

Consumer Protection and Financial Literacy Program
Europe and Central Asia Region

Comprehensive Report Prepared For The World Bank

Analysis of the Financial Literacy Survey in Romania and Recommendations

Sociologist: Manuela Sofia Stănculescu

Institute for the Study of the Quality of Life

Calea 13 Septembrie No. 13

76154 BUCHAREST

Telephone: 40-1-4114808

Bucharest

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The findings and interpretation expressed in this paper are those of the author, and do not necessarily represent the views of the World Bank.

INTRODUCTION

This final report includes the analysis of the baseline survey on Financial Literacy in Romania.

The survey is the follow-up of the Diagnostic Review on Consumer Protection and Financial Literacy conducted by the World Bank in 2008-2009. The Diagnostic Review in Romania was the fourth in a World Bank-sponsored pilot program to assess consumer protection and financial literacy in developing and middle-income countries.¹ The objectives of this Review were three-fold to: (1) refine a set of good practices for assessing consumer protection and financial literacy, including financial literacy; (2) conduct a review of the existing rules and practices in Romania compared to the good practices; and (3) provide recommendations on ways to improve consumer protection and financial literacy in Romania. The Diagnostic Review was prepared at the request of the National Authority for Consumers' Protection (ANPC), whose request was endorsed by the Ministry of Economy and Finance. Support was provided by the National Bank of Romania (BNR), which supervises banks and non-bank credit institutions. Further assistance was given by the supervisory commissions for securities (CNVM), insurance (CSA) and private pensions (CSSPP).

The Diagnostic Review found that the basic foundations needed for consumer protection and financial literacy are in place in Romania but they benefit from further strengthening support. The Review proposes improvements in six areas: consumer awareness, information and disclosure for consumers, professional competence, dispute resolution, financial education and financial literacy surveys.

Consequently, in 2010 the World Bank commissioned a nation-wide survey of the levels of financial literacy. A consultant (sociologist Manuela Sofia Stanculescu) developed the survey methodology (sampling methodology and questionnaire) in line with the *Financial Literacy Survey in Russia* (the World Bank, 2008) and the baseline survey *Financial Capability in the UK* (Financial Services Authority, 2005).² The final form of the questionnaire was agreed with representatives of the National Bank of Romania (BNR), the Romanian Banking Institute (IBR), the National Authority for Consumers' Protection (ANPC), and the Financial Companies Association in Romania (ALB). The Institute for World Economy (Romanian Academy) collected the data in May 2010.

The main objective of this work is the establishment (and later the evaluation) of a well targeted national program of financial education.

¹ Other reviews of consumer protection and financial literacy have been prepared (in chronological order) for the Czech Republic, Slovakia, Azerbaijan, Croatia, the Russian Federation, Lithuania and Bulgaria. The set of published reviews can be downloaded at www.worldbank.org/eca/consumerprotection.

² Prepared by the Personal Finance Research Centre at Bristol University and BMRB.

1 EXECUTIVE SUMMARY

The analysis presented below is based on the Financial Literacy Survey. Data collection was conducted by the Institute for World Economy (Romanian Academy) in May 2010.

Section 1 presents data and methods, with a special emphasis on the **conceptual** underpinning of the analysis. The report uses three concepts: (a) financial literacy, (b) financial education and (c) financial capability. The three concepts are related, but they are not similar. The concepts of financial literacy and financial education are narrower as they focus more on knowledge and skills and lack the behavioural element of financial capability (Dixon, 2006 apud O'Donell, 2009). Financial literacy is used for describing (and analyzing) the level of knowledge and understanding of financial issues of a population, whereas financial education relates to educational programmes offered (in or outside school) for increasing the level of financial literacy.

Section 2 of this report puts forward a **typology** of financial literacy in Romania, built in line with the conceptual model of financial capability (Kempson et al, 2005) presented in section 1.1. Unlike in the UK, however, an overall index of financial literacy was developed. This financial literacy index (FLI) allows us to group the population in four types sharing similar levels of financial capability across the four domains, which will be useful in designing well-targeted programs of financial education.

In the next sections of the report data analysis is organized according to the four domains – money management, provisioning for the future, making financial choices, and staying informed about financial matters - in which financial capability could be observed and measured. The link between financial capability and financial literacy is explored in each domain.

Section 3, **Making Ends Meet**, points out that most population struggle to keep up with their financial commitments and make little use of financial products either to finance deficit or to manage spare money. Informal consumer loans (from shops) and borrowing from relatives and friends are the main instruments used by households in Romania. Spare money is most often kept cash at home.

The main determinants of the capability of making ends meet are household income, individuals' level of financial literacy, education, age and location in urban areas. *Ceteris paribus* the higher the household income/ the financial literacy level/ the attained level of education/ age/ and the location in urban areas, the higher people capability of making ends meet.

Section 4, **Planning Ahead**, concludes that only a half of the population saves spare money and households' savings are rather small. The majority of people who save plan for the unexpected and less save for the long-term. Provision for retirement (additional to the state pensions) is very rare.

Unexpected financial setbacks are quite common mainly caused by redundancies and wage cuts related to the current financial crisis. People make little use of financial products in facing unexpected income drop. Informal consumer loans (from shops) and borrowing from relatives and friends are the main instruments used by households in Romania.

Another relevant domain for financial capability is **making (informed) choices**, analysed in Section 5. The low awareness of consumer rights combined with the low knowledge and confidence in the existing systems of solving disputes over financial transactions and with the low level of financial literacy result in passivity in defending their rights.

Data for Romania provide additional arguments that experience in using financial products plays the most important role regarding capability of making financial choices.

Financial Education Needs, presented in Section 6, shows that for Romania, the level of knowledge and understanding of financial matters at the level of general population is very low. Low level of financial understanding is a common result of all surveys on financial literacy across the world, from United States, to Korea, Japan or Russia. Nonetheless, the level of knowledge and understanding of financial issues in Romania appears lower than in Russia or in the UK.

As a concluding remark, the analysis clearly shows that (1) in Romania, most people are unprepared for the unexpected and (2) increasing financial literacy is a prerequisite of improvement of population capability to make adequate financial provision for the future. People at all income levels should foremost change attitude, learn responsibility for their future and learn to organize their resources in more appropriate ways.

2 DATA AND METHOD

2.1 CONCEPTS

In this report we use three concepts: (a) financial literacy, (b) financial education and (c) financial capability. The three concepts are related, but they are not similar. The concepts of financial literacy and financial education are narrower as they focus more on knowledge and skills and lack the behavioural element of financial capability (Dixon, 2006 apud O'Donell, 2009). Financial literacy is used for describing (and analyzing) the level of knowledge and understanding of financial issues of a population, whereas financial education relates to educational programmes offered (in or outside school) for increasing the level of financial literacy.

Financial literacy refers to 'the ability to make informed judgments and take effective decisions regarding the use and management of money. [...] The financially capable people are able to make informed financial decisions. They are numerate and can budget and manage money effectively. They understand how to manage credit and debt. They are able to assess needs for insurance and protection. They can assess the different risks and returns involved in different saving and investment options. They have an understanding of the wider ethical, social, political and environmental dimensions of finances'.³ (Noctor et al, 1992 apud Kempson et al, 2005)

Financial education 'is the process by which financial consumers/ investors improve their understanding of financial products and concepts and, through information, instruction and/ or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. Where: *information* involve providing consumers with facts, data, and specific knowledge to make them aware of financial opportunities, choices and consequences; *instruction* involves ensuring individuals acquire the skills and ability to understand financial terms and concepts, through the provision of training and guidance; and *advice* involve providing consumers with counsel about generic financial issues and products so that they can make the best use of the financial information and instruction they have received.' (OECD, 2005)

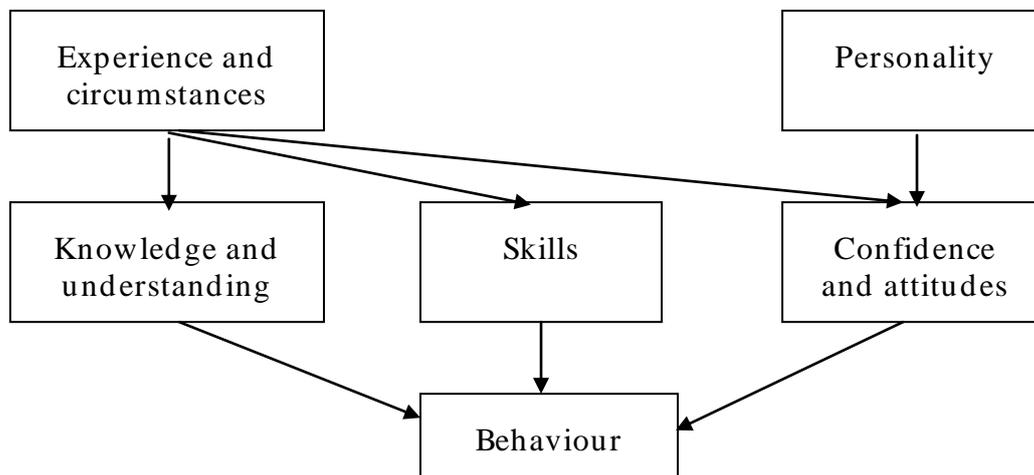
The *Adult Financial Capability Framework*, developed in UK in 2004 by the Basic Skills Agency and the FSA (Kempson et al, 2005) identifies **three broad elements of financial capability**: (1) Financial knowledge and understanding, which allows people to acquire the skills to deal with everyday financial matters and make the right choices for their needs; (2) Financial skills and competence, which allows people to plan, monitor, manage and resolve any financial problems or opportunities both in

³ This definition is widely accepted and in the UK has been built on in the context of personal finance education in schools.

predictable and unexpected situations; (3) Financial responsibility, which enables people to understand and appreciate their rights and responsibilities, to understand the various sources of advice and guidance available and have the right skills and attitudes to plan, analyze, decide, evaluate and monitor financial decisions and choices. The same document specifies **three levels of financial capability**: (i) basic understanding and developing confidence: (ii) developing competence and confidence and (iii) extending competence and confidence.

The concept of financial capability was further developed by the Personal Finance Research Centre at University of Bristol, in 2005, within a complex research commissioned by the Financial Services Authority (FSA). In this conceptual model, financial capability is seen as a relative and not an absolute concept. The conceptual model of financial capability is built around six factors interrelated as shown figure 1.

Figure 1 The conceptual model of financial capability



Source: Kempson et al (2005:2).

The same research showed that financial capability is inextricably linked to the **behaviour in four domains**: (1) managing money; (2) planning ahead; (3) making choices and (4) getting help. Thus, financially capable people are: (1) well organized, keep control over their financial resources, make ends meet resisting pressure to spend or borrow money and budget unexpected expenditure; (2) able to deal with a large fall in income and unexpected events, make provision for long term (save money and plan for retirement), know how and where to seek advice and help; (3) aware, confident and able to choose between the available financial products; (4) able to find and compare information for themselves and know where and when to turn for advice and help from a third party.

Financial capability is shaped and constrained by household's income and by person's life stage (age). Thus, for poor people, financial capability does not extend beyond day-to-day money management and plan for the future is

limited by lack of spare cash. In contrast, for better-off people managing money and planning ahead are not problematic, whereas choosing financial products and staying informed are much more important. In the same time, while the young focus on day-to-day money management, the middle-age persons (particularly those married with children) retain the high emphasize on money management but also stress the need for planning (for pensions in particular), and the older people share a specific generational parsimonious attitude towards money, particularly, the use of credit.

The importance of financial literacy, capability and education has considerably increased in recent years due to the growing diversity and complexity of financial products, the baby boom from the '60s and increased life expectancy, changing pension systems (more of the risk in pension provisioning has shifted from the provider to the worker), and low levels of financial literacy (particularly for less-educated, minorities, and low income groups). (OECD, 2005)

2.2 DATA

The analysis presented below is based on the Financial Literacy Survey. Data collection was conducted by the Institute for World Economy (Romanian Academy) in May 2010.

The sample of the survey is probabilistic, two-stage, stratified, representative at national level with an error of $\pm 3\%$ at a 95% confidence level. The sample is based on two stratification criteria: (i) historical region (8 regions) and (ii) type of locality (7 types depending on the city size, in urban areas, and on the synthetic index of community development,⁴ in the rural ones; see Annex).

Table 1 Sampling method by locality type (%)

| Locality type | Selected from electoral registers | Random route | | |
|---------------------------|-----------------------------------|--------------|----------------------------|------------|
| | | Population | Boost of youth 16-18 years | Total |
| Poor commune | 86,1 | 6,1 | 7,8 | 100 |
| Medium developed commune | 82,3 | 10,6 | 7,1 | 100 |
| Developed commune | 69,0 | 23,7 | 7,3 | 100 |
| Town under 30 thou inh | 87,1 | 7,8 | 5,1 | 100 |
| Town under 30-99 thou inh | 80,6 | 11,0 | 8,4 | 100 |
| City 100-199 thou inh | 81,8 | 10,5 | 7,7 | 100 |
| City 200+ thou inh | 30,8 | 59,8 | 9,3 | 100 |
| Romania | 70,0 | 22,4 | 7,6 | 100 |

Source: Institute for World Economy (2010). (N=2425, which is all applied questionnaires, valid or not).

⁴ Community development index computed by Dumitru Sandu – data and methodology available at: [http:// sites.google.com/ site/ dumitrusandu/](http://sites.google.com/site/dumitrusandu/) .

The sample volume is 2048,⁵ out of which 148 cases represent a boost of persons aged 16, 17 or those had their 18th birthday after November 2009.⁶ Respondents were randomly selected from electoral registers corresponding to 185 voting sections (randomly selected), located in 141 localities (77 communes, 63 towns/ cities and the capital Bucharest).

The overall response rate of the survey is 95.2%.

Table 2 Response rates and quality of the sampling frame by sampling method (%)

| Interview results (RI variable) | Selected from electoral registers | Random route | | |
|---|--|--------------|----------------------------------|--------------|
| | | Population | Boost of youth 16-18 years | Total |
| interview accepted | 86,4 | 79,9 | 80,0 | 84,5 |
| refusal | 2,8 | 8,7 | 5,4 | 4,3 |
| person is not in the locality the entire month | 2,2 | 0,0 | 0,0 | 1,5 |
| person is abroad | 3,4 | 0,6 | 1,1 | 2,6 |
| person could not be contacted after 3 visits | 1,9 | 6,8 | 7,6 | 3,5 |
| person is impossible to be contacted (ex. deceased) | 1,8 | 0,4 | 0,5 | 1,4 |
| dwelling empty, non-occupied, does not exist etc. | 0,7 | 3,3 | 4,3 | 1,6 |
| other situations | 0,9 | 0,4 | 1,1 | 0,8 |
| Total - % | 100,0 | 100,0 | 100,0 | 100,0 |
| Total - N | 1698 | 542 | 185 | 2425 |
| Response rate | 96,9 | 90,2 | 93,7 | 95,2 |

Source: Institute for World Economy (2010). Note: Response rate = valid qq *100/(valid qq + refusal qq).

The sample includes a slight over-representation of men, rural respondents, and elderly particularly due to the boost of young but also to the fact that people left abroad concentrate among the 25-44 age category. Nevertheless, the sample fairly reproduces the structure (by gender, age categories and area of residence) of the country population 16+ years according to the data for 2009 provided by the National Institute for Statistics. Socio-demographic structure of the sample is presented in table 3.

Demographic data and data regarding the use of financial services were collected for all members of respondents' households. In the respondents' households live 5406 persons overall. This extended sample has also a slight over-representation of rural respondents and an under-representation of children (0-14 years) and persons 25-24 years (most probably young people who left abroad with children).

Data used in this report are not weighted.

⁵ Out of 2425 applied questionnaires (selected individuals), 2048 were accepted interviews.

⁶ Because the electoral registers include only persons 18 years or more and, in nearly all Romanian localities, the electoral registers have been updated for the presidential elections from November 2009. One young 16-18 years was selected in each voting section.

