

AN EMPIRICAL ANALYSIS ON PREFERRED SAVING INSTRUMENTS BASED ON THE ENQUIRY “FINANCIAL SITUATION OF THE ROMANIAN HOUSEHOLDS”

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Abstract:

Keeping pace with the changing times and under the liberalized financial sector regime, the financial-banking institutions developed a new range of financial instruments that offer multiple saving opportunities.

But, this innovative and diversified financial-banking system was not able to attract the population away from the traditional methods of saving.

Pertinent results in the analysis of savings instruments that households resort to may be quickly obtained with the help of data from selective studies. To this purpose, the aim of this paper is to highlight some particularities of preferred saving instruments of the Romanian households, starting from the results of an enquiry that took place during 1-15 May 2012 on a sample of 1728 respondents, constituted with quota sampling.

The study reveals that cash and bank savings still remain the most preferred methods of the households. The results also highlight that certain factors like financial education level, trust about the financial-banking system or the residence area have a significant impact on decisions regarding saving methods.

Key words: saving instruments; financial education level; logistic regression

INTRODUCTION

The empiric approach of the households saving behaviour is usually done in two plans: macroeconomic and microeconomic (individual).

Orienting the population towards various saving instruments may only be approached from the microeconomic (individual) perspective. Few studies assess the behaviour of saving at the individual level generally due to the lack of data. The microeconomic approach, through surveys or enquiries, allowed for the identification of those characteristics of the households that influence the saving behaviour.

The literature on saving behaviour is vast. Most studies highlight the considerable heterogeneity of the households' reasons for saving (Abdelkhalek et al., 2009, Alessi & Lusardi, 1997, Browning & Lusardi, 1996).

The literature indicates a large number of reasons for household saving. The following major motives leading to such a decision can be distinguished (Sturm, 1983):

- **Retirement saving.** Generally considered the most important reason for saving, it is the basis of the Life Cycle Hypothesis (LCH). Savings are positive during the pre-retirement phase and negative after retirement.

- **Precautionary saving.** In the basic LCH model the household bases its decision on events the dates and magnitudes of which are assumed to be known (the future income, the time of death and the interest rate in each period). But in reality future events are uncertain and individual behaviour will be modified. Individuals seek to save for security, regardless of the life cycle stage they are in.

- **Saving for bequest.** Up to a certain degree this reason cannot be precisely differentiated from precautionary saving. An amount saved currently may simultaneously serve as a precautionary life-cycle function (guarding against future contingencies such as health shocks or other emergencies) and a bequest function because, in the likely event that the money is not absorbed by these contingencies, it will be available to bequeath to children or other worthy causes. However, a bequest motive changes the size of the saving ratio only in an economy expanding due to population growth, productivity growth or both.

- **Target saving.** We are referring especially to saving with the view to buy durable goods, but also for expenses caused by special events, holidays or education.

After investigating the savings behaviour of households, Lindqvist (1981) developed the saving motives hierarchy, as displayed in Figure 1, to describe the order in which households acquire financial products.

