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FINANCIAL LITERACY AND RESULTANT STABILITY OF THE FINANCIAL SYSTEM

ФИНАНСИЈСКА ПИСМЕНОСТ И СТАБИЛНОСТ ФИНАНСИЈСКОГ СИСТЕМА

Summary: *The aim of the author of this paper is to show the relationship between the level of financial responsibility of individuals and of company managers and the stability of financial markets, asset markets and the stability of the financial system as a whole. In Bosnia and Herzegovina (B&H) after the 1992-1995 conflict, there was a large influx of funding into the local economy both from the fields of FDI (Foreign Direct Investment) and bilateral and unilateral aid. Many people in BH were keen to access loans in a seemingly cash-rich economy, but were ill-prepared in the fields of financial borrowing and handling debt properly. Subsequently they experienced difficulties in servicing obligations and the loan portfolio of banks has deteriorated. Thus the onset of the financial crisis has brought something positive. Borrowing in B&H dropped, but problems servicing existing loans rose. The situation has not yet become problematic but banking sector shortfalls tend to manifest themselves between 12-18 months after the event. The author believes that a more serious approach to financial responsibility at micro-levels is necessary for the national economic good.*

Key words: *financial responsibility, financial culture, bank client's financial behavior, non-performing loans, financial system stability*

JEL Classification: *D14, D18, G21.*

Резиме: *Циљ аутора овог рада је да укаже на релације између нивоа финансијске одговорности појединаца и менџера предузећа са стабилношћу финансијских тржишта, тржишта актива и стабилности финансијског система као цјелине. Након конфликта током 1992 -95 године, дошло је до обимног прилива средстава у економију Босне и Херцеговине кроз стране директне инвестиције и билатералну и унилатералну помоћ. Многи људи у БиХ су дошли у прилику да користе кредите у условима обиља новца али су истовремено били махом неприпремљени на адекватно задуживање и управљање дугом. Као посљедица тога суочили су се са тешкоћама приликом сервисирања обавеза што је имало одраза на нарушавање квалитета кредитног портфолиа банака. Тако изгледа да финансијска криза доноси и нешто позитивно. Узимање кредита у БиХ се успорава али проблеми сервисирања постојећих кредита постају већи. Ситуација није постала драматична али проблеми у банкарском сектору настају тек протоком времена након неповољних догађања. Аутор сматра да је нужан озбиљнији приступ проблему финансијске одговорности на микро нивоу ради опште економске добробити*

Кључне ријечи: *финансијска одговорност, финансијска култура,, финансијско понашање клијената банке, неперформансни кредити, стабилност финансијског система*

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1. INTRODUCTION

Financial responsibility among the population of B&H is key as a large percentage of the country's population participate to a greater or lesser extent in its financial market. Neglecting financial responsibility can be a key contributor to such factors as the inefficient operation of financial markets, inadequate risk perception and poor choice of investment options. Financially uneducated consumers are prone toward easily accepting adverse conditions related to financial arrangements. They show preference to the acceptance of various scams, such as pyramid saving schemes, which are predicated precisely on this low level of financial education, which in Bosnia and Herzegovina has only just begun to be studied at economics' faculties. In EU countries higher levels of financial education and responsibility are becoming the norm. In B&H modern banking standards are still clashing with old existing beliefs.

2. THE IMPORTANCE OF FINANCIAL LITERACY AND RESPONSIBILITY

The banking sector as a whole in B&H, as well as the economy, can only benefit from the development of financial literacy, responsibility and education among the country's financially active citizens.

Here is one definition of financial literacy (Vitt et al, 2005.):

"Personal financial literacy is the ability to read, analyze, manage and write about personal financial conditions that affect material well being. It includes an 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."

Financial literacy should be linked to the concept of financial intelligence. This is a set of skills that must be held by all those who want to run their businesses successfully and to be able to follow and understand the financial world. (Berman & Knight. 2007. p.9.). They must be able to read balance sheets and financial statements of companies and financial institutions and to understand their mutual relations and influences.

