

Financial Literacy in Bosnia and Herzegovina: analytical report

Prepared for World Bank

***Author: Dragan Bagić, PhD
University of Zagreb
Department of Sociology***

***Sarajevo, Zagreb
June 2011***

Content

EXECUTIVE SUMMARY	3
1. INTRODUCTION.....	6
2. RESEARCH METHODOLOGY	8
2.1. DATA COLLECTION METHOD	8
2.2. SAMPLING	8
3. FINANCIAL LITERACY IN BOSNIA AND HERZEGOVINA	11
3.1. KNOWLEDGE AND UNDERSTANDING OF FINANCIAL MATTERS	11
<i>Introduction</i>	11
<i>Financial knowledge quiz</i>	11
3.2. TYPOLOGY OF FINANCIAL LITERACY	15
<i>Financial literacy – typology description</i>	17
3.3. STAYING INFORMED	21
3.4. FINANCIAL EDUCATION NEEDS	25
<i>Self-assessment of financial knowledge</i>	25
<i>Financial education sources</i>	26
4. HOUSEHOLD FINANCIAL MANAGEMENT	29
4.1. HOUSEHOLD FINANCIAL RESOURCES	29
4.2. MAKING ENDS MEET	32
<i>Determinants of households' economic situation</i>	39
<i>Dealing with shortages</i>	40
5. PLANNING AHEAD.....	43
5.1. DEALING WITH THE UNEXPECTED	43
5.2. SAVING	46
5.3. DEALING WITH SURPLUSES.....	49
6. USING AND CHOOSING FINANCIAL PRODUCTS	52
6.1. CHOOSING FINANCIAL PRODUCTS.....	52
6.1. USAGE OF BANKING AND INSURANCE SERVICES	55
<i>Usage of banking services</i>	55
<i>Use of insurance services</i>	58
6.2. USE OF LOANS	59
7. CONFIDENCE IN FINANCIAL INSTITUTIONS.....	60
8. CONCLUSIONS AND RECOMMENDATIONS	64
9. REFERENCES.....	68

Executive summary

This report presents the results of the first Financial Literacy Survey in Bosnia and Herzegovina. Data collection was based on a random, nation-wide sample of citizens of Bosnia and Herzegovina aged 18 or older (N = 1036). Data were collected by face-to-face interviews conducted during May 2011, with a response rate of about 60%.

The first section of the study deals with **financial literacy** and its various aspects. Arguably, the most important aspect of financial literacy is financial knowledge. To assess it, a 13-question quiz dealing with roughly two aspects (financial mathematics knowledge, knowledge of financial terms and regulations) was constructed. In general, the financial knowledge of B&H citizens seems to be low, indicated by the average score of about 5 and a half correct answers out of 13. Self-assessment of financial knowledge corresponds to the results of the financial quiz. In this sense, citizens recognize the need for a comprehensive financial education, and express very high interest in the proposed topics for financial education. Issues related to financial planning ahead and customer rights top the list of contents for the needed financial education.

Combining knowledge with the other four financial capability domains allowed us to arrive at the **Financial Literacy Index**, a single-dimension composite scale of financial knowledge and capability. The index was constructed according to a successful example of constructing such a scale in the previous similar study conducted in Romania. The average result of 39.2 points (of the maximum 100) suggests low levels of financial literacy in Bosnia and Herzegovina. By dividing the sample in four groups according to the financial literacy scale, we were able to recognize 4 segments of population according to financial literacy: *outsider*, *reluctant*, *adopter*, and *follower*. Each of them is characterized by some unique socio-demographic and socio-economic properties.

Financial outsiders (16% of the sample) are more frequently female, over 65 years of age, with low education; either retired or housewives and with below average income. Financial reluctant are the biggest group formed around financial literacy (37%). They are common among all age groups; characterized by low (mostly primary) education, coming most often from rural parts of the country, and common among the unemployed and people with no personal income

Financial adopters form around one-third of the sample. They encompass all age groups, but are less common among persons aged 65+; have higher education and income than average and are equally found among rural and urban population. Finally, financial followers (11% of the sample) are more frequently male, aged from 25 to 64. Their education is high school or university degree and they are common among highest income categories.

Next sections deal with **managing everyday financial choices** (saving, covering shortages etc.) in the context of general household financial situation. An assessment of household income per capita shows that an average income is on the level of 330 KM. However, respondents' subjective assessment points to 350 KM as an average amount needed to be able to buy all necessities like food and clothes. Furthermore, about half of respondents did not have any money unspent during the months of the year 2010. In this sense, saving is clearly difficult for the majority of respondents – 90% of those who do not save any funds mention that they have no extra money to do so.

Such objective circumstances, further characterized by high unemployment rates and low income levels relative to prices of necessities, create a tough environment for making financial choices. However, knowledge and skills in the financial area are lacking, a good example being that occasional extra money is predominantly kept in cash. Shortages are most often dealt with by reducing expenses (9 in 10 cases), and only exceptionally by using previous savings (only 20%). As an unfortunate consequence, citizens' readiness to longer-lasting drops of income stays rather low, as total savings would mostly cover up to three months of household income.

Confidence in financial institutions is generally low, on average under three on a scale from 1 to 5. A special case is the national currency, the Convertible Mark; it is trusted by almost half of the respondents. In comparison, the second highest trusted institutions are banks (the Central bank and commercial banks) who are trusted by less than one-fifth of respondents.

Way of **choosing financial services** is an additional indicator of financial literacy of Bosnian citizens. Regarding active shopping behaviour, one in three Bosnian citizens always compares terms and conditions of various financial products when deciding upon the best value. However, more than 40% 'rarely' or 'never' compare various offers.

Financial education should be formulated to influence this domain, as more knowledge would raise people's confidence when dealing with financial matters, leading in turn to a more active approach and better financial decisions. Awareness of the advantages and limitations of various information sources should also be raised, as financial services are usually chosen after contacting unreliable or biased information sources – predominantly friends and advertisements. Few Bosnia and Herzegovina citizens consult analytic articles in the mass media (12%) or independent experts (8%). Staying informed with financial and economic trends for most citizens means following the news about pensions and similar types of income and oil, gold and metal prices. The dominant sources of this information are (again) friends and acquaintances, followed by bank officers and bankers. **Use of financial services** is mostly limited to only two – about half of the respondents use one or two financial services, and more than a third do not use any financial products or services. By far the most commonly used type of financial services is the current account, followed by some type of general insurance. Loans are rarely used, by about 15% of the respondents, and a large majority of them is provided by the banks. Social networks and similar informal instruments often provide substitutes for financial instruments – borrowing from friends and relatives is an important strategy of dealing with both making ends meet from month to month (one half of respondents), as well as dealing with a sudden drop of income (one in three participants). Similarly, informal credits in shops prove to be a more widespread instrument of dealing with such shortages than credit card usage or tapping into previous savings.

As a conclusion, we come up with a diagnosis and a realistic possibility of improving the situation. The diagnosis is a low level of financial literacy in Bosnia and Herzegovina, which combined with low purchasing power and lack of resources means that households' economy is often concentrated just on making the ends meet. We believe, however, that high interest in various educational topic is an indicator of genuine demand for financial education in Bosnia and Herzegovina. When designing the appropriate education measures, the challenge is twofold: reaching active groups who have an actual need for making certain financial decisions and finding appropriate communication channels with the target groups, to avoid targeting already knowledgeable groups.

1. Introduction

This report presents the results of the survey on financial literacy among the citizens of Bosnia and Herzegovina, conducted within a larger project that aims at creating the Action Plan for Consumer Protection in Financial Services.

The conclusion about the need for an Action Plan was reached by the representatives of the World Bank, the Federal Ministry of Finance, the Central Bank of Bosnia and Herzegovina, supervisory authorities for entity financial institutions and non-governmental organizations for the protection of consumer rights, based on the Diagnostic Review on Consumer Protection and Financial Literacy in Bosnia and Herzegovina conducted by the World Bank in 2009-2010. This diagnostic review was conducted at the request of the Federal Ministry of Finance, as part of a larger World Bank pilot program to assess consumer protection and financial literacy in developing countries and middle-income countries. The diagnostic review in Bosnia and Herzegovina was the eighth within this project.

The financial literacy survey, whose results are presented in this report, aims at establishing the basic situation with respect to financial literacy, serving on the one hand as a preparation for the educational activities plan, and on the other as a basis for measuring the efficiency of activities undertaken. The survey was conducted on a nationally representative sample of Bosnian citizens aged 18 years and older. Data collection was conducted by the professional agency for marketing and public opinion research Ipsos. A consultant engaged for methodology and statistics was Dragan Bagić, PhD, from the Department for Sociology at the Zagreb Faculty of Philosophy, who supervised data collection, conducted statistical analysis of collected data and prepared this report¹.

The survey was modelled after the identical survey conducted in Romania. The questionnaire used in the Financial Literacy Survey in Romania was localized for Bosnia and Herzegovina, including adaptations to match the Bosnian context and methodological improvements in wording of questions. Data analysis and the structure of the report also followed the example of the Romanian survey authored by Manuela Sofia Stănculescu.

¹ The author of this report would like to thank his colleague Ivan Puzek for his help in preparing this report.

Conceptually, this financial literacy survey relies on the concepts developed in several Financial Services Authority studies in Great Britain, as well as their application and operationalisation in several financial literacy studies within the aforementioned pilot program of analysis and development of the consumer protection system in the financial services sector, conducted by the World Bank in developing and middle-income countries. Kempson et al (2005) state that financial capability consists of three basic dimensions: 1) financial knowledge and understanding, as preconditions for developing financial skills, 2) financial skills that enable the planning and managing of personal finances and household finances, and 3) financial responsibility which, based on financial knowledge and skills, enables people to manage their finances properly, without the risk of encountering financial difficulties. According to this definition of financial capability, financially capable people are people: 1) who are able to control their financial situation and are successful at "making ends meet", while resisting pressure to spend more than they can afford or go into debt due to unexpected expenditures; 2) who are able to handle unexpected falls in income and can set aside money for the future (pension funds or savings for a rainy day); 3) who possess necessary knowledge, skills and confidence to choose the right financial products and services, according to their short and long-term needs; and 4) who know where and how to find reliable necessary information and help with making decisions concerning financial services, whereas an important component of this dimension is trusting financial and supervisory institutions, as well as being familiar with their scope of activities with respect to consumer protection.

This report is structured to follow the above-mentioned dimensions to the highest degree possible. The description of survey methodology in Section 2 is followed by a detailed analysis of financial literacy of Bosnian citizens, with an emphasis on the level of knowledge and typology with respect to the financial literacy level. Section 4 presents the results regarding the skills of Bosnian households in managing household finances. The fifth section presents the results related to household experiences with various financial services and methods for choosing them. It is followed by indicators of trust in financial institutions and state supervisory agencies for the financial system and consumer rights protection. The section preceding conclusions presents results directly related to citizens' needs for financial education, and its modalities.

2. Research methodology

2.1. Data collection method

Data for this survey were collected by means of in-home face-to-face interviews, using a highly structured questionnaire. Data collection was conducted by the Ipsos agency. All interviewers participating in data collection were specifically trained for this project, including detailed rules for the selection of respondents, rules for asking respondents questions and rules for data collection itself. Seven local coordinators (Sarajevo, Tuzla, Zenica, Mostar, Bihać, Banja Luka, and Bijeljina) conducted verbal instructions in their respective areas, based on written instructions prepared by Ipsos researchers with the help of consultants working on this project. Interviewers engaged in particular regions were selected depending on their ethnic and local language background in order to decrease refusal rates and to avoid negative “halo effect”. Data collection was performed from 4th May to 15th May 2011.

2.2. Sampling

In Bosnia and Herzegovina, as is well known, there is no completely reliable sample frame or information about universe. The main reasons for such a situation are migrations caused by war and lack of recent census data. The last census dates back to 1991, but since then the size and distribution of population has significantly changed. In such a situation, researchers have to combine all available sources of population data to estimate the present size and structure of the population: estimates by official statistical offices and international organizations, voters’ lists, list of polling stations, registries of passport and ID holders, data from large random surveys etc.

The sample was three-stage stratified: in the first stage by entity, in the second by county/region and in the third by type of settlement (urban/rural). This means that, in the first stage, the total sample size was divided in two parts proportionally to number of inhabitants by entity, while in the second stage the subsample size for each entity was further divided by regions/counties. In the third stage, the subsample for each region/county was divided in two categories according to settlement type (rural/urban).

Taking into the account the lack of a reliable and complete list of citizens to be used as a sample frame, a multistage sampling method was applied. The list of polling stations was used as a frame for the selection of primary sampling units (PSU). Polling station territories are a good choice for such a procedure since they have been recently updated, for the general elections held in October 2010. The list of polling station territories contains a list of addresses of housing units that are certainly occupied.

In the second stage, households were used as a secondary sampling unit. Households were selected randomly by a random route technique. In total, 104 PSU were selected with an average of 10 respondents per PSU. The respondent from the selected household was selected randomly using the Trohdal-Bryant scheme.

In total, 1036 citizens were interviewed with a satisfactory response rate of around 60% (table 1). A higher refusal rate is recorded among middle-age groups (table 2). The theoretical margin of error for a random sample of this size is +/-3.0%.

Table 1: Response rate

Outcome of contact	n	%
Nobody at home	48	2,8%
Eligible person not at home	48	2,8%
Refusal – total	561	32,79%
Refusal in first contact	422	75,2%
Refusal of eligible person	139	24,8%
Given up after a minimum of two visits	14	0,82%
Other (excluded after control)	5	0,29%
Completed	1036	60,5%
Total	1712	100%

Table 2: Refusals by gender and age

		n	%
Gender	Male	261	46,5%
	Female	300	53,5%
Age	18-29	79	14,1%
	30-44	206	36,7%
	45-59	173	30,8%
	60+	103	18,4%

Due to refusals, the sample structure deviated from the estimated population structure by gender, age and education level. Deviations were corrected by RIM weighting procedure. The sample structure after applying the weights is presented in table 3.

Table 3: Sample structure

		n	%
Sample		1036	100%
Gender	Male	480	46,3%
	Female	556	53,7%
Age	18-24	132	12,7%
	25-34	197	19,0%
	35-44	166	16,0%
	45-54	189	18,2%
	55-64	157	15,2%
	65+	196	18,9%
Education level	Primary school	440	42,5%
	Secondary school	459	44,3%
	High school or university	137	13,2%
Occupation	Employee	327	31,6%
	Business owner / self-employed	45	4,3%
	Unemployed	172	16,6%
	Retired	260	25,1%
	Student	87	8,4%
	Housewife	139	13,4%
	Other	6	0,6%
Household income	Up to 300 KM	381	36,8%
	301-500 KM	173	16,7%
	501-800 KM	186	18,0%
	801-1500 KM	200	19,3%
	More than 1500 KM	97	9,4%
Entity	Federation of B&H	669	64,6%
	The Republic of Srpska & Brčko District²	367	35,4%

² The Republic of Srpska and the Brčko District are separate political entities, but since the Brčko District has a small number of inhabitants and a small share in the total population, for analytical reasons it is grouped together with the Republic of Srpska, which predominantly surrounds it.

3. Financial Literacy in Bosnia and Herzegovina

3.1. *Knowledge and understanding of financial matters*

Introduction

As the recent economic crisis suggests, the problem of rational choice when choosing the right financial instruments is not trivial. Moreover, households face financial decisions on a day-to-day basis, and each of these decisions can either improve the financial situation of the family or worsen it, sometimes dramatically. In a country like Bosnia and Herzegovina that is still undergoing transition, understanding basic financial concepts is probably even more important than in Western European countries with a long history of capitalism. We can find at least two reasons why this could be the case. First, the opening of the market after the war meant that there was suddenly a wide choice of goods that were not easily available before. However, the demand for those goods instantly created a demand for financial services to help financing the new acquisitions. Actually, it can be argued that the demand was largely fuelled by newly available financial services. The high demand for financial services means that care and planning must be taken to avoid over-indebtedness and bankruptcy. However, this planning can only take part if a citizen possesses the knowledge to choose the right course of action. Second, during the socialist era, financial services were not as common and their forms not as developed as today; thus, the citizens of Bosnia and Herzegovina are facing tough choices trying to choose among a number of similar options. In capitalist economies, these instruments have developed gradually, allowing their citizens to adopt and develop an understanding of them. On the other hand, sudden introduction of these instruments in the transitioning context means that citizens might not have had the time to develop the necessary skills.