Table 3 Socio-demographic structure of the sample, Romania 2010

| | | Total | | Urban | | Rural | |
|-------------------------------|--|-------------|---------------|-------------|--------------|------------|--------------|
| | | Count | Col % | Count | Col % | Count | Col % |
| TOTAL | | 2048 | 100,0% | 1073 | 52,4% | 975 | 47,6% |
| Gender | Male | 1031 | 50,3% | 549 | 26,8% | 482 | 23,5% |
| | Female | 1017 | 49,7% | 524 | 25,6% | 493 | 24,1% |
| Age | 16-24 | 306 | 14,9% | 169 | 8,3% | 137 | 6,7% |
| | 25-34 | 256 | 12,5% | 127 | 6,2% | 129 | 6,3% |
| | 35-44 | 350 | 17,1% | 183 | 8,9% | 167 | 8,2% |
| | 45-54 | 318 | 15,5% | 194 | 9,5% | 124 | 6,1% |
| | 55-64 | 347 | 16,9% | 190 | 9,3% | 157 | 7,7% |
| | 65+ | 471 | 23,0% | 210 | 10,3% | 261 | 12,7% |
| Education | University or higher | 164 | 8,0% | 139 | 6,8% | 25 | 1,2% |
| | College or post-secondary/ technical school | 151 | 7,4% | 116 | 5,7% | 35 | 1,7% |
| | High school | 466 | 22,8% | 310 | 15,1% | 156 | 7,6% |
| | First level of high school or vocational, apprentice/ complementary school | 424 | 20,7% | 203 | 9,9% | 221 | 10,8% |
| | Gymnasium at most | 843 | 41,2% | 305 | 14,9% | 538 | 26,3% |
| Nationality | Romanian | 1834 | 89,6% | 963 | 47,0% | 871 | 42,5% |
| | Hungarian | 137 | 6,7% | 71 | 3,5% | 66 | 3,2% |
| | Roma | 59 | 2,9% | 23 | 1,1% | 36 | 1,8% |
| | Other | 18 | 0,9% | 16 | 0,8% | 2 | 0,1% |
| Historical regions | Moldova | 455 | 22,2% | 193 | 9,4% | 262 | 12,8% |
| | Muntenia | 388 | 18,9% | 156 | 7,6% | 232 | 11,3% |
| | Oltenia | 231 | 11,3% | 106 | 5,2% | 125 | 6,1% |
| | Dobrogea | 90 | 4,4% | 62 | 3,0% | 28 | 1,4% |
| | Transilvania | 424 | 20,7% | 256 | 12,5% | 168 | 8,2% |
| | Crisana Maramures | 211 | 10,3% | 112 | 5,5% | 99 | 4,8% |
| | Banat | 98 | 4,8% | 58 | 2,8% | 40 | 2,0% |
| | Bucuresti Ilfov | 151 | 7,4% | 130 | 6,3% | 21 | 1,0% |

Socio-demographic structure of the sample, Romania 2010 (continuation)

| | | Total | | Urban | | Rural | |
|---|--|-------------|---------------|-------------|--------------|------------|--------------|
| | | Count | Col % | Count | Col % | Count | Col % |
| TOTAL | | 2048 | 100,0% | 1073 | 52,4% | 975 | 47,6% |
| Main occupational status in the present | Employee | 591 | 28,9% | 412 | 20,1% | 179 | 8,7% |
| | Informal employed (<i>daily worker, blackleg etc.</i>) | 117 | 5,7% | 34 | 1,7% | 83 | 4,1% |
| | Employer | 16 | 0,8% | 11 | 0,5% | 5 | 0,2% |
| | Self-employed in non-agricultural activities | 46 | 2,2% | 29 | 1,4% | 17 | 0,8% |
| | Farmer | 125 | 6,1% | 13 | 0,6% | 112 | 5,5% |
| | Unemployed | 98 | 4,8% | 60 | 2,9% | 38 | 1,9% |
| | Retired | 736 | 35,9% | 360 | 17,6% | 376 | 18,4% |
| | Pupil, student | 194 | 9,5% | 119 | 5,8% | 75 | 3,7% |
| | Houseperson | 108 | 5,3% | 28 | 1,4% | 80 | 3,9% |
| | Person unable to work, other inactive | 17 | 0,8% | 7 | 0,3% | 10 | 0,5% |
| Per capita monthly hhd. income quintiles | 1 | 351 | 17,1% | 84 | 4,1% | 267 | 13,0% |
| | 2 | 360 | 17,6% | 126 | 6,2% | 234 | 11,4% |
| | 3 | 367 | 17,9% | 175 | 8,5% | 192 | 9,4% |
| | 4 | 354 | 17,3% | 228 | 11,1% | 126 | 6,2% |
| | 5 | 359 | 17,5% | 280 | 13,7% | 79 | 3,9% |
| | No answer | 257 | 12,5% | 180 | 8,8% | 77 | 3,8% |
| Respondent' monthly income quintiles | 1 | 385 | 18,8% | 169 | 8,3% | 216 | 10,5% |
| | 2 | 331 | 16,2% | 73 | 3,6% | 258 | 12,6% |
| | 3 | 449 | 21,9% | 239 | 11,7% | 210 | 10,3% |
| | 4 | 324 | 15,8% | 191 | 9,3% | 133 | 6,5% |
| | 5 | 398 | 19,4% | 283 | 13,8% | 115 | 5,6% |
| | No answer | 161 | 7,9% | 118 | 5,8% | 43 | 2,1% |

2.3 METHOD

The analysis presented below is based on the data provided by the *Financial Literacy Survey in Romania*, carried out in May 2010.

Section 2 of this report puts forward a typology of financial literacy in Romania, built in line with the conceptual model of financial capability (Kempson et al, 2005) presented in section 1.1. Unlike in the UK, however, an overall index of financial literacy was developed. This financial literacy index (FLI) allows us to group the population in four types sharing similar levels of financial capability across the four domains, which will be useful in designing well-targeted programs of financial education.

In the next sections of the report data analysis is organized according to the four domains – money management, provisioning for the future, making financial choices, and staying informed about financial matters - in which financial capability could be observed and measured. The link between financial capability and financial literacy is explored in each domain.

In this report, we applied two methods to compute the scores (indexes). Most often, factor analysis was used to derive scores (including for the financial literacy index FLI). Factor scores have an average value of zero, with values typically ranging from -3 to +3. The second method refers to the dominant opinion index developed by Hofstede (1980) based on the formula:

$$(P-N) * (T-NR) / T * T,$$

where P – positive answers, N – negative, NR – neutral or non-response, and T – total number of variables.

This type of index varies between -1 (negative attitude) and 1 (positive attitude toward the issue).

For ease of readability all scores were simply rescaled to vary between 0 and 100, based on the formula:

$$100 * (\text{var} - \text{minvar}) / (\text{maxvar} - \text{minvar}).$$

Generally speaking, most of the tables in the report have percentages that add up to 100 per cent. However, in some cases the total may be slightly more or less, because of the way that numbers are rounded.

3 TYPOLOGY OF FINANCIAL LITERACY IN ROMANIA

3.1 DIMENSIONS OF THE TYPOLOGY

Kempson et al (2005) argued that for studying financial capability it is appropriate to develop separate scores for each of the four following domains: (1) managing money; (2) planning ahead; (3) making choices and (4) getting help, and not an overall score. In UK as well as in other well-developed economies with well-established financial systems, most population participates in the financial system (hold at least a bank account) and the majority obtains very similar levels of overall capability. Specifically due to this flat distribution of answers to the questionnaire, the differences between the mass of people who are clustered together are far too small to assess some as capable and others not capable. This is not the case in Romania (Bulgaria and probably other former communist countries), where the financial system developed only after 1990, large rural areas are far away from any provider of financial services/ products, knowledge society is still under-developed, e-literacy is still low, the rural population holds a large share, the general population is far poorer and, consequently, a small part of the population participates in the financial system. In these circumstances, an overall financial literacy is appropriate.

Data for Romania supports this approach. The overall financial literacy index (FLI) is built on four dimensions in line with the UK model of financial capability, namely: (a) knowledge and understanding, (b) skills, (c) attitudes and confidence, and (4) behaviour - participation in the financial system (use of financial services/ products).

The FLI was determined as factor score ⁷ of five scores, which are significantly correlated:

1. Knowledge and understanding financial issues - score obtained to a quiz of eight questions that test applied financial literacy (CSF2-9, see section 6.1); it was computed based on Hofstede's formula;⁸
2. General information – factor score of six questions on how frequently person uses to inform from various mass media sources (P1-3a);
3. Financial information – the share of financial indicators people generally monitor using a large range of sources (ISF1a-g);
4. Trust in financial institutions – score obtained using seven questions regarding trust in financial institutions (T1-7); it was computed based on Hofstede's formula;⁹
5. Participation in the financial system – number of different type of formal¹⁰ financial products people use.

The average FLI score (31 on a scale between 0 and 100) indicates a low level of financial literacy at the level of general population.

The FLI values were grouped in four clusters determined simply by adding/ extracting standard deviation from the mean value (figure 2). In this way we obtain four groups of population, which share similar levels of financial literacy and are significantly different (figure 3). These represent the four types that we will discuss further in this report with respect to money management, forward planning, making choices of financial products and institutions and getting help and advice when necessary.

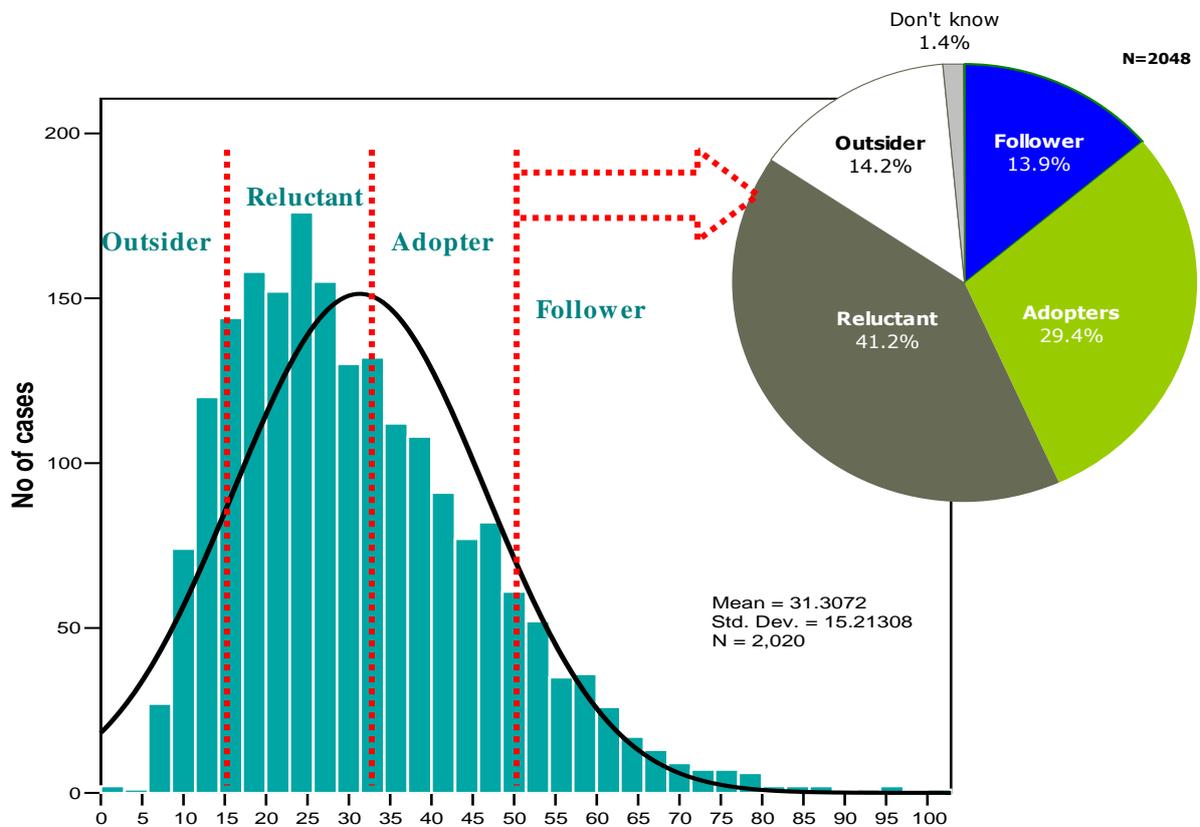
⁷ Total variance explained 42.2%, KMO=0.74 (p=.000).

⁸ The group of variables was tested with a factor analysis (one factor was extracted) but due to the large number of missing values we chose to apply the Hofstede formula, which uses also missing values. The index varied between -76.56 to +100 and it was rescaled to vary between 0 and 100. People who did not know to answer any of the eight questions obtained value zero, which was kept as such after rescaling.

⁹ The group of variables was tested with a factor analysis (one factor was extracted) but due to the large number of missing values we chose to apply the Hofstede formula, which uses also missing values. The index varied between -100 to +100 and it was rescaled to vary between 0 and 100. People who did not know any of the seven types of financial institutions obtained value zero, which was kept as such after rescaling.

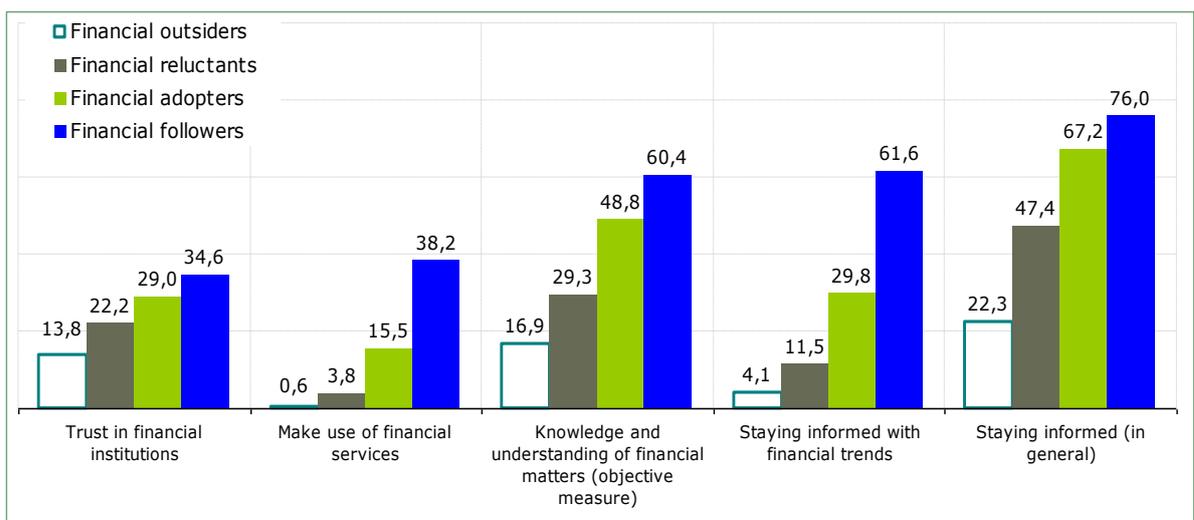
¹⁰ Borrowing from users, from relatives and friends, or from shops are not counted. See also section 5.2.3.

Figure 2 Financial Literacy Index (FLI) in Romania and the financial literacy types



Data: *Financial Literacy Survey in Romania* (May 2010).

Figure 3 Average scores of the financial literacy types for each dimension



Data: *Financial Literacy Survey in Romania* (May 2010). Note: All indexes vary between 0 and 100. N=2020 (for 28 cases the types could not be determined due to insufficient data). National average scores are the following: general information – 53.7, financial information – 22.9, knowledge– 37.7, use of financial services – 11.7 and trust – 24.8.

3.2 TYPES OF FINANCIAL LITERACY IN ROMANIA

Figures 2 and 3 show that the **financial followers type** cover about 14% of the population of 16 years or more from Romania, which is approximately 2.5 million persons.¹¹ They use to inform daily from various sources, among others following a range of financial trends (property market, interest rates, inflation rate etc.), have good knowledge and understanding of financial issues, nearly all make use of various financial products and have the lowest distrust in the financial institutions. They are interested in the new trends and developments of the financial system.

