ROMANIAN ELDERLY HOUSEHOLDS*: STATE’S OR FAMILY’S CONCERN?

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Abstract

On the short and medium term, the already high pressure imposed by a growing proportion of elderly in the population will be further augmented by the effects of the financial and economic crisis. In this context, the question regarding the financing and care of elderly persons, most exposed to the risk of poverty, is raised.

Based on the data resulted from the Households Budget Survey developed by the National Institute of Statistics in the second trimester of 2010 in Romania, the authors aimed at identifying the perceptions of the elderly households with regard to their financial resources for coping with current consumption, the solutions taken into account, the role of the family and the solidarity relations in the community**.

Key words: demographic ageig, elderly household, current consumption, income, solidarity relations

During the past two decades, the economic, social and financial systems of the developed countries, especially those of the European Union, have been suffering from numerous disequilibria generated by the deepening of the demographic ageing process.

In Romania, the evolutions of natality caused an unprecedented acceleration of the demographic ageing process. The weight of the elderly (65

* The term ‘elderly household’ as used in the present paper represents a household whose head is the person with the highest income and aged 65 year or more

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years and more) in the total population grew from 8.3% in 1968 to 10.3% in 1990 and to almost 15% in 2009 and it is expected to reach 20% in 2032. As a consequence, the demographic dependency ratio of the elderly is also increasing, from 158 elder to 1000 adults (15-64 years) in 1990, to 213 elder to 1000 adults in 2009 and it is possible to grow approximately 2.4 times by 2032. The entrance of the Romanian baby-boomers in the age group of 65 years and more will increase the demographic dependency ratio to 550 elderly to 1000 adults.

The pressure exerted by the elderly segment expressed by the demographic dependency ratio gives a first picture of the consequences of the demographic ageing process. More relevant for the real resources created in the economy is the ratio between the number of pensioners and the active, respectively the employed population. Thus, in 2008 there were 9,945,000 active persons registered in Romania who were supporting 5,685,000 pensioners*, thus almost 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.

The implications of these demographic evolutions are complex and they can be felt both at macroeconomic (growth, function of pension and health systems, savings, investments etc.) and at microeconomic levels, especially at household level (individuals adapt their behaviours according to the general economic environment and the reality according to which they live longer).

The austerity measures taken during the last year have a strong negative effect on the living standard of most of the population. As a consequence, the financial behaviour of the households suffered important changes in all its components, respectively saving, borrowing and wealth accumulation (be it financial or non-financial).

Before the crisis and in the context of the expansion of consumer credits, easily offered by banks, the indebtedness of the population grew sharply. The effects of the economic recession, especially visible in the decrease of employment and increase of unemployment, to which the measures for reducing the budgetary deficit by decreasing the salaries in the budgetary sector with 25% were added, caused important changes in the consumption and financial behaviour of the households.

According to the theory of life cycle (Modigliani and Brumberg, 1954), the financial behaviour is different for both the youth and the elderly compared to maturity and the theory of permanent income (M. Friedman, 1975) states that, for certain conjunctures, the active population may be stimulated

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to increase their caution savings in order to compensate for a possible relative decrease of the future benefits after retirement.

In Romania the elderly households prefer to save in bank deposits, while the young and adult ones opt to a higher extent for private pension funds, deposits and life and health insurances. The placed amounts are relatively small, almost half of the households having deposits up to 5000 lei, which means that the Romanian population still has a traditionalist financial behaviour. This is mainly the consequence of the severe decrease in incomes from the last two years, but also for various other reasons, such as distrust in other financial institutions than banks since the bankruptcy of some non-financial institutions in the 1990.

The accelerated ageing of the population in the context of the financial crisis, unemployment and job insecurity accentuates the vulnerability of some households. The poverty risk is to a higher extent elevated for young and elderly households, especially for old people living alone. The statistics on poverty indicate that 30% of the old people (65 years and more) living alone do not have enough resources to lead an adequate life.

