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AGEING AND THE FINANCIAL BEHAVIOUR OF ELDERLY

PEOPLE IN ROMANIA

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Abstract

The accelerated ageing of the population in the context of the financial crisis, unemployment

and job insecurity modified the financial behaviour of some households, especially of the

elderly, whose incomes were affected by inflation and the government's recent austerity

measures.

Based on the data from the fourth trimester of 2010 collected within the Households Budget

Survey developed by the Romanian National Institute of Statistics, we aimed at identifying

the perceptions of the elderly households with regard to their resources for coping with

current consumption, the solutions taken into account, the role of the family and the solidarity

relations in the community.

A logistic regression model was built with the purpose to estimating the odds that an elderly

household manages to save under the current austere economic conditions and taking into

account the Romanian pattern of parents helping their children at any age. The model clarified

certain aspects regarding the influence of household type, income per person and the number

of unemployed living in the household.

Key words: ageing, elderly households, financial behaviour, saving

JEL Code: J14, J31

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Introduction

According to the official statistics in 2010 in Romania approximately 21.1% of the population was living at risk of poverty¹. This is a real progress in terms of dynamics and in European context, because three years earlier (in 2007), in the ranking of the European Union, Romania was on the last place with an average poverty threshold of 24.8%.

Simultaneously, one shouldn't forget the fact that in Romania demographic ageing is increasingly more accentuated starting with the 1990s. The weight of the elderly population (65 years and more) grew from 10.3% in 1990 to 15.0% in 2010. As a consequence, the demographic dependency ratio of the elderly increased from 158 elder to 1000 adults (15-64 years) in 1990, to 214 elder to 1000 adults in 2010. In 2010, there were 8,998,300 active persons registered in Romania who were supporting 5,675,000 pensioners², thus more than 2 active persons for 1 pensioner. This situation became possible because of the various schemes for early retirement that entered into force in the beginning of the '90s. These evolutions impose increasingly more pressure on the active adults, particularly with respect to the social security budget (Mihaescu, C. et al. 2010).

In this demo-socio-economic context, to which we add the social implications of the global financial crisis and governmental austerity measures, it is raised the question whether certain population categories, especially the elderly, are faced with insufficient resources for leading an adequate life and what kind of financial behaviour they have, given the traditional pattern of Romanian parents to support their children (at any age).

1 Data used

The analysis is based on the data base from the Household Budget Survey held in Romania in the forth trimester of 2010. It mainly focuses on the answers given to section 12 of the questionnaire, "The satisfaction level of the households regarding consumption relative to income". The sample of the HBS is representative at national level and it is composed of 9320 permanent households, divided in independent monthly subsamples of 3210 permanent households.

The term of elderly household is used in the sense that the head is a person aged 65 years or more. We are aware of the fact that this approach doesn't take into account the

¹ The share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers) EUROSTAT.

² The TEMPO-ON LINE data base, National Institute of Statistics, AMIGO Survey, time series 1996-2008

population aged 65 years or more living in households whose heads are less than 65 years, but these are the recording principles of the survey methodology.

2 Results

In Romania, 43.4% of the households have insufficient monthly incomes for an adequate life. The households in this category are from all age groups. In our database, elderly households are 38.4% of the total, out of which 96.1% are households where the head is a pensioner.

The percentage of the elderly households that have difficulties in coping with current consumption vary across development *regions*. Contrary to our expectations, the biggest weights of households in critical situation are in the most economically developed regions of the country: North-West, West, Centre and the region of the capital, Bucharest/Ilfov. In fact, even though the elderly households in these regions have higher disposable incomes than the pensioners from the poorer regions, they face more difficulties in covering their expenses because of the higher cost of living from their residence regions.

The resources of the households in the rural area comprise, to a high extent, own consumption, therefore, their consumption expenses are, on average, smaller than in the *urban area*. As everywhere in the world, if the living conditions favour own consumption, the respective households are less pessimistic regarding subjective poverty because they have extra flexibility in managing their budget (Attias-Donfut, C. et al., 2005).