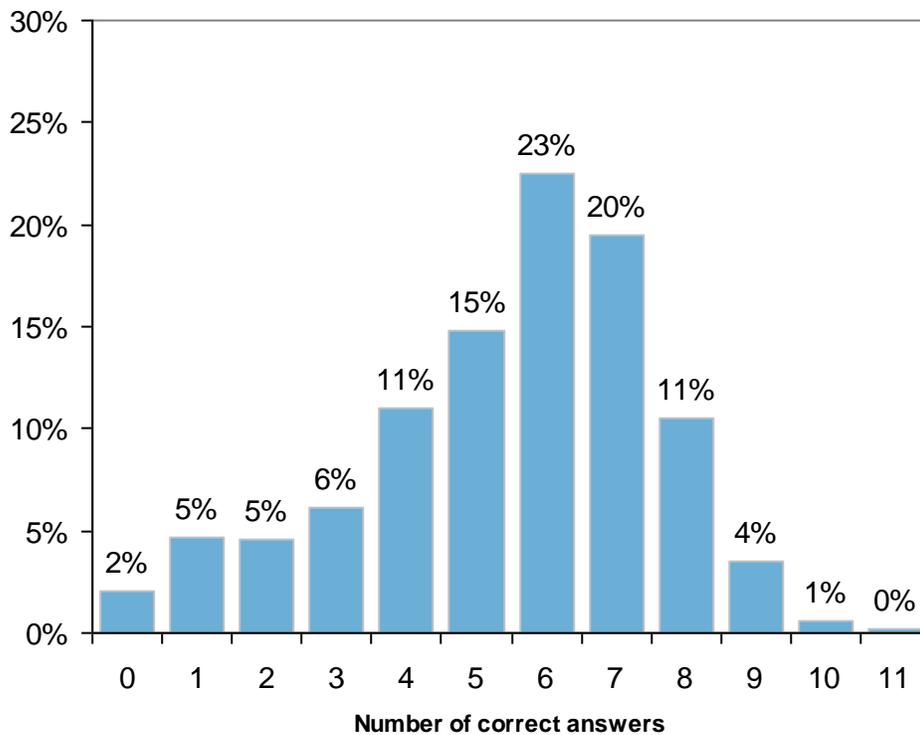
Financial knowledge quiz

The quiz on financial knowledge was constructed around two domains: the first one was the domain of financial mathematics, the second one the domain of financial terms and services. The domain of financial mathematics comprised six questions, covering the basics of an interest rate and a savings calculation (a basis for decision-making in the

sphere of saving money); the basic relationship between the price level and the purchasing power (inflation); the basic percentage calculation when dealing with price reductions; and a simple estimate of the interest rate of a loan when the amount of loan and the yearly instalment was given. To assess the knowledge of financial terms and services, respondents were asked about the basics of the regulation of Bosnian financial markets (e.g. deposit and stocks investment insurance); the role of guarantor; the role of loan currency clause; and basics of small-scale consumer credits.

The results suggest a slightly better knowledge of financial mathematics than of financial terms and services. Thus, among the questions correctly answered by half or more respondents, there are five questions (out of eight presented in the quiz) regarding financial mathematics and two questions (out of five presented) regarding financial terms and services. However, the most frequently correctly answered question belongs to the domain of terms and services – about 82% of participants knew that a loan guarantor could be made to repay the loan during the entire duration of the loan period.

Figure 1: Distribution of the number of correct answers – financial knowledge quiz



Out of 13 questions to be answered (and a maximum of 13 points to be gained), the mean number of correct answers for the whole sample was about five and a half correct answers. The mean result varies significantly between demographic categories. It is significantly higher in the male subsample than in the women subsample. The average quiz result also differs among age groups, with a basic trend of a slow, but steady rise in age groups from 18 to 54 years. Among the 55 and older age groups, there is a trend of a declining number of correct answers, with a 65+ age group having a rather poor score of four correct answers on average. As expected, the mean score on the quiz goes up as the education level increases, especially between primary and secondary school ($\Delta = 1.2$). Occupational positions reflect the differences found among age groups, with the retired scoring the lowest and general employees scoring the highest average score. Similar trends are observed when income is analyzed – the general trend is that of a rising average score with an increasing income, with the best-off households (earning more than 1500 KM monthly) providing the participants with the highest knowledge (6.4 correct answers on average). There is a significant difference between the two entities; respondents from the Federation of Bosnia and Herzegovina (FBiH) scored almost a point higher than respondents from the Republic of Srpska (RS) and the Brčko District. Finally, the data confirm a positive connection between the number of banking services used and the financial knowledge score, with users of two or more banking services scoring higher than the average and users of three or more services achieving a significantly higher average quiz results.

In addition to socio-demographic and socio-financial indicators, we assessed the link between the participants' media exposure³ and an average score on the financial knowledge quiz. The correlation coefficient of $r = .14$ indicates a weak positive relationship between media exposure (frequency of reading newspapers, watching television, surfing the internet etc.) and financial knowledge.

³ Media Exposure Scale was constructed by summing up the following items: „How often do you...“ „1 - Read newspapers sold on the territory of the whole entity or the state; 2 - Read local/regional or cantonal newspapers; 3 - Listen to radio stations broadcasted on the territory of the whole entity or the state; 4 - Listen to local or regional/cantonal radio stations; 5 - Watch the entity TV programs or the state public service; 6 - Watch local/regional or cantonal TV programs; 7 - Read news at Internet portals.” Possible answers were anchored on a five-point scale from “never” to “daily”.

Table 4: Average number of correct answers on the knowledge quiz – by demographics

		Mean	Valid N
Sample		5,45	1036
Gender	Male	5,78	480
	Female	5,17	556
Age	18-24	5,77	132
	25-34	5,83	197
	35-44	5,83	166
	45-54	6,04	189
	55-64	5,39	157
	65+	4,01	196
Education level	Primary school	4,74	440
	Secondary school	5,95	459
	High school or university	6,08	137
Occupation	Employee	6,22	327
	Business owner / self-employed	5,87	45
	Unemployed	5,24	172
	Retired	4,55	260
	Student	5,91	87
	Housewife	5,12	139
	Other	6,46	6
Household income	Up to 300 KM	4,91	381
	301-500 KM	5,49	173
	501-800 KM	5,77	186
	801-1500 KM	5,69	200
	More than 1500 KM	6,40	97
Entity	FBiH	5,73	669
	RS & Brcko District	4,94	367
Number of banking services used	0	5,04	378
	1	5,22	326
	2	5,87	176
	3	6,44	88
	4+	6,51	68
Financial literacy typology	Outsider	3,05	162
	Reluctant	5,22	379
	Adopter	6,09	316
	Follower	7,21	170

3.2. Typology of financial literacy

Financial literacy is a construct denoting consumers' ability to make effective financial decisions. As another definition states, "personal financial literacy is the ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect everyday financial decisions, including events in the general economy" (Vitt et al. 2000). The conceptualization of personal financial literacy may follow the general notion of literacy, which in the broadest sense consists of understanding (i.e., knowledge of words, symbols and arithmetic operations) and use (ability to read, write and calculate) of materials related to prose, document and quantitative information (Huston 2010). In this sense, financial literacy is one special case; other literacies include health literacy, statistical literacy, computer literacy etc.

In the context of this survey, and following earlier experiences in constructing this typology (*Analysis of the Financial Literacy Survey in Romania and Recommendations*) the concept of financial literacy encompassed the following domains:

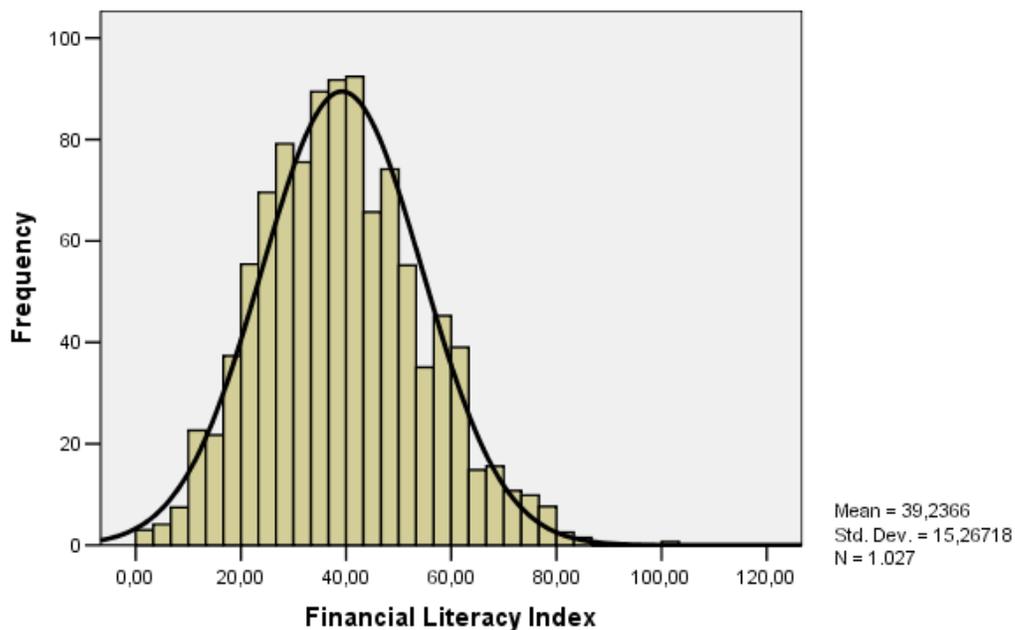
- Knowledge and understanding of financial issues – objective measure of knowledge obtained via a quiz that tested applied financial literacy
- Media exposure (information gathering sources) – using various mass media sources to gather finances-related information
- Financial information following – the number of financial trends and indicators followed by respondents
- Trust in financial institutions – scale composed of respondents' self-evaluation of trust in official/supervising financial institutions and commercial financial institutions
- Participation in the financial system – number of formal financial products and services that citizens use

Financial literacy index was constructed by first independently constructing (by counting or summing the answers, as appropriate) all of the above sub-scales. The next step was to check inter-correlations of the subscales and run factor analysis with all the subscales to

check the content domains measured by the subscales. As the analysis pointed to a unique underlying domain of the five subscales, we were able to sum up the information contained in subscales and thus construct the Financial Literacy Index. The FLI is rescaled to attain values from 0 to 100; the average score of 39 suggests a low level of financial literacy in the general population.

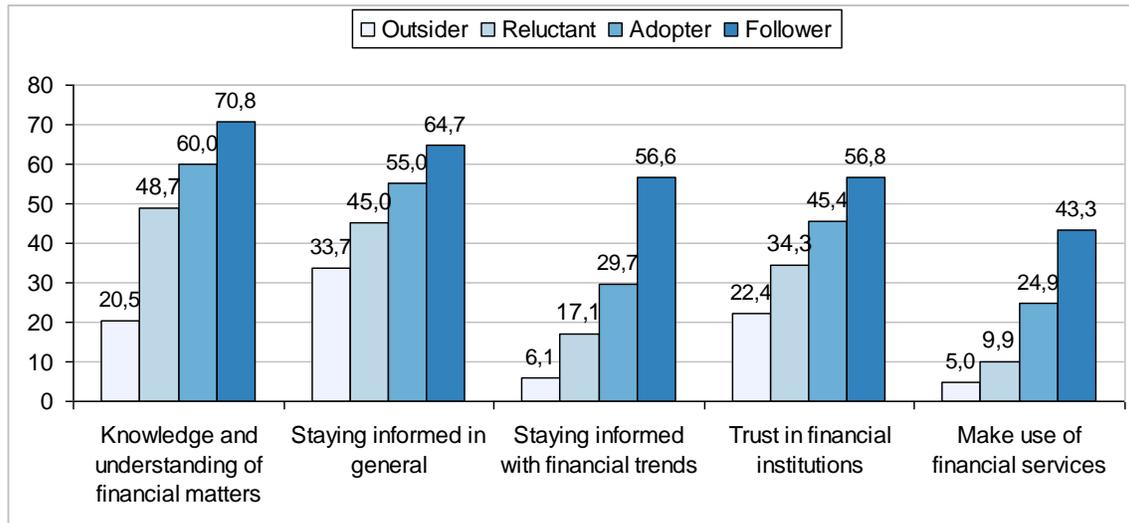
As the same uni-dimensional concept of financial literacy was used in a Romanian context (Stănculescu, 2010), we can directly compare the two results⁴. Average score recorded in Romania was 31, while in B&H it was 39. The difference is both statistically significant and substantial – both scores point to overall low levels of financial literacy, but findings in Bosnia suggest that it is a higher part of the lower portion of the scale than is the case in Romania.

Figure 2: Distribution of Financial Literacy Index - histogram



⁴ This is the only valid direct comparison, as other studies have used different approaches to measuring financial literacy.

Figure 3: Financial literacy types and their respective average scores on each financial literacy dimension



To facilitate further analyses, the FLI was divided into four groups, based on the standard deviation from the mean. By adding and subtracting the standard deviation, we were able to arrive to four distinct groups – financial literacy types: a) financial outsiders, b) financial reluctant type, c) financial adopters, and d) financial followers. This typology was created after a similar Financial Literacy Survey in Romania and shares the same methods of classification. Each of the financial types has some unique properties, which will be outlined below.

Financial literacy – typology description

1) *Financial outsider type.* Financial outsiders represent about 16% of the population aged 18+ in Bosnia and Herzegovina. Simply put, financial outsiders score very low on all subscales presented in the previous chapter. Most of them do not follow any financial trends, have very little understanding and knowledge and often have not even heard about certain financial institutions. All this makes them unable to participate equally in the product for financial markets and services. Financial outsiders are overly represented in the female subsample, most commonly are over 65 years of age and have low education. They are most frequently either retired or housewives. Their income is often below the average, and they are over-represented in RS and the Brčko District.

2) *Financial reluctant type*. The most widely represented type of financial literacy in Bosnia (about 37% of the sample) is the reluctant type. Their level of financial literacy can be thought of as a continuation of the financial outsider, but it is higher across all the analyzed aspects. This type is over-represented among women, but not as pronounced as the financial outsiders are. They are also found among all age groups, being slightly more represented in the youngest part of the population. Their education level is predominantly primary school, and they are the type most represented in rural parts of the country. This type is over-represented among the unemployed and people with no personal income.

3) *Financial adopter type*. The financial adopter type shares common characteristics with the financial reluctant type, but the differences among them are analytically important. First, there is an age difference: while financial reluctant types are found among all age groups, adopters are significantly under-represented in the older part of the population (65+). Their education profile follows the average pattern of the sample, but with less low-educated and correspondingly more higher-educated persons. They are equally represented in rural and urban areas, as well as in most occupations, from students to the employed and unemployed. They are more frequently represented in the higher income categories (both personal and household) than the financial reluctant type. They are equally likely to come from FBiH as from RS and the Brčko District.

4) *Financial follower type*. Financial followers are characterized by higher scores on all FLI index subscales, but especially on the use of financial services and staying informed with financial trends. They are more often males, and most frequently aged from 25 to 64. The majority of people belonging to this type have a high school or university degree. They are highly overrepresented among business owners/self-employed persons, but are also commonly found among the employed. Most of them belong to the highest income categories. Geographically, they more often come from FBiH than from RS and the Brčko District.

Typology profiles description points out to the key socio-demographic variables that determine the level of financial literacy. In order to discern the most important predictors of financial literacy, we ran a multivariate analysis (least-squares linear regression) that

takes all the mentioned predictors simultaneously into account and thus proved the information about the relative importance of the predictors, as well as the extent to which the named socio-demographic aspects influence the financial literacy score.

Table 5: Socio-demographic and socioeconomic profile of four financial literacy types

		N	Outsider	Reluctant	Adopter	Follower
Sample		1026	16%	37%	31%	17%
Gender	Male	473	7%	32%	37%	24%
	Female	552	23%	41%	25%	10%
Age	18-24	132	9%	46%	35%	11%
	25-34	197	7%	34%	37%	22%
	35-44	164	5%	32%	36%	27%
	45-54	186	12%	36%	28%	24%
	55-64	156	16%	39%	33%	13%
	65+	191	43%	37%	18%	2%
Education level	Primary school	435	28%	43%	24%	5%
	Secondary school	453	7%	36%	36%	21%
	High school or university	137	4%	23%	35%	38%
Settlement type	Rural	498	17%	41%	31%	12%
	Urban	528	15%	33%	31%	21%
Occupation	Employee	324	2%	23%	40%	35%
	Business owner / self-employed	44	13%	31%	23%	33%
	Unemployed	171	14%	50%	29%	7%
	Retired	255	29%	37%	29%	5%
	Student	87	9%	48%	34%	9%
	Housewife	139	31%	48%	15%	6%
	Other	5	37%	25%	37%	
Household income	Up to 300 KM	371	24%	40%	24%	12%
	301-500 KM	172	17%	49%	26%	8%
	501-800 KM	186	11%	34%	39%	16%
	801-1500 KM	200	10%	30%	40%	19%
	More than 1500 KM	96	1%	23%	30%	46%
Personal income	No income	263	18%	51%	25%	5%
	Up to 300 KM	199	30%	36%	29%	5%
	301 to 500 KM	189	13%	37%	34%	16%
	501+ KM	192	1%	18%	40%	42%
	DK/NA	182	15%	37%	28%	20%
Entity	FBiH	666	14%	37%	31%	18%
	RS & Brcko District	359	19%	37%	31%	13%

The regression model included Financial Literacy Index as a dependent variable and six independent variables: gender, age, education (primary, secondary, high school or higher education), personal income (last month), entity and settlement type (urban or rural).

The model accounts for 32% of explained variance, suggesting a satisfying explanatory power and a predictive value. In terms of socio-demographic determinants, apart from the settlement type all of the included variables significantly influence the outcome variable, financial literacy. In terms of the influence direction, being male, younger, highly educated, with higher personal income and living in the Federation of BiH significantly increases the score on the financial literacy index (the level of influence is relatively low, however). Type of settlement in which the person resides does not influence the score significantly. In this sense, it seems that personal characteristics like age, education and income play a major role in determining one's financial literacy, with education being an especially important one in the sense that it can be strategically targeted to increase financial literacy levels.

Multivariate analysis results should be briefly compared to findings of a very similar analysis in Romania. In contrast to our finding, their result suggest that gender does not play a key role in financial literacy; in other words, men and women in Romania have *ceteris paribus* similar levels of financial literacy (Stănculescu, 2010). Other common predictors (age, education level, income level) play a similarly important role in both countries.