According to the official statistics in 2008 in Romania approximately 18.2% of the population was living below the poverty threshold*, defined as 60% of the median of the population’s standard of living**. 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. Despite this favourable evolution, Romania remains among the poorest countries in the European Union. Also, it is worth mentioning that in 2008 the effects of the financial crisis were not as visible as in 2009 and 2010.

As a consequence, a variable like the saving rate may be significantly influenced by a structural demographic variable, independent from the economic activity. In other words, whether the population as a whole is a debtor or a creditor of the economy is influenced by the age structure of the population. Obviously, the saving rate is influenced by other factors as well,

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* It is considered that a person is living below the poverty threshold if the level of their disposable income is lower than a poverty threshold. In Romania, according to the EUROSTAT model, the LAEKEN indicators of poverty are computed, called indicators of “poverty risk”. They are estimated through the relative method, based on the equivalised disposable income of the households compared to a threshold fixed at 60% of the median of the population’s disposable income.

** The standard of living is equal to the disposable income of the household divided by the number of consumption units. Thus, the standard of living is the same for all the individuals in a household. The consumption units are usually computed with the help of the modified OECD equivalence scheme: an equivalence coefficient of 1 is attributed to the first adult in the household, 0.5 to all other adults and 0.3 to each child under 14 years.
such as income, inflation rate, economic growth, interest rate etc. For this reason, together with other economic and social factors, the acceleration of the demographic ageing process requires an increase in savings.

In this demo-socio-economic context, to which we add the social implications of the global financial crisis, it is raised the question whether certain population categories, especially the elderly, are faced with insufficient resources for leading an adequate life.

Based on the data resulted from the Households Budget Survey (HBS) developed by the National Institute of Statistics in the second trimester of 2010 in Romania, the authors aimed at identifying the perceptions of the elderly households with regard to their financial resources for coping with current consumption, the solutions taken into account, the role of the family and the solidarity relations in the community.

The sample of the survey comprises 9360 permanent households, distributed in sub samples of 3120 permanent households per month. The total answer rate for the wave used in our analysis was 83.9%.

The results obtained with regard to the questions raised by the present paper are focused on the perception of the elderly households with regard to their financial resources for coping with current consumption, followed by a presentation of the solutions they take into account. Further, we present our results with regard to the influence of the income structure of the elderly households on their possibility to cope with current consumption and the amounts they estimate would suffice them for living an adequate life. As an expression of the role of the family and the solidarity relations in the community, we made an analysis of the intergenerational transfers.

We considered useful to present some aspects with regard to intentions of saving for private pensions, since they mostly concern today’s adult and young population. The main reason why we chose to present this analysis is that today’s adults are tomorrow’s elderly, while today’s young persons are tomorrow’s adults. Given the current structure of the population, the exit from the labour market of the adult population today, which will start to have most visible effects after 2032, when the baby-boom generations retire, will generate enormous pressure on the social security budget. On top of this, the generations born after 1989, less numerous, are already entering the labour market and they will be the ones contributing to the state budget after 2032. In this context, we believe it is extremely important to see how young and, especially adult generations intend to ensure their living after retirement.

In the end of this section we built a binomial regression model in order to estimate the odds that an elderly household is in the critical situation of not being able to cope with current consumption.
Elderly households’ perceptions regarding their financial resources for coping with current consumption

In the 2nd trimester of 2010, 44.4% of the Romanian households perceived themselves in the situation of not being able to cope with current expenditure. The failure to provide daily living does not have uniform effects on all household categories. By age of the household head, the most affected are adult households. The elderly households (the age of the household head is 65 years or more) are not as affected, both due to the stability of the social benefits (pension and other social support entitlements) and because of the specific consumption of this age group. However, 43.2% of them declared that they are not able to cope with current consumption from their incomes (Graph 1).