The households are unable to cope with certain types of expenditure that vary very little across *household head age* (Motel-Klingebiel, A. et al., 2005). Basically, the problems are almost the same for all age groups (Ogg, J., & Renaut, S., 2006). The most problematic are expenses with adequate food, followed by housing expenditure (electricity, gas, water etc.), as well as expenses for communications and media (radio-TV subscriptions, telephones) and, on the last place, rent.

A particularity of Romanian households is that most of them own the dwelling they live in. The locative legislation from the beginning of the 1990s gave people the opportunity to buy the dwellings owned by the state.

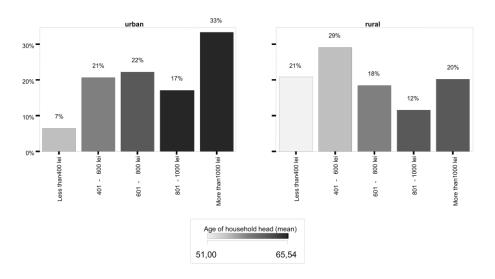
The households that are not able to ensure themselves their current consumption frequently ask for various *financial aids* (Billari, F. C., 2004). The differences between the solutions to which elderly households in critical situation resort to and the ones to which young and adult households in the same situation resort to are statistically different for a probability of 99%. The resource deficit of the elderly households is covered through their

own savings (30%) or aids from family and friends (approximately 60%), refundable or non-refundable. However, we must not forget that in Romania the poverty rate of pensioners (12.8%) is lower than the national average rate. In 2008 the pensions contributed to the reduction of poverty for one in five Romanians³. The elderly and persons aged 50-64 years managed to keep themselves out of the poverty area due to social financial benefits.

On the other hand, the young and adult households that are in a critical situation ask, to a higher extent (34%), for loans from friends, parents and other persons. Among these households, 23.5% resort to own savings and 19.2% to an extra job. Non-refundable aids are important for young and adult households as well, but only at a rate of 23% of total aids.

The analysis of the consumption expenditure shows an indirect relationship between the household age and the monthly net income of the household, necessary for balancing consumption (Kendall's tau_b=-0.319 is statistically significant for a probability of 99%) (Figure 1).

Figure 1. Correlation between the age of the household head and the minimum necessary amount to cover current expenditure in rural and urban areas



1 Euro=4.2 lei

Also, the net income necessary for covering monthly consumption depends on the **residence area.** Rural households estimate that the necessary amount for their monthly consumption is 600 lei, while this amount would cover only 30% of the consumption of urban

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³Institutul Naţional de Statistica, "Tendinţe sociale – 2009", INS, 2009 (The National Institute of Statistics, « Social Tendencies – 2009», 2009), pg. 118.

households. We should mention that the minimum gross salary in 2010 was 700 lei (approximately 167 euros).

The main explanations for such a situation are:

- own consumption in rural area reaches 31.95% of the consumption expenses, while in urban areas is only 6.2%
- the higher percentage of elderly households in rural areas compared to the urban one (47.5%, respectively 29.3%), where the cost of living is very elevated (the purchasing power of the same pension is much bigger in rural areas than in urban ones)
- the average number in an elderly household (1.79 persons per household) is much smaller than the one in young or adult household (2.66 persons per household) (the difference is statistically significant).

The data base also allowed us to process *non-reimbursable transfers by age of household head*. These are financial aids that reflect the solidarity between generations (Daatland, S. O., Herlofson, K., 2003). The most generous are persons aged 50-60 years and more, as donors, while the beneficiaries of these aids are especially young people up to 30 years. They are part of households that need funding for education, housing, food and other specific for the beginning of a new life cycle (Finch, J., & Mason, J. 1990).

In the urban area the young households receive much bigger financial aids than the ones in the rural area, where the situation is different because the adult household (household age 30-39 years) receive the bigger non-reimbursable amounts (Figure 2)..

urban rural Mean sent amounts to parents and 50 other persons (lei) 40 30 20 10 40-49 50-59 60-69 80 less 40-49 50-59 less years than Household_head_age_group years Household_head_age_group 30 years and more30 years and more

Figure 2. Amounts sent to family and other persons

^{* 1} Euro=4.2 lei

The model of aids offered either to parents, children or other relatives shows that the households that send aids are mostly those whose heads are aged between 50 and 70 years. The difference between residence areas is only with regard to transferred amounts.