Table 6: Socio-economic correlates of Financial Literacy Index score

		Non-standardized Coefficients		Standardized Coefficients	t	Co linearity Statistics	
		B	Std. Error	Beta		Tolerance	VIF
1	Gender (1 = female)	-5,786	,838	-,189**	-6,906	,888	1,126
2	Age	-,160	,026	-,184**	-6,105	,732	1,366
3	Primary education (ref)						
	Secondary education	5,649	1,010	,184**	5,592	,616	1,624
	High education	10,953	1,432	,244**	7,651	,654	1,530
4	Personal income	,009	,001	,240**	8,589	,855	1,170
5	Entity (1 = RS & The Brčko District)	-1,854	,836	-,058*	-2,217	,973	1,028
6	Settlement type (1 = Urban)	1,517	,808	,050	1,877	,949	1,054
	(Constant)	49,105	2,653		18,510		

**p < .01

*p < .05

Dependent Variable: Financial Literacy Index

Adjusted R² = .32

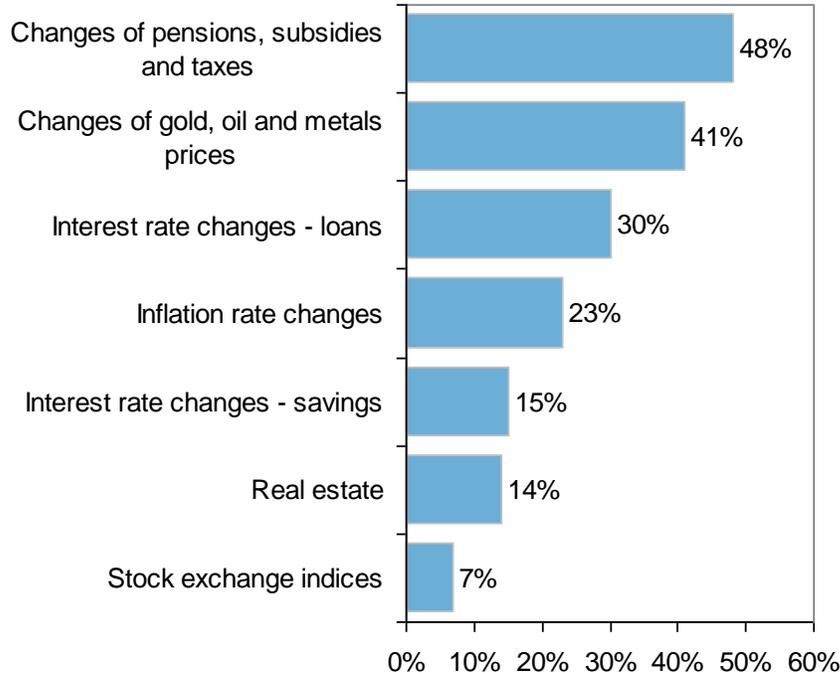
3.3. *Staying informed*

The following of financial trends, an integral part of the Financial Literacy Index (see below), is the focus of a separate detailed analysis presented in this section. Almost half of the respondents (48%) follow changes in pensions, subsidies and taxes, while another forty percent follow changes in gold, oil and metals prices. Changes in loan interest rates are followed by about 30% of the respondents, which is a noteworthy example of developing loans market. Half as many (15%) respondents follow the analogous interest rate changes for savings, and a similar number track real estate market changes. Following changes in stock indices is the least common: only about 7 percent of the respondents do it regularly.

It should be noted that different financial literacy segments follow different contents: in spite of their overall low following of financial trends, financial outsiders are informed about changes in pensions and related state provisions – key information for this, on average, old segment. Apart from that, they do not follow any other information to a greater extent. Other segments follow all of the proposed contents, but to varying degrees, with financial followers scoring the highest percentages on all of the aspects;

they least eagerly follow stock indices (30% of them) while a large majority follows interest rate changes for loans (79%) and changes in gold, oil and metals prices (78%).

Figure 4: What trends from the ones given below you follow personally?



A picture of the respondents' following of the financial trends is incomplete without an assessment of sources of information, as information the respondents get can significantly vary across the media. According to the presented data, news in the media are the dominant source of financial information, with a majority of citizens (72%) using it. Other sources are much less important: advertising, insurance and bank employees and friends all contribute less than 10% to the financial information.

An average survey participant follows 1.79 (7 being the maximum) of the presented financial trends. There is a substantial difference between men and women, men following more than 2 financial trends on average. Young people tend to follow the least number of financial trends, while middle-aged people follow the most, 2.25 on average, similarly to self-employed participants who follow about 2.3 trends on average. There is a very clear relation between the number of banking services used and the following of financial trends, which is not surprisingly a positive one.

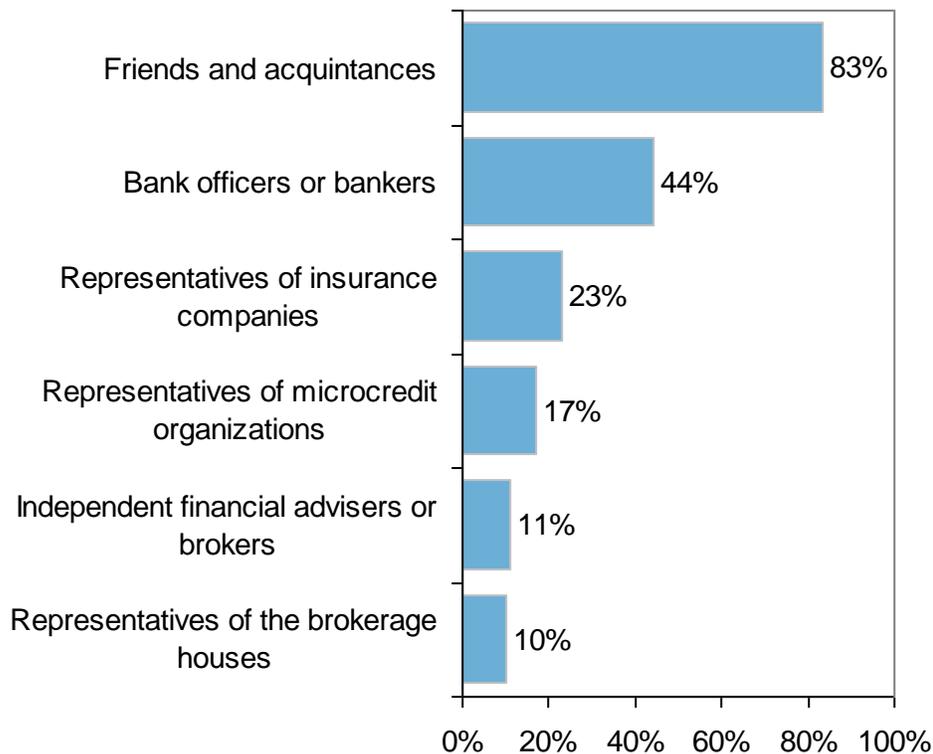
Table 7: Average number of financial trends following - by demographics

		Mean	Valid N
Sample		1,79	1036
Gender	Male	2,10	480
	Female	1,52	556
Age	18-24	1,07	132
	25-34	1,92	197
	35-44	2,25	166
	45-54	2,07	189
	55-64	2,04	157
	65+	1,29	196
Education level	Primary school	1,50	440
	Secondary school	1,92	459
	High school or university	2,30	137
Occupation	Employee	2,29	327
	Business owner / self-employed	2,32	45
	Unemployed	1,63	172
	Retired	1,65	260
	Student	,98	87
	Housewife	1,46	139
	Other	,94	6
Household income	Up to 300 KM	1,46	381
	301-500 KM	1,58	173
	501-800 KM	2,20	186
	801-1500 KM	1,88	200
	More than 1500 KM	2,51	97
Entity	FBiH	1,84	669
	RS & District Brcko	1,70	367
Number of banking services used	,00	1,39	378
	1,00	1,70	326
	2,00	1,95	176
	3,00	2,52	88
	4 or more	3,11	68
Financial literacy typology	Outsider	,42	162
	Reluctant	1,20	379
	Adopter	2,08	316
	Follower	3,96	170

In addition to the analysis by demographic categories, we present here the results of the relation analysis between the index of the following of the financial trends and the Media exposure scale. The analysis shows that there is a statistically significant ($p < .01$) correlation of $r = .15$; however, the proposed relation is rather weak.

An additional measure of citizens' exposure to financial institutions is constructed by summing up contacts with various financial institutions: bank officers or bankers; representatives of insurance companies; representatives of brokerage houses; independent financial advisers or brokers; representatives of micro-credit organizations. Additionally, there is also a measure of talking with friends about financial matters. The majority of respondents (83%) discuss financial issues with their friends and acquaintances. Bank officers or bankers are the most frequently used (44%) formal sources of information. Representatives of insurance companies and micro-credit organizations are contacted at least sometimes by about one-fifth of the participants. Other possible personal sources of information are rarely used. This indicates that bank officers or bankers have the highest current as well as potential impact on certain aspects of financial literacy, a fact that should not be overlooked in the design of the literacy education.

Figure 5: Financial information sources – percent of citizens who have contact at least once a year



Additionally, we have constructed a summative scale of contacting in order to acquire information on financial matters. A relative majority of respondents use only one direct source of financial information. Men contact more than two institutions on average,

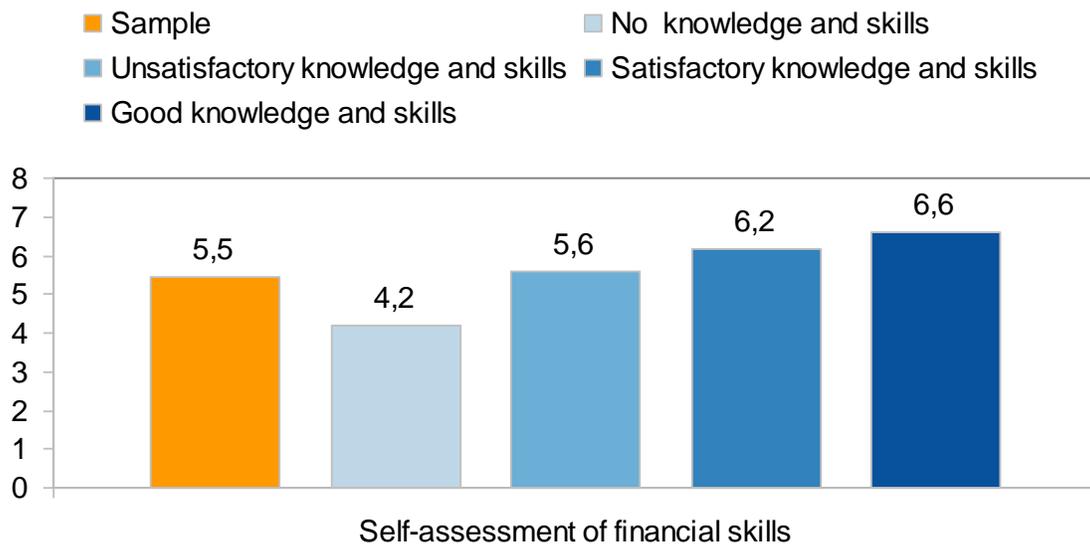
significantly more than women do. Contact levels are lower among the youngest and the oldest respondents, but very similar among the middle-aged respondents (25-54 years). Contacting levels are the highest among higher educated participants with a higher-than-average income, which is hardly surprising given their higher knowledge and a wider range of possibilities in dealing with the resources.

3.4. *Financial education needs*

Self-assessment of financial knowledge

In order to contextualize the objective findings of the knowledge quiz in a subjective framework of education needs, it was important to analyze participants' self-assessment of knowledge level and its relationship with the number of correct answers in the knowledge quiz. In general, the self-assessed level of knowledge among Bosnian citizens is rather low. In numbers, this means that almost a quarter of respondents think they have no knowledge or skills in the domain of finances. A further quarter of respondents state they possess unsatisfactory knowledge and skills. The prevailing level (38%) is 'satisfactory knowledge and skills' and finally, less than 10% of citizens think they have good or excellent financial knowledge and skills. The correlation between self-assessed knowledge and the number of correctly answered quiz questions is clearly shown in the graph below – respondents who state having no knowledge and skills answered about 4 questions correctly, while respondents who claim to possess good knowledge and skills answered about 6.6 quiz questions correctly. We can conclude that low levels of knowledge explored in the quiz are accompanied by correspondingly low levels of self-assessed knowledge, which indicates citizens' readiness to accept their low knowledge and thus creates demand for an efficient financial education program.

Figure 6: Self-assessment of financial skills



Low levels of objective knowledge and the correspondingly low levels of subjective knowledge indeed create the demand for financial education programs, as indicated by our data and the following figure.

Financial education sources

In general, most of the proposed financial education topics are considered as needed by Bosnian citizens. Furthermore, for most of the topics the levels of agreement regarding their needed are exceptionally high, indicating high interest in rather diverse topics, from planning, customer information and protection to general information on financial products and services. The most prominent topic is not to end up to one's neck in debt when using credits, which is indicated as needed by 86% of the citizens.

Next, about 80% of the people agree that topics concerning customer awareness (information user needs to pay attention to when signing a contract) and customer protection (available consumer protection laws, what to do when these rights are violated) should be included as well.

In general, the dominant construct interesting to the large majority of people is the general notion of financial planning. It is represented primarily by the fact that most participants want to know what to do to avoid indebtedness. In addition, there are three more statements (indicated by the dark shade in the graph) that generally regard planning

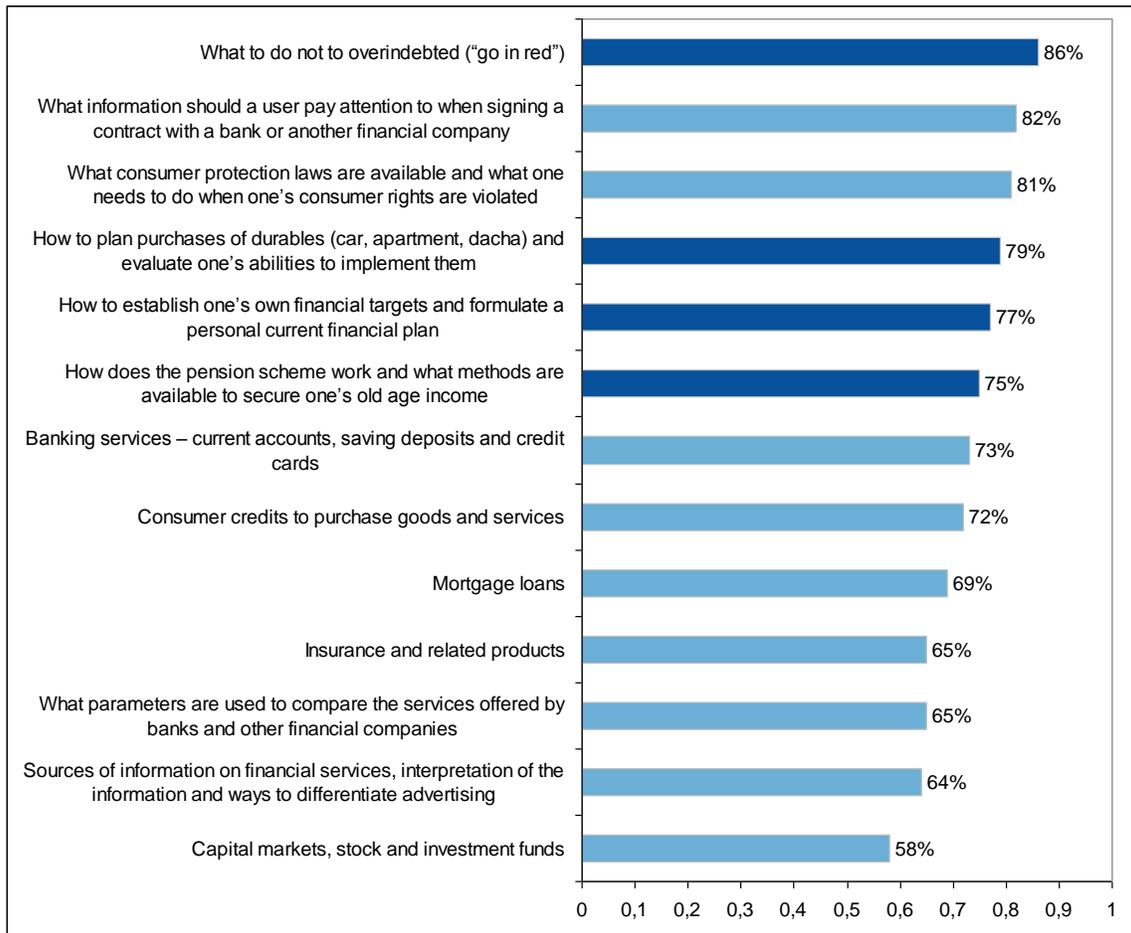
ahead: 1) planning purchases of durables; 2) establishing own financial targets, and 3) securing old age income via pension scheme – all of them are very highly ranked when considering financial education needs.

General information about various financial products and services seems to be a somewhat less important topic. The most interesting are the most frequently used ones: information about bank accounts, consumer and mortgage loans, insurance products and so on. However, interest in these topics is still very high, as suggested by the agreement rates, ranging from 73% to 65%.

The above findings suggest an understanding among the Bosnian public that financial products and services are extremely complex nowadays, and that a wide spectrum of knowledge is needed for making satisfactory decisions among the various financial products. For providers of the mentioned education services, Bosnian citizens prefer two distinct options: the first option is institutions of higher education for economy and finances, the other are the mass media. For most people, the mass media would be a more accessible option, but citizens seem to value the quality of education associated with institutions of higher education .

Among the proposed set of education topics, citizens seem to especially value applied skills which should help them to make rational financial plans effectively, both short-term (debts, purchases of durables) and long-term (pensions). Of equal importance are the topics promoting citizens' knowledge as customers, both in the area of awareness and in the area of customer rights.

Figure 7: Which of the following aspects of managing personal finances do you believe should be a necessary part of a financial training course for people...?



