SAVINGS RATIO, THE IMPACT OF READING INFORMATION

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Abstract

 Personal financial ratios are an important indicator of a family's financial situation. By calculating the level of the financial report, the family can analyze its financial situation and can predict its financial performance in the future. Savings ratio is one of personal financial ratios, recognizing and calculating the recommended level of this ratio as well as keeping this ratio closer to recommended levels serves as a foundation for achieving a better financial situation in the future. The aim of this paper is to identify the families whose managers have read too much about personal finance management are more likely to achieve the recommended level of savings ratio. In order to achieve this aim was studied a vast literature of national and foreign researchers, where it was concluded that there is no recommended level of savings ratio as well as to other ratios of personal finance discussed in any academic study for Albania. Considering this observation to calculate the recommended level of saving ratio was referred foreign researchers, who recommended a "guide" about this ratio and its level, "guide" which we refer throughout this paper. The absence of alternative data led us to make questionnaires in order to collect the necessary information. After the data was collected and refined for their elaboration were used the programs Microsoft Office Excel and Spss Ibm Statistics. For testing was used statistical methods Chi - square test.

Keywords: Savings ratio, household (household unit), personal financial ratios, recommended level

Introduction

 Knowing and managing personal finances is very important in achieving a better financial situation for the family. A household must pass several steps until it reaches into a better financial situation. It is worth emphasizing that a household's financial welfare also depends on its ability

to meet recommended levels of financial ratios. One of the personal financial ratios whose keeping is as close as possible to the recommended levels indicates a healthy financial situation is the savings ratio. There are many factors that affect the achievement of the recommended level of savings ratio. In this paper we will focus on the impact that reading information about personal finances have in meeting the recommended level of savings ratio.

Via Chi - square test was proved that the level of reading information about personal finances has an impact on achieving the recommended level of liquidity ratio (Xarba, Peta, Ruspi 2015), at this paper will verify the impact of reading information about personal finances, but this time about the savings ratio.

Level "guide", optimal level, or recommended level, of a particular ratio will realize that level, for the terms of studying, states a satisfactory financial situation of the household.

This paper is the partial result of a wider study concerning personal financial ratios, the achievement of the recommended level for these ratios and the factors that affect their achievement in the region of Gjirokastra, South of Albania.

Literature review

Personal financial ratios have been in the focus of studies of researchers for decades.

As indicators of progress, the financial ratios appear to function reasonably well, (DeVaney, S. A. 1993, p. 46).

For our country there is a lack of research about personal financial ratios in general and for savings ratio in particular. This lack of studies directed us towards the findings of foreign researches about this ratio and its guide level.

Savings ratio = annual total savings / annual disposable income

The savings ratio provides an indicator of progress in achieving financial goals by measuring the percentage of disposable income that is being saved annually. The savings ratio compares all cash inflows over a specific time period, generally one year, to disposable income. If the individual or family does not save any money during the year, the savings ratio will be zero. Moreover, the savings ratio is a measure of the percentage of disposable income allocated for future, not present, goal attainment. (Lytton, Garman, Porter, 1991, p 18-19).

Greninger, Hampton, Kitt, Achacoso. 1996 recommended that the ratio should be at least equal to or greater than 10%.

According to Hanna 2000, p. 142 (**as cited in** Moon et al. 2002 p. 502) who suggested that the repayment of the principal portion of a loan

should not be counted as an expense, so part of savings could be repayment of loans. However, Hanna also noted that it might be difficult for consumers to separate out the principal portion of mortgage and installment loan payments. Therefore, in practice, "savings," as calculated from an income/expense statement, might consist mostly of contributions to financial assets.

Beer, Mooslechner, Schurz and Wagner (2006), in their study concluded that slightly more than half of all families in the study showed that were saving regularly and 5% of all households were not able to save.

According to Moon et al.2002, p 509 annual total savings is calculated as following:

annual total savings=net gain=annual disposable income – annual consumption expenditures.

In order to calculate the savings ratio except data that could get ready by questionnaires must create through the calculation of various data of the questionnaire new elements that will be used to calculate the savings ratio.

Methodology

As it is mentioned previously in our country it is the first time that it is performed an analysis of the financial ratios of households. The lack of official data on households in Albania, from which we could take data to calculate the personal financial ratios, it directed us towards questionnaires that were given to complement to the managers of the households. Questionnaires were distributed and completed during 2013. The distribution was conducted into various families to Gjirokastra District in its rural and urban areas, households selection was casual. Households that had no employees or self-employed persons to provide safe monthly income were excluded from this study.

Totally were gathered data from 523 families District of Gjirokastra.