Given these results, the authors intended to build a binomial logistic regression model in order to determine the probability that a elderly household could save, in the context of the traditional pattern of Romanian parents to support their children (at any age).

3 Logistic regression model

We intend to estimate the odds that an elderly household has saving behaviour with the help of a binomial logistic regression.

The dichotomic dependent variable is "the household has saving behaviour" with possible answers 0 – the household does not have saving behaviour and 1 – the household has saving behaviour. The independent variables of the model are the type of household (categorical variable), income per person (numerical variable) and number of unemployed living in the household (numerical variable).

The categorical independent variable included in the model and the associated codes are presented in Table 1 and the reference category is the one shaded in grey.

Table 1. Coding of the independent categorical variable

			Parameter coding		
		Frequency	(1)	(2)	(3)
Type of the household	1 person aged 65 years or more	1390	1,000	,000	,000
	2 persons aged 65 years or more	715	,000	1,000	,000
	1 person aged 65 years or more and other persons	730	,000	,000	1,000
	2 persons aged 65 years or more and other persons	166	,000	,000	,000

3.1. Interpretation of the logistic regression coefficients

Table 2 presents the coefficients of the logistic regression and the odds that the event takes place, to be more precise, that the elderly household manages to save.

The independent variable *Household net income per person* has a direct influence, a 100 lei increase in the income causing the odds to increase by 10% (controlling for all other variables).

Tabelul 2. The coefficients of the logistic regression model

	-	В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Type of household			27,143	3	,000	
	1 person 65+ years	-,561	,203	7,647	1	,006	,570
	2 persons 65+ years	-,063	,216	,085	1	,771	,939
	1 person 65+ years and other persons	-,222	,209	1,124	1	,289	,801
	Income per person	,001	,000	19,510	1	,000	1,001
	Number of unemployed living in the household	-,454	,185	6,022	1	,014	,635
	Constant	1,022	,210	23,769	1	,000	2,779

a. Variable(s) entered on step 1: TipG, Income_pers, p_s.

The independent variable *Number of unemployed living in the household* has an inverse influence. If an unemployed person lives in the household, the odds that it saves decrease by 36.5%.

The *Type of the household* has a strong impact. The households of an elderly living alone stand out due to the difficulties they face in coping with every day expenses, since their income is not cumulated with anyone else's. These vulnerable households have 40% less odds to save as compared to the reference group.

The variables residence area, development region, education level and gender have no significant influence on the propensity to save.

Conclusion

The proportion of the Romanian households that are below the poverty threshold has slightly decreased during 2005-2008 due to a general increase in the disposable incomes of the population. After this period of economic growth, Romania was strongly affected by the global financial crisis and currently is still among the poorest countries in the European Union.

As a consequence, the standard of living of the households was relatively low in 2010, since 43% of all households appreciated that they are in the critical situation of not being able to cope with current consumption expenses. This situation is the same for all age groups.

The elderly households (65 years and more) from the most developed regions of the country perceive themselves as most affected. This situation is explained by two factors. On the one hand, the **cost of living** is higher in these regions. On the other hand, in the least developed regions, where the weight of the rural population is bigger, **own consumption** is possible and frequent, representing a significant proportion of the current consumption of a household.

The data base allowed us to process non-reimbursable transfers according to the age of the household head. We refer to financial aids that reflect the solidarity between generations. The most generous are the persons aged 50-60 years and more, as donors, while the beneficiaries of these aids are especially young people aged up to 30 years. They are part of households that need funding for education, housing, food and other specific for the beginning of a new life cycle.

We built a binomial logistic regression model with the purpose to determining the odds that an elderly household manages to save under the current austere economic conditions and taking into account the Romanian pattern of parents helping their children at any age.

The model clarified certain aspects regarding the influence of household type, income per person and the number of unemployed living in the household. The households that have the highest odds to save are those composed from two elderly and other persons, with no unemployed members and high incomes, while an elderly person living alone or households with one elderly and other members have greater difficulties, further increased by the presence of an unemployed in the household.

The results obtained underline the living arrangements in Romania, where multigenerational households may still be found in many parts of the country. This is mainly due to the decreasing in living standards caused by the diminished incomes in the context of the current economic crisis.

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