4. Household financial management

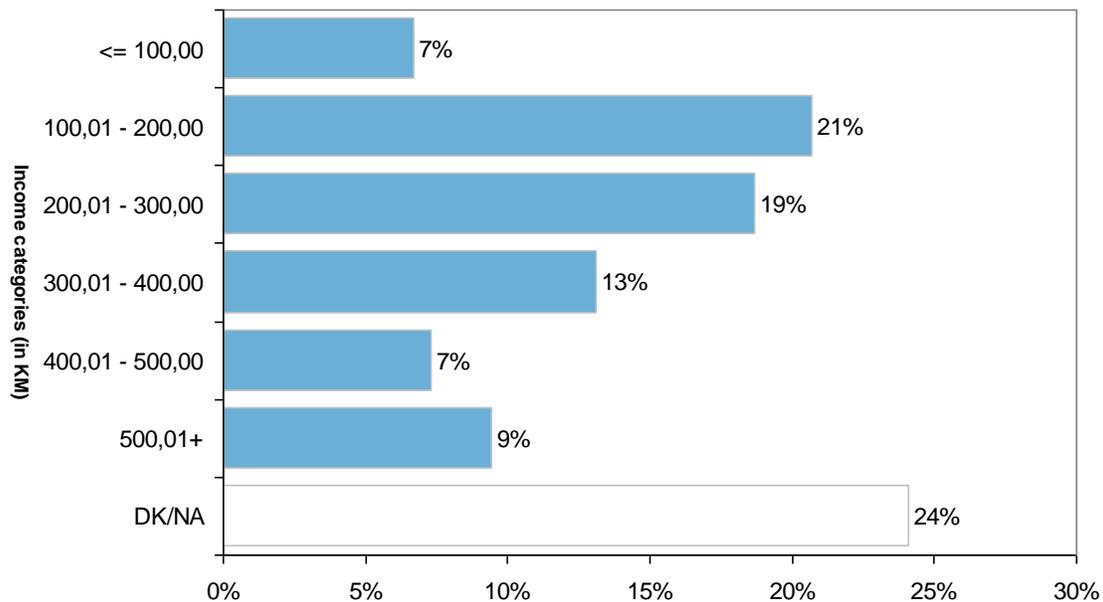
4.1. Household financial resources

In order to assess basic socio-economic background of Bosnian households, we will give a short overview of financial resources typically available to them. Both the household income and the assets will be described in order to depict budget constraints households face when making decisions regarding savings, investments, loans, etc.

As an indicator of choice, we used the household income per capita. This is the most suitable indicator in this case, as taking into account only personal income does not depict the relevant unit of analysis (household), and gross household income does not take into account the number of persons in a household.

Mean value of household income per capita is about 330 KM, which is approximately 165 euro. About 7% of Bosnian households have less than 100 KM income per capita. Most of the households (about 40%) earn between 100 and 300 KM per month per person: about one-half of these earn between *100 and 200 KM* and the other half earn between *200 and 300 KM*. About one-third of the surveyed households earn more than 300 KM per capita: 13% (of the sample) earn between 300 and 400 KM, further 7% earn between 400 and 500 KM, and 9% belong to the high-income category which earn more than 500 KM per person per month. It should be noted that the refusal rate on this question was rather high: about one-fourth of the respondents did not want to answer this question.

Figure 8: Household income per capita - distribution of categories



Apart from an average household income, employment structure of the families plays a major role in the household's financial position. The uncertainty plays a major role in the ability of long-term financial decision-making. With this in mind, we evaluated two further household indicators: employment status in the household and the existence of at least one steady income (salary/wage or pension) in the household.

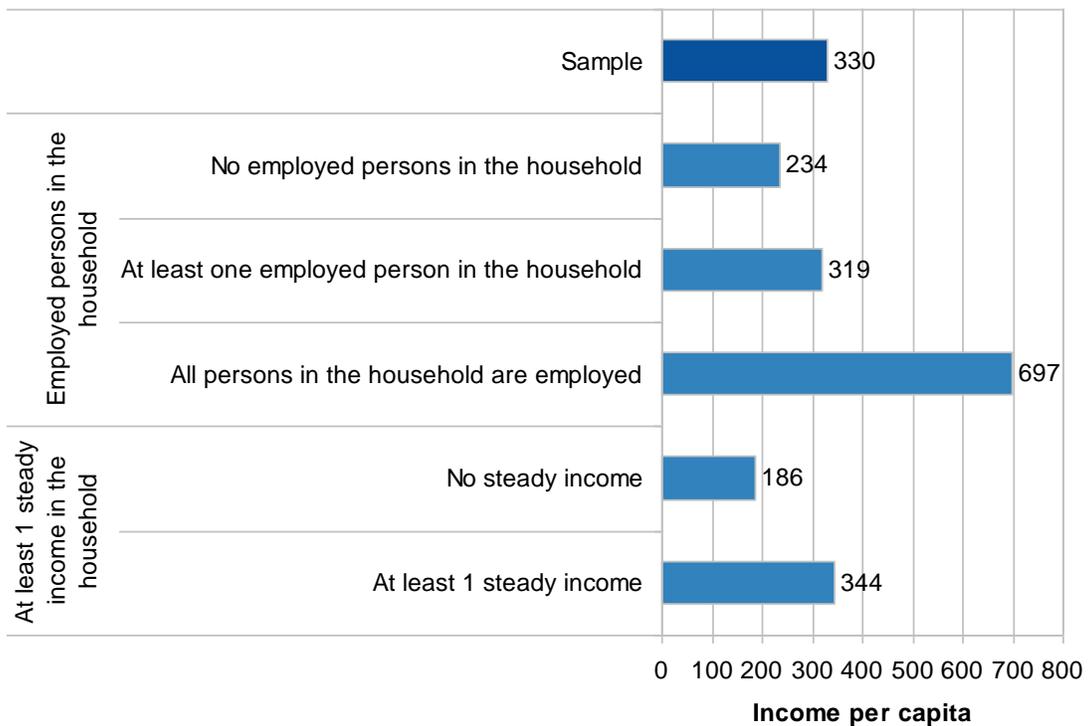
About 34% of the households have no employed persons, while the majority (56%) have at least one household member employed. In about ten percent of the households we expect to find all persons employed. About 90% of Bosnian households have at least one steady income, while 10% do not have a steady income. By combining the level of income per capita and the two mentioned uncertainty indicators, we can get a rough picture of the types of financial possibilities of Bosnian households in general:

- Households with no steady income make about 10% of all households. In addition to the uncertainty most of them face, they are also characterized by low average household income – about 186 KM.
- Households with no employed persons tend to have lower than average income, but most of them are not without a steady income and are thus in a much better position than the households with no steady income. In general, the existence of a

steady income is the main demarcation between really poor households and the others.

- On the other hand, we find about ten percent of households that tend to be much better off than the average household. All employed persons in the household means at least one steady income, but also much higher household income per capita: 697 KM, which is more than twice as much as an average income.

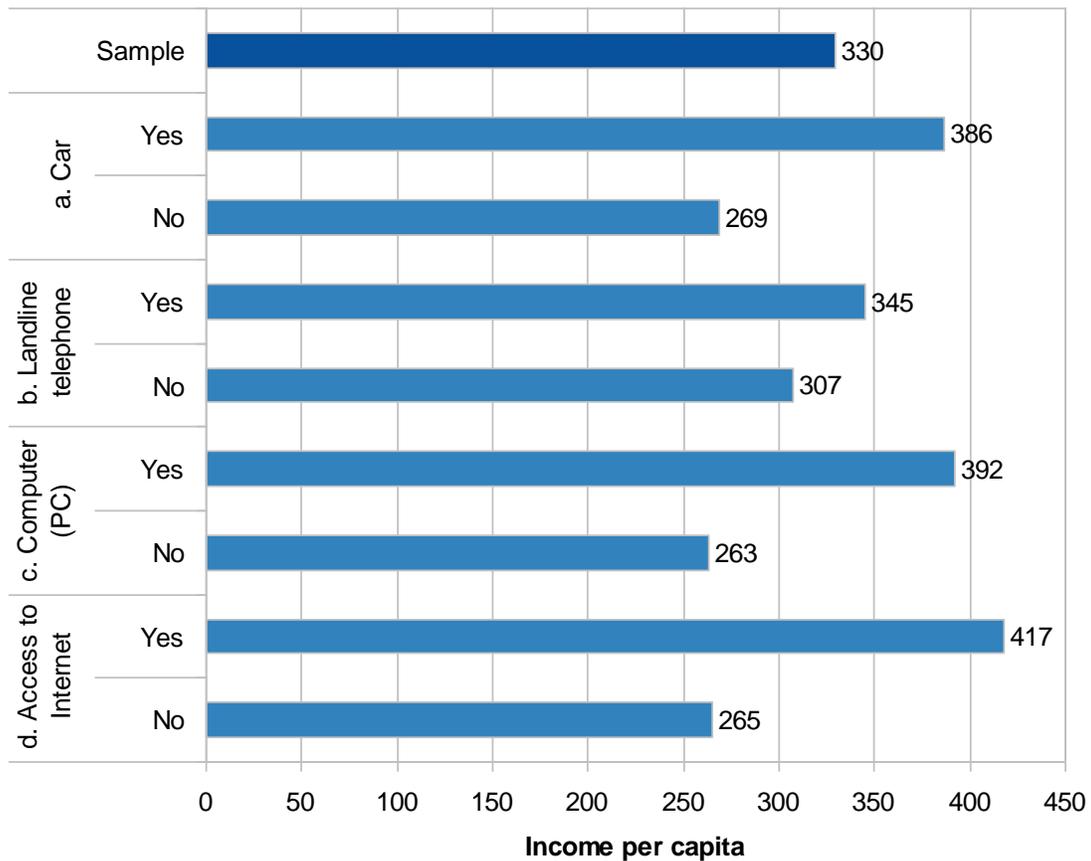
Figure 9: Household types by employment and income – by average household income per capita



In addition to the employment and income indicators, we included four indicators of household material status: owning a car, a landline telephone, a PC and an internet connection. A car, a landline telephone and a computer are owned by somewhat more than one-half of the households: a car by 57%, a landline telephone by 61% and a computer by 54%. Internet connection is owned by somewhat less respondents, about 44%. In terms of a relationship between possessing those goods and a household income, a landline telephone does not discriminate strongly between better-off and worse-off households. In contrast, a PC and a car are clearly indicators of higher and lower income households – both are quite reliable indicators of households belonging to the above-

average and below-average income subgroups. However, possession of an internet connection is especially striking: households with internet connection have an average household income of 417 KM, well above the average of 330 KM. Obviously, the phenomenon of the “digital divide”, in the form of large socio-economic differences between households that participate and households that do not participate in the information society, is already strongly present in Bosnia and Herzegovina.

Figure 10: Household possessions - by average household income per capita



4.2. Making ends meet

One of the key socio-economic indicators in any country is the ability of households to cover their monthly costs of living with the household income. At least two factors have an important impact on this ability: first, objective economic and social conditions of the household and second, financial capability of household members. The Study of British

Financial Service Authority put emphasize only on the second aspect (FSA, 2006.), but in developing and middle-income countries the first aspect also plays and important role and should not be neglected. FSA selects four criteria for discernment between the more capable and the less capable in managing household finances in order to make ends meet:

- a) Keeping up with his/her financial commitments without any difficulty and never struggles
- b) Agrees that he/she 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).

The basic theoretical situation is a “zero-deficit” situation, where the household’s monthly income equals its expenses, exactly from month to month. This situation is not typical in real life, however: both income and expenses are subject to changes (and often so, as our data suggest). This variability is a key opportunity for financial services to help citizens cover unexpected or planned higher costs by providing temporary resources to cover them at a later point in time. It is not only the shortages that must be handled: surpluses are also an opportunity for using financial services wisely, thus generating additional resources for the ‘rainy days’. It is in this context that financial literacy can play a key role: citizens should be able to choose rationally the best possible financial instrument to overcome the temporary debt or save additional funds. Lack of financial literacy can lead to wrong decisions, making small financial problems much more costly than they should have been.

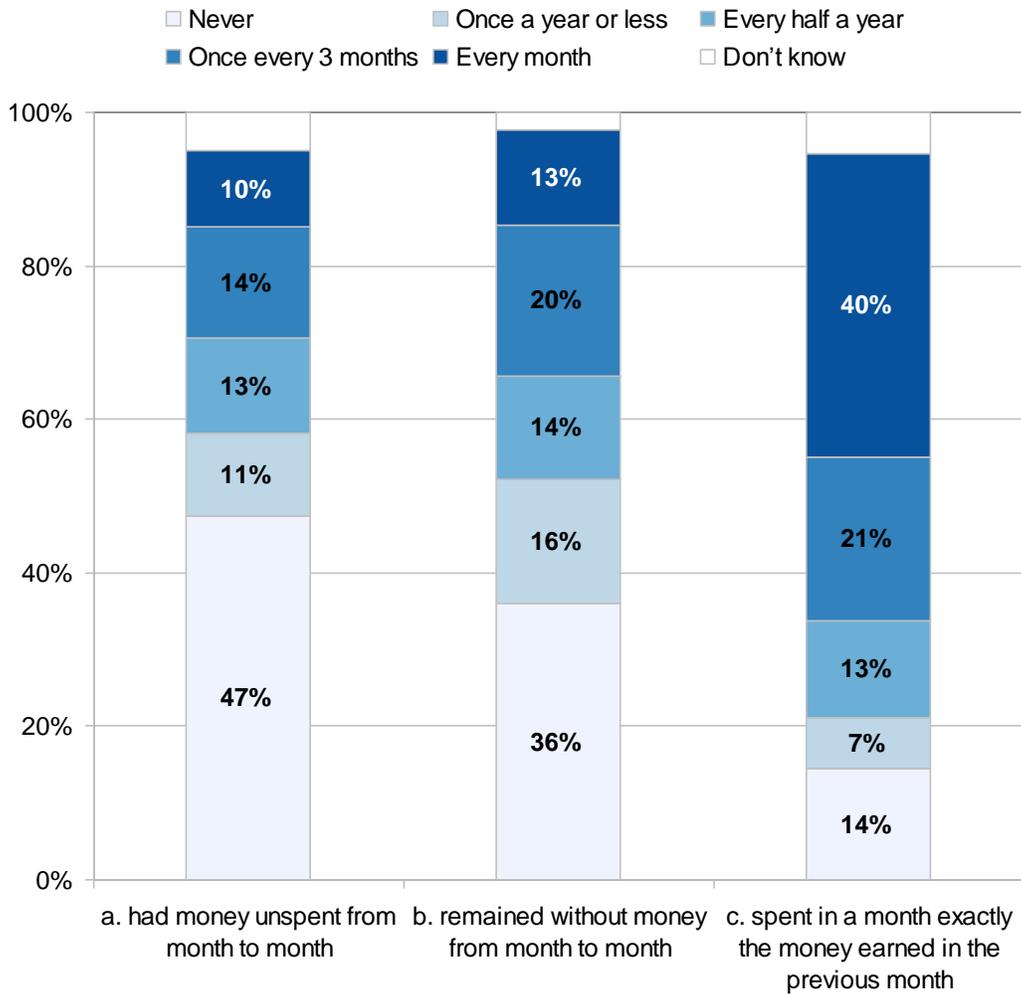
Income vs. expenditure. Our first task is to identify basic patterns of incoming and outgoing funds in the Bosnian households, which can be understood as indicators of financial capability. Bosnian situation is determined by four crucial findings:

- 47% of participating households ‘never’ had money unspent during the last 12 months. As such, almost one-half of the households probably did not have a chance to save any money.
- in the previous year, 40% of the households spent exactly how much they earned the month before. This situation obviously severely limits their possibilities to use financial services, as they did not need any credits, but also could not afford to save

anything. As the Financial Services Authority (FSA 2006) states, one of the key characteristics in the domain of successful money management is “[...]never running out of money at the end of the week/month”, which these households fulfil.

- Third, 36% of the participating households did not run out of money from month to month in the last 12 months. This is an encouraging finding, as at least a part of them could have saved funds for a rainy days.
- Finally, about one-third of the households had considerable financial difficulties in the last 12 months, running out of money every month (13%) or every three months (20%). For these households, using financial services can represent a remarkable short-term help, but obviously they need to revise either their expenditures or their income in the long term.

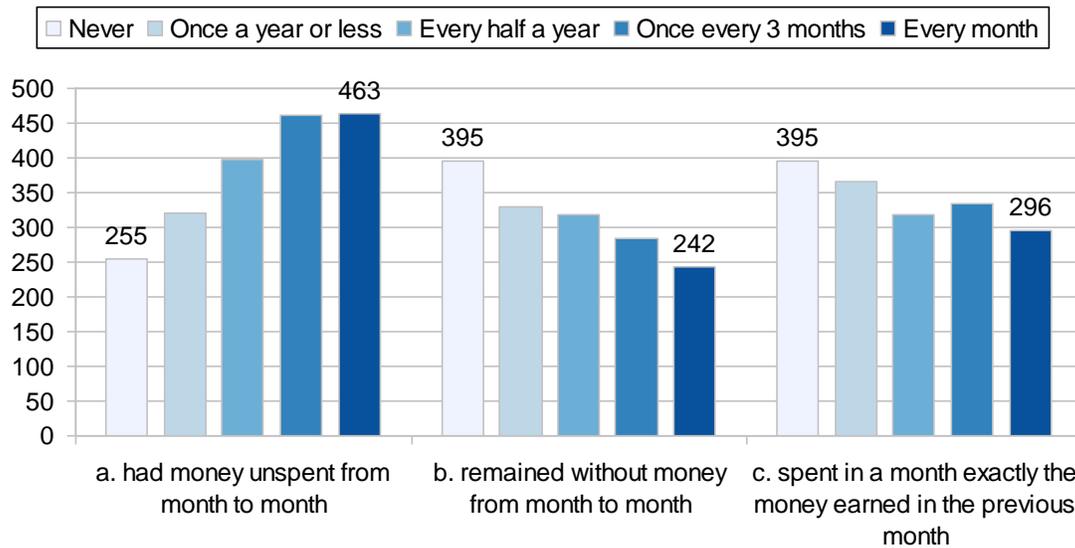
Figure 11: How often during the last 12 months your household....



