much less savings. In our study, the majority of households surveyed, 49% of them is composed of more than four persons. However the definition of family size is not enough to show its impact on savings, because by increasing the number of family members is the possibility to increase the number of persons that provide income theoretically resulting in an increase in household savings.

Also, economic culture that gives ownership of the business or responsibility for a certain business often affects the amount of savings, in our study 37% of respondents had responsibility for business or a business, while 63% of them were not. However, more than anything, regardless of income level and other factors, important in our opinion is the pursuit of a savings plan. In the study we did not include factors such as interest rates on deposits, as the majority of respondents see no incentive from the fact that these interest rates currently in Albania are at very low levels, even 48% of households save expressed that keep the house in the form of cash in their savings.

2. Literature Review

Savings are considered as a crucial factor in investment, which consequently affect economic growth (Kiva Halil Arica (2015)). In general, the savings can be defined as money that is not spent at the moment, because people usually save so they can buy more later (George Popovici (2012)). Without savings, families have fewer mechanisms to mitigate abrupt changes in their income (Abdur R. Chowdhury (2004)). Economic factors, social, demographic and cultural determine the behavior of households to saving (Ileana Niculescu-Aron, Constanta Mihaiescu (2012)). In the economic activity of the family one of the most important elements are household savings, as household savings indicate the level of their living conditions and simultaneously form the financial resources for markets and investments in economy country (Mykola Zhuk (2015)). Speaking to family savings, as households are responsible for the most significant savings both in industrial countries and in developing countries (Klaus Schmidt-Hebbel, Steven B. Webb and Giancarlo Corsetti (1992)).

From various literature review noted that in the level of household savings could affect many different factors, both these factors outside the family (macro) or within the family (micro). Some of macroeconomic factors are affecting household savings, public savings (report outstanding general qeveritareme GDP), savings corporate (savings ratio of corporate to GDP), the level of income per capita in a state, growth rates of disposable income households, the unemployment rate, the real interest rate (3-month interest rates by removing inflation), inflation rate, as well as direct and indirect taxes on income (Tim Callen and Christian Thimann (1997)). But in this study we will only deal with some microeconomic factors affecting household savings, since it is the main purpose of the study.

Marcia Freed Taylor (ed), with John Brice, Nick Buck and Elaine Prentice-Lane (2009) identify several different factors that affect savings. Factors such as age of the head, the possession of the house from the family income. Household incomes have a positive relationship with family savings, where revenue growth also increased savings. Savings in this study include payments on savings deposits, investments made recently, but the capital gains in a period from 2000 to 2005.

Mark N. Harris, Joanne Loundes and Elizabeth Webster (1999) studied the determinants of household savings by collecting data over 17700 Australian family. According to the results of the data the main factor affecting household savings are earnings. But according to this study, in addition to income, the level of household savings have a very significant impact on the demographics and the level of economic optimism to families.

Yigzaw Halefom Nigus (2011) analyzes the factors determining household saving social economic and demographic characteristics of the head of household. In these characteristics are taken into account variables such as gender, age, country housing, education and income, etc. From the results of this study has proved that there is a significant positive impact between income, education, gender, household savings. Put in other words to increase the income, education and gender differences will increase the domestic savings.

While the study of Brownson Sunday Akpan, Edet Ebirigor Joshua Udoh and Aya Aya (2011), to determine the factors influencing the level of household savings to 250 workers (head) randomly selected. Analysis results then showed that income, taxes, work experience, education, family size, membership in social groups affect their household savings.

Dmitry Kulikov, Annika Paabut, Karsten Staehr (2007) focus on the analysis of Eight impact earnings, assets and financial exposure on the household savings rate in Estonia for the period 2002 - 2005. The study included a variety of microeconomic factors that constituted the income, assets and family financial exposure, but it should be noted that this study showed that there was a positive relationship between income and household savings, especially when family incomes were regular periodically.

Tanvi Kiran & Shivam Dhawan (2015) analyzed the impact of family size on monthly household savings and consumer costs for 100 employees in the steel industry in a city in India. Results of the study showed that there was an
inverse relation between family size and monthly household savings, where the increase in the number of persons in the household monthly household savings fell. While there was a straight relation between the size of the family and consumer spending. Which means that the bigger the family is the higher will be the cost to keep that family, so savings will be lower.

Steven Lugauer, Jinlan Ni, Yin Zhichao (2015) also studied the impact of family size on family savings, indicating a negative relationship between the number of children dependent on the level of household savings. Which means the smaller the number of dependent children in the family, the higher will be the level of savings and vice versa. In this study is also indicated that there is a positive link between household savings and number of people who work, higher education, good health of members as dhasetet. In other words the higher the number of people who work, higher education, good health and many more have family assets, the higher will be the level of household savings.

Martin Browning and Annamaria Lusardi (1995) present some facts on household savings in the US, and analyzed the impact on savings behavior of age, household composition, income, education and welfare. Different family members have different tendency (trend) towards saving. While the structure and composition of the family is moving in a trend where such savings are higher for married couples without children and lower for families with children, single parents result in lower levels of saving. Also, this study, like all other studies, showed a very strongly positive link between income and household savings.