**Percentage of elderly households unable to cope with current expenditure by age groups**

Because of insufficient financial resources at their disposal, the biggest problems of the households that cannot cope with current expenses are ensuring sufficient **food** (83%) and **home maintenance** – heat, gas, water etc. – (31%). The elderly households do not have problems with paying the rent, most of them being the owners of 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 Romanian model is characterized by the high propensity to buy the dwelling, this option giving the individual the maximum safety and security of living (Graph 2).
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 (Branco R. M. C et al. 2005).

The households that are not able to ensure themselves their current consumption frequently ask for various financial aids. The resource deficit of...
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the elderly households is covered through their own savings (19%) or aids from family and friends (approximately 35%), refundable or non-refundable (Graph 3). However, we mustn’t 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 Romanians*. The elderly and persons aged 50-64 years managed to keep themselves out of the poverty area due to social financial benefits.

**Comparative analysis between elderly households that are able to cope with current consumption and those who are not**

The average age of elderly households that are in the critical situation of not being able to cope with current consumption is 74.5 years. The number of persons living in such a household is, on average 1.71 and the income per person, 573.6 lei. On the other hand, the elderly households that manage to cover their current consumption are, on average, younger (70.04 years), with more numerous members (1.98 persons) and have higher incomes (761.3 lei per person). All the differences are statistically significant for a probability of 99.99%.

The influence of the education level of the household head on the household’s possibility to cope with current consumption is suggestively presented in Graph 4 below. As expected, education level has a direct influence on the household’s possibility to cope with current consumption. Thus, almost three quarters of the households whose heads have graduated up to 8 grades are in the critical situation of not being able to cover their current consumption. The weight is much smaller for high school and complementary education graduates, only one fifth of them being in a critical situation. For post secondary and higher education only about 2 households out of 100 are in the risk group.

Possibility to cope with current consumption by education level of the household head

The average structure of the incomes of the elderly households shows that incomes from social benefits have the most important weight in total incomes of elderly households. In 2009, the average pension from state social insurance was 711 lei*. We notice that for the household in the critical situation of being unable to cope with current consumption, the weight of income from social benefits is bigger than for other households, incomes from salaries are smaller and they resort to a greater extent to non-reimbursable financial aids from relatives and friends.

Structure of elderly households’ income, by their possibility to cope with current expenses

* Ministry of Labour, Family and Social Protection
On the other hand, in the case of the households outside the risk group, although the weight of social insurance is also big, the weight of salary income is almost double. Also, the households not in the risk group have more incomes from agriculture and resort less to aids from relatives or friends (Graph 5).

The gap between the net income and the income considered necessary for coping with current expenses

We intended to quantify the gap between the total net income of elderly households and the income they consider necessary for covering current expenses. We observed that the higher the net income, respectively the average net income per person, the bigger the amount perceived as necessary for coping with current consumption (Graph 6). This may be explained by the fact that households are used to certain standards of living, according to their income. If the income is higher, the goods and services used by the households are more various, their quality is better, and it is harder for the person or the household to get used to lower levels of quality or less various range of goods and services.

Based on a One-Way ANOVA, we estimated that the gaps between the net and the average income per household, computed by groups of necessary income, are statistically significant for a probability of 99.99%. Tuckey’s Post
Hoc test for comparing the means of the net average income of the households clearly shows a 700 lei gap between the net income and the estimated one.

**Intergenerational transfers**

In Romania, as in the entire EU, the financial crisis, combined with the employment and social protection crises, have revived family solidarity and transfers outside the households between relatives, more or less remote. Intergenerational transfers are various in nature and vary according to the different life stages or the needs of the beneficiaries. But the expression of family solidarity also depends on the resources and norms of each social environment.

The data base allowed us to process transfers by age of household head and residence area. These are financial aids that reflect the solidarity between generations. The analysis showed the way the Romanian population benefits from and contributes to intergenerational transfers (Graphs 7 and 8).