Consequently, the financial situation of an average Bosnian household does not seem to allow it to save larger sums of money every month, nor make big investments in durable goods. To understand this situation better, we will now turn to the crucial objective determinant of the households' financial status, their household income. An average household income per capita in B&H amounts to 330 KM, which is approximately 160 euros. The four previously identified key findings can be illustrated using these numbers as indicators. First, the income level per capita which does not allow households to have a surplus of money at the end of the month is about 255 KM, or about 130 euros. Next, households that spend in a month exactly the amount they earn in a previous month have an average income per capita of 296 KM, which is still below the sample average of 330 KM. The level of income with which households do not seem to have financial problems ('never ran out of money from month to month') equals 395 KM. Finally, about one-third of households who seem to have constant financial problems from month to month feature an average income per capita of about 250 KM or 125 Euro.

Comparison with other countries suggests similar levels of population living paycheck to paycheck in east-European countries. Thus in Romania there are 61% of people living from paycheck to paycheck; 62% in Bulgaria and 60% in Russia (Stănculescu, 2010: 20). Our analysis show that this percentage is around 64% for Bosnia & Herzegovina. It is important to keep in mind that high-income countries like UK or Ireland keep this proportion on levels below 33%, which enables their citizens to use financial services much more frequently, to gather experience and thus use them more effectively.

Figure 12: How often during the last 12 months your household.... – by household income per capita



These findings are significant on two levels. First, they enable us to identify the relationship between making ends meet as an indicator of financial capability and the objective financial situation, which is not just the result of personal capability or literacy but also an objective economic situation in the country. These data suggest that an income of over 255 KM per capita is needed in Bosnia to ensure a break-even situation of ‘zero deficit’; anything below this threshold is likely to cause constant financial difficulties. Second, the sample average income of 330 KM is not enough for a basic trouble-free financial situation (not running out of money from month to month). This income threshold was identified at 395 KM, which is significantly higher.

The second significant finding from this analysis is a clear relationship between objective household income levels and the subjective income indicator. We found a moderate positive relationship between the indicator that discusses monthly unspent money and the household income per capita ($r = .25$; $p < .01$) and a low negative relationship between being left with no money at the end of the month and the income per capita ($r = -.16$; $p < .01$). This moderate to low level of relationships confirms the intuitive link between these two variables, but also means that additional factors may play a role in this relationship. The multivariate model dealing with this possibility will be explored at the end of the section.

To illustrate further the relationship between the subjective measure of financial well-being and the household income level per capita, we explored the link between the household situation description on a scale from ‘we hardly make the ends meet’ to ‘we can afford quite expensive things’ and the income level. A relative majority (30%) of respondents states to have enough money to buy food and clothes, but have trouble buying durable goods or expensive things. For about one-fourth (26%) of the sample, the financial situation can be described as making ends meet, meaning they cannot easily afford bare necessities such as food. About 20% have no difficulties in purchasing food, but do not have the funds for other necessities as clothes.

When compared to other countries, it is obvious that Bosnia and Herzegovina closely resembles Romania in the aspect of making ends meet – a majority of citizens in both countries struggles to finance basic necessities. Data for Romania indicate a somewhat worse situation, in which only 7% of the respondents live better than just covering up basic needs (Stănculescu, 2010: 20). In Bosnia, about 22% of respondents easily cover necessities, and can buy durable goods (15%) or expensive things (7%).

About 200 KM per capita is an income level with which respondents can hardly make the ends meet. About 350 KM (180 euro) per capita on average is needed in order to experience no difficulties when buying necessities like food and clothes, which is slightly above the sample average of 330 KM. In Romania, this level of well-being is achieved by a slightly higher income of 200 euro (vs. 180 euro) per capita per month. This category fulfils the FSA (2006:10) condition that successful money managers “Keep up with his/her financial commitments without any difficulty and never struggle”. The category of citizens who do not have trouble buying durable goods encompasses households earning more than 460 KM per capita, which is only about 20% of the surveyed sample.

Figure 13: Which of the descriptions comes closest to your household's income nowadays?

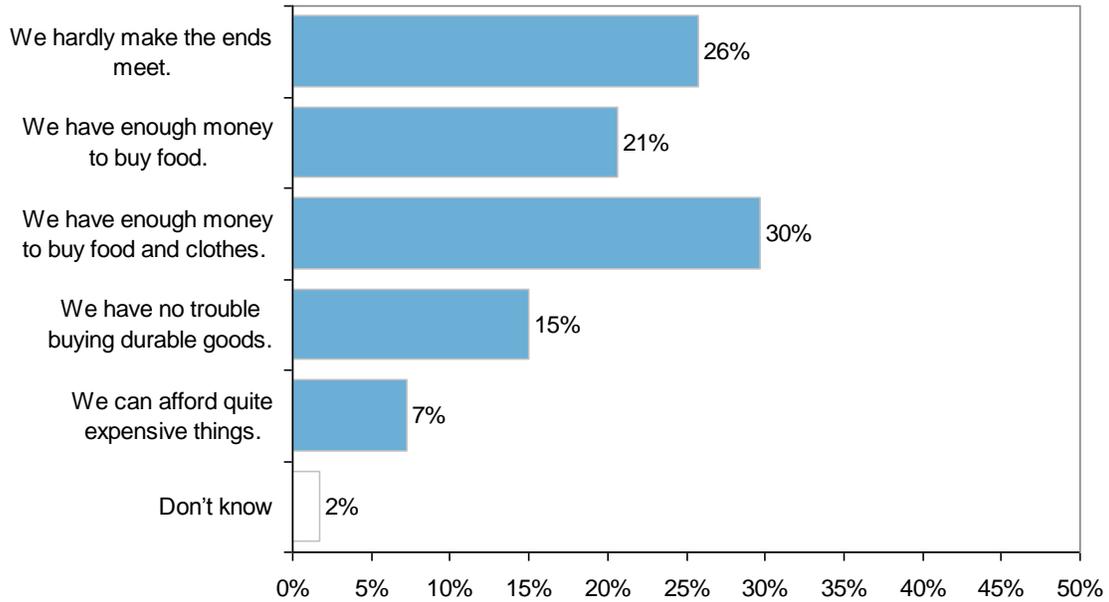
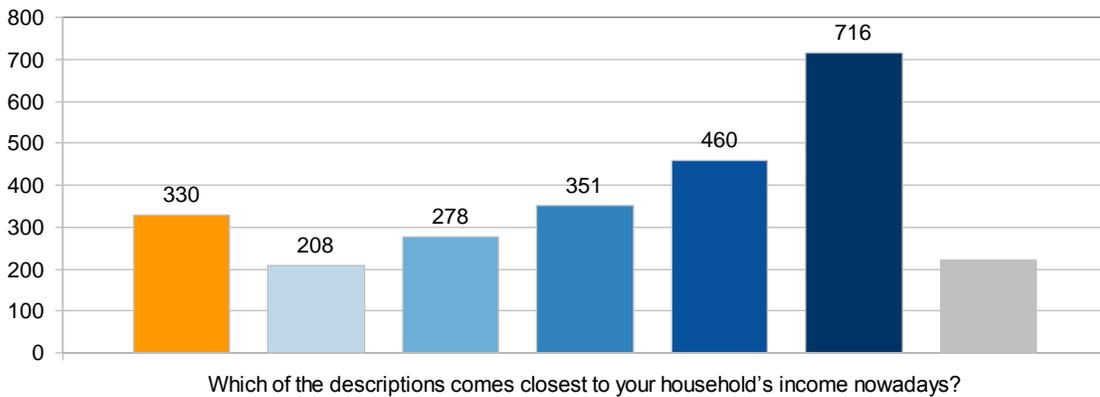


Figure 14: Which of the descriptions comes closest to your household's income nowadays? – by household income per capita



Determinants of households' economic situation

In order to assess the wider scope of factors determining the subjective well-being of the households, we tested the influence of the same set of predictors on two contrasting subjective measures of households' economic circumstances.

The aim of the first model is to explain the economic difficulties in the households, defined as being left with no money at least once in the last 12 months. Apart from household income, which is expectedly confirmed as a factor linked to economic circumstances, other significant predictors include entity and average age of the household. Living in the Republic Srpska or the Brčko District significantly increases the chances of the household experiencing economic difficulties. Higher average age of the household makes the household significantly more likely to experience economic difficulties. Surprisingly, education level and financial knowledge do not seem to influence the subjective economic outcome.

The second model mirrors the first one in that it tries to explain the outcome of the economic well-being, in this case presented as households that were left with extra money at least once in the last 12 months. The household income per capita is, as expected, a significant factor even after controlling the influence of other variables. The second model confirms the role of the average age of the household in determining economic circumstances, and the influence is a negative one; higher average age means that economic well-being is less likely. However, in contrast to the first model, financial literacy has a significant positive influence on the subjective economic well-being. In other words, the more financially literate the respondent is, the more likely her or his household is to be left with extra money at the end of the month.

Table 8: Socio-economic correlates of economic difficulties in the households (remained without money at least once in the last 12 months – p = 33%)

	<i>Exp(B) – Odds ratio</i>	<i>95% C.I. for EXP(B)</i>	
		<i>Lower</i>	<i>Upper</i>
Residential area (Urban = 1)	1,083	0,787	1,49
Household income per capita	0,998**	0,997	0,999
Entity (RS = 1)	2,48**	1,77	3,473
Household average age	1,014**	1,004	1,025
Household education (1 = at least 1 member with high education)	0,737	0,494	1,099
Financial Literacy Index	0,994	0,982	1,006

** $p < .01$

Table 9: Socio-economic correlates of economic well-being in the households (were left with extra money at least once in the last 12 months– p = 26%)

	<i>Exp(B) – Odds ratio</i>	<i>95,0% C.I. for EXP(B)</i>	
		<i>Lower</i>	<i>Upper</i>
Residential area (Urban = 1)	0,995	0,684	1,449
Household income per capita	1,002**	1,001	1,002
Entity (RS = 1)	0,841	0,561	1,26
Household average age	0,983*	0,969	0,996
Household education (1 = at least 1 member with high education)	1,471	0,974	2,221
Financial Literacy Index	1,025**	1,011	1,04

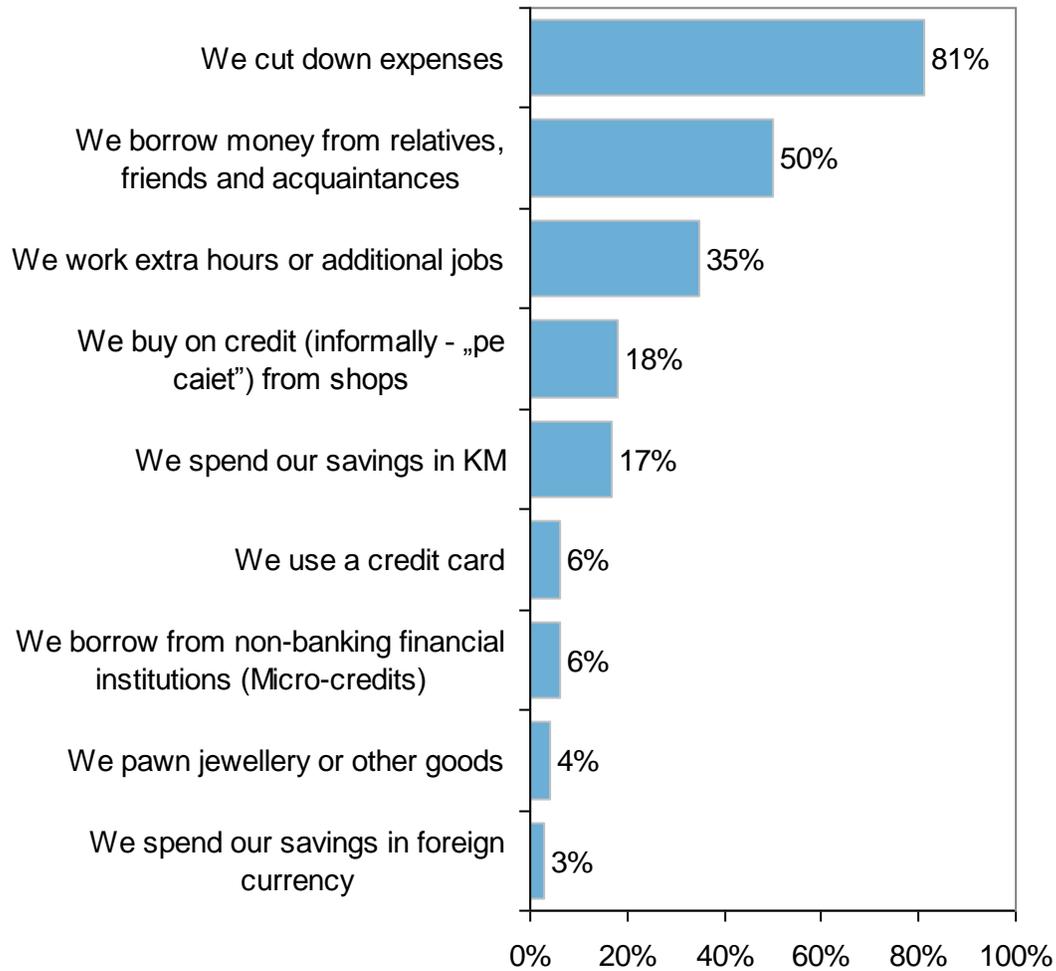
* $p < .05$

** $p < .01$

Dealing with shortages

Running out of money at the end of the month requires taking certain steps to make the ends meet. Apart from the usual financial services (usually credit cards), there are other means citizens can employ to cover the deficit. Data for Bosnia suggest the dominant way of dealing with household deficit to be cost-cutting, which is employed by over 80% of the participants. Almost half of the respondents borrow money from relatives and friends, and about 35% work additional jobs. Another form of an informal credit – from shops – is used by about one-fifth of respondents, while about 17% spend previously accumulated savings. Only about 6% of the sample use a more formal way, a credit card, to deal with running out of money. Roughly the same proportion borrows money from micro-credit institutions.

Figure 15: When your household runs out of money from month to month, generally, what do you do?



Debts handling. As the analysis of the general economic position of Bosnian households has shown, there is a considerable need of at least short-term debts – almost two-thirds of households ran out of funds at least once in the last 12 months, and a significant proportion of them had to borrow money to cover these expenses. When asked directly, about 60% of the households did not have to borrow money to pay back other debts, which means that a sizeable proportion of households had to borrow money to cover other debts. Currently, about 8% of the households have debts, apart from long-term loans. A relative majority of the respondents with debts (N = 85) allocate less than the monthly income or 1 to 2 monthly incomes to repay this debt.

The results show that Bosnian households are able to make ends meet to a relatively low degree, according to the FSA criteria. A considerable number of households, approximately 1/3, have significant problems making ends meet i.e. frequently face financial difficulties. Only a minority of households try to save more, whereas numerous households deal with financial difficulties over a longer period. These data clearly indicate the need for increasing people's financial capability. However, our analysis also clearly suggests that the objective economic situation and its influence on the amount and frequency of household income have a major influence on the ability of households to make ends meet.

5. Planning Ahead

Planning ahead involves anticipation of the future sources of income and expenditure and acting accordingly to compensate for either expected (such as pensions) or unexpected events (sudden raises of expenditure for various reasons). As FSA states: “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).

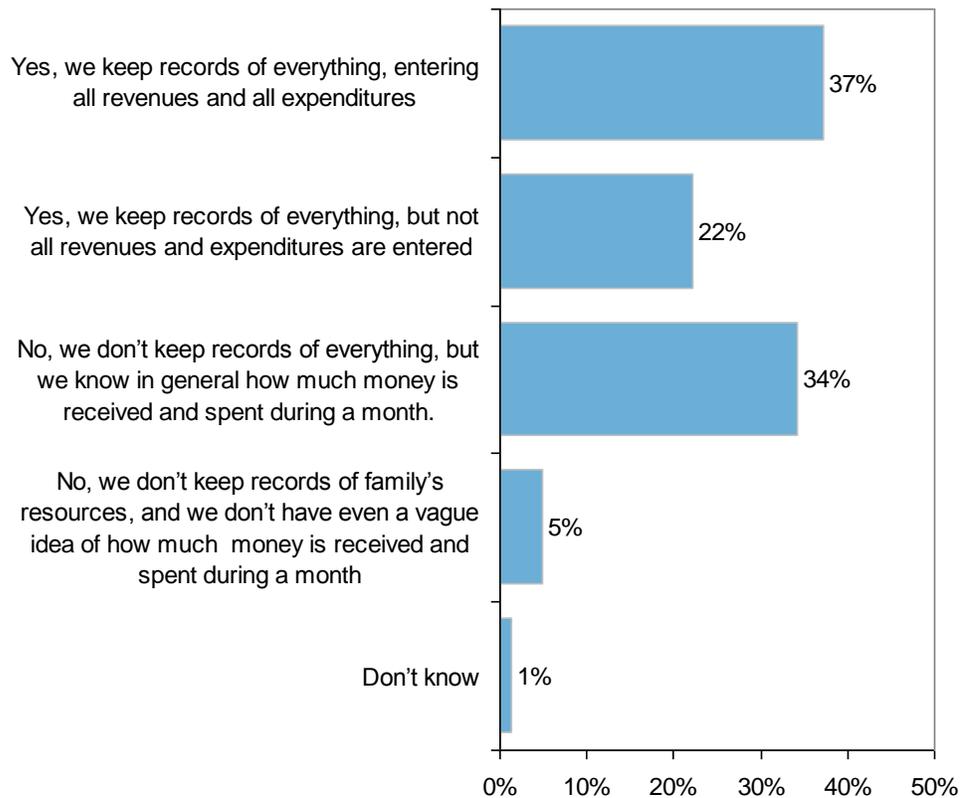
The most prominent form of planning ahead is saving. Saving often involves decision-making, in a sense of trade-offs between current and future consumption. However, we must note that for a large number of the households in our sample, saving is a very difficult option because of a lack of disposable income. In this situation, saving is not a decision based on factors like caution or financial knowledge, but simply an activity which is not possible in the current circumstances. Our data on socio-economic indicators does not suggest that a large proportion of households will be able to save regularly, and we can illustrate this situation with more in-depth indicators.