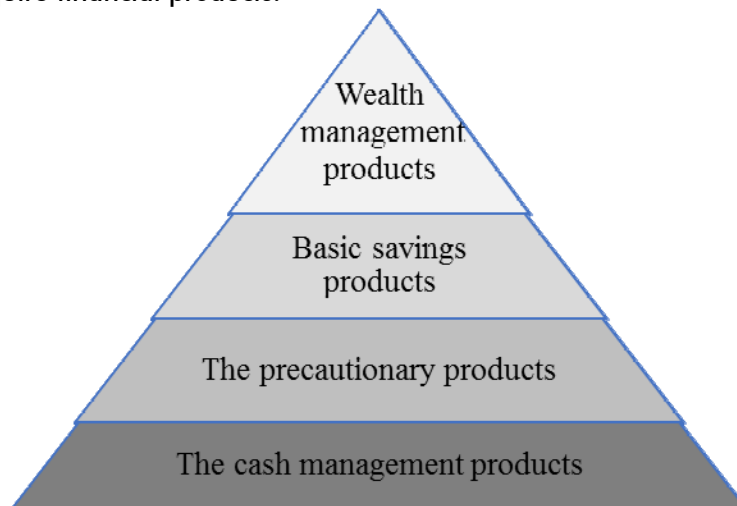
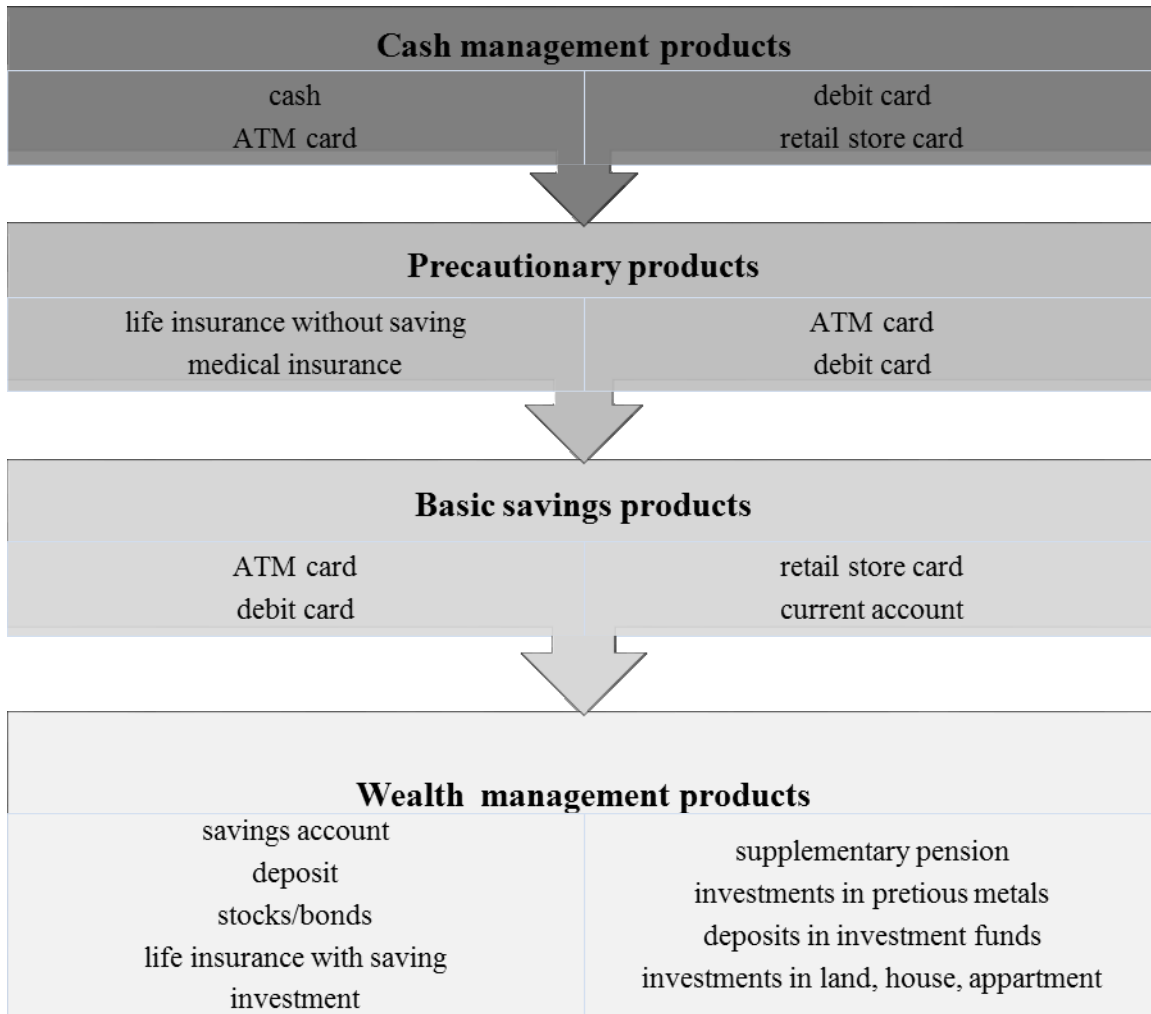


Figure 1: Saving motives hierarchy

For each level of the pyramid, the needs are ensured using specific financial instruments. The cash management products include payments for current, short-term expenses. The precautionary products refer to instruments used by the households for having a financial reserve in case of unexpected expenditure. Basic saving products include accumulation of financial deposits for buying a house, a car or durable goods, and wealth management products comprise financial instruments used by households with the view to earn returns (profit, interest).