The fact that a large percentage of the population is financially illiterate is widely observed in developed countries. This has adverse results for consumers of financial services. Many citizens in the U.S. for example, do not have a bank account. Most borrowers are unaware of the real burden of flexible interest when buying houses and flats on the basis of a mortgage, a market sector known as subprime borrowers. More educated people tend to be financially more literate (Hoghart, 2007). Financial education is, as pointed out by Bernanke (2006), a very important part of effective financial markets, but is not a *panacea* because it cannot replace wise and effective regulation. We should not forget that many financial decisions are motivated by irrational reasons, while Thaler from the University of Chicago, quoted in The Economist in 2008, believes that financial literacy is impossible. Economic uncertainty can lead to human behavioral mannerisms not always driven by rational motives and reasoning, often leading to poor financial decisions, says Akerlof and Shiller, in 2009. Financial education can be of assistance because in daily life people are constantly faced with the need to make rational decisions.

The less people's financial wherewithal, the greater the problem of financial education. A recent World Bank study estimated that many families in Bosnia face bankruptcy following excessive borrowing. It is estimated that almost 74% of households spend at least 20% of their revenue for the repayment of loans given to them. Even 59% of indebted households allocate more than 30% of monthly income for the repayment of the loans. The problem is exacerbated by the fact that B&H has no possibility of personal bankruptcy, like the U.S. where, for example, there exist credit advisors who advise before bankruptcy or on alternatives to bankruptcy[1]. Financial education needs to provide individuals with a thorough understanding of the complex financial environment, which includes the provision of loans, savings, and maintaining adequate levels of insurance and how to avoid unscrupulous financial firms. (Parrish & Servon, 2006.). Research in the U.S. shows very different financial behavior of households (Hogarth, Beverly & Hilgert, 2003). The only variable which consistently affects behavior in financial management is financial knowledge and experience. The implications are that increasing knowledge and experience can lead to improved financial behavior. The improvement of knowledge is achieved by additional education, although this is only one way of influencing behavior. Personally targeted and tailored approaches have been shown to work best. Numerous studies have shown that Americans have an inadequate knowledge of personal finance, (Chen &Volpe, 1998). They fail to make correct decisions because they have not received a sound personal financial education, and in a survey of financial literacy among college students only 53% of them gave the correct answers.

It was noted that even students of business studies in the United States are not obliged to take courses in personal finance. (Bialaszewski, Pencek, & Zietlow, 1993). Of course, this age group is not significantly active in the financial world. Elder students are better versed in financial matters. Students who study economics and related disciplines are better informed than students of other studies. (Chen & Volpe, 1998. p.114.). Experimental studies show that financial education by itself is not enough unless it is supported with advice when making financial decisions, and education and consulting are complementary and not substitutional methods. (Carlin & Robinson, 2010) . Over half of employees in the U.S. participate in at least one program of financial education, and in most cases they learned about the importance of saving and investment from retirement scheme programs.

In Australia, empirical research found that financial literacy is highest among people aged between 50 and 60, in professionals, business and farm owners and university and college graduates. Literacy is lowest among the unemployed, females, and those from a non-English speaking background with a low level of education. (Worthington C.A. 2006). However, a research of financial literacy of the general population implemented in most developed countries such as the USA, the UK and Australia showed varying results from a satisfactory general level of financial literacy to unsatisfactory levels, as in the USA. A general assessment of financial literacy levels among student populations is almost as bad. The critical group in terms of financial literacy in Australia, for example, are groups with certain demographic characteristics, followed by the less educated, those with low-income, low savings, singles, and the youngest and oldest population, below 25 and above 75 years old. (Marcolin S. Abraham A.2006. p.4).