The **financial adopter type** includes about 29% of the population aged 16 years or more, that represents approximately 5.2 million people. They use also to inform daily from TV and few times a week from various other sources, but follow only few financial trends, particularly interest rates, inflation rate, and changes in the level of public pensions, benefits and tax exemptions. Their knowledge and understanding of financial issues is medium. Their majority has started using formal financial products consumer loans, bank debit card (in many cases imposed by their employers for wage payment), and insurance policies (mainly compulsory car insurance) in particular. They have little trust in financial institutions; their trust level is lower in comparison with the trust level of followers, but higher than the levels of the other two types.

The **financial reluctant type** is the best represented in Romania: about 41% of the population 16 years or over, which is more than 7.5 million persons. Their level of financial literacy is significantly lower than the average level of the adopters and particularly of the followers. On average, the financial reluctant people use to inform daily, but only from TV and ignoring other sources. The only financial trend to which they pay some attention regards changes in the level of public pensions, benefits and tax exemptions. They have poor knowledge and understanding of financial issues and only 20% of them use a formal financial product. The financial reluctant people consider financial institutions as 'legal usurers' and, consequently have very low levels of confidence or know nothing about them.

Finally, the **financial outsiders** represent about 14% of the population of 16 years or more from Romania (nearly 2.5 million persons). The main characteristic of this type is lack of participation, lack of knowledge and lack of awareness in relation to the financial system. Mere 3% of them use one formal financial product. They 'have never heard' of financial institutions such as insurance companies, securities companies or leasing companies. Their knowledge and understanding in financial matters is simply missing some are not numerate. On average, they inform few times a week only from TV and pay no attention to financial trends. Practically they appear to be financial illiterate.

¹¹ The total population 16 years and over in Romania was in 2009 of more than 18.2 million persons (National Institute for Statistics, *Tempo Online Database*).

In the following sections of the report we test the link between financial literacy and financial capability in each domain of activity; we analyze if and to what extent the four types of financial literacy remain significantly different across domains. Before that however, the next section presents the socio-demographic profiles of the four financial literacy types (table 4).

3.3 PROFILES OF THE FINANCIAL LITERACY TYPES

For describing the socio-demographic profiles of the financial literacy types, we use predictors both at the individual and at the locality level. The results are shown below.

Table 4 Socio-demographic profiles of the financial literacy types in Romania, 2010 (%)

| | | Financial literacy types | | | | Total |
|---------------------------|--|--------------------------|-------------|-------------|-------------|-------------|
| | | Follower | Adopter | Reluctant | Outsider | |
| TOTAL – N | | 290 | 843 | 603 | 284 | 2020 |
| TOTAL - % | | 14,4 | 41,7 | 29,9 | 14,1 | 100 |
| Gender | Male | 12,1 | 40,1 | 32,6 | 15,2 | 100 |
| | Female | 16,7 | 43,4 | 27,0 | 12,9 | 100 |
| Age | 16-24 | 12,5 | 52,8 | 28,4 | 6,3 | 100 |
| | 25-34 | 12,2 | 29,0 | 33,7 | 25,1 | 100 |
| | 35-44 | 7,8 | 30,1 | 39,1 | 22,9 | 100 |
| | 45-54 | 14,1 | 32,9 | 34,8 | 18,2 | 100 |
| | 55-64 | 12,0 | 42,5 | 30,5 | 15,0 | 100 |
| | 65+ | 23,5 | 55,5 | 17,9 | 3,0 | 100 |
| Education | University or higher | * | 10,5 | 37,7 | 51,2 | 100 |
| | College or post-secondary/ technical school | * | 24,7 | 36,0 | 38,7 | 100 |
| | High school | 4,5 | 32,3 | 44,6 | 18,6 | 100 |
| | First level of high school or vocational, apprentice/ complementary school | 12,3 | 43,4 | 34,9 | 9,4 | 100 |
| | Gymnasium at most | 26,0 | 55,4 | 16,5 | 2,2 | 100 |
| Nationality | Romanian | 13,8 | 41,0 | 30,5 | 14,7 | 100 |
| | Hungarian | 11,9 | 48,5 | 29,9 | 9,7 | 100 |
| | Roma | 40,7 | 44,1 | 11,9 | * | 100 |
| | Other | * | 55,6 | 27,8 | * | 100 |
| Historical regions | Moldova | 21,5 | 40,1 | 26,0 | 12,3 | 100 |
| | Muntenia | 19,3 | 42,7 | 25,8 | 12,2 | 100 |
| | Oltenia | 18,2 | 39,4 | 33,8 | 8,7 | 100 |
| | Dobrogea | 5,6 | 56,7 | 34,4 | * | 100 |
| | Transilvania | 11,1 | 40,1 | 28,7 | 20,0 | 100 |
| | Crisana Maramures | 6,3 | 48,1 | 35,6 | 10,1 | 100 |
| | Banat | * | 50,0 | 33,3 | 13,5 | 100 |
| | Bucuresti Ilfov | 7,3 | 29,1 | 35,8 | 27,8 | 100 |
| Residential areas | Urban | 4,2 | 37,6 | 38,0 | 20,1 | 100 |
| | Rural | 25,6 | 46,3 | 20,8 | 7,3 | 100 |

**Socio-demographic profiles of the financial literacy types in Romania, 2010 (%)
(continuation)**

| | | Financial literacy types | | | | |
|---|--|--------------------------|-------------|-------------|-------------|-------------|
| | | Follower | Adopter | Reluctant | Outsider | Total |
| TOTAL – N | | 290 | 843 | 603 | 284 | 2020 |
| TOTAL - % | | 14,4 | 41,7 | 29,9 | 14,1 | 100 |
| Locality type | Poor commune | 34,9 | 42,6 | 18,0 | 4,4 | 100 |
| | Medium developed commune | 24,5 | 46,1 | 23,4 | 6,0 | 100 |
| | Developed commune | 18,6 | 49,8 | 19,9 | 11,6 | 100 |
| | Town under 30 thou inh | 6,1 | 48,0 | 34,4 | 11,5 | 100 |
| | Town 30-99 thou inh | 3,4 | 39,0 | 41,1 | 16,5 | 100 |
| | City 100-199 thou inh | 4,4 | 32,3 | 38,0 | 25,3 | 100 |
| | City 200+ thou inh | 3,3 | 31,5 | 38,7 | 26,4 | 100 |
| Main occupational status in the present | Employee | 3,3 | 22,6 | 42,8 | 31,3 | 100 |
| | Informal employed (<i>daily worker, blackleg etc.</i>) | 36,5 | 45,2 | 15,7 | * | 100 |
| | Employer | * | * | 43,8 | 50,0 | 100 |
| | Self-employed in non-agricultural activities | * | 11,4 | 40,9 | 47,7 | 100 |
| | Farmer | 23,6 | 51,2 | 21,1 | 4,1 | 100 |
| | Unemployed | 12,2 | 50,0 | 30,6 | 7,1 | 100 |
| | Retired | 19,1 | 51,9 | 23,4 | 5,7 | 100 |
| | Pupil, student | 6,2 | 58,5 | 29,0 | 6,2 | 100 |
| | Houseperson | 30,8 | 42,1 | 24,3 | * | 100 |
| | Person unable to work, other inactive | 29,4 | 47,1 | * | * | 100 |
| Per capita monthly hhd. income quintiles | 1 | 30,4 | 47,6 | 18,9 | 3,2 | 100 |
| | 2 | 23,4 | 45,5 | 25,4 | 5,6 | 100 |
| | 3 | 12,9 | 50,1 | 27,8 | 9,1 | 100 |
| | 4 | 8,9 | 45,0 | 32,1 | 14,0 | 100 |
| | 5 | 1,7 | 25,4 | 39,9 | 33,0 | 100 |
| | No answer | 6,7 | 34,6 | 37,0 | 21,7 | 100 |
| Respondent' monthly income quintiles | 1 | 19,1 | 50,8 | 25,7 | 4,5 | 100 |
| | 2 | 38,6 | 44,4 | 14,8 | 2,2 | 100 |
| | 3 | 13,0 | 53,6 | 26,9 | 6,5 | 100 |
| | 4 | 6,0 | 41,8 | 37,7 | 14,6 | 100 |
| | 5 | 2,0 | 23,9 | 38,4 | 35,6 | 100 |
| | No answer | 4,4 | 25,2 | 42,1 | 28,3 | 100 |

Data: *Financial Literacy Survey in Romania* (May 2010). Notes: Colored cells indicate values significantly higher than average (adjusted residuals higher than two in absolute value). * Cells with less than five cases.

The four types of financial literacy have significantly different socio-demographic portraits. Thus, financial outsiders tend to be over-represented about women, persons 65 years or more, less educated persons, Roma minority, subsistence farmers, informal workers, retired and housepersons, residents of poorer rural areas, particularly those located in the poorer

regions (Moldavia and Muntenia) and, accordingly, among low incomes groups,

The financial reluctant people are statistically over-represented among young (16-24 years) and elderly (65 years or more), poorly educated, farmers, pupils and pensioners, low to middle income groups, based in villages and very small cities from Dobrogea (SE) and Crisana-Maramures (NW) regions.

The financial adopter persons represent significantly larger shares among men, persons 35-54 years, employees, with medium to high education and income, located in cities with more than 30 thousands inhabitants.

The financial followers are well represented between (both men and women) employees, employers and self-employed that attained a level of education above average (college or university) and high-income groups, being located in large cities (over 100 thousands inhabitants) from the better-off regions of the country Transilvania and Bucharest.

Consequently, in Romania financial illiteracy correlates with poverty, poor education, rural areas, employment in subsistence agriculture and under-development, whereas high levels of financial literacy correlates with good education, employment for money in non-agricultural sectors, and large urban areas.

Few additional arguments: the percentage of persons who know at least one foreign language varies between 17% of the financial outsiders and 56% of the financial followers (33% at the population level). In a similar way, the share of persons who attended long-life learning courses varies between 2% of the financial outsiders and 40% of the financial followers (15% at the population level). While only 7% of the financial outsiders travelled abroad after the year 2000, the share bounces up to 49% of the financial followers (19% of total population). And those who worked abroad represent 5% among the financially outsiders and 12% among followers, with 6.5% national average.

The share of car owners also increases from 7% of the outsiders to 67% of the followers (with 27% the national average). The percentage of individuals that have a personal computer at home is only 9% among the financial outsiders compared to 74% of the financial followers (and 35% at the country level). The persons with Internet access at home account for only 6% of the financial outsiders in comparison with 69% of the followers, and 30% of the whole population. Regarding all these aspects, both financial reluctant and the financial adopter groups hold intermediary positions and always the position of the former is significantly lower than the one of the later.

All in all, **financial literacy is interrelated with the level of modernity of both the individuals and their environment.**

All socio-demographic predictors included in table 4 are significantly associated with the financial literacy index. For determining the most powerful determinants of financial literacy, we developed a multi-level regression model (table 5), which includes as predictors: gender, age, level of

education, respondents' monthly income, and, at the locality level, the index¹² of social development (IDSL index, Sandu, 2010).¹³

It is important to include in the model predictors at the locality level specifically due to the unbalanced territorial distribution of the providers of financial services in Romania, which tend to be located in cities and much less in rural areas, particularly in the poor and remote ones.

Table 5 The main determinants of financial literacy in Romania

| Predictors | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|--|-----------------------------|------------|---------------------------|---------|-------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -1,784 | 0,106 | | -16,862 | 0,000 | | |
| Education (years of school) | 0,116 | 0,009 | 0,296 | 13,135 | 0,000 | 0,637 | 1,570 |
| Personal income (lei) | 0,000 | 0,000 | 0,289 | 12,962 | 0,000 | 0,650 | 1,538 |
| IDSL index of locality level of social development | 0,009 | 0,001 | 0,210 | 10,912 | 0,000 | 0,875 | 1,143 |
| Age (years) | -0,009 | 0,001 | -0,177 | -9,316 | 0,000 | 0,891 | 1,122 |
| Gender (1=man) | 0,035 | 0,035 | 0,018 | 0,995 | 0,320 | 0,968 | 1,033 |

Dependent Variable: Financial Literacy Index

Data: *Financial Literacy Survey in Romania* (May 2010). Note: Linear regression model, enter method, $R^2 = 0.41$.

The model has a good predictive value and shows that *ceteris paribus* education, income, age and the locality level of social development predict the individual's level of financial literacy. Regardless gender of a person, the higher is his/her education, the more money s/he makes, the more developed is the locality where s/he lives and the younger s/he is, the higher his/her level of financial literacy.

Consequently, increasing financial literacy in Romania is first of all a matter of improving education, economic and social development and generation. Ensuring an increase of financial literacy requires the development of financial educational programmes (in and outside school), addressed to young (16-24 years) and active population in particular, but also economic growth and social development of the Romanian localities.

¹² Both for communes and cities the index is based on data regarding: residential area (urban/rural), infant mortality (2005-2008), average age of adult inhabitants (2008), gross building area (2008), distance between the village and the administrative centre of commune (1998), stock of education of adult population (Census, 2002), share of arable land in total surface of locality, rate of temporary emigration abroad (2002), share of elderly 65+ years (2009).

¹³ Noteworthy, for avoiding the multicollinearity effect we ran a number of linear regression models with various combinations of predictors included in table 4. The model presented in the text is the one with the highest goodness-of-fit and the lowest collinearity. So the selected predictors are the most influent ones in relation to financial literacy.

4 MAKING ENDS MEET

Money management involves budgeting and control of one's financial resources (monitoring income, keeping record of expenditures), being aware of one's financial commitments and being able to meet those, and resisting the pressure to spend and the temptation to borrow.

Almost 65% of population struggle to manage day-to-day needs and commitments with an average household income per capita lower than 150 euro. A first question from the managing money domain is the self-assessment of the household income. A quarter of the population (with an average household income per capita of 90 euro) has difficulties in covering bare necessities. Another 40% (average income per capita of 140 euro) succeed only to cover basic needs; 25% (average income per capita of 200 euro) can afford food and keep up with bills but have difficulties in purchasing durable goods. Only 5% (average income per capita 250 euro) can afford also durable goods and only 2% (average income per capita of 320 euro) have enough money for anything.

Less than a quarter (23%) of population keeps record of expenditures. Nonetheless, the large majority (more than 66%), although does not keep record of expenditures knows, fairly accurately how much money is available to cover future expenditure and (70%) has a plan to deal with current monthly expenditures. Those with the lowest income tend to plan and to keep record of their expenditures in a significantly smaller proportion than the middle-income groups because low-income is associated with irregular income from casual informal work. One needs some regular money in order to plan and to track them.

Over half (61%) of population live paycheck to paycheck: 26% run out of money before payday 'always' or 'very often' and 35% 'sometimes'.¹⁴ The same proportion is 62% of population in Bulgaria,¹⁵ 60% in Russia,¹⁶ and less than a third in UK and Ireland (O'Donnel, 2009).

Only 11% of those living paycheck to paycheck use financial products (such as consumer credits or credit cards) to manage this situation. Instead, three main strategies are used to managing running short of money:

- Cut down expenditures (75% of those living paycheck to paycheck)
- Borrow money (with no interest) from relatives and friends (62%) and
- Buy informally on credit ('on the notebook') from shops (42%).

¹⁴ For the lowest income group, this proportion increases to about 50%. Nonetheless, 8% of the highest income group run out of money before payday 'always' or 'very often'.

¹⁵ Data for Bulgaria from Alpha Research (2010).

¹⁶ Data for Russia from Rutledge (2009).

During the last year, 39% of population had to borrow to pay back other debts, either regularly or from time to time, compared with 35% in Russia and 31% in Bulgaria. However, the amount of most debts does not exceed double their monthly income.

More than 40% of the population succeeds regularly to spend exactly as much as they earn. The level of income does not influence this situation. However, it is more frequent among elderly (65 years or more) and among those who make a monthly financial plan.