Using the Lindqvist saving motives hierarchy, factors influencing movement from a lower to a higher level in the hierarchy were investigated by DeVaney, Anong and Whirl (2007). The authors concluded that there were three very important factors relevant to all four levels of the savings hierarchy: the age of the household head, the size of the family and the length of the planning horizon influencing the acquisition of financial products. Based on the principles of Lindqvist's model, Venter and Stedall (2010) developed a South African financial product usage hierarchy. By adapting the scheme proposed by Venter and Stedall for the financial market in Romania, we obtained the hierarchy of financial products usage presented in Figure 2.



Source: Adapted from Venter & Stedall (2010)

Figure 2: Financial product usage hierarchy

Depending on the saving behaviour and the financial situation, each household may shift or not from a hierarchic level to another. However, the instruments used for the higher levels of the pyramid require information and a high level of general and financial education.

The findings that individuals are uninformed about the most important components of their total savings and lack basic financial knowledge would not be so troubling if individuals relied on professional advice and financial experts to make their saving decisions. In fact, only a small fraction of households consult financial advisers, bankers, certified public accountants, and other professionals, while the majority of households rely on informal sources of advice (Lusardi 2008).

This situation leads to the widespread use of the classic saving instruments (bank deposits) or, even worse, if lack of financial education is associated with lack of trust in financial institutions, savings in cash. In South-eastern European countries more than 50% of the respondents report to prefer cash over bank deposits (Sixt 2012).

The financial institutions aim at attracting savings in cash into the banking system.

This implies an improvement in the image of the banking system and financial education of the population. The objective of financial education is to raise financial literacy levels by teaching new knowledge, skills and attitudes that can bring about changes in money management behaviours. It is also a tool of financial inclusion, enabling people to take greater advantage of the financial services available to them.

The interests by scholars and policy-makers in Europe and in the US on the determinants of financial literacy and on the link between financial literacy and savings has been constantly increasing in the last years and some institutions, such as the OECD, the U.S. Treasury Department and the Bank of Italy, have expressed the need for improved financial knowledge among European and US citizens, emphasizing the role of formal financial education in schools or at the workplace. (Fort et al.,2012)

RESEARCH METHODOLOGY

The paper aim is to highlight the preference for certain saving instruments of the Romanian households and to outline the factors playing a decisive role in deciding for one saving method or another.

The data come from an enquiry that took place during 1-15 May 2012 on a sample of 1728 respondents, constituted with quota sampling.

In designing the questionnaire, the following objectives were followed: assessing the financial situation and the saving capacity of the households; identifying the main saving reasons and preference for various saving instruments.

Starting from the empirical studies focusing on the analysis of the saving behaviour, I advanced the following hypotheses:

1. Preference for classical financial products. The lack of financial education of the population determines the placement of savings in banks, the main option being bank deposits.
2. An important part of the households (at least 50%) resort to cash savings.
3. Those using modern savings instruments have a high level of general and financial education.

ANALYSIS OF ENQUIRY RESULTS

The data resulted from the enquiry were centralised in a database that was verified for completeness of the information. Partial non-responses were treated through methods of imputation with mean or median of nearby observations, formed with the help of auxiliary variables. The obtained database was processed using SPSS, with the view to allowing for a complex analysis of households saving behaviour.

Preference for Various Saving Instruments

There is an alarmingly high proportion of households that save in cash (74%). Moreover, among those who chose to save in cash, 41.7% in 2012 only use this saving method. The banking system instruments (saving accounts, deposits, and current accounts) are used by 51% of the households. The lack of financial education makes the other saving instruments quite unattractive, only 39% resorting to other methods than the classical ones.