Gjirokastra district has an area of 2883.98 km2 and lies in the south of Albania, bordering with Korca, Berat, Fier and Vlora. This district consists of the three towns: Gjirokastra, Permet, Tepelenë (Office of Tourism, Gjirokastra).

After the selection of 523 questionnaires only 302 remained accurate and validated to be processed and analyzed.

According to the Population and Housing Census 2011 in the district of Gjirokastra are 20,991 residences inhabited by persons with ordinary residence (Census of Population and Housing Census 2011, INSTAT).

This sample represents a 95% confidence level with an error ± 5%.

The analysis in this study is limited to a determination of the original sample where the informant should be the head of household or spouse of the head. This is done according to Prather (1990) to eliminate cases where

informer is: grandfather, father, brother, sister, child, friend or another relative of the head of household.

Creating and computing new variables
During processing and entering the data in relation to the third point of the questionnaire "Personal Income", for items that the household had not benefited any income during the period were completed with 0. As most of the interviewees for the variables: incomes from private business or partnership, income from agriculture, incomes from livestock, incomes from remittances, incomes in the form of gifts, incomes from handwork, was given as annual amount for the same variables which households were expressed as monthly amount were transformed by multiplying by 12 in annual and registered as annually in database.
Creating variable "incomes from salary", this variable was computed as follows:
Incomes from salaries = salary1 + salary 2+ salary 3 + salary 4
Creating variable "Incomes from pension", this variable was computed as follows:
"Incomes from pension"= pension 1 + pension 2 + pension 3
Since most of the respondents for the variables: salary, pension, other income were expressed in a monthly amount for the households, whose managers were expressed in annual amounts were transformed in the monthly amount divided by 12 months, and were entered as such in the database.
The monthly disposable income for households was computed as follows:
The monthly disposable income for households = (incomes from private business) / 12 + (incomes from agriculture) / 12 + (incomes from livestock) / 12 + (incomes from remittances) / 12 + (incomes in the form of gifts) / 12 + (incomes from handwork) / 12 + salaries + Income from pensions + other incomes + (the annual incomes from interests) / 12 + (the annual income from rental property) / 12.
Creating variable "annual disposable income": this variable was formed as a product of the variable "monthly disposable income" and 12. (Actions performed in the program Microsoft Office Excel).
"The disposable annual income" = "The monthly disposable income" x 12
Creating variable "annual savings": this variable was formed as the difference between the variable "annual disposable income" with "annual personal expense", the calculation of this variable was conducted in Excel as follows:
"Annual savings" = "annual disposable income" - "annual

household expenditure"

Creating variable "annual household expenditure": this variable was formed as a product of the variable "monthly household consumption expenditure" with 12 (Actions performed in the program Microsoft Office Excel).

"Annual household expenditure" = "monthly household consumption expenditure" x 12

To calculate the variable created "Monthly Household Consumption Expenditure" was operated as follows:

1. It was calculated the created variable "Total monthly expenditures" (variable that was computed in Excel as the sum of all variables expressed in section 2.1 of the questionnaire).

2. It was calculated the created variable "Monthly allocation of annual expenditures" (variable that was computed in Excel as the sum of all variables expressed in section 2.2 of the questionnaire divided by 12).

3. "Monthly household consumption expenditure" = "Total monthly expenditures" + "Monthly allocation of annual expenditures".

Descriptive information

By the survey were available 302 questionnaires, of which 66.9% belonged to households residing in the town and 33.1% belonged to households residing the village. According to the gender the sample was divided into 63.2% males, 24.2% were females and 12.6% of households involved in the study were managed by both husbands and wives.

The age interval which occupies the largest percentage is the age of 40-59 years, that means that 60.6% of managers have been in this interval, this interval divided into 36.8% males, 14.9% females and 8.9% are both males and females. New managers represented the only 21.5% of the sample, and 17.9% were elderly.

Detailed information is presented in Table 1.

Table 1: Age of manager according to the gender

Gender	Age	Count	Column N %	Table N %
Male	Up to 39 years	39	20.4%	12.9%
	40 - 59 years	111	58.1%	36.8%
	Over 59 years	41	21.5%	13.6%
	Total	191	100.0%	63.2%
Female	Up to 39 years	16	21.9%	5.3%
	40 - 59 years	45	61.6%	14.9%
	Over 59 years	12	16.4%	4.0%
	Total	73	100.0%	24.2%
Both	Up to 39 years	10	26.3%	3.3%
	40 - 59 years	27	71.1%	8.9%

	Over 59 years	1	2.6%	0.3%
	Total	38	100.0%	12.6%
Total	Up to 39 years	65	21.5%	21.5%
	40 - 59 years	183	60.6%	60.6%
	Over 59 years	54	17.9%	17.9%
	Total	302	100.0%	100.0%

Results of the research

It is worth mentioning that the average savings ratio is 0.09, indicating that typical saving level is almost at recommended levels, but on the other hand, the value of percentile 05 and percentile 25 were respectively -0.35 and -0.03 and nearly a third of households had negative saving ratios. Negative ratio was as a result of higher expenditure than income. For further information refer to Table 2.