Around 35% of population remains with unspent money from month to month: 8% regularly and 27% from time to time.¹⁷ These persons are better represented among well-organized people with middle to high income who keep strict records entering all incomes and all expenditures. The large majority (75%) of them keep the spare money in cash at home, whereas 25% deposit them in a bank account. Only 7% invest their spare money in a business and less than 2% invest in capital markets. Instead, they spend spare money on consumer goods or lend it to relatives and friends.

In conclusion, most population struggle to keep up with their financial commitments and make little use of financial products either to finance deficit or to manage spare money. Informal consumer loans (from shops) and borrowing from relatives and friends are the main instruments used by households in Romania. Spare money is most often kept cash at home.

4.1 FINANCIAL LITERACY AND MONEY MANAGEMENT

A financially capable person in the domain of money management: ‘(a) Keeps up with his/ her financial commitments without any difficulty and never struggles; (b) Agrees that s/ he is more of a saver than a spender, preferring to save up to buy something rather than use credit; (c) Never runs out of money at the end of the week/ month; (d) Has not been in financial difficulties in the last five years.’ (FSA, 2006: 10)

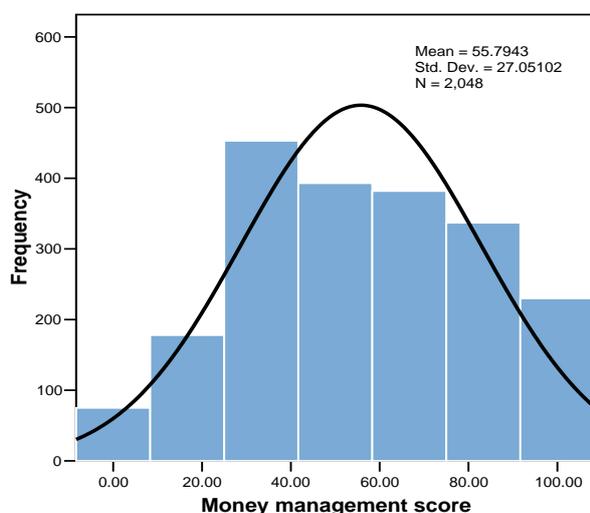


Figure 4 Overall score of money management in Romania

The general capacity to make ends meet is rather low in Romania as the distribution of the money management overall score shows in figure 4.

Also, a significant proportion of population (about 12% of population found at the far left of the

¹⁷ In Bulgaria, data indicate a similar situation 30% of population: 8% frequently and 22% occasionally.

distribution) are clearly experiencing significant difficulties.

Data: *Financial Literacy Survey in Romania* (May 2010).

For Romania we determined an overall score¹⁸ of money management which is higher when the person: (1) does not struggle to cover basic day-to-day needs, (2) knows how much money is available to cover future expenditure (irrespective if they keep record or not), (3) has a plan to deal with current monthly expenditures, (4) ‘never’ or ‘very rarely’ runs out of money before payday, (5) does not borrow to pay back other debts, and (6) manage day-to-day income at least trying to save some money (regardless they succeed to save or not).

The higher the income, the more capable the persons at making ends meet.¹⁹ Thus, the general low capability to manage money is linked to the low levels of cash income earned by the population. There is a general recognition that inadequate or low incomes make the process of money management more difficult. In Romania, the large majority of population earn small to medium monthly incomes and a considerable part of rural population lives with in-kind incomes from subsistence agriculture and various low level social benefits (farmer pensions, child allowance, social aid etc.).

Table 6 Average monthly income per capita of the households in Romania

| | N | Monthly household total income per capita (EURO) | | | |
|--------------|------|--|----------------|---------|---------|
| | | Mean | Std. Deviation | Minimum | Maximum |
| Urban | 893 | 181 | 110 | ,00 | 1509 |
| Rural | 898 | 114 | 104 | ,00 | 1700 |
| Total | 1791 | 147 | 112 | ,00 | 1700 |

Data: *Financial Literacy Survey in Romania* (May 2010). Notes: Income data for April 2010; Exchange rate 1 euro=4.1186 lei for April 2010 (National Bank of Romania).

Significantly less capable at making ends meet are the young (16-24 years), people poorly educated (the higher the level of education , more capable at making ends meet the person), Roma minority, and rural residents, particularly those located in less developed and remote communes.

Financial literacy is another powerful predictor of the capability to make ends meet. The higher the level of financial literacy, the higher the overall score of money management. Thus, the average score of money management varies from 39 for the financial outsider group, to 52 for the financially reluctant people, 61 for the financial adopters and 73 for the financial followers.

¹⁸ The score is computed as the share of aspects fulfilled by the person out of the six listed in the text. The score was rescaled to take values between 0 and 100.

¹⁹ The average scores of money management increases from 39 for households in the lowest income quintile to 49 in the second quintile, 55 in the third, 62 in the fourth and 72 in the highest income quintile respectively.

In conclusion, the main determinants of the capability of making ends meet are household income, individuals' level of financial literacy, education, age and location in urban areas (in this order as table 7 shows). *Ceteris paribus* the higher the household income/ the financial literacy level/ the attained level of education/ age/ and the location in urban areas, the higher people capability of making ends meet.

Table 7 The main determinants of money management in Romania

| Predictors | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 24,105 | 3,773 | | 6,389 | ,000 | | |
| Household income per capita (lei) | ,014 | ,001 | ,236 | 9,414 | ,000 | ,711 | 1,407 |
| Financial Literacy Index | 6,319 | ,719 | ,233 | 8,795 | ,000 | ,633 | 1,579 |
| Education (years of school) | 1,349 | ,290 | ,126 | 4,656 | ,000 | ,612 | 1,635 |
| Age (years) | ,138 | ,030 | ,100 | 4,549 | ,000 | ,916 | 1,091 |
| Residential area (urban=1) | 1,431 | ,612 | ,054 | 2,338 | ,020 | ,836 | 1,196 |

Dependent Variable: Overall score of money management

Data: *Financial Literacy Survey in Romania* (May 2010). Note: Linear regression model, enter method, $R^2 = 0.22$.

These data show that in order to increase financial capability of making ends meet are necessary economic growth and the development of non-agricultural labour market in rural areas but also financial education programmes targeted to the young (16-24 years) from rural areas.

5 PLANNING AHEAD

Planning ahead refers to making financial provisions for the future both for expected commitments (such as pensions) and for unexpected events (such as a sudden drop of income). The ability to save is strongly associated with planning ahead.

About half (51%) of population do not save any funds from their monthly income. This proportion is similar with the one from the UK, it is higher than in Russia (36%) but lower than in Bulgaria (61%).²⁰

Saving behaviour clearly differs with income. For people on low incomes, saving is difficult if not just wishful thinking. In the survey, nearly all those who do not save mentioned an unique reason – lack of spare money due to low income. The proportion of people who do not save decreases as household income (per capita) increases from 73% of the lowest quintile to 29% of the highest income quintile. Correspondingly, the proportion of those

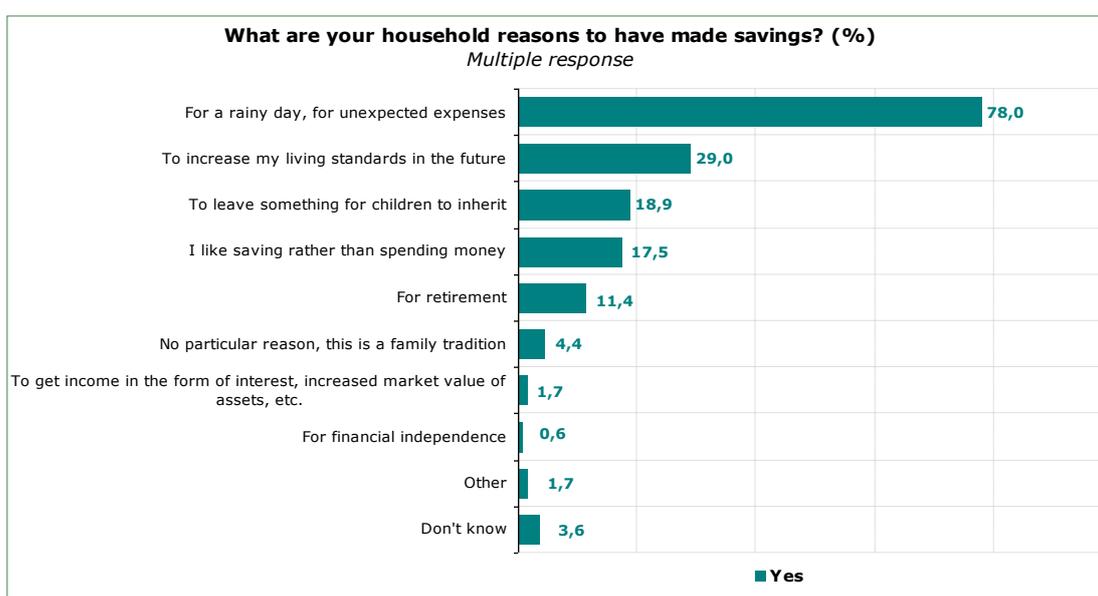
²⁰ Data for Russia from Rutledge (2009), for the UK from FSA (2006), and for Bulgaria from Alpha Research (2010).

who save is significantly lower among poorly educated people, Roma minorities, people based in rural areas (particularly in poor commune) and in underdeveloped regions Moldova and Muntenia.

The households' savings in Romania are quite low as 75% of these are less than two monthly income.

The large majority (78%) of those who save are planning for the unexpected, while about a half (48%) of them plan for the long-term: increasing quality of life in the future (by buying a car, a dwelling etc.), leaving inheritance to children, for retirement or for financial independence. Finally, 21% of them prefer saving rather than spending or follow their family tradition (figure 5).

Figure 5 Reasons for saving



Data: *Financial Literacy Survey in Romania* (May 2010). Note: N=968 persons who use to save.

Saving for the long-term is significantly higher among people with higher incomes, persons 35-54 years, and persons with medium to high education. People 65 years or more save for the long-term significantly less as, for them, the long term have arrived.

Only about 6% of all pre-retired make some provision for retirement. Thus, the large majority of population in relation to retirement tends to leave things to the government, in spite of the general low level of trust in the government and in pension providers (see section 5.3). Saving for retirement is not associated with income. Noteworthy, only a very small share of population save for the long-term by investing in stocks and shares as an alternative to conventional pensions.

Interestingly, if people would get 12,500 euro tomorrow, more likely they would save 'for the rainy days' (58% of the population 16 years or over) or for buying a car, a dwelling or other expensive things (27%), but only 2% would purchase an insurance or a voluntary pension.

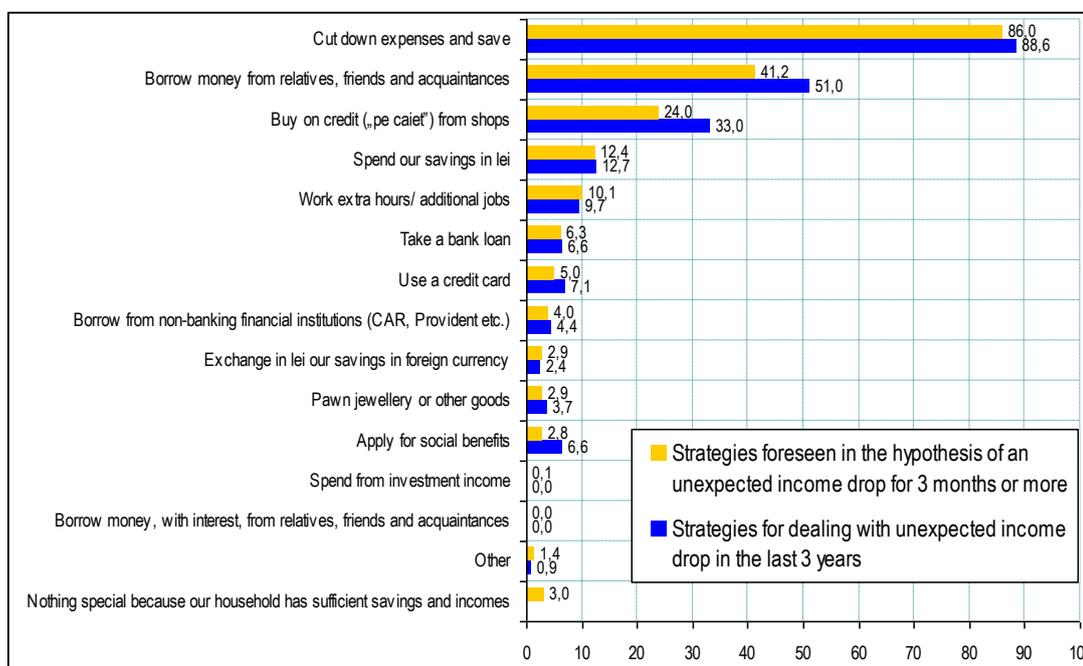
Unexpected financial setbacks are quite common in Romania as well as in Bulgaria. In the last three years, 35% of population experienced a large unexpected drop in income (36% in Bulgaria), in most cases caused by redundancies and wage cuts related to the current financial crisis.²¹ This problem have affected to a significantly larger extent low income groups, active generations (25-54 years), Roma minority, people with vocational education, residents of urban areas, from very small cities (with less than 30 thou inhabitants) in particular.

Only 15% of those who experienced unexpected income drop use financial products to manage this situation and other 15% rely on previous savings. Instead, three main strategies are used for dealing with unexpected income drop:

- Cut down expenditures
- Borrow money (with no interest) from relatives and friends and
- Buy informally on credit ('on the notebook') from shops.

Furthermore, the strategies envisaged in the hypothesis of an unexpected income drop (with one quarter for a period of three months or more) are strikingly similar with those already used by people who experienced an unexpected drop in income in the last three years.

Figure 6 Strategies used for dealing with an unexpected drop of income (% of each group)



Data: *Financial Literacy Survey in Romania* (May 2010).

²¹ Corresponding proportion for the UK is lower – 28%, but it refers to 2005 so does not reflect the effect of the current international financial crisis.

Provisioning for financial setbacks is very low. When asked how long they expect to be able to make ends meet if faced with an unexpected drop in income, 67% say they would manage less than three months. Only 7% would manage for 12 months or over.

A small share of population use insurance policies for managing future risks. Only 16% of people hold at least one voluntary insurance policy.²²

In conclusion, only a half of the population saves spare money and households' savings are rather small. The majority of people who save plan for the unexpected and less save for the long-term. Provision for retirement (additional to the state pensions) is very rare. Unexpected financial setbacks are quite common mainly caused by redundancies and wage cuts related to the current financial crisis. People make little use of financial products in facing unexpected income drop. Informal consumer loans (from shops) and borrowing from relatives and friends are the main instruments used by households in Romania.

5.1 FINANCIAL LITERACY AND PROVISIONING FOR THE FUTURE

A financially capable person in the domain of planning ahead: '(a) Has made sufficient provision for an unexpected major expense or significant drop in income; (b) Would be able to make ends meet for twelve months or more if income dropped unexpectedly; (c) Holds some general insurance; (d) Has made provision for his/ her retirement; (e) Takes the attitude, "I make sure I have money saved for a rainy day" and is willing to consider trade-off in current standard of living in order to plan for retirement.' (FSA, 2006: 15)

For Romania we determined an overall score²³ of planning ahead which is higher when the person: (1) have savings equal to six months income or more, (2) would be able to make ends meet for six months or more if income drops unexpectedly, (3) holds at least a voluntary insurance, (4) saves for the long-term.

²² Compulsory car insurance (RCA) is not taken into account.

²³ The score is computed as the share of aspects fulfilled by the person out of the four listed in the text. The score was rescaled to take values between 0 and 100.