**Amounts received from persons outside the household, by residence area**

Graph 7

At young ages, mainly up to 30 years, households benefit from transfers, coming from their parents and, when possible, even grandparents. They are part of households that need funding for education, housing, food and other specific needs for the beginning of their life cycle. Urban young households seem to need aids with a higher value (more than 250 lei) compared to rural ones (about 150 lei), which might be explained by the fact that in urban areas own consumption has a small weight in total consumption. Also, urban areas are more economically developed therefore the living costs are higher (Graph 7).

The value of financial aids decreases after 30 years in both residence areas. However, for urban households the decrease is steeper. A possible...
explanation is that after 30 years most young persons have finished their studies, they have jobs and are able to support themselves with the money they earn. In the case of rural households, there are fewer jobs available in these areas and the salaries are smaller. Also, in rural areas young families have more children and earlier than in the urban area, thus they need help from their relatives to a higher extent than urban households.

The amounts received further decrease with the increase of age, while the amounts sent increase. This evolution is explainable, since adult and elderly households are the main donors of the intergenerational transfers. We notice a small increase in the received amounts for the 50-59 years age group in the urban area, which is corroborated with an increase in the amounts sent by the 70-79 years age group and the big amounts received by young households. A possible explanation for this situation is the difference in age between the age groups. Elderly households send some of their savings to adult households (most probably to their children), who, in their turn, send financial aids to their children (the young households).

A similar explanation may be given for the rural area, the difference being that the gap between the adult and the elderly generation is smaller, due to the early fertility of rural families in the post-war period. Thus, elderly households (60-69 years) send aids to their children (40-49 years), who, in their turn, transfer aids to their own children (up to 30 years).

**Graph 8**

*1 Euro=4.3 lei*
The intergenerational financial transfers are not one-way only. To a lesser extent, young households also help adult and/or elderly households. Up to 30 years, their contributions are small, mostly coming from working students or young couples, usually married, where both partners work. As they manage to settle down and gain financial independence, the amounts sent to relatives and other persons increase. However, their evolution is quite different for households whose heads are aged 30-39 years in urban and rural areas, but it converges for the 40-49 years age group (Graph 8).

**Intentions of saving for private pension**

The Romanian demographic evolutions of the last two decades are convergent with those in the EU countries and their main results are the numeric decline of the population and accelerated demographic aging. In this context we may also point out a positive evolution – the increase of the life expectancy in Romania as well, from 69.7 years in 1990 to 72 years in 2009.

Perceptions of the changes regarding the longevity determined the adult generations to be more preoccupied than in other times in finding some solutions to preserve the standard of living they enjoyed during their active life, i.e. to ensure themselves a decent income after retirement (the theory of the permanent income – Friedman, 1957).

The intentions expressed by the heads of the households from adult generations over 45 years show the values and attitudes “polished” in two periods that are one the opposite of the other from the point of view of social policies and pension systems, i.e. the former communist regime and the current democracy. Currently, the respondents don’t feel as safe and don’t have as much confidence in the traditional pension system and believe they need to save in order to ensure themselves a decent living at old age. They prefer to place their own savings in banks, which they trust the most due to the deposits’ minimum guarantee level (Graph 9).

The distinct financial problems that the big insurance companies (with branches in Romania) had during the peak period of the crisis, as well as the low financial education of the Romanians are only two of the reasons because of which the confidence in private life and health insurances is still very low.
The relatively high weight of those who have or intend to save through products like private pensions is due to the legislation in force regarding the compulsoriness of the second pillar for pensions for all persons aged up to 35 full years on the 31st of December 2007.

**Logistic regression model**

With the help of a binomial logistic regression model, we aimed at estimating the odds that an elderly household is able to cope with current consumption.