Table 2: Spreading of savings ratio

	Mean	*Median*	*Percentile 05*	*Percentile 25*
Savings ratio	.09	.07	-.35	-.03
	Percentile 75	*Percentile 95*	*Percentile 99*	*Standard Deviation*
Savings ratio	.23	.55	.66	.30

Considering the literature studied (calculations for this ratio were performed in Excel) the saving ratio was calculated for the sample studies where the households were classified into household that reached level guide and households did not reached. This classification was performed starting from the guide of this ratio suggested by Greninger et. al.1996. According to Greninger et. al. 1996, this ratio must have a level greater or equal to 0.1. Only 43% of the households including in the study, meet guide level of savings ratio, for detailed information see Table 3.

Table 1: Households classified by meeting the recommended level of savings ratio * The gender of household manager Crosstabulation

			The gender of household manager			
			Male	Female	Both	Total
Households classified by meeting the recommended level of savings ratio	Households that do not meet the recommended level	Number	103	48	21	172
		% within total	34.1%	15.9%	7.0%	57.0%
	Households that meet the recommended level	Number	88	25	17	130
		% within total	29.1%	8.3%	5.6%	43.0%
Total		Number	191	73	38	302
		% within total	63.2%	24.2%	12.6%	100.0%

In the ninth section of the questionnaire was measured with Likert scale of 1 to 5 the variable "the level of reading information about personal finance management"

where the respective ratings were: 1 = I have not read at all, 2 = I have read just little, 3 = I have read a little, 4 = I have read some, 5 = I have read a lot.

In order to measure the impact of the level of reading information about personal finance management in meeting the recommended level of savings Chi square test was used to be tested:

Test: Managers of households who have read about personal finance management are more likely to achieve the recommended level of savings ratio.

To perform the test was used this variable "The level of reading information about personal finance management" which is measured with 5-point version: I have not read at all, I have read just little, I have read a little, I have read some, I have read a lot, compared with the variable "Households classified by meeting the recommended level of savings ratio", variable that is classified into 2 categories: "Households that do not meet the recommended level" and "Households that meet the recommended level".

In the group of households that were in the recommended level were classified all the households that had a value of savings ratio greater than or equal to 0.1. Other households were classified as ones that do not achieve the recommended level.

From the results of Chi-Square Tests for "The level of reading information about personal finance management" and "Households classified by meeting the recommended level of savings ratio", was concluded that there is significant association between reading information about personal finance management and meeting the recommended level of savings ratio (χ^2 = 126.849, df=4, p <0.05). (when Sig <alpha, there is a relationship between variables, Table 4)

Table 4: Chi-Square Tests (The impact of information & saving ratio)

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	126.849[a]	4	.000
Likelihood Ratio	143.596	4	.000
Linear-by-Linear Association	111.559	1	.000
N of Valid Cases	302		

a. *0 cells (0.0%) have expected count less than 5.*

For concrete research (*V= 0.648, df = 4*) we concluded that effect size is very high. According to the result that expresses the relationship between two variables (V = 0648), Table 5, we concluded that the level of reading information about personal finance management has a significant impact in meeting the recommended level of savings ratio.

Table 5: *Symmetric Measures* (The impact of information & saving ratio)

		Value	Approx. Sig.
Nominal by Nominal	Phi	.648	.000
	Cramer's V	.648	.000
N of Valid Cases		302	

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Based on these results we can conclude: "Managers of households who have read about personal finance management are more likely to meet the recommended level of savings ratio.

Conclusion and recommendations

From the analysis of the savings ratio, it results that 57% of households that were surveyed haven not the recommended level for this ratio. The mode of this ratio indicates an unsatisfying level -0.02%.

It is worth emphasizing that the average value of the savings ratio is 0.09, indicating that the typical level of savings is almost in the recommended levels, but on the other hand the value of 5 – percent and 25 – percent were respectively -0.35 and -0.03 and almost one third of the families had negative ratios of saving. This means that in the period in which the questionnaire is performed a considerable percentage of households spent more than their income, over-expenditure which according in our opinion can be covered by the emergency funds, savings, borrowing, such ways that lead the households towards the worsen of their financial situation.

From the analysis of the data and Chi square test was confirmed: Managers of households who have read about personal finance management are more likely to meet the recommended level of savings ratio

Researches for households budgets in the Albanian economy in view of using financial ratios during the transition period has been minimal. Empirical researches in this area have been quite rare in our country. Lack of knowledge on household finances and their management make quite important to attract the attention towards personal finance.