5.1. *Dealing with the unexpected*

Planning ahead starts with a financial plan, a rough estimate of the ability to cover current monthly expenses. Almost two thirds of the survey participants have a financial plan. In more detail, this means that about 37% keep record of all revenues and expenses, while additional 22% keep financial records, but not of every revenue or expenditure. When compared to Romania, these findings suggest that Bosnian citizens more often keep records (37% vs. 23%), and that citizens who have at least a rough idea of households’

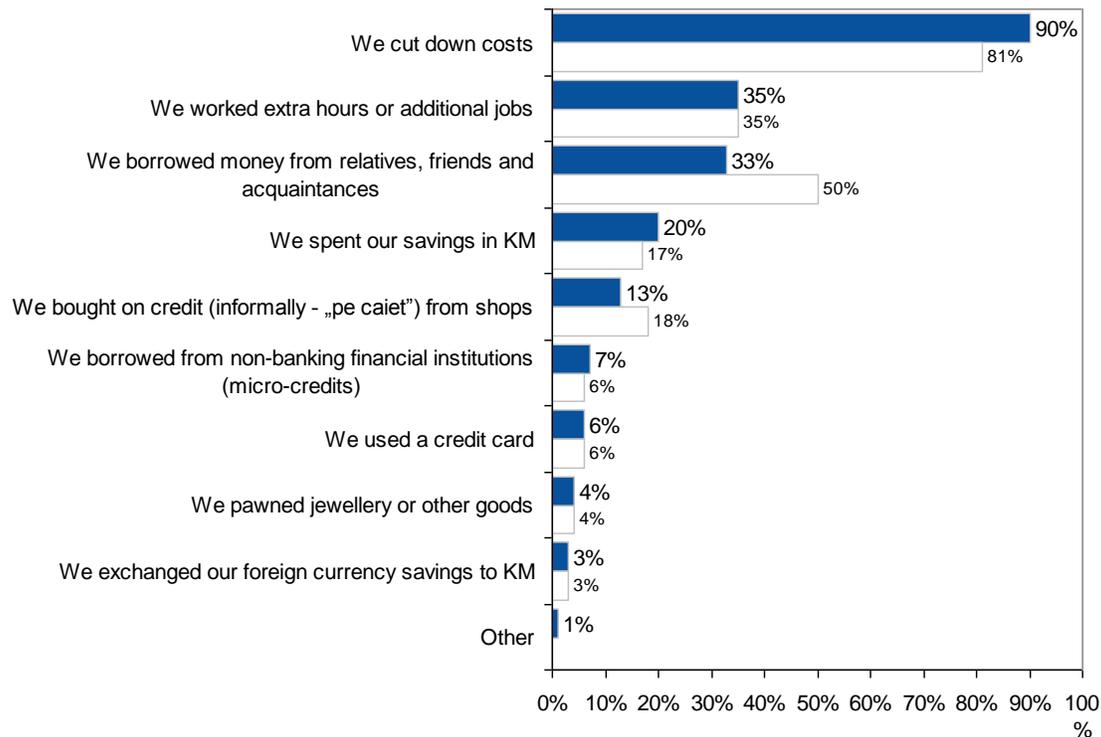
financial flows form a more substantial majority in Bosnia and Herzegovina than in Romania (Stănculescu, 2010: 20).

Figure 16: Is your family used to keeping records of income and expenditures?



However, over the course of the last three years almost one half of the households experienced at least one form of significant reduction of income. The two main causes of sudden reductions are a considerable reduction of salary (or salary being delayed) and loss of employment due to economic crisis. Salary reductions were mainly an issue in the better-off households and those with an average age between 31 and 40 years, while losses of jobs were more often an issue in the youngest households (average age under 30 years).

Figure 17: Strategies for dealing with unexpected reduction – compared to strategies for dealing with month-to-month shortages



Dealing with a sudden drop of income emphasises the most common strategy: cutting the costs, which is clearly dominant with 90% of respondents using it to make ends meet after an unexpected reduction of income. As reduction of income is often associated with a person losing their job, it is not unexpected that the second most prominent way of dealing with the situation is working extra hours or finding an additional job. Informal loans from friends, relatives (one third of the citizens dealing with an unexpected reduction) or shops (13% of the subsample) are also widespread, more than using loans from micro-credit institutions or a credit card.

These findings correspond with Romanian findings (Stănculescu, 2010: 25), especially in the way that cutting costs is the preferred method of dealing with the drop of income, but also the fact that social connections and informal ways are much more frequently used than formal financial products.

Finally, spending savings in KM is also frequently utilized (20%), and is generally a preferred method of dealing with the unexpected, as making provisions for a rainy day conforms to the FSA conditions for successful planning ahead.

Demographic analysis reveals that cutting the costs down is a widespread strategy across all of the population segments. This is necessarily not the case with working extra hours or getting additional jobs – households averaging an age of 31 to 50 (at the peak of their ability to find a job) do it more often than older households. Working extra hours is especially widespread among wealthier households (1500+ KM income), which points to their relative stability in the case of unfortunate circumstances.

Table 10: How did you manage to make ends meet when your income suddenly dropped?

		We cut down costs	We worked extra hours or additional jobs	We borrowed money from relatives, friends and acquaintances
Sample		,90	,35	,33
Household average age	Up to 30	,90	,32	,35
	31 to 40	,93	,39	,28
	41 to 50	,92	,39	,27
	51 to 60	,83	,34	,46
	60 or older	,89	,21	,34
Highly educated household member	No	,91	,35	,35
	Yes	,88	,34	,27
Income	Up to 300 KM	,90	,34	,33
	301-500 KM	,96	,29	,35
	501-800 KM	,89	,35	,43
	801-1500 KM	,87	,37	,23
	More than 1500 KM	,82	,51	,18
Entity	FBiH	,91	,30	,27
	RS & District Brcko	,90	,43	,42
Settlement type	Rural	,92	,33	,37
	Urban	,89	,36	,29

5.2. Saving

As saving is a fundamental element of planning ahead, it should be analyzed in great detail: possibilities of saving, reasons for saving and not saving, and the total amount of household savings are all crucial parts of depicting savings behaviour and its key influence on planning ahead in general.

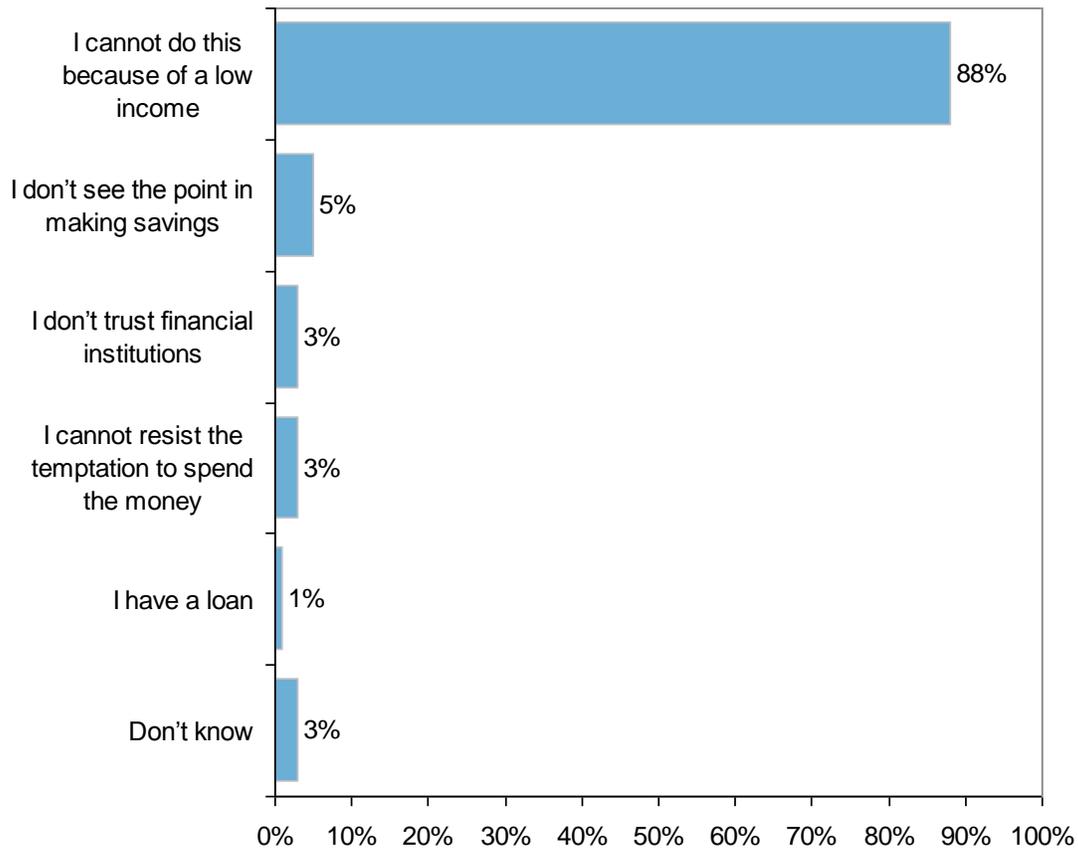
The big picture tells us that more than half of the Bosnian citizens (56%) are excluded from saving, i.e. most probably are not in the position to dedicate one part of their

incomes to savings, as they spend all the money on everyday needs. Proportion of non-savers is higher than in Romania and UK (around 51%), but lower than in Bulgaria (61%) (Stănculescu, 2010: 23).

Household income is a key determinant of the ability to save; higher income is expectedly positively associated with the ability to spend money outside everyday needs. The highest income group (1500+ KM) is able to save almost twice as often as the middle income group (70% for high income households vs. 40% for low-income households). The rest of the population may count, at least from time to time, with some savings – thus about 29% spend the money on everyday needs but are able to save the rest, and about 14% save a sum of money before spending on everyday needs.

The reason given for not saving is already identified and almost universally accepted among the non-savers – 88% of citizens state they cannot save any money because of their low income. Other reasons given can be influenced by financial education: some citizens do not see a point in making savings; some do not trust the financial institutions, while some cannot resist the urge to spend money.

Figure 18: Reasons for not saving



An absolute level of savings in Bosnia & Herzegovina is quite low, best illustrated by the fact that a relative majority of respondents have managed to save a sum lower than their monthly income. About one fourth of participants have savings amounting to 1-2 monthly incomes, which gives them at least some security in case of an unexpected drop of income. Households who have savings greater than their 6-month incomes are quite rare – only about 5% of households can claim that. As FSA regards provisions for at least 12 months as satisfactory for good planning ahead, it is clear that few Bosnian households fulfil this criterion.

Reasons given for saving behaviour are much more diverse than reasons given for not saving. Apart from the general reason – ‘For a rainy day, for unexpected expenses’, the most frequent mode of thinking values the increase of the living standard in the future by saving today. These reasons are also predominant in Romania. Saving is also important as a way to ensure that children inherit something from their parents. Saving can also be a

pleasure preferred to spending money (for 13% of participants) and a family tradition (11%). Only 6% of Bosnian citizens save to provide additional funds for retirement. The cited reasons suggest the type of saving behaviour proposed by the FSA in the planning ahead guidelines (“I make sure I have money saved for a rainy day”), but not in the domain of provisioning for the retirement, which is still rare.

5.3. *Dealing with surpluses*

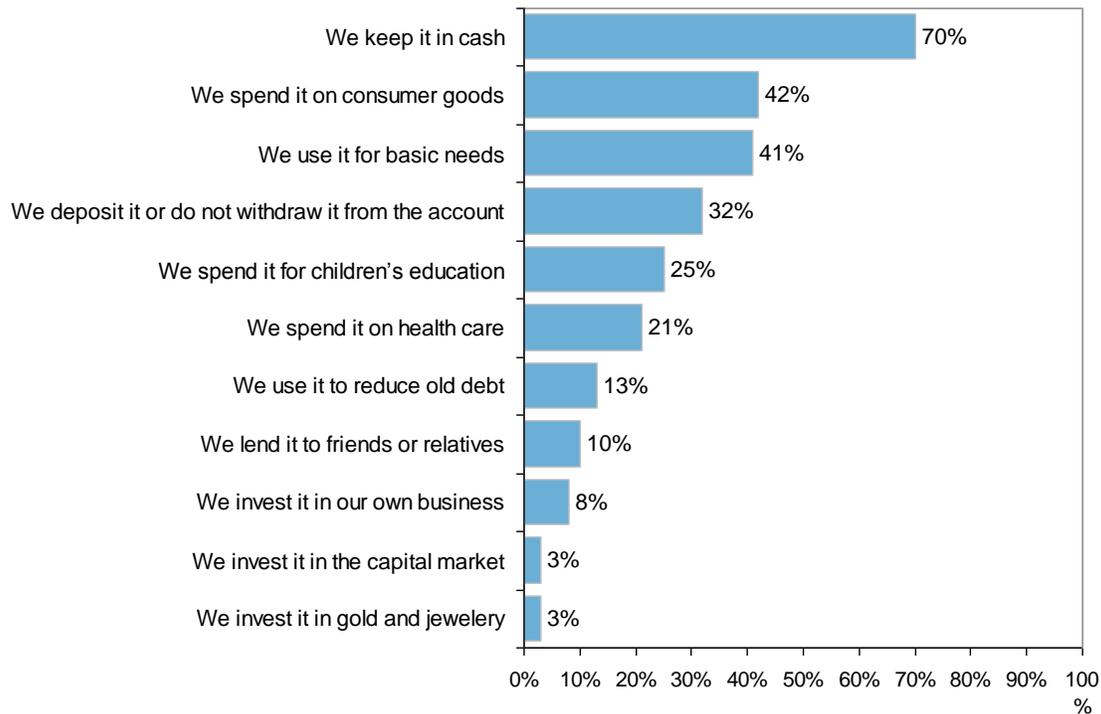
Another way of interpreting the planning ahead behaviour is to analyze the strategies households use when facing surpluses in funds. In our case, surpluses are defined as having unspent money from the previous month, and the basic question is how to make best use of them.

The majority of participants have a simple strategy when dealing with surpluses: they keep the surpluses in cash. Keeping surpluses in cash might be a valid choice for a smaller number of households who wish to stay solvent, but it is still surprising that such a large proportion of households choose a rather suboptimal strategy. The fact points out the inadequate financial literacy, as financial followers (the most knowledgeable financial literacy segment) spend significantly less of their month-to-month savings in cash.

Two often mentioned ways of spending surpluses are spending them on consumer goods and using them for basic needs (e.g. clothes that are usually bought with leftover funds).

About one-third of the participants who are sometimes left with extra funds leave those funds on the account or deposit them, which is especially frequently done by financial followers. Lastly, a larger number of households invest surpluses in other important life aspects, such as children’s education and health care (over-represented in elderly population).

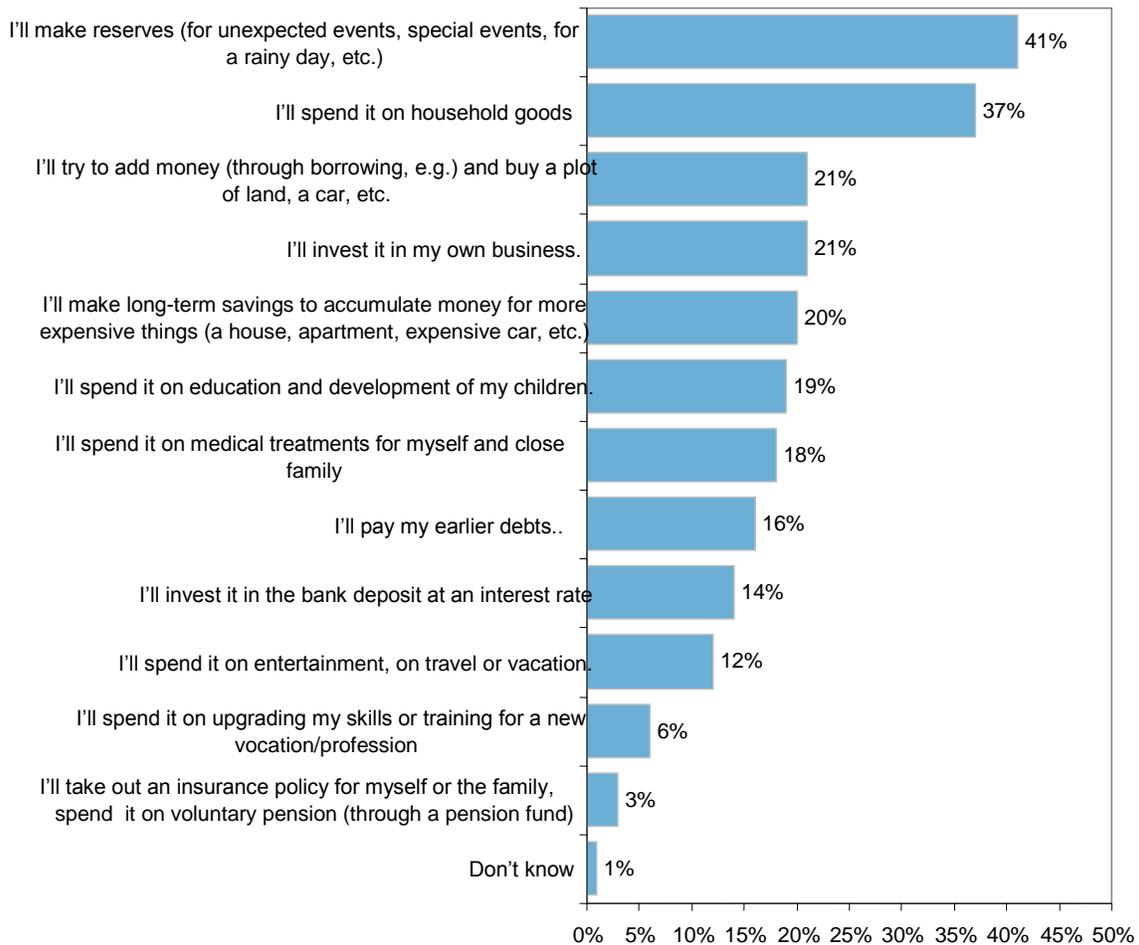
Figure 19: When your household has unspent money from month to month, generally what do you do with it?