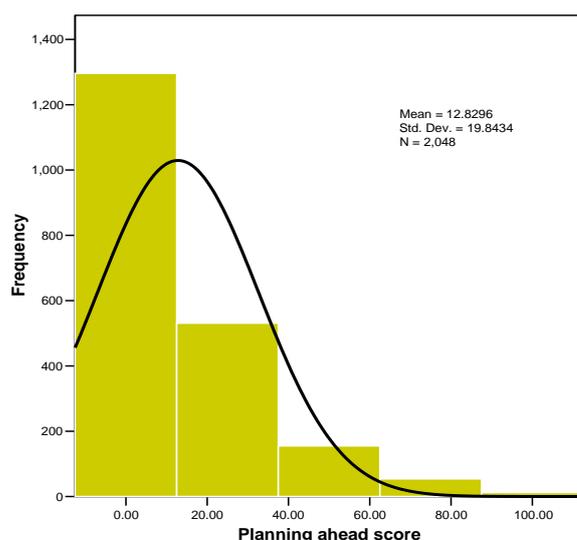


Figure 7 Overall score of financial planning in Romania

The general capability of planning ahead one’s financial resources is very low in Romania.

The majority (more than 60% of population found at the far left of the distribution) are highly vulnerable.

Data: *Financial Literacy Survey in Romania* (May 2010).

The higher the income, the more capable the persons at planning ahead.²⁴ Thus, the general low capability to make adequate provision for the future is constrained by the low levels of cash income earned by the population.

Significantly less capable to develop effective financial plans are the young (16-24 years). Older people (65 years or over) have less incentives to plan for long-term. Less capable are also people with vocational education at most, Roma minority, and rural residents.

Financial literacy is a powerful predictor of the capability to make adequate financial provision for the future. The higher the level of financial literacy, the higher the overall score of planning ahead. Thus, the average score of planning ahead varies from 3 for the financial outsider group, to 7 for financially reluctant people, 16 for financial adopters and 34 for financial followers.

Table 8 The main determinants of planning finances ahead in Romania

| Predictors | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -3,114 | 2,643 | | -1,178 | ,239 | | |
| Financial Literacy Index | 9,020 | ,503 | ,449 | 17,918 | ,000 | ,633 | 1,579 |
| Household income per capita (lei) | ,007 | ,001 | ,162 | 6,860 | ,000 | ,711 | 1,407 |
| Residential area (urban=1) | 2,180 | ,429 | ,111 | 5,081 | ,000 | ,836 | 1,196 |
| Education (years of school) | ,587 | ,203 | ,074 | 2,891 | ,004 | ,612 | 1,635 |
| Age (years) | ,030 | ,021 | ,030 | 1,428 | ,153 | ,916 | 1,091 |

Dependent Variable: Overall score of planning ahead

Data: *Financial Literacy Survey in Romania* (May 2010). Note: Linear regression model, enter method, $R^2 = 0.30$.

²⁴ The average scores of money management increases from 5 for households in the lowest income quintile to 26 in the highest income quintile.

In conclusion, the main determinants of the capability of planning ahead are individuals' level of financial literacy, household income, location in urban areas, and education (in this order as table 8 shows). In Romania, unlike for instance in the UK, age is not a significant determinant.

These data show that (1) in Romania, most people are unprepared for the unexpected and (2) increasing financial literacy is a prerequisite of improvement of population capability to make adequate financial provision for the future. People at all income levels should foremost change attitude, learn responsibility for their future and learn to organize their resources in more appropriate ways.

6 MAKING CHOICES

The third domain relevant for financial capability is making (informed) choices: 'People need an understanding of risk: both what risks they face, and the trade-off between risk and reward. This needs to be complemented by a good general awareness of the types of financial products that can help them achieve their goals, for example how protection products can mitigate setbacks and how exposure to different asset classes can help to spread risk.'(FSA, 2006: 17)

Regarding this domain we need to take into account the considerably caveat between the UK and Romania with respect to financial services. In Romania, the financial system has continuously developed and the number and complexity of financial services/ products has considerably increased after 1990. Nonetheless, the system is neither so developed nor so sophisticated as the well-established financial system from the UK. Furthermore, whereas in the UK, for generations already, people learn about financial products from early childhood, in Romania still are some that have never seen, for instance, a credit card. Precisely for this reasons we extend this domain by including use of financial products and choosing a financial institution besides choosing a financial product. In the Romanian context, the first choice to be made refers to participation in the system that is to make use of financial products.

6.1 USE OF FINANCIAL SERVICES/ PRODUCTS

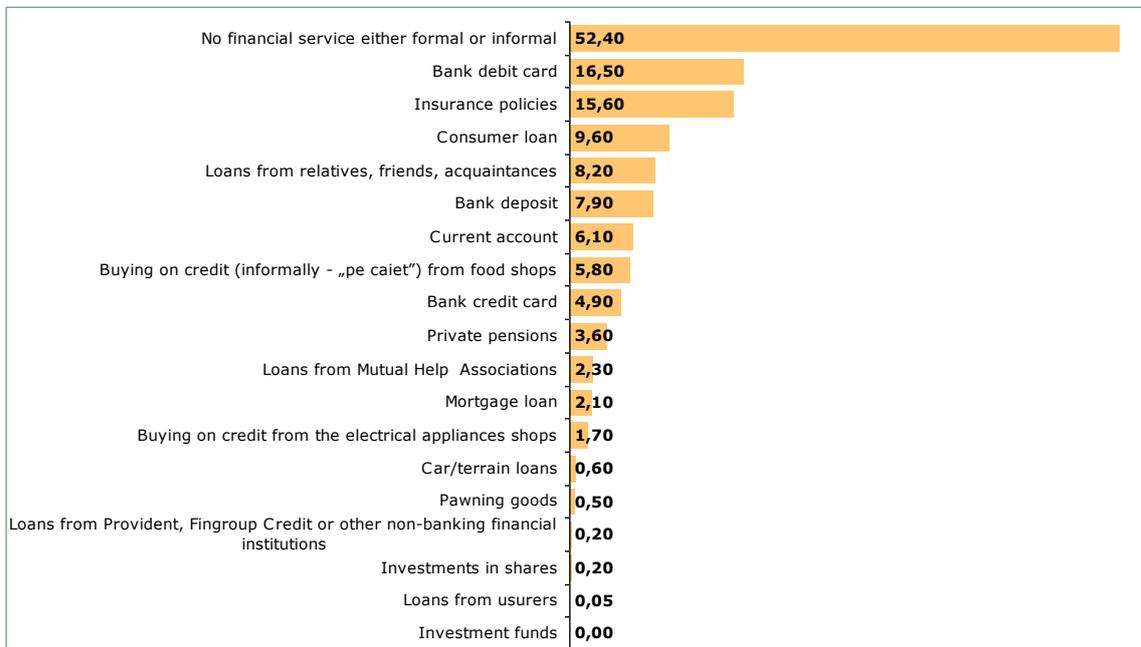
The questionnaire included a number 18 types of financial services of which people reported up to 6 types of services that they use. The list of financial services include both formal services, which indicate participation in the financial system, and informal services such as borrows from relative and friends, from usurers or informal credit from shops.

Participation of population in the financial system is low. Over half (52%) of population 16 years or more does not use any financial service be it formal or informal. Only 35% use one or more formal financial service, 8% use only informal ones, and 4% combine formal and informal services (figure 8).

However, there are large discrepancies between various groups of population:

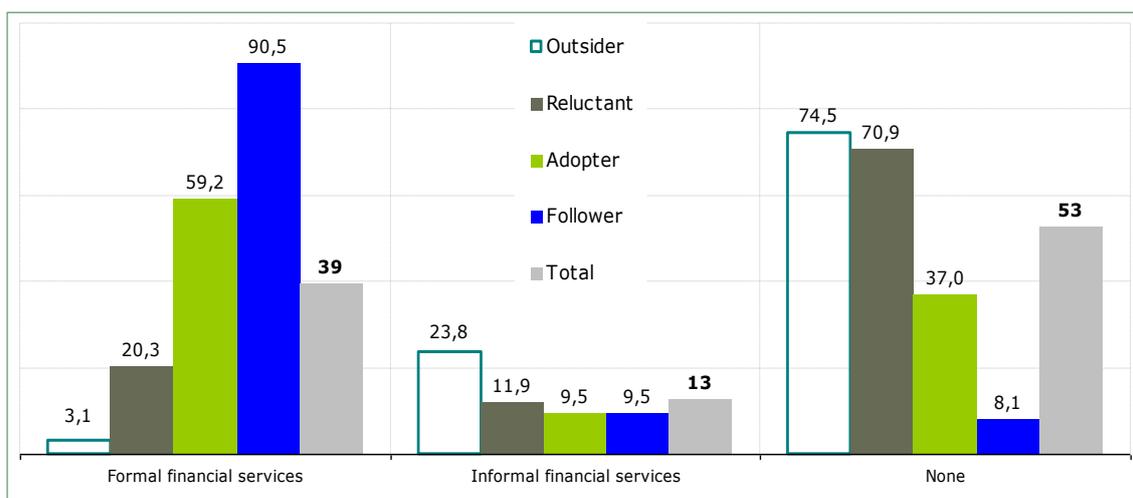
- higher the household income, more formal financial services used
- women and men use formal financial services to the same extent
- young (16-24 years) and older people (65 years or more) use significantly less financial services and products than people 45-64 years, who use significantly less than people 25-44 years
- higher the level of education, more formal financial services used
- Roma people as well as rural residents use significantly less formal financial services.

Figure 8 Use of financial services and products (% of population 16 years or more)



Data: *Financial Literacy Survey in Romania* (May 2010).

Figure 9 Use of financial services by financial literacy types (% of each group)



Data: *Financial Literacy Survey in Romania* (May 2010). Sum of values per group exceeds 100% because some people use both formal and informal financial services.

The formal financial products used by the largest shares of population are:

- Bank debit cards (in many cases imposed by employers, particularly the state, for wage payment),
- Insurance policies (compulsory car insurance RCA in particular)
- Consumer loans

Interestingly, if people would get 12,500 euro tomorrow, only 15% of them say that more likely they would use some financial service (insurance, private pension, bank deposit, stock and shares).

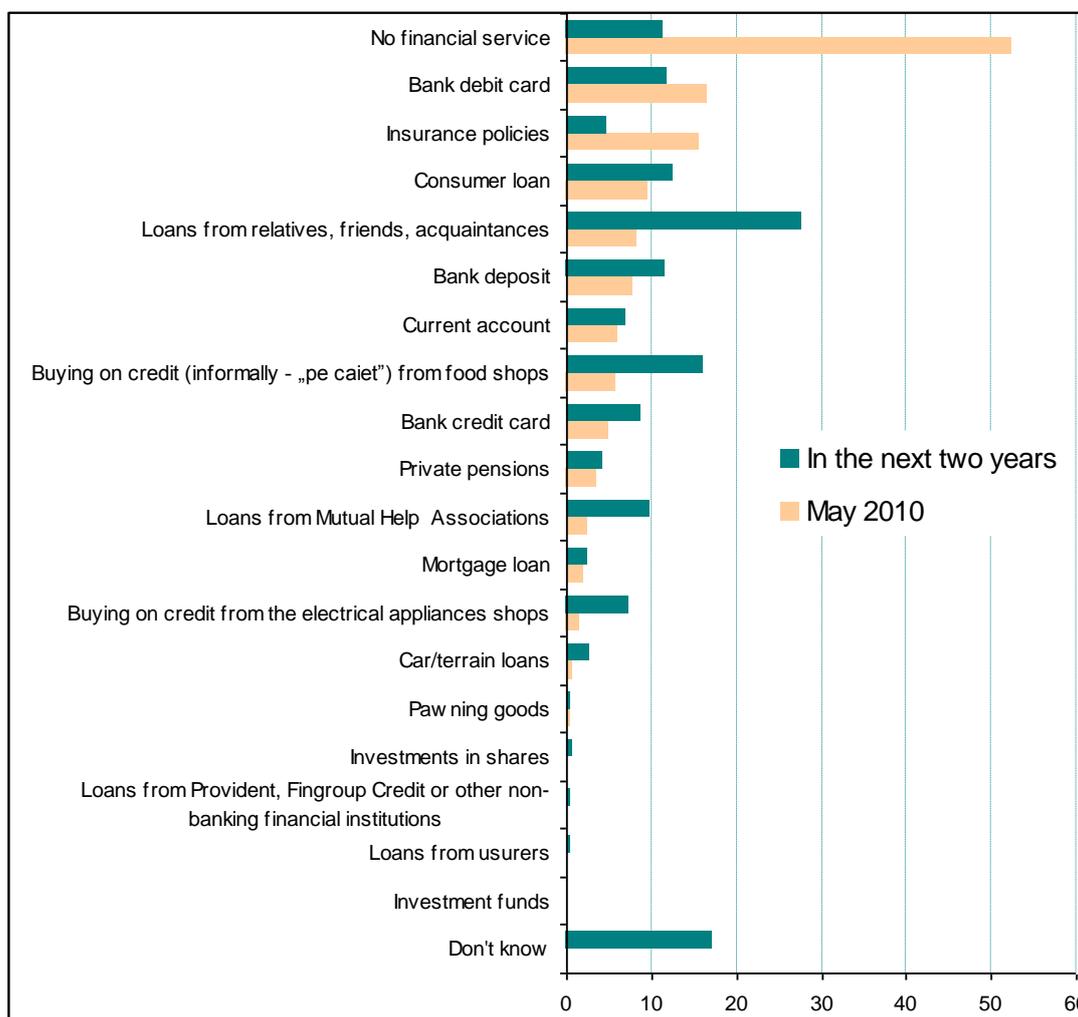
In the next two years, the proportion of people using formal financial services is expected to increase to from 35% (in May 2010) to 45%.

Table 9 Use of the formal financial services in 2010 and in the next two years (%)

| Current use of formal financial services | Intention to use formal financial services in the next two years | | | Total |
|---|--|----------------------|--------------|------------|
| | Plans to use | Does not plan to use | Not answered | |
| Uses financial services at the moment | 74,8 | 17,0 | 8,2 | 100 |
| Does not use financial services at the moment | 25,1 | 51,9 | 23,0 | 100 |
| Total | 44,7 | 38,1 | 17,2 | 100 |

Data: *Financial Literacy Survey in Romania* (May 2010).

Figure 10 Use of financial services in 2010 and in the next two years (% of group)



Data: *Financial Literacy Survey in Romania* (May 2010). Note: Data for the next two years represent intentions.

In the next two years, among formal financial services, larger proportions of population intend to use loans from Mutual Help Associations, credit cards and bank deposits.

6.2 CHOOSING A FINANCIAL SERVICE/ PRODUCT

6.2.1 BANK LOANS

In 2010, 11% of the population 16 years or more have a consumer and/ or a mortgage loan. In the next two years, 14% intend to use bank loans.

There is a clear preference for consumer loans in favour of mortgages, most probably because the former have much higher accessibility compared to the later. Most consumer loans were aimed at buying various durable goods or

dwelling repairing/ renovating. The large majority of credits are in lei and, more generally, people prefer loans in lei. Also 68% of bank loans have a fixed interest rate.

Worrisome, 40% of people with bank loan face difficulties paying the loan rates. Nonetheless, the proportion of people who reported delays in loan payment decreases to 13%.

When making a credit from a bank, people tend to give more importance in the same time to the commission charged by the bank and to the credit interest rate.

The profile of people who borrow from banks, expectedly, corresponds to the general eligibility conditions imposed by banks – people with income above a certain threshold. Accordingly, data show that more money people earn, the higher their probability to hold a consumer loan. Nevertheless, 5% of people from the lowest income quintile have a consumer loan, which as however taken before they were made redundant or suffered wage cuts.

Persons aged 25-54 years tend significantly more than young and older people to use consumer loans for improving their living standard or for solving various problems.

People who completed at least high school use consumer loans in significantly larger shares than the poorly educated ones.

Holders of consumer loans are significantly better represented in urban areas (12%) compared to rural areas (7%).

Higher a person's level of financial literacy, higher his/her probability to hold at least a consumer loan: 30% of financial followers (have access to and) make use of consumer loans, whereas the proportion decreases to virtually zero among the financial outsiders (which most probably have no access to consumer loans from a bank).