According to Myra Bishop (1954), self-employed and managers avoid getting out of debt and save more by other groups of occupations, for an individual with an independent business is more responsible for the success that must reach and is more inclined to save for a low level of income than an individual with a fixed salary. Possession of a business or a business responsibility seem to indicate an incentive for families to save a larger share of their income, thus leading to a positive link between ownership rights of a business and household savings.

3. Methodology

For the analysis of data on the factors affecting the level of household savings, the study used a multiple linear regression model by the technique of small squares (OLS). We used primary data processing program primary Microsoft Office Excel 2007, and econometric model 4.0 MICROFI program. The data were obtained for 270 families in the city of Elbasan. Methodology used to collect primary data consisted in the distribution of 300 surveys by conducting direct interviews by enumerators through a questionnaire for families including every layer of the population, but only 270 surveys were available for inclusion in our study. The survey addressed the individuals / households randomly selected.

Econometric model and analysis of the survey results
To reach the econometric model of the independent variables considered in our study are:
1. The family income
2. The size of the family
3. The number of persons that provide income in the family
4. Possession of a business - (takes value 1 when owns a business and the value 0 when not owns one)
5. The pursuit of a savings plan - (takes value 1 when the answer is yes, and the value 0 the answer is no)
The zero hypothesis is: none of the variables does not affect the level of household savings.
The alternative hypothesis is: at least one of the independent variables taken into its consideration affects the level of household savings.

For ease of analysis, we have decided symbols variables explained in Table 1.

Table 1. Symbols and explanations of variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family savings</td>
<td>$Y$</td>
<td>Keeping cash savings, bank accounts and other forms of savings</td>
</tr>
<tr>
<td>Household income</td>
<td>$X_1$</td>
<td>All sources of income that a family</td>
</tr>
<tr>
<td>Family size</td>
<td>$X_2$</td>
<td>All family members that determine the size of its</td>
</tr>
<tr>
<td>Number of persons that provide income</td>
<td>$X_3$</td>
<td>All family members earning from work eg, different pension etc.</td>
</tr>
<tr>
<td>Possession of a family business</td>
<td>$X_4$</td>
<td>Ownership or responsibility to a family business</td>
</tr>
<tr>
<td>Savings plan</td>
<td>$X_5$</td>
<td>Leaving aside the money under various forms of saving, even while collecting cash in a specific country home periodically on specific dates.</td>
</tr>
</tbody>
</table>

In order to measure the internal impact of family factors on the level of household savings we have built a regression
model the following form:

$$Y_i = \alpha + \beta_1 X_{1,i} + \beta_2 X_{2,i} + \beta_3 X_{3,i} + \beta_4 X_{4,i} + \beta_5 X_{5,i} + \varepsilon_i$$

Through statistical program MICROFI 4.0, we tested the hypothesis raised by criteria \( F \), and probabilities. Ho is rejected if the probability \( (p) \) results in less than 0.05 or when \( F = F\)-statistic will prove more critical than it by degrees of freedom.

The processing of data was obtained the following results:
- Determination coefficient (\( R^2 = 0.82683 \)) shows that independent variables in the regression explain 82.68% of changes in the dependent variable, ie the level of household savings.
- About the statistical significance of the econometric model we reviewed indicated \( F\)-statistic, which has a value \( F = 19.3681 \) level probability \( p = 0.000 \) which confirms that the model is statistically significant because we have a high value of \( F\)'s and a very small probability that the error level \( \alpha = 0.05 \).
- Statistical indicator that shows the errors autocorrelation DW (Durbin - Watson) is equal to 1.8562. This value is the value of the indicator is almost 2, which means that errors (connection of waste with a step) auto correlation not express themselves, pointing waste independence as a condition of the method of least squares (OLS).

Table 2 shows the results of the regression analysis of independent variables, where the dependent variable \( Y \) is the level of household savings.

### Table 4. The results of the regression analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient (( \beta ))</th>
<th>Standard deviation</th>
<th>T – Value</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \alpha )</td>
<td>-0.11703</td>
<td>0.35924</td>
<td>-0.32578</td>
<td>0.021</td>
</tr>
<tr>
<td>( X_1 )</td>
<td>0.41084</td>
<td>0.070651</td>
<td>5.8151</td>
<td>0.000</td>
</tr>
<tr>
<td>( X_2 )</td>
<td>0.037406</td>
<td>0.075554</td>
<td>0.49509</td>
<td>0.621</td>
</tr>
<tr>
<td>( X_3 )</td>
<td>0.049058</td>
<td>0.095327</td>
<td>0.51463</td>
<td>0.607</td>
</tr>
<tr>
<td>( X_4 )</td>
<td>-0.10545</td>
<td>0.14699</td>
<td>-0.71737</td>
<td>0.474</td>
</tr>
<tr>
<td>( X_5 )</td>
<td>0.82695</td>
<td>0.14822</td>
<td>5.5792</td>
<td>0.000</td>
</tr>
</tbody>
</table>