In addition to the presented measures of actual or past behaviour, which indicate limited possibilities of savings for a majority of households, the following measure proposes a hypothetical situation of an additional 25,000 KM to the household's current regular income. The advantage of this measure is the possibility to assess the behaviour of all households, not only those with actual disposable income available for saving. The results point to the main dilemma: making provisions for special events/rainy days (41%) vs. spending the funds on household goods (37%). Various types of investments are frequently mentioned as probable in this situation: investing in a durable good or land; investing in private business; making long-term savings for purchasing more expensive things; spending it on children's education or medical treatment. Two special scenarios related to the financial situation are worth emphasizing: repaying earlier debts (16%) and investing in a bank deposit at an interest rate (14%), which is a more precise description of making reserves in general. These findings suggest differences in income levels as basis for various choices – for example, better off households (who manage to save monthly) would rather use the amount to buy a plot of land or a car, while households

who barely make ends meet would prefer to make reserves for a rainy day or repay earlier debts.

Figure 20: Let's assume that in addition to your regular income your family receives 25,000 KM, or approximately 12,500 Euro.



When speaking of the ability to plan ahead, the results are even worse than those referring to the ability to make ends meet. Only a smaller number of households have extra money that they can afford to put aside and thus enable long-term financial security. The minority of households that are able to save mostly do so with relatively small amounts of, which does not, however, provide for a normal long-term existence of the household in case of a sudden drop in income. Every fourth citizen out of ten would use unexpected income as savings for a rainy day, whereas an equal number would spend the money instantly. A small number of households have some kind of voluntary insurance plan (see next chapter).

6. Using and choosing financial products

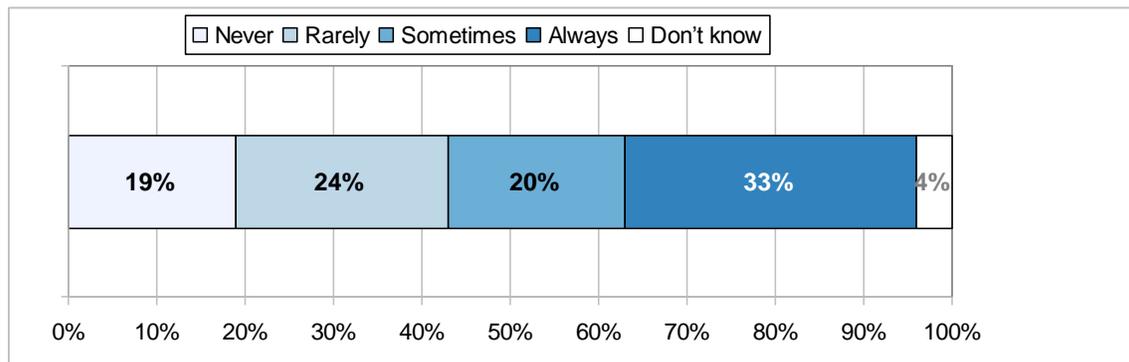
6.1. *Choosing financial products*

Participation in the financial markets demands making serious decisions when choosing among various financial products and services. Knowledge and will are necessary conditions for making an informed choice. The key is to identify relevant information of the financial product in question, and then seek advice from (preferably) objective and neutral experts in the field. The real prices of financial products and services are often not as transparent as in other markets, which makes professional advice necessary.

This part closely follows the aspects of informed financial choice-making based on the notion from FSA that a financially capable person in the domain of making financial choices: „(a) Seeks advice from an appropriate professional advisor before buying financial products or actively shopping 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 advisor; (d) Compares products on features and price, rather than making a choice based on brand image; (e) Reads terms and conditions in detail." (FSA, 2006: 18).

Active shopping, meaning reading multiple terms and conditions of financial services and comparing options, is one of the prerequisites for successful decision-making on the financial markets. In Bosnia, we have identified about one-third of the financial services users to be active shoppers ('always' or 'sometimes' compare terms and services when choosing financial products). This is significantly higher than around 20% of active shoppers (by this definition) found in Romania (Stănculescu, 2010: 36). However, in accordance to relatively low levels of financial literacy, there are 43% of financial services users who 'never' or 'rarely' compare financial products before committing to them. Active shopping behaviour is strongly positively associated with increased financial literacy.

Figure 21: How often do you compare the terms and conditions for provision of financial services by various companies before you sign a contract for such a service?



As the decision-making process on the financial markets tends to be rather complex, it is important to get help as needed. In Bosnia, the data point to a quite unsatisfying situation in this respect. The most commonly used source of information is friends and relatives, who certainly cannot provide expert advice in most of the cases. Advertisements typically contain biased information, but are still used by almost a third of the respondents. One-fourth of the respondents use information materials of financial companies, which could provide better information, but still be biased similarly to advertisements. About one-fifth of respondents use advice of consultants working for providers of required sources, and only 8% use the best available option, recommendation from independent financial consultants and brokers. We can conclude that, despite various sources used, the quality of the collected information on which financial choices are based is likely to be low. Finally, FSA guidelines demand from consumers to make the financial product choice based on the price, and not on the other characteristics like brand image. Our data suggest that this is indeed the case in Bosnia, with about two-thirds of the respondents basing the choice on loan interest and other occurring costs. 22% of the respondents primarily take a bank's reputation into account, which can frankly be a rational choice in a developing financial market like the one in Bosnia and Herzegovina. This figure is quite higher than around 10% found in a similar Romanian study (while roughly the same proportion also consult the loan prices) (Stănculescu, 2010: 36).

Figure 22: What sources of information do you pay attention to when choosing a company to buy a service from?

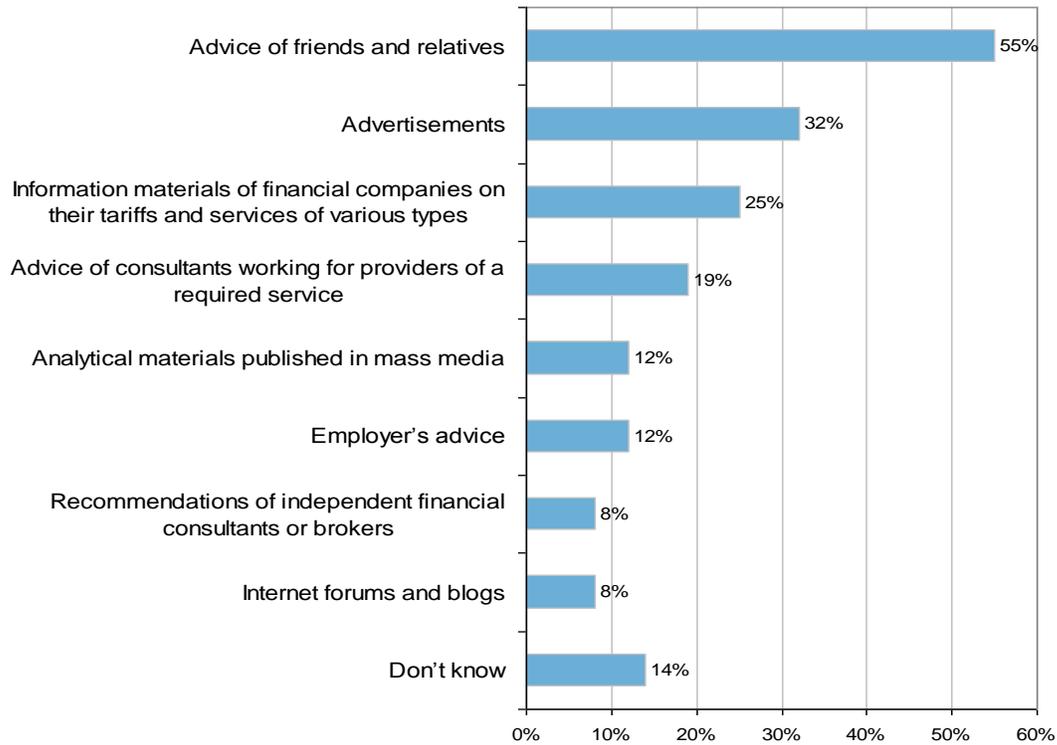
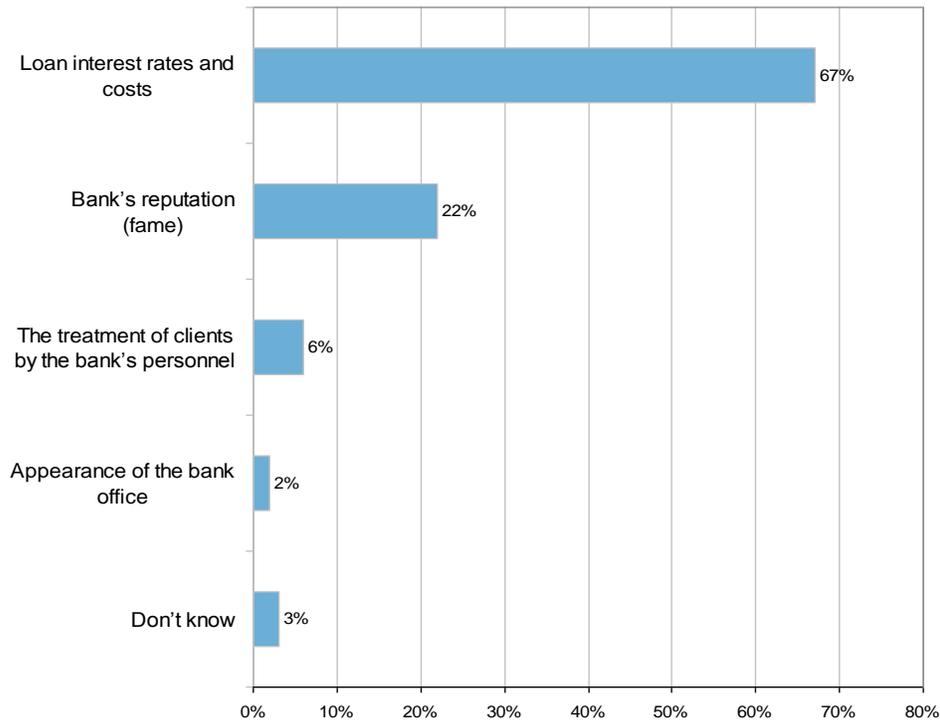


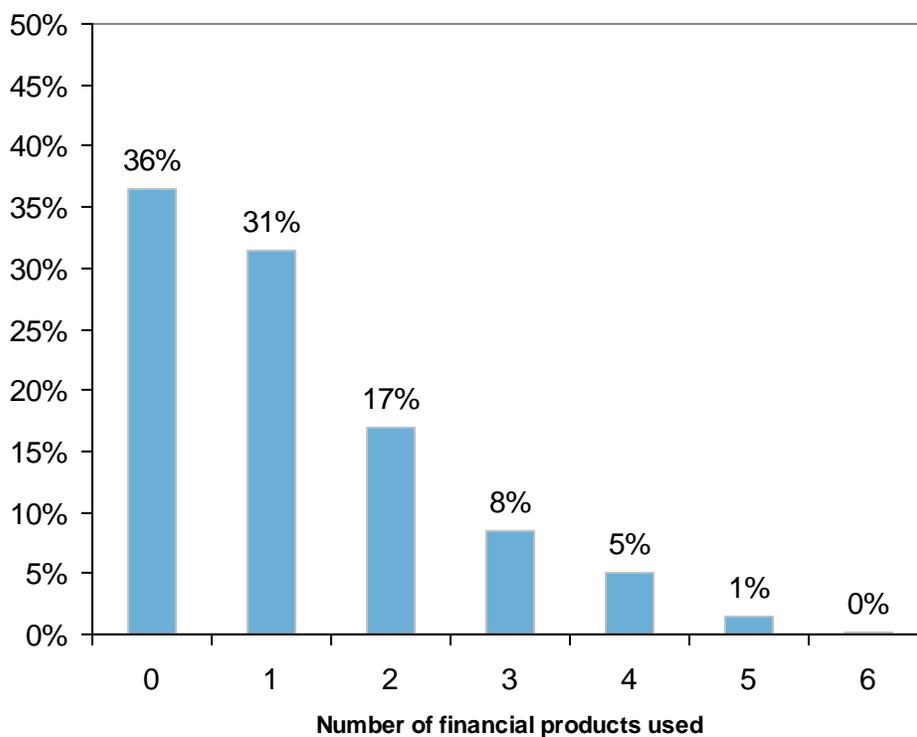
Figure 23: What do you think is most important when comparing banks and having to choose the one to take out a loan from?



6.1. Usage of banking and insurance services

The report has so far revealed general patterns of financial services usage, without referring to the actual financial services in detail. In this section we will turn to the services, revealing which financial services are used by Bosnian households to achieve the goals (saving, investing, making ends meet) outlined in the previous chapter.

Figure 24: Number of financial products used



Usage of banking services

As a general indicator of using banking products and services, we count the number of all available banking services used by respondents. About 36% of respondents can be classified as complete outsiders when it comes to banking products, meaning they do not use any financial product or service offered by banks. Financial outsiders are over-represented among retired people and housewives, lower-educated and older age (65+) groups, and are characterized by below-average financial knowledge. One banking

financial service is used by almost one-third of respondents; the product used more often is the current account. It is very rare that Bosnian citizens use more than 4 financial services, and on average use 1.2 financial products or services offered by banks.

Current account is the most frequently used banking service, used by about three-fourths of the participants.. Almost one half of the participants use insurance policies, one quarter use bank debit cards and about one-fifth have a consumer loan. Bank credit cards are used by about 7% of the participants. The analysis of all household members reveals that the usage patterns of other household members closely followed that of the survey participant – the ranking of the use of bank financial services is the same, but the proportions using the products and services are invariably lower, as this sample includes younger persons (aged 15 and older).

Demographic analysis suggests that the employment status is a key characteristic which determines the use of financial services. Thus employed persons (employees and business owners alike) use banking financial services more frequently than other groups (like students, retired and unemployed persons). The other general trend is linked to household income; participants living in households with higher incomes generally use services like current accounts, insurance and debit cards more frequently. Male participants use financial banking services more frequently, a clear consequence of gender roles in Bosnian society.