6.2.2 INSURANCE POLICIES

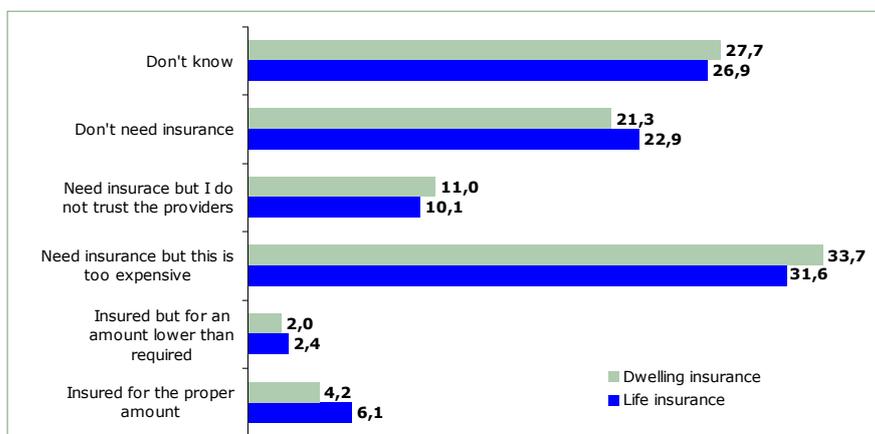
In 2010, 16% of the population 16 years or more have at least one insurance policy.²⁵ In the next two years, mere 5% intend to use insurance policies.

The most numerous are policies of life insurance (9% of population). Follow car insurance CASCO (8%), dwelling insurance (6%), medical insurance (2%), and land/ crop insurance (less than 1%). Most of these insurance policies are bought on one's own will, only 25% being imposed with another financial service (such as bank loan).

Assessment of life and dwelling insurance policies are strikingly similar. The largest group of about a third of population is aware of the need for insurance but lack the financial resources to buy it.

²⁵ Also 19% of population holds a compulsory car insurance (RCA), which is not included in the following analysis.

Figure 11 Assessment of life insurance and dwelling insurance (%)



Data: *Financial Literacy Survey in Romania* (May 2010).

Use of insurance to mitigate risks is strongly correlated with income level, education, age and area of residence. High-income people use insurance policies in significantly larger share than the low-income population. While 55% of people from highest income quintile hold at least one voluntary insurance, the proportion decreases steeply with income reaching 6% in the lowest income quintile.

The higher the level the education attained, the higher the probability to hold insurance. The proportion of insurance holders declines abruptly from 54% of university graduates to 34% of post-high school, 21% of high school graduates, 12% of people with vocational training and less than 5% of those with gymnasium at most.

Women, on average, make less use of insurance policies than men.

People aged 25-54 years tend to make more use of voluntary insurance policies compared to young (16-24 years) and older persons (65 years or more), among which only 6-7% hold an insurance.

Roma do not hold insurance policies.

Among regions, Transilvania and Bucharest-Ilfov have significantly larger proportions of residents with at least one voluntary insurance (19% and 29% respectively).

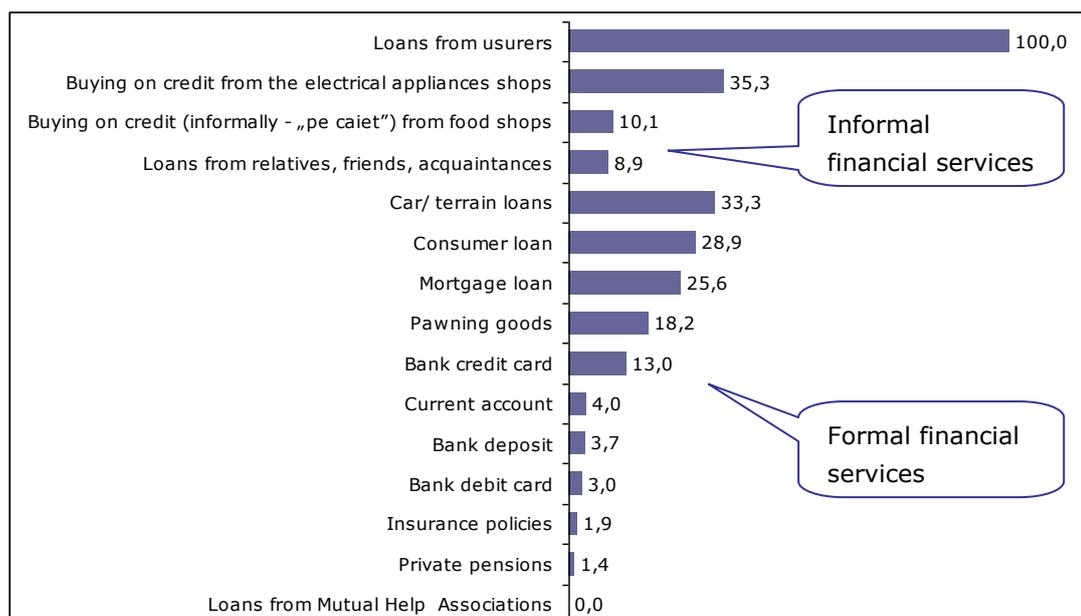
Urban residents make much more use of insurance than rural people (22% compared to 9%).

Higher a person's level of financial literacy, higher his/her probability to hold at least a voluntary insurance: 53% of financial followers make use of insurance, whereas the proportion decreases to virtually zero among the financial outsiders.

6.2.3 MANAGING UNSATISFACTORY FINANCIAL PRODUCTS

In the last five years, about 12% of people who use financial services (that account for 6% of the whole population) have had to deal with unsatisfactory financial products. Almost half of these cases refer to consumer loans. Nevertheless, the rate of dissatisfaction with consumer loans is lower than those of loans from usurers (expectedly), credit from electrical appliances shops (‘credite cu buletinul’), and car/ terrain loans.

Figure 12 Rate of dissatisfaction with financial services (% of each group)



Data: *Financial Literacy Survey in Romania* (May 2010). Notes: Share of dissatisfied people of total who use that specific service. Investment funds, investments in stock and shares and loans from non-banking financial institutions excluded due to insufficient number of cases.

Less than 2% of dissatisfied customers pressed their claims with the financial supervisory agencies; 66% took no action and 26% stopped using the service before contract expired.

Romania’s population has very low awareness of their rights as financial consumers. Only 12% of the population knows the correct level of bank deposits guaranteed per deponent through law, 6% believes that all deposits in their full amount are covered by insurance, and only 22% know that government does not protect from personal losses in investment funds.

At the same time, most population is not prepared to take any risk with their savings/investments, but has high expectation of government support. More than half of the population considers that the Government should compensate them for losses in the case of a bank’s bankruptcy. Another 15% believes that the government should compensate individuals from losses in the cases where the market value of shares in investment funds drop, and 9% expects government to compensate for any decrease in prices of residential real estate.

Understanding of risk with savings/ investments is significantly correlated with the individual's level of financial literacy, but not with the level of income. Compared to the other groups, the financial followers understand better the risks they face and expect less protection from the government, whereas most financial outsiders do not know to answer the question.

There is little confidence in the existing systems of solving problems. About a quarter of the population have no knowledge in this respect and only 13-15% are 'sure' or 'rather sure' that they can resolve disputes over financial transactions 'fairly' and/ or 'in short time'.

In conclusion, the low awareness of consumer rights combined with the low knowledge and confidence in the existing systems of solving disputes over financial transactions and with the low level of financial literacy result in passivity in defending rights.

6.3 CHOOSING A FINANCIAL INSTITUTION

Trust in institutions, particularly in financial institutions, is a prerequisite of participation in the financial system. Thus, the little use of financial services/ products is correlated with distrust in financial institutions, besides the low levels of income and the poor knowledge and understanding of financial issues (Table 10). For instance, about 10% of population considers that they need life or dwelling insurance policies, but do not buy them because they 'do not believe that the insurance companies will pay the claims'.

Table 10 Correlation of trust in financial institutions, participation in the financial system, and knowledge and understanding of financial issues

| | | Score of knowledge and understanding | Score of trust in financial institutions | Score of participation in the financial system |
|--|---------------------|--------------------------------------|--|--|
| Score of knowledge and understanding | Pearson Correlation | 1 | ,203(**) | ,323(**) |
| | Sig. (2-tailed) | . | ,000 | ,000 |
| | N | 2048 | 2048 | 2048 |
| Score of trust in financial institutions | Pearson Correlation | ,203(**) | 1 | ,162(**) |
| | Sig. (2-tailed) | ,000 | . | ,000 |
| | N | 2048 | 2048 | 2048 |
| Score of participation in the financial system | Pearson Correlation | ,323(**) | ,162(**) | 1 |
| | Sig. (2-tailed) | ,000 | ,000 | . |
| | N | 2048 | 2048 | 2048 |

** Correlation is significant at the 0.01 level (2-tailed).

Data: *Financial Literacy Survey in Romania* (May 2010). See description of scores in section 2.1.

Trust in financial entities is rather weak (figure 13).²⁶ The National Bank of Romania and the National House of Pensions, among the state regulatory structures, as well as commercial banks and mutual help associations, among financial institutions, are trusted by 40% of population or more. The other financial entities are either not known or little trusted by more than 60% of the population. With respect to trust in financial bodies, Romania and Bulgaria are very similar.

Quality of services provided by financial institutions is assessed, on average, as 'fair'. Perceived quality of services is correlated with trust in institutions and with use of formal financial services. More formal financial services a person uses, better his/ her assessment of the quality of services provided by banks, mutual help associations and insurance companies.

About 45% of population actively shops around before buying financial products. Most of these (27% of population) 'rarely' compare the terms and conditions of a financial product before purchasing it; only 6% do so 'always'.

The main factor in choosing a bank for borrowing is cost of credit, which is mentioned by 70% of population. The second factor is bank reputation (mentioned by 10%). Gifts and advertising campaigns are mentioned by less than 1% of population. The same criteria are used for choosing a non-banking institution (51% mention cost of credit and 12% reputation).

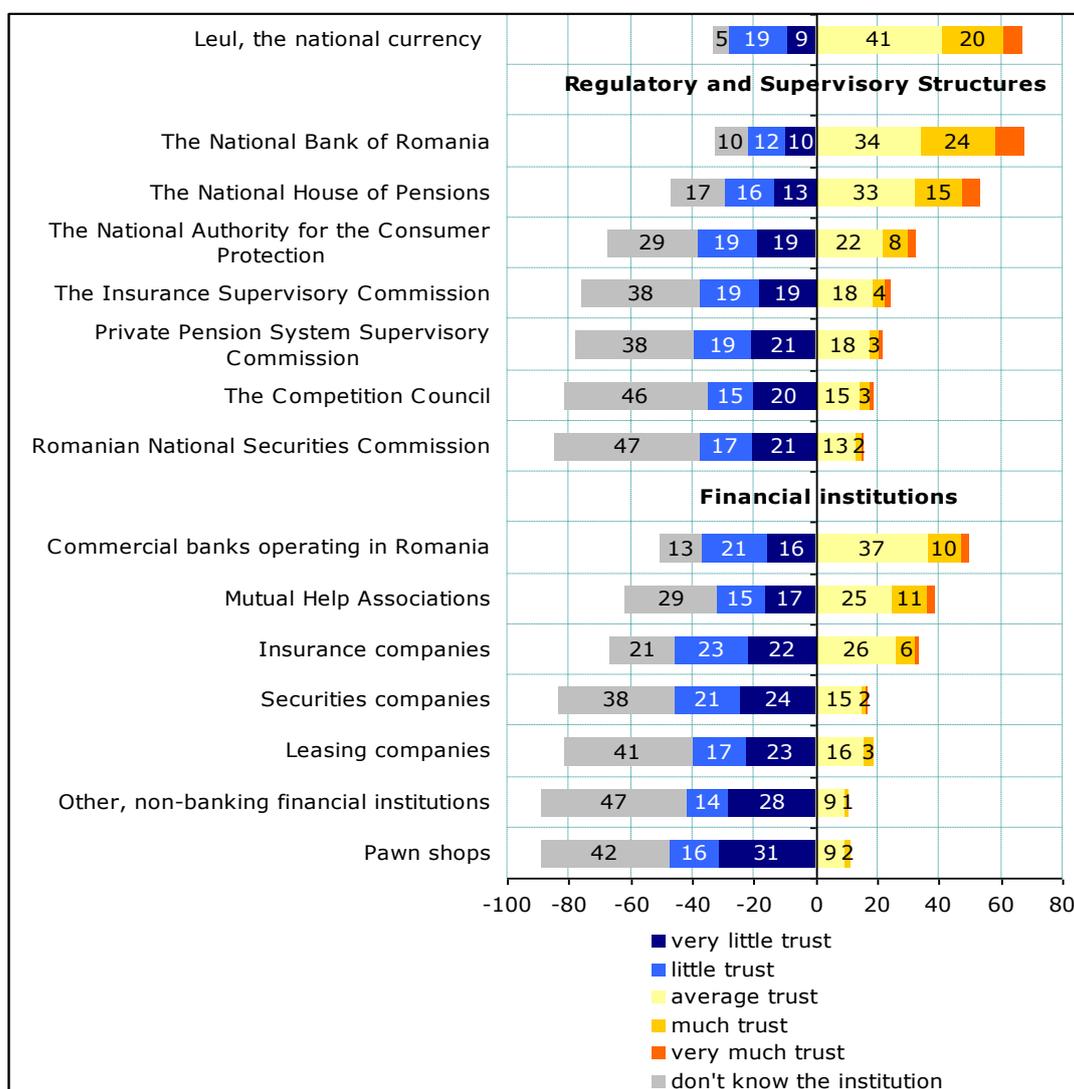
People not always choose the financial institution: 26% of those who use at least a financial service work with a bank imposed by the employer and 4% have no other options due to lack of access.

More than half of population (54%) uses advice when buying financial products. Most of them use two-three sources of information, only 3% of population search in four sources of information or more. The other 46% either do not use financial products or buy products without considering any other option.

People however do not necessarily seek advice from an appropriate professional adviser: 28% turn first to the advice of family and friends, 17% rely on product information, 15% turn to sale staff, 15% make their financial decision based on advertisements, and 9% use Internet. Only 4% consult a professional adviser and 14% look to analytical materials published in mass media.

²⁶ Lack of trust is common to all institutions (financial or not), with the exceptions of the Orthodox Church and the Army.

Figure 13 Trust in financial entities (%)



Data: *Financial Literacy Survey in Romania* (May 2010).

6.4 FINANCIAL LITERACY AND MAKING FINANCIAL CHOICES

A financially capable person in the domain of making financial choices: (a) Seeks advice from an appropriate professional adviser before buying financial products or actively shops around; (b) Doesn't just rely on the information that accompanies the product to inform his/her purchasing decision; (c) Compares products from multiple providers either personally or through an appropriate professional adviser; (d) Compares products on features and price rather than making a choice based on brand image; (e) Reads terms and conditions in detail.²⁷ (FSA, 2006: 18)

²⁷ Question not asked in Romania.

For Romania we determined an overall score²⁸ of making financial choices which is higher when the person: (1) understands the risks they face with savings/ investments and do not have unrealistic expectations of government support, (2) actively shops around before buying financial products, (3) uses advice when buying financial products either from many sources or from an appropriate professional adviser, (4) choosing a bank for borrowing depending on cost of credit and not on reputation.²⁹

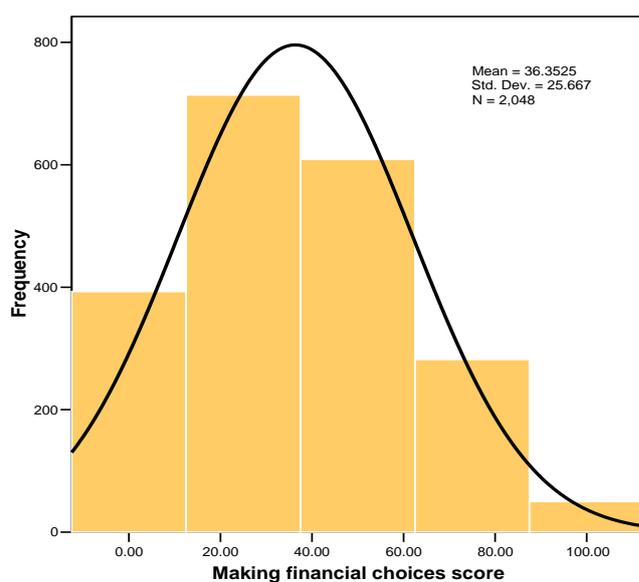


Figure 14 Overall score of making financial choices in Romania

The general capability of making financial choices is relatively small in Romania.