In the UK it is characteristic that respondents keep their financial affairs confidential. Estimates are similar in terms of high correlations of financial literacy, education levels and socio-economic status. The educated and wealthy are both financially literate. In B&H many people can be considered functionally illiterate and the unemployment rate in the post-conflict period is constant, at around 40%, with high unemployment rates. Research of non-governmental organizations in B&H has showed that in the population aged 25 to 35 years in urban areas, who

[1] The members of the National Foundation for Credit Counseling (NFCC) are the oldest nonprofit network of agencies for credit counseling. They provide the budget review, education, advice, possibly referrals to social – service agencies or other institutions to solve specific problems, and recommendations for specific changes in the client's behavior. (Staten, Elliehausen & Lundquist, 2002).

have not completed primary school, and thus are virtually illiterate, 7.7% are male and 22.2% women. In the rural areas it is 24.7% male and 47.5% of illiterate women. The percentage of illiterate people before the war, following data from 1991 was 9.9%. The situation is now certainly much worse because of the war, the slow post-conflict recovery and widespread poverty. The price is that B&H has the most illiterate, compared with Europe and B&H is also among the Balkans countries with the highest rate of illiteracy. In Europe, there is 1.8% of illiterates, and in the U.S. 6, 9%.

These two groups (illiterate and unemployed) are also the group with the worst financial literacy, according to research in developed countries. It is reasonable to expect that a large number of people in Bosnia and Herzegovina would be financially illiterate.

A World Bank study (Rutledge L.S. 2010.p.10) shows that in the case of 9 countries (Bulgaria, Poland, Latvia, Lithuania, Romania, Slovakia, Azerbaijan, Croatia and Russia) consumer rights with regard to financial services were not respected. Endangering consumers is manifested in a range of usurious unregistered financial institutions. In Croatia, the common complaint was that: *"we did not understand what we signed"*. Romanians complained that contracts are very important things written in letters too small to read. In Azerbaijan old and retired people need to use ATM machines. In Serbia, the banks are unilaterally changing bank interest margins, in the interest rate over EURIBOR

It is a requirement everywhere that Central Banks publish their nominal and effective interest rates. It is a common feature in many countries, including Serbia and Bosnia, that consumers are not aware of the risks that accompany long-term loans in foreign currency and the risk of flexible variable interest rates.

In B&H, there is a systematic lack of financial education and this has consequences not only at the individual level, but it has a direct impact on the functioning of the financial system as a whole. There is no relevant research on the financial literacy of the public in B&H. When the problem with the repayment of loans started in Bosnia in mid-2010, a report on consumer protection and financial literacy of clients regarding banking services was presented. The report was prepared at the initiative of local authorities who are obviously faced with the escalating problem of servicing bank loans granted to citizens and businesses. The author of this paper believes that this approach is useless because the actions are taken *ex post facto*. Financial literacy in the broader sense is still not on the agenda for local government. The conclusion of the Report is that there is no alternative to financial education. The World Bank representative in B&H emphasizes the strengthening of institutions, of rule of law and lastly, financial education programs. *(www. N24.ba/novosti/11632/ finansijska pismenost građana)*.

Surveys were carried out by the experts group of the Ministry of Finance and Treasury of B&H, showing that 21% of respondents underestimated its ability to repay a loan, and those contracts were signed mostly unseen. 10% of respondents thought they might be late with payments, 8% took credit for the return of old loans as a large percentage of borrowers expected the creditor to solve their problem. *(www. N24.ba/novosti/11632/finansijska pismenost građana).*

A survey carried out for the author of this paper, and conducted by economics students at various locations in Republic of Srpska, (one of two entities in B&H) in Pale and Bijeljina, indicated that the vast majority of students, even though they are studying economics, are practically financially illiterate. And respondents have an awareness of currency risk but not a strong preference for borrowing. The respondents would take a loan only in real need. They recognized the importance of their own creditworthiness. About 80% do not know what EURIBOR is. They show a very high preference toward saving and productive investment that would be expected of future economists. 66% of respondents would invest their own savings in a number of alternative options which displays evidence of risk awareness and understanding of the importance of investment diversification. Some 6% of them would invest their savings in the bank. Only 27% know that the small bank deposits are insured by the Deposit Insurance Agency of B&H. As might be expected the situation is even worse for students in other degree programs. Nowhere at universities in B&H is there a subject or a scientific discipline related to personal finance. People who have already stepped into the working world also have weak levels of financial literacy. It is reflected in *a priori* and non-critical manner, heedlessly accepting all the conditions offered by banks. There is a noticeable lack of any form of self-informative process or research carried out into conditions offered by competing banks. This can be sometimes explained away by the need for credit, and sometimes perhaps by the conscious acceptance of adverse conditions following the credit contract, because of the immediate need for funds. It is recognized as a phenomena called 'cost unconsciousness' and 'interest insensitivity'.