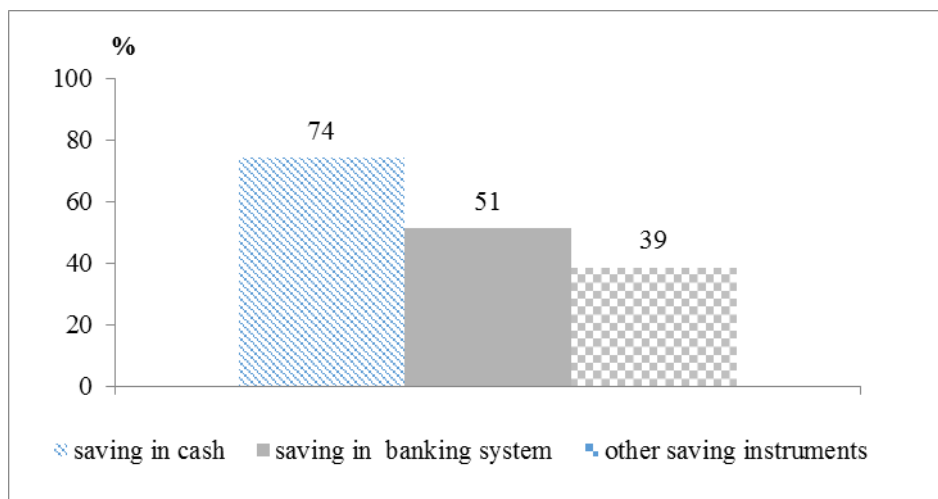


Fig. 3 Preference for saving instruments

The high percentage of those who prefer to keep their money “under the mattress” is determined by the lack of confidence in the banking system and the other financial institutions.

Among those who save only using this method, 73% declared that the main reason they chose it is the security that they will not lose their money. The average score given (on a scale from 1 to 5) for the security of financial-banking saving instruments is 2.26, as compared to saving in cash, which they evaluate at 3.7.

Regarding the profitability of savings in the banking system and other financial institutions, this is appreciated as weak (below 2.2 for both methods). These saving instruments are not perceived as having a higher profitability than saving in cash.

The profile of the respondent who prefers to keep their money in cash is given by a number of demographic and socio-economic characteristics:

- Lives in the rural area – above 41% of the respondents in rural area rather keep their money in cash, as compared to only about 31% in the urban area ($\chi^2 = 5.4$, there is a 0.98 probability that the variable residence area influences the preference for saving in cash only).
- Has a low education level – approximately 49% of those without higher education keep their savings in cash, as compared to 20% of those with higher education ($\chi^2 = 47.5$, there is a 0.9999 probability that the level of education influences the preference for saving in cash only).

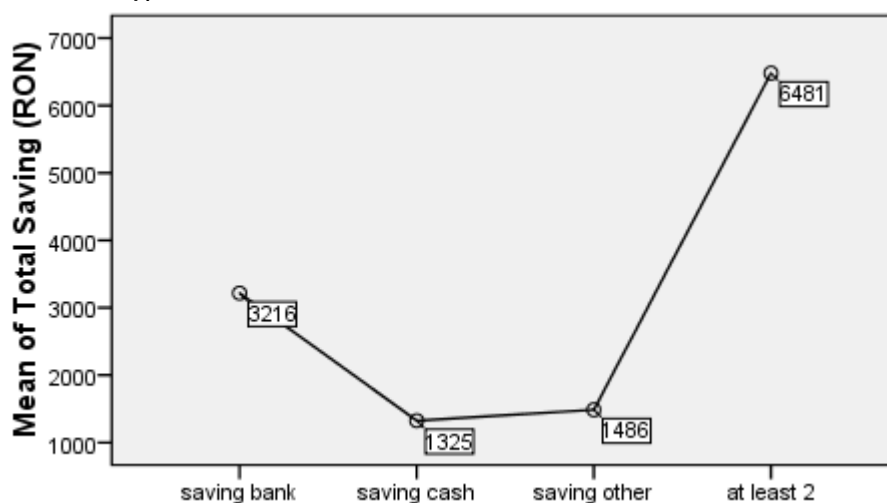


Fig. 4 Average amount saved by saving instrument

As may be seen in Figure no 4, the households that opt to keep all their savings in cash have the smallest saving potential (on average 1325 RON). The hypothesis of the equality of means for savings with various instruments was rejected for a probability of 0.9999.