Data: *Financial Literacy Survey in Romania* (May 2010).

The capability of making informed financial choices is correlated with income: the higher the income, the more capable the person.

Making informed choices is strongly linked with age, education and residential area. Older people (65 years or over) perform worse than young under 24 years who perform worse than 25-64s. People who completed gymnasium at most do worse than those with vocational training who do worse than those with high school and so on. Rural residents score, on average, significantly less than urban residents.

Financial literacy is a powerful correlate of the capability of making informed choices. The higher the level of financial literacy, better the performances in this area. Thus, the average score of making choices increases abruptly from 20 for the financial outsider group, to 28 for the financially reluctant, 45 for financial adopters and 60 for financial followers.

The main determinants of the capability of making choices are the level of financial literacy, education, location in urban areas, and age (in this order as table 11 shows).

²⁸ The score is computed as the share of aspects fulfilled by the person out of the four listed in the text. The score was rescaled to take values between 0 and 100.

²⁹ Use of financial services and trust in financial institutions are not included in the overall score of making choices because they are part of the financial literacy index.

Table 11 The main determinants of making financial choices in Romania

| Predictors | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 19,360 | 3,287 | | 5,889 | ,000 | | |
| Financial Literacy Index | 11,370 | ,652 | ,435 | 17,438 | ,000 | ,609 | 1,643 |
| Education (years of school) | 1,669 | ,263 | ,162 | 6,358 | ,000 | ,584 | 1,713 |
| Residential area (urban=1) | 1,778 | ,531 | ,070 | 3,351 | ,001 | ,866 | 1,154 |
| Age (years) | -,088 | ,027 | -,068 | -3,234 | ,001 | ,861 | 1,162 |
| Household income per capita (lei) | ,001 | ,001 | ,022 | ,883 | ,377 | ,605 | 1,652 |

Dependent Variable: Overall score of making financial choices

Data: *Financial Literacy Survey in Romania* (May 2010). Note: Linear regression model, enter method, $R^2 = 0.30$.

The study conducted in 2005 in the UK (FSA, 2006) showed that experience is by far the best indicator of capability of making choices, much stronger than income. Experience refers to the number of different types of financial products people have bought. In this study, ‘experience’ is called ‘use of financial products’³⁰ or ‘participation in the financial system’ and it is incorporated in the financial literacy index.

In conclusion, data for Romania provide additional arguments that experience plays a very important role regarding capability of making financial choices. Thus, it is reasonable to say that improving capability in this area requires time, so that more and more people experience the role of financial consumer. However, education is the second important predictor. Therefore, the process of learning by doing could be boosted up through programmes of financial education addressed to the young from rural areas in particular.

7 FINANCIAL EDUCATION NEEDS

7.1 KNOWLEDGE AND UNDERSTANDING OF FINANCIAL MATIERS

The questionnaire included a section on consumer knowledge and understanding of financial calculation. This section includes both the self-assessment and an objective measure of knowledge and skills in financial issues. Thus, the level of knowledge and understanding is, on the one hand, self-reported and, on the other hand, determined based on a simple quiz of eight questions on basic issues needed to manage household finances. They related to: (1) awareness about consumer financial disclosure (e.g. effective annual interest rate, deposit insurance coverage); (2) understanding of basic financial concepts (e.g. inflation, interest on loans and deposits); (3) financial

³⁰ Pearson coefficient of correlation of overall score of making financial choices and use of financial services (experience) is 0.41 (p=.000).

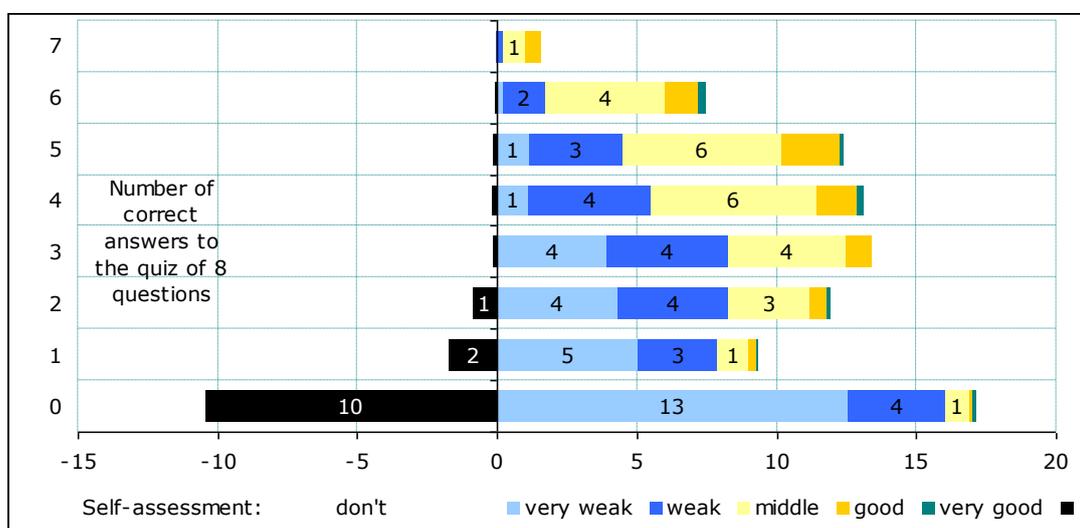
mathematics skills (e.g. percentages); and (4) awareness of rights as financial consumers.

The level of knowledge and understanding of financial matters at the level of general population is very low. First of all, 28% of population 16 years or more did not know to answer any of the eight questions. Secondly, 51% answered fewer than 60 percent of questions³¹ correctly, 21% gave five correct answers or more, and only one person answered correctly all eight questions. Low level of financial understanding is a common result of all surveys on financial literacy across the world, from United States, to Korea, Japan or Russia (OECD, 2005). Nonetheless, the level of knowledge and understanding of financial issues in Romania appears lower than in Russia³² or in the UK.

People from higher income households, men, age groups 25-44 years, and urban residents perform significantly better to the quiz.

Financial knowledge and understanding is strongly correlated with education. The number of average correct answers increases sharply from one for those who completed at most gymnasium and 4 for graduates of university.

Figure 15 Self-assessment versus number of correct answers to the quiz of knowledge and skills in financial issues (% of sample)



Data: *Financial Literacy Survey in Romania* (May 2010).

People self-assess their levels of knowledge and skills in financial issues as ‘weak’. Self-assessment is correlated with the score obtained to the quiz (figure 12). People often feel they know more about financial matters than is

³¹ Less than five questions.

³² In Russia the 2008 survey included a quiz of six questions. 19% of population gave at least five correct answers to the six questions. About 25% could not provide more than one correct answer. (Rutledge, 2009)

actually the case (OECD, 2005). This happens in Romania only for a small share of population. The majority is aware of their low capability of understanding financial issues.

7.2 STAYING INFORMED ABOUT FINANCIAL ISSUES

In the current rapidly changing environment, planning ahead and making appropriate choices is almost impossible without keeping abreast with financial developments.

The majority of population uses to keep informed with financial trends. Almost two thirds of population (63%) use to monitor at least one financial indicator but 37% monitor none. The comparative shares for the UK are 78% and 22% respectively (FSA, 2006).

There is a strong correlation between keeping well informed about financial matters and both income and general levels of education. While more than 90% of university graduates keep informed with financial matters, less than a half of people who completed at most gymnasium do so.

In addition, men outperform women. Young (16-24 years) and elderly (65 years or more) outperform population 25-64 years. Urban residents perform significantly better than rural ones.

Most people keep up with three financial indicators at most. The highest proportion, 40% keep up with interest rates; 36%, monitor changes in the public pensions, benefits and tax exemptions; 29% monitor the inflation rate; 16% keep up with changes in the housing market; 19% follow price fluctuations for oil or gold and 6% keep up with trends on capital market.

Newspapers and television or radio (34%), friends (25%), and advertising (20%) represent the main sources people use to keep informed about financial matters.

Keeping informed with regulations and activities of the regulatory and supervisory structures is rather low. Only regulations issued by the National House of Pensions and the National Authority of the Consumer Protection are monitored by larger proportions of population (namely 40% and 24% respectively).

For keeping informed with financial matters 26% of population consults (once a month or less most often) bank officers or bankers and about 10% seeks advice to representatives of insurance companies/ private pension fund. All other professional advisers are consulted by less than 3% of population.

Financial institutions and financial services represent a topic of conversation with family and friends for about 60% of population.

7.3 FINANCIAL EDUCATION NEEDS

As we have already shown, the large majority of population is aware of their poor knowledge and understanding of financial issues.

At the same time, there is a major interest for financial training courses (figure 16); 22% of population 16 years or more believe that financial training is needed on all fourteen items included in the questionnaire and 19% think that financial education is not needed at all.

Over 65% of population is interested in learning how to avoid over-indebtedness. This topic is recommended in significantly larger shares by people with high income and with high level of education located in urban areas. .

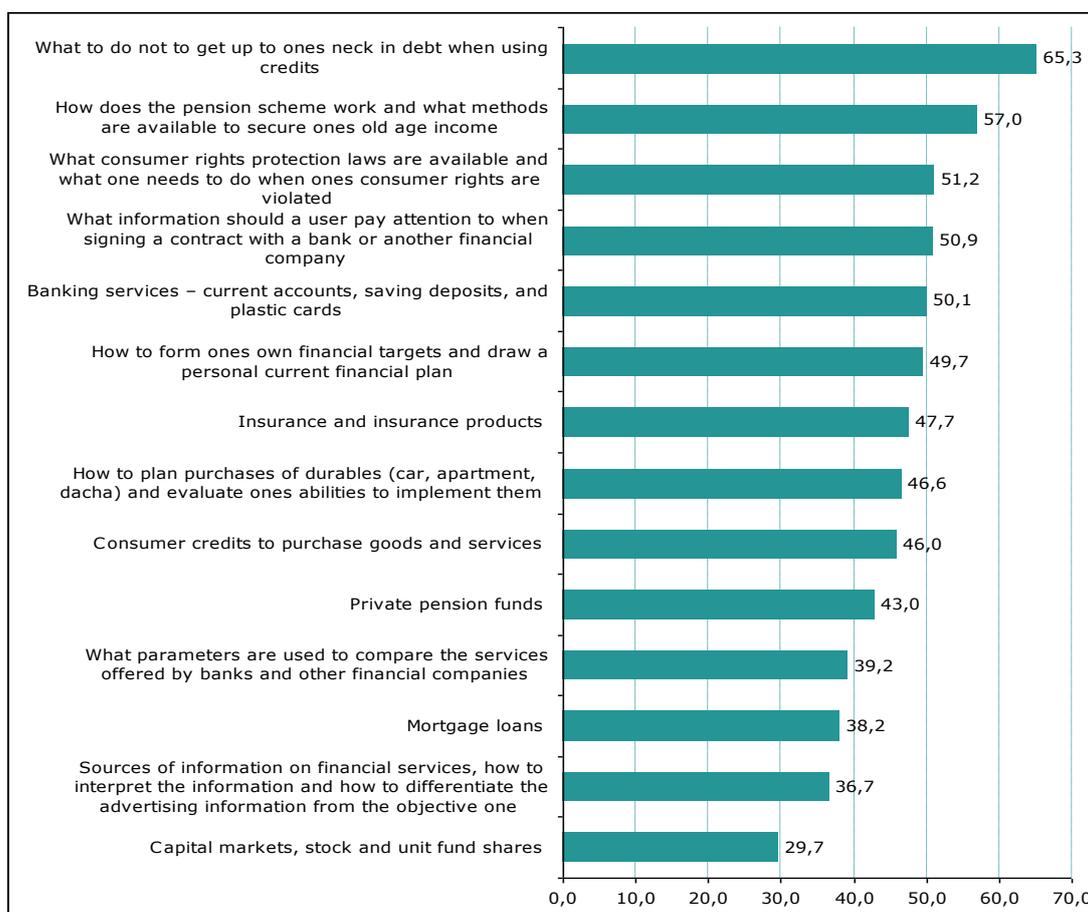
More than half of population (57%) thinks that pension planning should necessarily be part of a financial training course. They are over-represented among high-income groups, population 35-64 years, urban residents. With respect to education, only people who completed at most gymnasium show significantly lower interest in this topic, the others unanimously agree.

More than half of population (57%) considers necessary courses about consumer protection issues: (a) what laws protect financial consumers and what procedures should be followed when consumers feel that their rights have been violated and/ or (2) understanding of what parts of the contract agreements with financial institutions should be thoroughly studied in order to reduce a risk of future fraud or unfair business practices. These people account for significantly larger shares among high-income groups, 16-44 years age group, graduates of high school or higher education, people based in urban areas, particularly from large and very large cities.

Around a half of population want to learn more about:

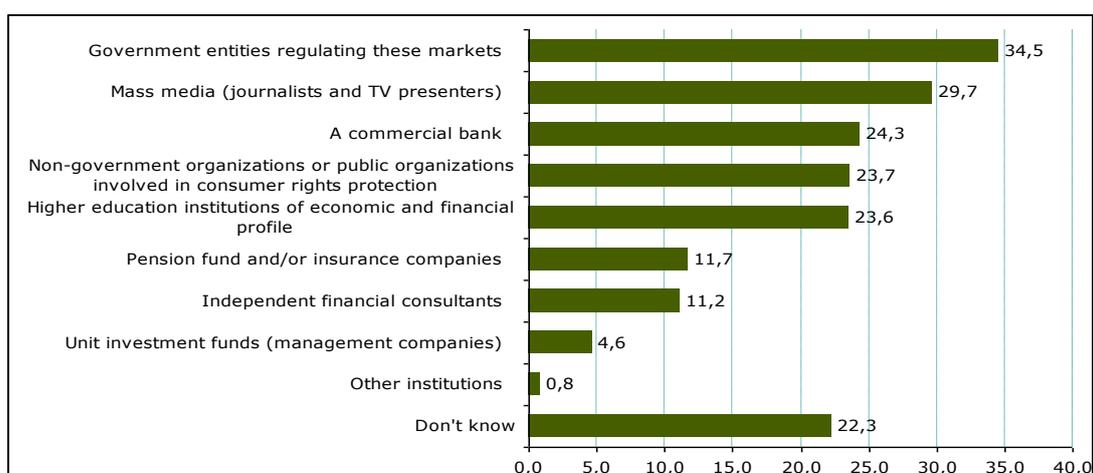
- various financial products: (a) banking services – current accounts, deposits and plastic cards, (b) insurance policies and (c) consumer loans
- planning for the future: (a) how to define targets and to draft a financial plan and (b) how to plan buying of durables.

Figure 16 Needs of financial education (%)



Data: *Financial Literacy Survey in Romania (May 2010)*.

Figure 17 Preferences for providers of financial education programmes (%)



Data: *Financial Literacy Survey in Romania (May 2010)*.

Most people consider government financial regulators to be the most appropriate providers of financial education programmes to the public. In the preferences hierarchy follows mass media and then, with very similar shares, bank, NGOs and universities with economic or financial profile (figure 17).