The programs of financial education organized by commercial banks are very rare and sporadic. After the problems in the banking sector this needs to be seriously taken into consideration.

The general euphoria that accompanied the expansion of bank credit, asset prices and performance of foreign investors, mostly from the region, on the stock exchanges in B&H had to feed small, domestic and financially illiterate investors in the stock exchange. Many newcomers were buying on the stock exchange contrary to the logic of buying when cheap, but they invested with the highest prices. In one fell swoop, financially literate insiders withdraw and these small newcomers experienced the bursting of a classic financial bubble, accompanied by the predictable losses. So the stock exchanges in B&H hence operated on the principle of a Ponzi financing scheme.

Financial ignorance also provides a very fertile breeding ground for the existence of fraud schemes, such as pyramid savings.

3. BANKS' CREDIT POLICY

Since 2000, the domestic market has been hungry for loans and there was a sudden and large expansion of bank lending to households and the economy. Because of the perception of risk investment in the domestic market, banks accrue interest margins significantly so in 2010 the interest margin or the difference between the lending rates of commercial banks in the twelfth month EURIBOR was 7,01 percentage points (Bulletin of Central Bank of B&H, No.3.2010. p.70)

This large demand for bank loans showed that they are more comfortable when contracting loans in the sense that they themselves allowed interest rate changes according to their own needs. Banks often increase interest only in an upwards direction. Interest rates in domestic banks proved fairly rigid in the inverse direction. Credit activity was reduced in the first half of 2011. The profitability of banks has significantly reduced. Several banks in Bosnia and Herzegovina have made massive losses. The consequence of this is that banks increased interest rates acting in this way pro-cyclically, thus making it hard to negotiate a way out of the recession.

It is somewhat paradoxical that the interest rates on short and long term loans indexed in foreign currency have been on average higher in every month since 2007 than interest rates on loans in local currency. This applies to loans to business enterprises and the difference is even higher for loans to citizens. This difference at some point is 1.55 percentage points. A currency clause is included in the loan agreement, although Bosnia and Herzegovina has a currency board system and the local exchange rate is pegged to the euro by law, and guaranteed by the Central Bank of BH. This indicates the distrust of banks in the currency board system. In this way the risk of exchange rate fluctuations switches to the final users of credit, for these latter obviously do not enjoy any risk premium in the form of lower interest rates. It seems that users of loans do not negotiate the terms of loans, but the loans are used mainly on the of ‘take it or leave it,` in relation to the conditions offered by the bank.

A good example of what the domestic banking market is like can be illustrated by the example of Pale. It is a municipal centre some 12 kilometers east of Sarajevo. Its population is some 30,000 inhabitants. Ten different organizational units of banks operate in the Pale concentrated in a radius of 500 meters, side by side, offering the same types of loans under dramatically different conditions. For example, loans in cash up to 5 years are offered mainly with flexible interest rates, worked out on EURIBOR plus a bank margin. Even though the short-term loans are generally indexed in foreign currency, the biggest differences are manifested in terms of the interest rate. Two different banks located next to each other offer a dramatically different rate for the same type of loan. In one, the interest rate is 8% with 1% of compensation for the cost of processing a loan application and with another bank it is 14.77% (effective). This represents a difference of nearly 50%. The first bank has no penalties for early repayment of a loan while with another bank these penalties amount to 2% and with another even to 5%.

These banks offer different conditions for their clients and for those who are not, or do not receive their salary through the bank, for example, insurance and similar services carry additional costs for the borrower. The conclusion is that although there are so many banks in the same small area they are not competitive. Otherwise, the terms and conditions of loans would be fairly uniform, which is not the case. Since the same banks offers very different conditions in Pale, then the situation is equally the same in a wider area. One important reason is the ignorance of customers of different conditions of the loan and their "insensitivity" to the cost of the loan. Customers are not aware that credit terms can be negotiated. In direct communication with the bank loan officers the author of this paper saw that it was possible to negotiate. Customers generally take credits with their bank regardless of the conditions that the bank offers.