Households that have an increased saving capacity (on average 6521 RON) mainly use a wide range of financial instruments for saving.

The gender and the age of the household head do not have statistically significant influence.

Identifying the Profile of the Modern Saving Instrument Users

Next, the analysis focuses on the identification of the characteristics of the 39% who use modern saving instruments (shares/bonds, life insurance with saving component, private supplementary pension, investment in real estate, deposits in investment funds). To this aim I used the logistic regression model.

The dichotomy dependent variable is “saving with modern instruments”, having the following possible answers:

0 NO	The household does not use modern instruments
1 YES	The household uses modern instruments

The independent variables of the regression model are:

NoPrGoods=number of goods owned by the household. Numeric variable that quantifies the assets of the household. These goods may be: main dwelling, second dwelling, lands, forests, garages, offices, commercial spaces, livestock, cars and agricultural machines.

NoBankProd=number of banking products used. Numeric variable that quantifies financial knowledge, ability. The banking products used may be: debit card, real estate or personal need credit, dwelling credit, current account, saving account or deposit, overdraft, internet banking, telephone banking, mobile banking).

ProfOther=perception on profitability of saving through modern instruments (on a scale from 1 to 5)

No_inc_mb=number of income earning household members

RiskType=the type of risk. Nominal variable. Categories: 1. Big return-high risk, 2. Good return-low risk and 3. Low return-minimum risk

ResidenceArea=nominal variable. Categories: 1. Urban; 2. Rural

FSPY=financial situation compared to previous year. Dichotomy variable: 1. Financial situation of the household improved, 0. Financial situation of the household did not improve.

The coefficients of the logistic regression model are presented in Table no.1. Their significance was tested using the Wald test. The percentage of the cases correctly classified is 77% and Nagelkerke R² is 0.34. It may thus be said that the model adequately fits the data.

The influence of demographic and socio-economic characteristics

The variable “number of income earning household members has a direct influence, determining, for an increase of 1 member, a 1.08 times increase of the odds that the household uses modern financial instruments.

The situation of the household assets also has a positive influence on the propensity to use modern saving instruments. The increase in the number of goods in the household by one, the odds of using modern financial instruments increase 1.352 time.

Table no.1. The coefficients of the logistic regression model

	B	S.E.	Wald	df	Sig.	Exp(B)
No_inc_mb	,077	,031	6,287	1	,012	1,080
NoPrGoods	,302	,059	26,215	1	,000	1,352
NoBankProd	,169	,050	11,590	1	,001	1,184
ProfOther	,408	,096	18,197	1	,000	1,504
FSPY	,642	,202	10,120	1	,001	1,899
RiskType			12,001	2	,002	
RiskType (Big return-high risk)	1,023	,307	11,118	1	,001	2,782
RiskType (return-low risk)	,337	,167	4,068	1	,044	1,400
ResidenceArea (Urban)	,633	,176	12,966	1	,000	1,884
Constant	-3,618	,476	57,864	1	,000	,027

The reference category for the nominal variable “ResidenceArea” is “Rural”. The influence of this variable is the expected on. The odds for those living in the urban area to use modern saving instruments are 1.884 times higher than those of the reference category.

The households that evaluate their financial situation to be better than the one in the previous year are more active on the financial market, their odds for using modern financial products being 1.889 times higher than those of the households which have the same or a worse financial situation.

The influence of education

The education level of the household head does not have significant influence on the propensity of the household to use modern financial instruments.

Regarding the abilities on the banking market, using more banking products increases the odds of using modern financial instruments 1.184 times.

Furthermore, those who perceive the profitability of saving through modern methods as being high, have 1.5 times greater odds of using these instruments.

The influence of personality

According to the type of personality of the individual, they can take a bigger or a smaller risk when opting for a certain saving instrument. The reference category of the variable “RiskType” is “low return, minimum risk”. As compared to this category, the persons who appreciate their saving or investing risk taking as “good return, low risk” have 1.4 times more odds to resort to modern instruments. Those who prefer to take high risks in order to obtain high returns have a 2.782 times larger propensity to use modern financial instruments.