This emergency is indicated even by world experience of recent years which connects the start of the global financial crisis with household finances and their mismanagement (Xarba, Peta, Ruspi, 2015).

The government, through its policies, should stimulate savings in our country. In this way it offers the assistance of the economy in general and the families in particular. 36% of households in this study that had a savings ratio smaller than 0, should be helped by the government with its policies that will help in improving their financial situation to have guaranty for the future.

Fitzsimmons, Leach (1994) have recommended the households to be

informed and clarified and find ways to make expenditures reductions and based on the results of our study, where was found that only 43% of households involved in this study meet the recommended level of savings ratio. We recommend technical assistance for the citizens to use not only the earnings with high efficiency but also to manage better their personal expenses.

Considering the fact that for our country there is no recommended levels for savings ratio, it is of interest to be studied and determined the optimal level of this ratio for our country.

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Questionnaire

1. **Please circle the alternative approximates more you and your household. Complete the required information.**

   1.1 You and your family live in:
      1. Town
      2. Village

   1.2   The gender of the person who actually manages the money in the family is:
      1. Male
      2. Female
      3. Both

   1.3 The age of the person who manages earnings _____.

2. **Personal expenditures:**

   2.1 Please enter your household average monthly expenditure that your family has had to last month:

   Attention! Do not report expenditures more than once.

DESCRIPTION	Sum/ALL
2.1.1 Personal expenditures (food, clothing, shoes, detergent, hairdressing, make- up, gifts, fitness, jewelry, etc.)	
2.1.2 Health care expenditures (medicines, doctor visits, etc.)	
2.1.3 Transportation expenditures (fuel, maintenance, license / taxes, tickets, public transport, etc.)	
2.1.4 Debt expenditures (credit cards, car installment loan, personal installment loan, line of credit, etc. excluding home loan)	
2.1.5 Housing expenditures (phone, water, electricity, cables, furniture, appliances, etc.)	
2.1.6 Expenditures for children (day care, babysitters, toys, clothing, etc.)	
2.1.7 Tax expenditures / taxes (taxation and various taxes)	
2.1.8 Monthly expenditures of mortgage	
2.1.9 Expenditures: Monthly rent house	
2.1.10. Entertainment expenditures (movies, concerts, theater, vacations, hobbies, pets, bars, restaurants, art magazines and books, CDs, videos, cassettes, etc.)	
2.1.11. Other expenditures	

2.2   Please enter your household average yearly expenditure that your family has had to last year.

DESCRIPTION	Sum/ALL
2.2.1 Insurance Expenditures: car, life, etc. (not included insurance of the home)	
2.2.2 Education Expenditures (school fees payment, textbooks, courses, etc.)	
2.2.3 Maintenance of the apartment, utilities, repairs, etc.	
2.2.4 Tax expenses for housing, apartment insurance	
2.2.5 Expenditures for charity (donations, other)	
2.2.6 Other expenditures	

3. **Personal Income:**

Please enter your household average monthly/yearly incomes that your family has had to last month/year**. (**Attention! Do not report expenditures more than once.)

DESCRIPTION	Sum/ALL	Monthly	Yearly
3.1.1 Incomes from private business			
3.1.2 Incomes from agriculture			
3.1.3 Incomes from livestock			
3.1.4 Incomes from remittances			
3.1.5 Incomes in the form of gifts			
3.1.6 Incomes from workhand			
Salaries of family members are as follows::			
3.1.7 Salary 1			
3.1.8 Salary 2			
3.1.9 Salary 3			
3.1.10 Salary 4			
Pensions for members of the family are as follows:			
3.1.11 Pension 1			
3.1.12 Pension 2			
3.1.13 Pension 3			
Other incomes			
3.1.14 Other incomes			

4. **Does your family has saved or invested financial instruments?**
    Yes   No

5.   **Circle the appropriate alternative in which your family has saved or invested money:**
    1. Accounts, savings deposits
    2. Stocks
    3. Bonds / Treasury Bonds
    4. Other investment

6. **Set below the income derived from the amount of the money you have invested or saved.**
    Amount of _____ ALL earned during one year

7.   **Circle the appropriate alternative in which your family has invested money:**
    1. Rented land.
    2. Home rented.
    3. Warehouses rented.
    4. Stores rented.
    5. Other assets rented.

8.   **Write down the income earned from the amount of the money you have invested above:**
    Amount of _____ ALL earned during one year

9. **On a scale of 1 to 5, where 1 is "I have not read at all" and 5 is "I have read a lot" determine the level of information that you have read in about managing of personal finances?**