Figure 25: Financial services used

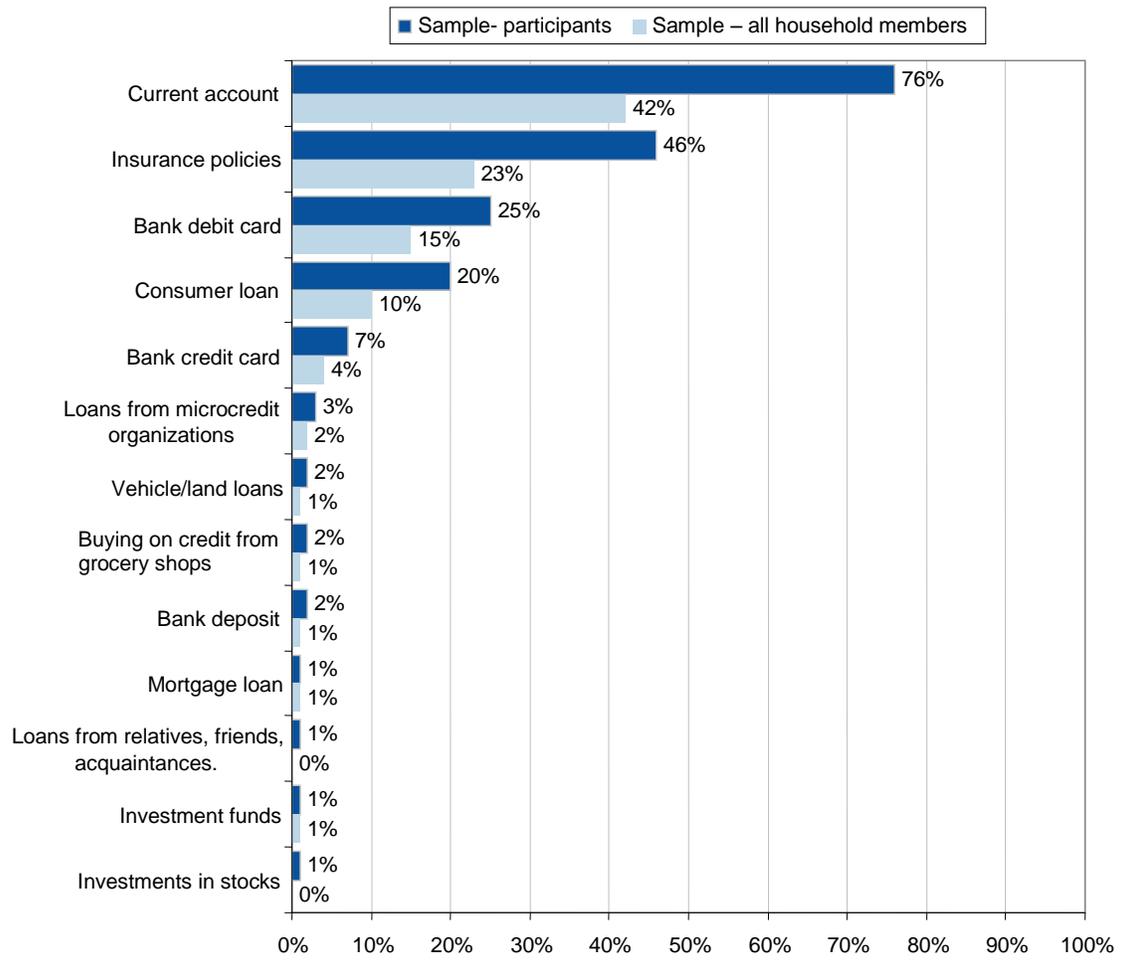


Table 11: Socio-demographic profile of most commonly used financial products and services

		N	Current account	Insurance policies	Bank debit card	Consumer loan
Sample		658	76%	46%	25%	20%
Gender	Male	364	80%	47%	28%	22%
	Female	294	70%	46%	22%	16%
Age	18-24	80	69%	47%	19%	3%
	25-34	141	79%	47%	34%	20%
	35-44	127	75%	55%	25%	29%
	45-54	117	85%	45%	34%	32%
	55-64	105	76%	37%	15%	19%
	65+	88	65%	46%	15%	5%
Education level	Primary school	202	59%	50%	9%	12%
	Secondary school	342	82%	41%	30%	24%
	High school or university	114	87%	55%	39%	20%
Occupation	Employee	293	90%	47%	39%	30%
	Business owner / self-employed	32	84%	46%	37%	30%
	Unemployed	77	46%	53%	7%	10%
	Retired	167	68%	40%	11%	13%
	Student	55	72%	40%	18%	2%
	Housewife	31	51%	77%	6%	4%
	Other	3	43%		57%	
Income	Up to 300 KM	224	59%	50%	19%	16%
	301-500 KM	86	89%	39%	13%	16%
	501-800 KM	114	76%	35%	31%	21%
	801-1500 KM	149	84%	52%	25%	22%
	More than 1500 KM	85	92%	49%	47%	25%
Entity	FBiH	429	73%	51%	32%	18%
	RS & District Brcko	229	80%	37%	13%	22%

Use of insurance services

Only three types of insurance services are used by a significant proportion of Bosnian citizens – life insurance, medical insurance and car insurance – CASCO. The other two types of insurance, household insurance and crop/land insurance are used so rarely by participants (1% and 0%, respectively) that we decided to exclude them from the following analyses. Life insurance is an optional insurance that resembles savings and can be considered its complement in this context. About 10% of the general population

uses this kind of insurance, but the prevalence varies among the subgroups. Higher educated people (high school or university), business owners / self-employed, members of higher-income households (1500+ KM) and financial trend followers are more than twice as likely to use this type of insurance, compared to the general population (10% in general population – about 22% in the subgroups). Medical insurance and car insurance – CASCO are used much more frequently, but their use is to a certain extent obligatory and we have no data to discern the extent to which optional insurance is used as opposed to obligatory insurance. CASCO car insurance is optional by definition, but the high prevalence of usage (about 55%) indicates that at least some of the participants confused it with obligatory car insurance.

6.2. Use of loans

When analyzing financial services in a country like Bosnia & Herzegovina, especially in the context of financial literacy, special attention needs to be paid to loans. Wider availability of loans has enabled households to invest in durable goods and thus raise their quality of life. On the other hand, loans are a potential source of debts when careful planning and financial literacy are not utilized, or when sudden economic changes occur. Most of the loans taken by the survey participants are provided by banks (79%), while the rest is provided by micro-credit organizations. Consumer loans are by far the most often used type of loans, followed by mortgage loans, which are used by only 8% of participants. Loans are almost invariably taken in domestic currency, and the prevailing type of interest rate is fixed interest rate. Majority of participants do not face difficulties when repaying the loan, but there are a substantial proportion of respondents who do face difficulties (22% of 157 participants who use loans).

In addition to households that use one loan, there are about 1,3% of households who use more than one loan. The second loan is typically a consumer loan type taken in micro-credit organizations. Households that use a second loan do not seem to have additional problems repaying the second loan, in comparison to the first loan.

7. Confidence in financial institutions

Analysis of confidence in financial institutions begins by dividing it into two parts: confidence in supervision and official bodies and confidence in commercial financial institutions. There are two key indicators relevant for our analysis: first is the percentage of citizens who have heard about the institution (awareness), and the second is the mean value of the responses recorded on the scale of trust from 5 – very much trust, to 1 – very little trust. Awareness of the institutions ranges between 97% (for the national currency) to 71% (for the Deposit Insurance Agency). When speaking of trust ratings, national currency, Convertible Mark, is also the most trusted financial institution in the country, achieving a mean trust score of 3.34. 16% of the respondents have very much confidence in the national currency, and another 32% have much confidence in it. Apart from the national currency, the institutions almost invariably enjoy limited support and confidence from the Bosnian public. The institution responsible for backing the national currency, the Central Bank of BiH, scored the second highest trust score of 2.64, but with much lower levels of confidence – only 4% of citizens have very much confidence in it, while 21% trust it very little. Among commercial institutions, trust in commercial banks reaches a score of 2.57, which is the third highest among all institutions and similar to that of the Central bank. However, as in the case of other institutions, only a low percentage of citizens trust them much (15%) or very much (4%).

This pattern of confidence is rather different to the one observed in Romania. In both countries there is a relatively high confidence in national currency, but in Romania the central bank and commercial banks are also trusted by a substantial majority of citizens (although still low, as noted by the author) (Stănculescu, 2010: 37). This lack of confidence in all financial institutions in Bosnia and Herzegovina is an unfavourable fact that should be addressed in all educational materials.

Surprisingly, even the consumer protection Ombudsman does not seem to inspire more confidence in citizens than other institutions – only 17% of citizens trust them much or very much. There is an expected association between institution awareness and the trust score, with only one exception – microcredit organizations are highly known (more than 90%), but enjoy the lowest trust score of 2.06 on the scale from 1 to 5.

Table 12: Confidence and awareness in BiH financial institutions

	Trust: Mean value	% of respondents who have heard about the institution
Convertible Mark, the national currency	3,34	97
Central Bank of BiH	2,64	92
BiH commercial banks	2,57	94
Insurance companies	2,49	94
The Consumer Protection Ombudsman Institution in BiH	2,36	75
Fund management companies	2,33	79
Brokerage houses	2,28	74
Securities Commission of FBiH/RS	2,24	75
Deposit Insurance Agency	2,23	71
Banking Agency of FBiH/RS	2,23	72
Leasing companies	2,21	75
Microcredit organizations	2,06	91

The structure of the basis for trusting financial institutions remains to be explored. In order to assess the nature and possible differences of the trust in various agency groups (primarily official and supervision bodies vs. commercial institutions), we ran principal component factor analysis to explore the structure of associations between various institutions. One dominant component was extracted⁵, strongly suggesting that there is a common basis of trust in financial institutions. In other words, there are no systematic differences in trust between official bodies and commercial institutions – citizens who trust the supervising/official bodies also tend to trust commercial banks and other commercial enterprises.

The single-factor structure suggests the creation of a single scale to facilitate the analysis of determinants of trust in financial institutions among various socio-economic groups.

⁵ PCA Factor Analysis – first extracted component explains 43.9% of total variance, compared to the second extracted component which explains 12.2% of variance. This is a clear indication that there is only one trust concept underlining the findings in the trust domain.

The proposed scale sums up the answers on a five-point scale encompassing all twelve financial institutions (possible range of scores is from 0 – no institutions heard of to 60 – maximum possible trust in all institutions). Finally, the scale has been rescaled to vary between 0 and 100.

Mean value of trust on the proposed scale means that Bosnian citizens' trust in financial institutions is mostly below average, as already indicated by the separate analysis. Age seems to be one of the key correlates of trust in financial institutions – young citizens (from 18 to 24) have the highest level of trust, and this level is falling steadily to the eldest participants (65+) who exhibit the lowest trust values. Levels of trust rise steadily with education level; citizens who have finished high school or university have a significantly higher level of trust than the lower educated participants. Rise in income is also characterized by higher trust.

Table 13: Trust in financial institutions - by demographics

		Mean	Valid N
Sample		39,55	1027
Gender	Male	42,51	473
	Female	37,03	554
Age	18-24	47,28	132
	25-34	43,35	197
	35-44	43,37	164
	45-54	38,61	188
	55-64	40,02	156
	65+	27,60	191
Education level	Primary school	33,47	437
	Secondary school	42,92	453
	High school or university	47,81	137
Occupation	Employee	47,14	324
	Business owner / self-employed	38,80	44
	Unemployed	38,14	171
	Retired	33,44	255
	Student	45,85	87
	Housewife	31,72	139
	Other	25,05	6
Household income	Up to 300 KM	35,12	373
	301-500 KM	36,47	172
	501-800 KM	42,93	186
	801-1500 KM	43,25	200
	More than 1500 KM	48,02	96
Personal income	No income	38,41	263
	Up to 300 KM	35,06	201
	301 to 500 KM	39,56	189
	501+ KM	47,97	192
	DK/NA	37,29	182
Entity	FBiH	41,15	668
	RS & District Brcko	36,58	359
Financial literacy typology	Outsider	22,41	162
	Reluctant	34,35	379
	Adopter	45,43	316
	Follower	56,84	170

8. Conclusions and recommendations

Data collected in this survey suggest that Bosnian citizens have a relatively low degree of financial literacy and financial capability. In the financial literacy index, which was in this study modelled after the identical Romanian study, the average number of points is 39 out of 100. On the financial knowledge test, with questions referring to the basics of interest rate and financial mathematics, as well as basic financial terms, respondents on average answered correctly to 6 out of 13 questions. However, average scores are somewhat blurred by the large differences within the population, with respect to the level of financial literacy, which is in turn closely related to demographic and social characteristics of particular groups. According to the results of the financial literacy index, Bosnian population may be divided into four groups. The first group consists of the citizens with a low degree of financial knowledge, awareness and of following economic trends, a low degree of trust in financial institutions and thus a low degree of involvement in the financial system, in terms of using financial services. This group was named *financial outsiders* and includes approximately 17% of the population. The group most frequently includes women, elderly persons (over the age of 65), persons with a low level of education, retired and economically inactive persons, and persons with the lowest incomes. The second group consists of persons whose knowledge is below average, but still significantly higher than outsiders', persons with general awareness below average, a low level of interest in financial and economic trends, as well as a low level of involvement in the financial system. It was named *financial reluctant* and includes approximately 37% of the population. This group also includes more women than men, persons up to the age of 24, lower and higher educated persons, as opposed to those with a college degree, residents of rural areas, unemployed and economically inactive persons, and persons with no personal income. A relatively significant proportion of the population includes a group named *financial adopter*, and consists of persons with larger than average knowledge and general awareness, however, with a relatively lower degree of interest in financial trends and the use of financial services, in comparison to the financially most literate group named *financial followers*. This last group differs from the previous groups particularly by the fact that they are significantly more interested in following various financial and economic trends, and are substantially more involved in

the financial system, by using a relatively large number of financial services. One in three Bosnian citizens may be qualified as an adopter, one in six as a follower. Both these groups contain more men than women. The followers are more frequently middle-aged persons, highly educated persons, persons in urban settlements, employed persons and business owners, and persons with higher personal incomes and from wealthier households. On the basis of listed differences it is clear that the degree of education and involvement in the labour market are key dimensions influencing the level of financial literacy, whereas gender differences and age have influence to a certain degree.

However, financial literacy is only a part of overall financial capabilities. According to the definition from the financial literacy study by the British *Financial Services Authority (FSA 2006)*, financial capability has four basic dimensions: 1) making ends meet i.e. the skill of controlling one's finances; 2) planning ahead i.e. the ability to ensure financial stability, even in a crisis; 3) making choices i.e. the ability of choosing the right financial services; 4) getting help i.e. the ability of finding reliable information and sources. The indicators for each dimension indicate that the overall level of financial capability among Bosnian citizens is not flattering, and that active measures must be taken to reach a satisfactory level.

When speaking of making ends meet, almost 60% of citizens cannot afford to save money, because they rarely have any left to save at the end of the month, whereas 1/3 relatively frequently face financial difficulties. One in ten households relatively frequently (once in three months) has to borrow money to cover debts. Only around 14% of respondents prefer saving money, rather than satisfying their needs. All of this indicates severe financial difficulties or risk of difficulties, affecting a significant proportion of Bosnian households. Although persons with a lower degree of financial literacy more frequently face these kinds of problems, the ability to make ends meet is not related only to knowledge and capabilities, but also to the objective financial situations that such households encounter. The overall economic situation in BiH, the high unemployment rates and relatively low incomes in relation to the prices of bare necessities, constitute the objective circumstances which are difficult to overcome with knowledge and skill in managing personal finances. However, this in no way means that

a higher level of knowledge and skills in this area could not alleviate to some extent the pressure of these objective circumstances.

When it comes to planning ahead, around 40% of households keep no record of their incomes and expenses, meaning they have no information as a base for planning. The need for planning ahead is evident in the fact that around one half of households have experienced a sudden drop in income in the last three years, which is mostly related to the economic crisis. Most dealt with the crisis by cutting their expenses, seeking extra work and borrowing money from friends and family. Only 1/5 tapped into their savings, meaning they were prepared for such a scenario. Over half of citizens are not able to save money, especially for a long-term purpose, like retirement. Those that do have some savings have most frequently saved up relatively small amounts. The data also suggest a low capability of planning for the future. Some of the elements of this ability are a result of objective economic and social circumstances, whereas some stem from financial culture and knowledge, with room for improvement.

The other two dimensions of financial capability are related little to the objective economic and social situation in Bosnia and Herzegovina, and primarily to consumer culture and habits, and can be directly dealt with through appropriate educational programs. When it comes to the means of choosing financial services, only 1/3 of persons who use financial services regularly are active users, are sufficiently informed and compare different offers. As many as 1/5 of persons using financial services never compare different offers, whereas another 1/4 do so very rarely! Only a small number of users rely on independent and objective sources when choosing financial services, such as independent financial advisors. Most turn to relatively unreliable or bias sources, like friends and acquaintances, advertisements, materials and employees of financial institutions offering financial services. Evidently, awareness must be raised when it comes to the need for active approach to buying financial services, and a critical attitude developed towards bias and unreliable sources of information and advice. It is somewhat encouraging that 2/3 of respondents place emphasis on the price when choosing financial services, whereas it is concerning that the other 1/3 do so with other elements, most frequently banks' reputation, which is not insignificant when it comes to countries with recent experiences with instability of financial institutions.

The results clearly suggest that there is a need for appropriate educational activities to increase financial literacy and capability of B&H citizens. Citizens are mostly aware of their low level of knowledge and are basically open towards such forms of education. When speaking of the contents of education, it is clear that it should consist of two simultaneous levels: the first aspect is raising the level of financial literacy in the sense of getting to know basic terms and characteristics of financial plans, and promoting the active approach to buying financial services; the second is related to educating citizens on the need and methods for managing household finances. Only the combination of these two aspects of financial education can generate long-term results. In planning the contents of financial education it is important to consider the poor financial and social situation of the majority of the persons in need of such education. Such an objective financial and social situation of these persons may cause a resistance towards advice related to financial services and management of personal finances, in turn related to the traditional belief that financial services and management are intended for persons with a financial surplus.

When planning educational activities, special attention must also be given to correct targeting of persons, and communication. Clearly, the groups to be targeted are those with lower education, the eldest and youngest groups, those with lower income and unfavourable professional status (unemployed persons, etc.), and women. In doing so it is important to concentrate on the group segments that are economically and professionally active and have an actual need for making certain financial decisions. It is necessary to find the appropriate communication channels with the target groups, to avoid concentrating on financial followers, who are not to be the primary goal of these activities. The difficulty lies in the fact that the most critical groups in terms of financial literacy are at the same time less exposed to various information channels and are thus more difficult to reach.

9. References

Financial Services Authority (2006) *Financial Capability in the UK: Establishing a Baseline*. http://www.fsa.gov.uk/pubs/other/fincap_baseline.pdf, accessed on June 1st 2011.

Huston, S. J. (2010) Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44, 2: 296-316.

Kempson E., Collard S. and Moore N. (2005) *Measuring financial capability: an exploratory study*. Financial Services Authority, Consumer Research Report No. 37.

Stănculescu, S. M. (2010) *Analysis of the Financial Literacy Survey in Romania and Recommendations*. World Bank.

Vitt, L. A., C. Anderson, J. Kent, D. M. Lyter, J. K. Siegenthaler, & J. Ward (2000) *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S.* <http://www.isfs.org/documents-pdfs/rep-finliteracy.pdf>; accessed on June 10th 2011.