Customers are not aware of the standard currency risk, which is equally present in B&H in terms of currencies other than euro, while the banks obviously do not have fundamental trust in the stability and durability of the currency board, and the fixed exchange rate of their domestic currency against the euro which has been in force in B&H since 1997. That customers are not interested in more favorable credit terms is shown by the fact that to our public notice on credit counseling services, consisting of assistance in choosing the best credit conditions, there was not a single response.

A large number of citizens in B&H are dysfunctional in terms of the credit criteria of commercial banks, which has influenced the dynamic development of microcredit institutions in B&H so that the number of loan accounts even surpasses the number of loans approved by banks. The effective interest rates in these organizations range from 22.94% for housing loans up to 38.99% per annum for non-purpose loans. Ignorant users and their expressed need for loans led to the indebtedness of borrowers with micro-credit organizations and subsequent losses for these institutions.

4. NON-PERFORMING LOANS

With the arrival of the financial crisis and the global recession, bank asset quality can be expected to deteriorate. Lending activity is largely reduced due to reduced demand and stricter loan conditionality. Non-performing loans in B&H were not of concern in the midst of the crisis, but experience from past crises tells us that problems arise mainly with the time lag. This is noticeable in B&H and regionally, where the growth of bad assets is quite noticeable and quick. According to reports from the Central Bank at the end of 2010, banks in their portfolios have about 10% of non-performing loans in relation to their total credit portfolio. In Republic of

Srpska (one of two entities in B&H), 15% of the loan portfolio of enterprises are bad loans of categories C and D. It is predicted that bad loans will make up an even greater share in the near future. Companies in B&H do not return the loans 11.7 percent of cases. At the same time 6% of households users of credit do not repay loans. In 2010 the number of credits that cannot be repaid was doubled.

The crisis was only partly the cause of the problem. This summary does not include only outstanding credits, but also those whose return was prolonged. Companies complain about high interest rates while banks similarly complain of bad business plans and poor business practices. A key problem is that businessmen borrowed funds based on reckless business plans and by using borrowed funds earmarked for business purposes bought expensive cars and luxury consumer goods. Although there are no studies on this subject and it is difficult to argue this claim, the fact is that companies established after the conflict in B&H are young companies with no business history and with a poor business reputation. Owners of small and medium sized companies are usually also the owners and managers of their companies. Plenty of companies were established on the basis of dubious privatization, through the interface with politics and they often lack the business approach inherent to a competitive business environment. Certainly, the financial education and literacy of such entrepreneurs is low when accepting expensive loans and indulging in inappropriate use of borrowed funds. In addition, further dangers were inherent in some banking circles, (‘’moral hazard’’) such as in the case of Hypo Alpe Adria Bank.

5. WHAT TO DO IN B&H?

Some recent research shows that financial literacy does not affect participation in financial markets and subsequent decisions until researchers discovered that cognitive ability is important (Cole & S. Shastry K.G. 2008.p.31.). Doubts about the justification and the actual effects of significant investment in financial literacy courses indicate the need for rigorous testing to measure their effectiveness. In our conditions, such investments must be viewed as a long-term investment in economic development.

The author believes that financial literacy, as understood in the broader sense that includes not only the client-bank relationships, but also a more productive use of available financial resources, is of great importance to poor countries such as Bosnia, because it helps the efficient allocation of the already very modest resources, financial and otherwise, in the country. Increasing levels of financial literacy in a broader sense will improve the general and economic culture of citizens and entrepreneurs. Economic and social culture of society in B&H is traditionally characterized by ‘’the poverty syndrome" with a strong need to emphasize welfare by the display of external symbols whose minimal real financial status marks them as one form of unproductive waste of resources and low economic culture. It is a society which, in the words of the British playwright Oscar Wilde, “knows the cost of everything but the value of nothing.”