Accuracy

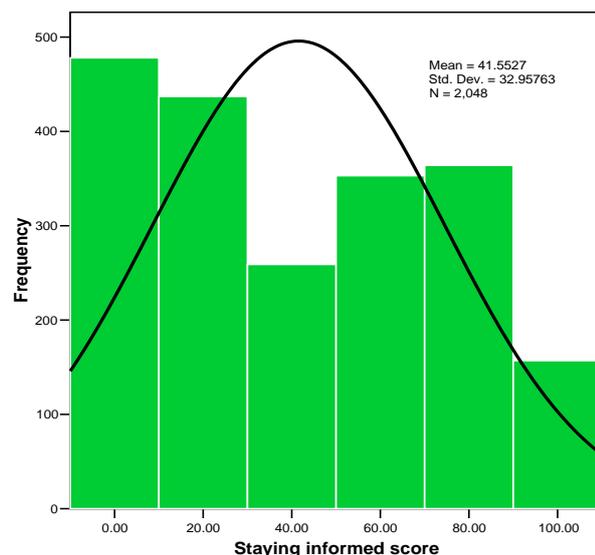
7.4 FINANCIAL LITERACY AND STAYING INFORMED ABOUT FINANCIAL MATTERS

A financially capable person in the domain of staying informed: (a) Monitors many financial indicators such as changes in the housing market, stock market and interest rates; (b) Checks these financial indicators frequently;³³ (c) Has a good level of applied financial literacy (good score to the ‘money quiz’); (d) Thinks it is reasonably important to keep up to date with financial matters.³⁴ (FSA, 2006: 18)

For Romania we determined an overall score³⁵ of staying informed about financial issues, which is higher when the person: (1) knows the main activities and regulations issued by the financial regulatory and supervisory structures, (2) conducts an active search for information by consulting professionals, (3) wants to learn more about sources of information on financial issues and how to interpret the information, (4) is interested to learn how to compare financial services, (5) considers that consumer protection issues should necessarily be considered by any financial education programme.³⁶

Figure 18 Overall score of staying informed about financial issues in Romania

Data: *Financial Literacy Survey in Romania* (May 2010).



³³ Question not asked in Romania.

³⁴ Question not asked in Romania.

³⁵ The score is computed as the share of aspects fulfilled by the person out of the four listed in the text. The score was rescaled to take values between 0 and 100.

³⁶ Knowledge and understanding of financial matters (score of the money quiz) and financial information (monitoring of financial trends) are not included in the overall score of staying informed because they are part of the financial literacy index.

The capability of staying informed about financial matters is rather diverse in Romania. While a number of people are clearly willing and taking efforts to stay informed it is just as common for people to be completely indifferent.

The capability of making informed financial choices is correlated with income, age, education, level of financial literacy and area of residence. Older people, on average, have fewer relevant information and are not willing to learn new things. Urban residents, again, outperform the rural ones. People from higher income groups performed better in staying informed about financial issues than people from low income groups. University graduates perform better than post-high school who perform better than those who completed high school and so on.

However, only financial literacy and education are significant determinants of staying informed about financial matters, all other things being equal or held constant. It is not surprisingly taking into consideration the high weight of the information related components within the financial literacy index.

Table 12 The main determinants of staying informed about financial matters in Romania

| Predictors | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 33,942 | 4,536 | | 7,482 | ,000 | | |
| Financial Literacy Index | 15,814 | ,864 | ,471 | 18,303 | ,000 | ,633 | 1,579 |
| Education (years of school) | ,837 | ,348 | ,063 | 2,404 | ,016 | ,612 | 1,635 |
| Residential area (urban=1) | -,087 | ,736 | -,003 | -,118 | ,906 | ,836 | 1,196 |
| Age (years) | -,020 | ,036 | -,011 | -,537 | ,591 | ,916 | 1,091 |
| Household income per capita (lei) | ,000 | ,002 | -,001 | -,022 | ,982 | ,711 | 1,407 |

Dependent Variable: Overall score of staying informed about financial matters

Data: *Financial Literacy Survey in Romania* (May 2010). Notes: Linear regression model, enter method, $R^2 = 0.25$. We did not improve the model for keeping comparability with the other three domains of activity.

In conclusion, financial education would be a very effective instrument to improve people skills to seek, understand and use financial information for their well-being.

8 CONCLUSIONS AND RECOMMENDATIONS

This report includes the analysis of the baseline survey on *Financial Literacy in Romania*, conducted in May 2010, with a survey methodology (sampling and questionnaire) in line with the *Financial Literacy Survey in Russia* (the World Bank, 2008) and the baseline survey *Financial Capability in the UK* (Financial Services Authority, 2005).

From the **methodological** point of view, the analysis uses three concepts: (a) financial literacy, (b) financial education and (c) financial capability. The three concepts are related, but they are not similar. The concepts of financial literacy and financial education are narrower as they focus more on knowledge and skills and lack the behavioral element of financial capability.

The research carried out in UK showed that financial capability is inextricably linked to the behavior in four domains: (1) managing money; (2) planning ahead; (3) making choices and (4) getting help. Kempson et al (2005) argued that for studying financial capability it is appropriate to develop separate scores for each domain, and not an overall score. In the UK as well as in other well-developed economies with well-established financial systems, most population participates in the financial system (hold at least a bank account) and the majority obtains very similar levels of overall capability.

This is not the case in Romania (Bulgaria and probably other former communist countries), where the financial system has developed only after 1990, large rural areas are far away from any provider of financial services/ products, knowledge society is still under-developed, e-literacy is still low, the rural population holds a large share, the general population is far poorer and, consequently, a small part of the population participates in the financial system. Under these circumstances, an overall financial literacy is appropriate.

Data for Romania supports this approach. The overall financial literacy index (FLI) is built on four dimensions in line with the UK model of financial capability, namely: (a) knowledge and understanding, (b) skills, (c) attitudes and confidence, and (4) behaviour - participation in the financial system (use of financial services/ products).

As **key findings**, the report identifies the major challenges that any financial literacy program will have to face the low level of financial literacy at the level of general population (with a value of 31 on a scale between 0 and 100).

The FLI values was grouped in four financial literacy types:

- *Financial followers* type cover about 14% of the population of 16 years or more from Romania, which is approximately 2.5 million persons. They use to inform daily from various sources, monitor a wide range of financial trends (property market, interest rates, inflation rate etc.), have good knowledge and understanding of financial issues, nearly all make use of various financial products and have the lowest distrust in the financial institutions.
- *Financial adopter* type includes about 29% of the population aged 16 years or more, which represents approximately 5.2 million people. They use also to inform daily from TV and few times a week from various other sources, but monitor only few financial indicators, particularly interest rates, inflation rate, and changes in the level of public pensions, benefits and tax exemptions. Their knowledge and understanding of financial issues is medium.
- *Financial reluctant* type is the best represented in Romania: about 41% of the population 16 years or over, which is more than 7.5 million persons. Their level of financial literacy is significantly lower than the average level of the adopters and particularly of the followers. They have poor knowledge and understanding of financial issues and only 20% of them use a formal financial product.
- *Financially outsiders* represent about 14% of the population of 16 years or more from Romania (nearly 2.5 million persons). The main characteristic of this type is lack of participation, lack of knowledge and lack of awareness in relation to the financial system. Mere 3% of them use one formal financial product. Practically they appear to be financial illiterate.
- The four types of financial literacy have significantly different socio-demographic portraits. Thus, financial outsiders tend to be over-represented about women, persons 65 years or more, less educated persons, Roma minority, subsistence farmers, informal workers, retired and house-persons, residents of poorer rural areas, particularly those located in the poorer regions (Moldavia and Muntenia) and, accordingly, among low incomes groups. In contrast, the financial followers are well represented between (both men and women) employees, employers and self-employed that attained a level of education above average (college or university) and high-income groups, being located in large cities (over 100 thousands inhabitants) from the better-off regions of the country Transilvania and Bucharest.
- Financial literacy is interrelated with the level of modernity of both the individuals and their environment.
- The main determinants of the capability of planning ahead are individuals' level of financial literacy, household income, location in urban areas, and education. In Romania, unlike for instance in the UK, age is not a significant determinant. Also, regardless gender of a person, the higher is his/ her education, the more money s/ he makes, the more developed is the locality where s/ he lives and the younger s/ he is, the higher his/ her level of financial literacy.

On the side of **policy recommendations**, the analysis clearly shows that (1) in Romania, most people are unprepared for the unexpected and (2) increasing financial literacy is a prerequisite of improvement of population capability to make adequate financial provision for the future. People at all income levels should foremost change attitude, learn responsibility for their future and learn to organize their resources in more appropriate ways.

Data for Romania provide additional arguments that experience plays a very important role regarding capability of making financial choices. Thus, it is reasonable to say that improving capability in this area requires time, so that more and more people experience the role of financial consumer. However, education is the second important predictor. Therefore, the process of learning by doing could be boosted up through programmes of financial education addressed to the young from rural areas in particular.

The survey commissioned by the World Bank provides the ground for further in-depth analyses, at regional level, with a differentiation of the information needed for the consumers' segmentation. These next steps will better contribute to the overall objective of the establishment (and later the evaluation) of a well-targeted national program of financial education.

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10 ANNEXES

10.1 SAMPLING METHODOLOGY

Sampling methodology for the Financial Literacy Survey in Romania

Sample volume: 2,200 non-institutionalized persons aged 18 or older. In addition, the sample will be boosted with 180 persons aged 16-18 years old. Overall, at least 2,000 valid questionnaires should be completed during fieldwork.

Type of the sample: Probabilistic, two-stage, stratified, representative at national level, with an error of $\pm 2.8\%$ at a 95% confidence level.

Stratification criteria: The sampling scheme is based on two stratification criteria

- (a) Historical region (8 regions)
- (b) Type of locality, with 7 theoretical strata
 - i. Urban areas – 4 strata
 - 1. very small towns under 30 thou inhabitants
 - 2. small towns 30,001-100 thou inhabitants
 - 3. medium cities 100,001–199 thou inhabitants
 - 4. large cities 200 thou inhabitants or more
 - ii. Rural areas – 3 strata determined based on the synthetic index of community development ³⁷
 - 1. poor communes (the 30% communes with the lowest level of development within the country)
 - 2. medium developed communes
 - 3. developed communes (the 30% communes with the highest level of development within the country).

Sampling stages: The sampling scheme includes two stages.

Sampling units: There are two sampling units corresponding to the two sampling stages. In the first sampling stage, voting sections are selected and in the second stage, non-institutionalized persons aged 18 years or more.

Selection: Random selection in all sampling stages.

Sampling scheme: In the first stage the sample is distributed proportionally with the volume of population for each of the 56(= 8 x 7) theoretical strata different from zero.

³⁷ Community development index computed by Dumitru Sandu – data and methodology available at: [http:// sites.google.com/ site/ dumitrusandu/](http://sites.google.com/site/dumitrusandu/) .

Table 1. Population structure by historical regions and type of localities, data for 2008 (%)

| Historical region | Type of locality | | | | | | | Romania |
|-------------------|------------------|--------------------------|-------------------|--------------------|----------------------|---------------------|----------------|---------|
| | RURAL | | | URBAN | | | | |
| | Poor commune | Medium developed commune | Developed commune | Town under 30 thou | Town of 30 - 99 thou | City 100 - 199 thou | City 200+ thou | |
| Moldova | 6.3 | 4.6 | 1.3 | 2.3 | 2.4 | 2.4 | 2.8 | 22.0 |
| Muntenia | 3.1 | 4.7 | 3.0 | 2.2 | 2.7 | 1.4 | 2.1 | 19.2 |
| Oltenia | 1.9 | 2.6 | 1.0 | 1.7 | 1.0 | 1.0 | 1.4 | 10.6 |
| Dobrogea | 0.2 | 0.8 | 0.6 | 0.5 | 1.0 | 0.0 | 1.4 | 4.5 |
| Transilvania | 0.4 | 2.8 | 4.7 | 3.9 | 3.8 | 1.4 | 2.7 | 19.7 |
| Crisana-Maramures | 0.6 | 1.9 | 1.7 | 1.7 | 0.2 | 2.0 | 1.0 | 9.0 |
| Banat | 0.1 | 0.5 | 1.3 | 0.8 | 0.6 | 0.0 | 1.5 | 4.6 |
| Bucuresti-Ilfov | 0.0 | 0.1 | 0.7 | 0.4 | 0.1 | 0.0 | 9.0 | 10.4 |
| Total | 12.6 | 17.9 | 14.3 | 13.4 | 11.8 | 8.1 | 21.8 | 100.0 |

Data: Population data from the *Locality Database* (National Institute for Statistics, 2010).

The corresponding number of voting sections for each strata (Table 2) is determined taking into account on the one hand, the volume of each strata sub-sample (= sample size x share of total population in that strata as shown in Table 1) and, on the other hand, a minimum level of 10 questionnaires for each sampling point. The voting sections which will represent sampling points are then randomly selected based on the exhaustive national list of voting sections (the latest available from the Permanent Electoral Authority).

Table 2. Number of sampling points by historical regions and type of localities

| Historical region | Type of locality | | | | | | | Romania |
|-------------------|------------------|--------------------------|-------------------|--------------------|----------------------|---------------------|----------------|---------|
| | RURAL | | | URBAN | | | | |
| | Poor commune | Medium developed commune | Developed commune | Town under 30 thou | Town of 30 - 99 thou | City 100 - 199 thou | City 200+ thou | |
| Moldova | 12 | 8 | 2 | 4 | 4 | 4 | 5 | 39 |
| Muntenia | 6 | 9 | 5 | 4 | 5 | 3 | 4 | 36 |
| Oltenia | 4 | 5 | 2 | 3 | 2 | 2 | 3 | 21 |
| Dobrogea | 1 | 1 | 1 | 1 | 2 | 0 | 3 | 9 |
| Transilvania | 1 | 5 | 9 | 7 | 7 | 3 | 5 | 37 |
| Crisana-Maramures | 1 | 4 | 3 | 3 | 1 | 4 | 2 | 18 |
| Banat | 0 | 1 | 2 | 1 | 1 | 0 | 3 | 8 |
| Bucuresti-Ilfov | 0 | 1 | 1 | 1 | 0 | 0 | 17 | 20 |
| Total | 25 | 34 | 25 | 24 | 22 | 16 | 42 | 188 |

The sample has 188 sampling points (voting sections) of which 104 are in urban areas, and 84 are in rural localities, including the capital city.

For each sampling point is computed the number of corresponding questionnaires by dividing the strata sub-sample by the number of sampling points of that strata.

In the second sampling stage, the electoral registers corresponding to the voting sections (selected as sampling points) are used as sampling frame. Non-institutionalized persons aged 18 or more are randomly selected from the electoral registers based on the mechanical step method.³⁸

In those localities where the electoral registers are not available (or the municipality do not grant access), the random route method will be used. All these cases will be specified and explained in the fieldwork report, except for Bucharest, where the random route method will be used for all voting sections, as the rate of replacement from electoral registers is high in all national representative surveys.

The electoral registers include only persons 18 years or more. Accordingly, the sample will include a boost of persons aged 16, 17 or persons that had their 18th birthday after November 2009.³⁹ For each voting section, one person aged 16-18 years will be added. They will be selected based on the random route method.

Ensuring data quality

- the consultant company will train the field interviewers regarding the sampling rules, with special attention paid to the individuals' selection and replacement.
- for each person selected in the sample will be completed the first page of the questionnaire, which includes identification variables needed for computing the error.
- replacement of persons is allowed only in the following cases:
 - o The person does not live at the address mentioned in the electoral register or s/ he is absent for the entire period of data collection
 - o Interview refusal – for reducing the refusal rate, training and constant monitoring of the field interviewers is needed, particularly given the complexity of the questionnaire

³⁸ The mechanical step per sampling point is computed by dividing the total number of persons included in the electoral register by the number of corresponding questionnaires per sampling point (specified in the attached excel file). Then the persons are selected by adding the step, starting with the fifth position of the register. Thus, in each sampling point (voting section) there will be selected the persons from positions 5, 5+step, 5+2*step, ..., 5+n*step.

³⁹ In nearly all Romanian localities, the electoral registers have been updated for the presidential elections from November 2009.

- Use the “three visits rule”: a selected person can be replaced only after three visits at different hours and days, with at least one weekend day.