The dichotomous dependent variable is “the household can cope with expenditure” with answer variants:

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<th>0 NO</th>
<th>1 YES</th>
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<td>the household cannot cope with expenditure</td>
<td>the household can cope with expenditure</td>
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The model contains three categorical variables: Type of household (1 person, 2 elderly persons, 2 elderly persons with children aged less than 18 years, Other type); Education level (less than 8 classes, highschool or complementary education, post-secondary, higher education, post-university and PhD). For the categorical independent variables, the variants associated with the highest code were considered as reference categories.

The validation of the logistic regression model was made with the help of the Hosmer and Lemeshow test. Wald’s $\chi^2$ test shows that all the coefficients of the model are statistically significant for a probability of at least 95%.

**Interpretation of the logistic regression coefficients**

The independent variable *Education level*. The reference category is the highest education level (higher, post-university and Ph.D.). Even though not all coefficients associated to this categorical variable are statistically significant (the significance level of Wald’s $\chi^2$ does not only have values smaller than 0.05), this variable was kept in the model because it has influence on the dependent variable. The negative values of the coefficients for lower education levels show that the odds for elderly households to be able to cope with current consumption are significantly smaller.

The independent variable *Gender*. The reference category is male. The odds that a household with a female head can cope with current consumption are about 40% smaller.

The independent variable *Net income of the household* has a direct influence on the dependent variable. Thus, a 100 monetary units (100 lei) increase in the net income of the household, causes the odds that the respective household is able to cope with current consumption to increase by 10% (when controlled for all other variables).

The independent variable *Household type* has a strong influence. If the household has only one or two persons aged 65 years or more then the odds that they can cope with current consumption are bigger than in the case of households that also have children (up to 18 years) or other persons. The reality in Romania is that there are households where the elderly are considered household heads because the adults have smaller incomes than the pensions of the elderly.

**Concluding remarks**

The strong interconnection between economy and demography brings to surface the need for coherent social and demographic policies, along with
economic ones, at national level. These should focus not only on social and economic development, but on redressing the current age structure of the population as well.

On the short and medium term, the already high pressure imposed by a growing proportion of elderly in the population will be further augmented by the effects of the financial and economic crisis. In this context, the question regarding the financing and care of elderly persons, most exposed to the risk of poverty, is raised.

In 2010 in Romania the main financial stream of intergenerational transfers was from elderly to adults and young households. In the same time, a large proportion of elderly households have problems in ensuring themselves adequate food and house maintenance with the incomes they have. Most of them resort to aids (reimbursable or not) from relatives and friends in order to cope with current expenditure.

This places a part of the financial burden on the shoulders of family and friends, who, as such, contribute twice to the wellbeing of the elder relative or friend: firstly by contributing to the social insurances system, and secondly, by providing the elderly with money, care and sometimes even housing.

The main source of income for all elderly households in Romania is the social benefits from the state. This imposes a huge pressure on the adults, as well as on the state budget. Although the households that manage to deal with current consumption also have a great proportion of social benefits in the structure of their incomes, they supplement it with salary incomes and avoid resorting to aids.

Our analysis showed that amounts estimated as necessary for coping with monthly expenses increase along with the increase of the total net income of the household and the 700 lei gap between the two amounts is statistically significant.

Influenced by the current situation and somehow constrained by state regulations, adult and young Romanians started to save through private pensions in order to ensure themselves some income after retirement. However, the weight of the population who takes such measures is still low, also because of the lack of appropriate financial education.

With the help of a regression model, we estimated the odds that an elderly household is not in the critical situation of being unable to cope with current consumption. It resulted that the least exposed to such a risk are the elderly households whose head is a male, that comprise only one or two pensioners with high education level and high incomes.

To conclude, the task of taking care of the elderly is unequally distributed between the state and the family. If in Romania the social problems
resulted from demographic ageing are not tackled with properly, the pressure of the unfavourable dependency ratio will raise significant problems for the state budget. Currently, the state is the most important source of income for the elderly, while relatives and friends are rather concerned with their care and their emotional comfort.

Bibliography

- www.ined.fr
- www.insse.ro
- Ministry of Labour, Family and Social Protection