A key step to start solving the problem of the financial illiteracy of the population in B&H is the recognition and diagnosis of the problem. Which would make those who are concerned about the public interest, about financial institutions and citizens interests to become better aware of the problems and damages resulting from its failure to solve this situation. Given that it is unlikely that B&H will initiate and implement a national strategy for financial literacy, it is thus very important to investigate the problem and suggest to relevant policy makers concrete policies and actions to solve this problem. None of the nine countries analyzed in the previously mentioned study is without a national strategy. For B&H it is a particular problem as policy makers generally rely on foreign initiative and foreign technical assistance.

For countries with high and middle-income as recommended by World Bank experts, it is necessary to formulate a national strategy to raise the level of financial education of the population while the poorer countries, which include B&H, financial literacy, should adjust their institutional capacity. In this context emphatic primacy is given to the protection of consumers of financial services (financial literacy and consumer protection are "two sides of one coin" because it would strengthen the protection of consumers through emphasizing the financial literacy of the population.) This would best be done through one supervisory institution. In addition it is necessary to have constant monitoring of consumer protection (using e.g. "mystery shoppers") (Rutledge LS2010.p.5).

There are very few domestic initiatives involved in solving even the most important economic and social problems. The fundamental necessity to address this problem should be considered in the curricula of high school students. Institutional infrastructure provides conditions for education in financial literacy and does not require significant additional costs. One would then be able to choose a specific target group within the framework of the borrower (the general public, owners and managers of small and medium-sized companies) which would encourage the central bank and financial institutions (banks and insurance companies and investment funds). To protect consumers it is necessary to pass a law on protection of consumers of financial services. (Serbia has, at the time of writing this paper, just adopted such a law). It is important for consumers; it means that if they need recourse to advice or arbitration there is one address they can turn to. In Serbia, for example, consumers who are not satisfied with financial services have to contact the six different addresses. In Bosnia and Herzegovina no one single institution has the mandate to protect consumers. Financial literacy can be an effective form of consumer protection, which helps to understand the terms offered by banks and other institutions, and consumers thus make decisions based on knowledge. Financial literacy cannot replace regulation but may be supplemented by an effective legal and regulatory basis for financial protection of consumers (Rutledge LS2010.p.31.).

6. CONCLUSIONS

The thesis of this paper is that the financial literacy of the population of each country is crucial for the well-functioning of the financial system and thereby the economy as a whole. The situation in regards to this in BiH is very bad. Financial literacy is the primary interest of the customers of banks, because, as we have seen, efforts by banks to switch the risk to the users of banking services can ultimately lead to the spread of the problems of the borrower as it bounces back to banks. The financial literacy of the population is in the public interest because the adequate behavior of users of financial services increases the stability of the entire financial system and economy as a whole. Mass errors in any personal financial management or finance companies ultimately undermine the financial system and economy. There is ample room for financial education of the population and financial managers in which it is easy to find a place for professional educators, banks and international financial institutions.

We have tried only discreetly to address the topic of financial education of wider groups of people whose lack of education and financial incompetence can lead to significant problems in their personal lives as well as with problems in the financial sector as a whole. There is a largely unexplored area of this problem that has not yet been adequately looked at or investigated by management structures and policy makers and other interested parties in the country and it should have much more attention devoted to it in the future. Financial literacy and education is in the interest of educators, community groups, businesses, government agencies, organizations and policy makers.

Central activities related to the education of the wider population could be handled by the Central Bank, which would provide incentives for commercial banks to engage in these activities, ranging from the introduction of courses for children up to broader areas of activity. In this way it could be ensured that over time people become aware of the increased costs of using credit cards, problems arising from excessive debt, and they would take care of their own retirements, with the introduction of private insurance and the importance of insurance schemes. This should raise awareness of the importance of savings and what it promotes. It should help them in investing their savings and having protection against risk. It concerns the wider public interest and the efficient protection of the domestic financial system which would be less exposed to volatility resulting from incompetency and irrational behavior of consumers of banking and financial services. It is true that the Central Bank pays particular attention to the education and training of its employees, however, it misses its engagement in the broader education of the population where it could have a catalyst role in guiding and encouraging financial institutions to engage in the education system and inform the population about financial services and the opportunities, risks, savings and various forms of investments that are offered on the domestic market. On the other side, the Central Bank would have to have a greater impact on rules and regulations that to a large extent protect the rights of consumers and consumers of financial services.

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