Association of the Saving Reasons and Saving Instruments

Starting from the saving motives hierarchy I intended to identify the saving instruments used for each stage. The first stage in the hierarchy (the cash management products) was not included in the analysis because data regarding it were not collected. We considered that the management of current expenses of the household is not comprised in the saving issue.

As may be seen in Figure no. 5, saving in cash is the preferred saving instrument in all stages of the hierarchy.

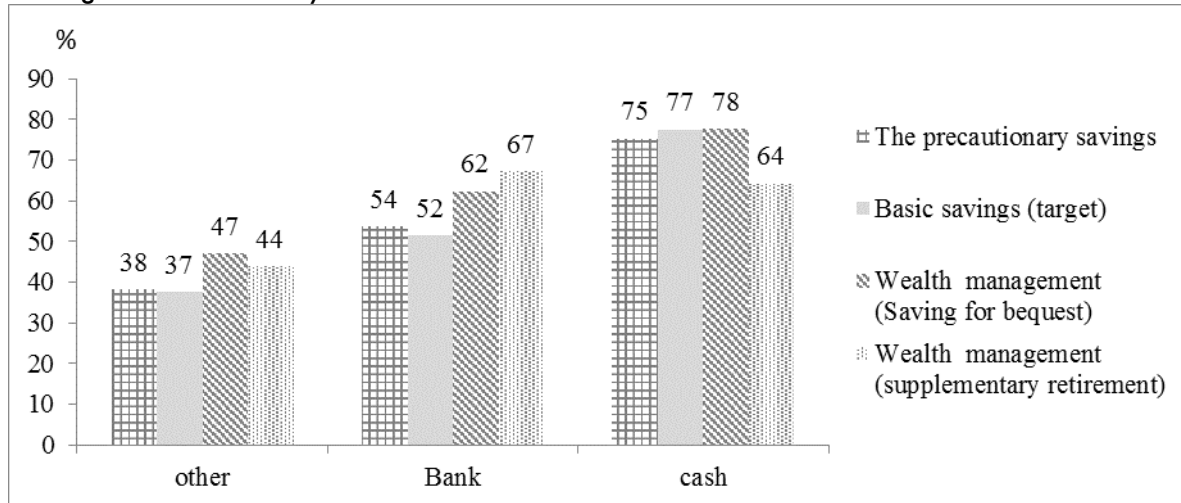


Fig. 5 Saving instruments used according to saving reasons

According to the study I referred to (Venter and Stedall, 2010), the cash is used for current expenses. Even on the last hierarchy stage (Wealth management, realised through saving for bequest and supplementary pension) most households use saving in cash.

CONCLUSIONS

Those who use modern saving instruments have a high level of general and financial education.

The first hypothesis is validated. The main saving instruments are the classical ones, namely bank deposits and cash. Only 39% of the households use modern saving methods.

The second hypothesis is validated. Approximately two thirds of the households prefer to keep their money "under the mattress". Savings in cash are small amounts (their average value is around 300 Euros). This preference is determined on the one hand by the lack of trust in the financial-banking institutions and, on the other hand, by a weak amenity from the point of view of their profitability. The households that opt for saving in cash are mostly those from the rural area and the education level of their head is low.

The third hypothesis is partially validated. The education level does not influence the decision of using modern saving instruments. However, the level of financial education, quantified through the number of banking products used, has a direct influence on the odds of saving through other methods than the classical ones. Other variables that have a positive influence on the odds that a household uses modern saving instruments are: improvement of the financial situation, the number of income earning members, the households' assets, trust in the profitability of these methods. The households are to a higher extent from the urban area and they are willing to a higher extent to take a greater risk.

The lack of financial education, of trust in the banking system, as well as the bank high commissions that lower the profitability, determine a concentration of savings in cash. I believe that through substantiated policies these amounts may be attracted into the banking system.

Rising the financial education level is a priority since the objective of financial education is to raise financial literacy levels by teaching new knowledge, skills and attitudes that can bring about changes in money management behaviours. It is also a tool of financial inclusion, enabling people to take greater advantage of the financial services available to them.

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