On the basis of the data of Table 2 built econometric model that explains the dependent variable \( Y \) (level of household savings) in the following form:

$$Y_i = -0.117 + 0.410X_{1,i} + 0.037X_{2,i} + 0.049X_{3,i} - 0.105X_{4,i} + 0.826X_{5,i}$$

To analyze the statistical significance of the connection and beta coefficients of independent variables we examined the values of probability “\( p \)”. For greater values than 0.05, the impact of the independent variable on the dependent variable it is irrelevant given that all other variables remain unchanged and, for values \( p <0.05 \) null hypothesis about the lack of connection will be rejected, so the connection between the variables is important. Also we analyzed all beta coefficients about the sign and their value according to the results of regression.

**Independent variable 1.** Beta coefficient of household income is 0.41 showing positive that has the right connection between family income and the level of household savings. 00:41 coefficient indicates that the average increase by 1 unit (ALL) household income, household savings will grow on average by 0.41 units (ALL), while keeping all other variables constant. The value of “\( p \)” variable is equal to 0.000 (ie, \( p <0.05 \) level). This means that the null hypothesis fails and verified alternative hypothesis: The family income affect the level of household savings. This result is in line with other studies in this field because an increase in household income leads to increased levels of household savings.

**Independent variable 2.** The beta coefficient is positive family size of 0.037, indicating that there is a straight connection between the number of persons in the household and the level of household savings. The value of “\( p \)” is equal to 0.0621, ie greater than 0.05. This shows that the null hypothesis is confirmed: family size have no impact on the level of household savings.

**Independent variable 3.** Beta coefficient of the number of persons that provide income in the family is a positive of 0.049, showing that we have a right connection between the number of persons that provide family income and level of household savings. Which means that by increasing the number of persons that provide income, increase the chance of having a higher level of household savings. The value of “\( p \)” for this variable is therefore 0.607 greater than 0.05 and this means that the null hypothesis is verified and that the number of persons that provide family income has no effect on the level of household savings.

**Independent variable 4.** Beta coefficient of ownership of a family business is negative of (-0.0105), showing that we
have the inverse relation between ownership of a family business and the level of savings familjare. Vlera the "p" for this variable is 0.474 therefore under 0.05. This shows that the null hypothesis is confirmed: Owning a business has no impact on the level of household savings.

Independent variable 5. The beta coefficient is positive saving plan of 0826, showing that we have a right connection between saving plan and the level of household savings. The value of "p" is so 0000, under 0.05, which means that the null hypothesis alternative hypothesis falls and verified and that the pursuit of a savings plan has an impact on the level of household savings.

4. Conclusions

The main purpose of this study was to analyze the impact that internal factors have in some family in the household savings level, for 270 families in our city. Through the model of linear regression of multiple tested relationship between the dependent variable, the level of household savings, and independent variables as average monthly income of the family, family size, the number of persons that provide income violence, possession a family business and following a savings plan.

The analysis of data through the regression model came to these conclusions:

1) The average monthly family income, number of persons in the household, number of persons that provide income in the family, and the pursuit of a savings plan have a positive relation to the level of monthly family household savings. With regard to income and number of persons that provide income to our survey results are in line with other studies. As for the number of persons in the household outcome it is different from other studies in this area, as these studies identifies an inverse relation between family size and household savings, where the increase in the number of persons in the household savings fell. Perhaps this result in our study is influenced by the fact that the increase in the size of families, so the more family members constituted those families the more family member gain the income.

2) Other studies showed that the possession of a family business had a positive relationship the right to family savings, but the study Our proved the contrary, the results of which showed that the possession of a family business is related inversely with the level of household savings monthly the family. words, as many have family responsibilities of owning a business has less chance to save it. In our opinion, this result is not related to the fact of influence or not the economic culture that gives owning a business, but above all by the fact that where and how to invest the family for the proper functioning of their businesses. After Albania, a country still in transition and with not a highly developed economy and financial markets mostly identified with the banking system, it provides many opportunities for families to invest and develop family businesses. Therefore it brings the inability to save, because everything that can be earned is reinvested in the business to keep the family business alive.

3) As other studies show, our study identifies the average monthly household income as the main influence on household savings. Also, the pursuit of a savings plan, sas this factor is not taken from other studies, the analysis showed that it affect the level of the family's monthly household savings.

4) Number of persons in the household, number of persons that provide income and owning a family business do not affect the level of monthly household savings. These results that conflict with other studies. In our view, these results are influenced perhaps by the fact that the level of income for an individual are very low and at the same time very high costs, leaving no room for savings. To look at the family level, despite an increased number of persons that provide income, such income at a household level are not enough to save the family since the costs increase with the number of persons in the family. Not to mentioned the fact that Albanian families, even though they may have different sources of income, such income is not very high and can come in the form of pensions or social assistance, which in Albania does not meet even minimum living breathing; compared these with the level of costs that are reflected by very high prices.

References


