



## FINANCIAL (IL) LITERACY AND STABILITY OF THE FINANCIAL SYSTEM

**Novo Plakalović**

University of East Sarajevo, Bosnia and Herzegovina  
novoplakalovic@gmail.com

### **Abstract:**

*The aim of the author of this paper is to show the relationship between the level of financial literacy of individuals and company's managers and the stability of financial markets, asset markets and the stability of the financial system as a whole. In post-conflict Bosnia and Herzegovina (BiH) economy was "struck" by foreign banks and financial capital that has swept the local public "hungry" for loans but also under-educated in the financial sense to borrow and use borrowed funds more effectively and accept tolerable burden of debt. Financial illiteracy and the willingness to accept the conditions imposed by banks have led to difficulties in servicing obligations and deteriorating loan portfolio of banks. In such circumstances, the onset of the financial crisis has brought something positive. The trend of rapid borrowing of citizens and companies in BiH was abruptly cut, but on the other hand problems with servicing the loan already taken simultaneously arose. The problems are still not dramatic but it should be noted that problems in the banking sector come to the surface only after one and a half to two years after the crisis. The author believes that a more serious approach to the financial literacy of citizens and managers and owners of small businesses is crucial, not only for the economy as a whole but also for the health of the banking system or financial system of the country.*

*Keywords: financial literacy, financial culture, bank clients financial behaviour, nonperforming loans, financial system stability.*

## **1. INTRODUCTION**

General financial literacy of the population as a whole in terms of the Bosnia and Herzegovina (BiH) economy is of great importance because wider population appears as active participants in financial market. Neglecting the components of the broader financial literacy can cause serious problems ranging from inefficient operation of financial markets, adverse panic and financial crisis, financial market instability (euphoric behaviours in investment and sudden exits from the market), inadequate risk perception and poor choice of investment options. Illiterate consumers are prone toward easily accepting adverse conditions related to financial arrangements. They show preference to acceptance of various scams (pyramid saving modes, etc...) which are based precisely on the financial illiteracy of the population. Financial education in Bosnia and Herzegovina has practically only begun to be studied at the faculties of economics (except for the high schools of economic orientation). In the developed world, financial education is a part of the necessary knowledge at least on a basic level. It is necessary for "normal life". In any case, in BiH it has not yet been adequately perceived as a necessity because, given the long tradition of non-market systems and habits thereby established, the awareness of the changed environment has not still taken root. Old habits and value systems are colliding with the new standards, and now with the privatization and earning orientation come to the fore. In the minds of people there is still confusion on many issues and they make big mistakes when making financial decisions, both personal and in business, which ultimately threatens the stability of the financial system.

## **2. IMPORTANCE OF FINANCIAL LITERACY**

Recently, in addition to issues of education and greater sophistication of bankers, brokers, analysts, portfolio managers or specialists in risk management and the importance of their attributes for the development of financial markets and overall economic development, special attention should be paid to issues of financial education and literacy for all savers and investors and wider population who basically determine the overall benefits of financial development and risk diversification.

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 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.”

The term "financial literacy" should be linked to the concept of financial intelligence with wider use in popular literature. It is important to point out that financial intelligence is "an innate ability" that you have or do not have, "a set of skills that can and must be learnt". These are the skills that must be held by all those who want to run their businesses successfully and to be able to follow and understand what the financial world is speaking (Berman & Knight, 2007, p. 9). They must be able to read balance sheets and financial statements of companies and financial institutions and to literally understand their mutual relations and influences.

The fact that a large percentage of the population is financially illiterate is widely observed in developed countries. Consequences are a very bad position of consumers of financial services,

which causes problems in the financial sector. 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 in contract to purchase real estate, houses and flats on the basis of the mortgage (subprime borrowers). The fact is that more educated people are also financially more literate (Hogarth, 2007). Financial education is, as pointed out by Bernanke (2006), a very important part of effective financial market but not a *panacea* because it cannot replace a wise regulation, clear procedures for closing businesses, and preclude the providers of financial services to engage in unfair or illegal activities. We should not forget that many financial decisions are motivated by irrational reasons while Thaler from University of Chicago (The Economist, 2008, p. 72) believes that financial literacy is impossible. This is about the other issues of human behaviour in the financial world. This is a behaviour that is not always driven by rational motives and reasoning so it often leads to bad financial decisions. Faced with economic uncertainty behaviour is largely driven by behavioural means and raw emotion ("animal spirits") which can rapidly and sharply deviate from the behaviour in the past (Akerlof & Shiller, 2009).

Psychological factors that lead people in decision-making should be separate from the education of the people because in real life they are constantly faced with rational decisions where financial education can help.

The problem of financial education particularly appears with people with less financial strength. This education is necessary for children and adults. In societies where personal savings are neglected financial education has special importance. Thus, for example in a recent World Bank study it is estimated that many families in Bosnia after a wave of intense borrowing are threatened with bankruptcy. 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. Problem is that BiH has no possibility of personal bankruptcy as U.S. where, for example, there exist credit advisors who advise before bankruptcy or alternatives to bankruptcy<sup>1</sup>. This education needs to provide positive financial behaviour of individuals, to direct and provide orientation in a complex financial environment, which includes provision of loans, savings, maintaining adequate levels of insurance and avoiding unscrupulous financial firms (Parrish & Servon, 2006). Researches in the U.S. show a very different financial behaviour of households (Hogarth, Beverly & Hilgert, 2003). The only variable which consistently affects the behaviour in financial management is financial knowledge and experience. The implications are that increasing the knowledge and experience can lead to improved financial behaviour. Improvement of knowledge is achieved by additional education although it is only one mechanism to influence behaviour. The authors consider that "one size fits all" and "one delivery techniques fits all" approach was less effective than more targeted, tailored approaches. Numerous studies have shown that Americans have inadequate knowledge of personal finance (Chen & Volpe, 1998). They fail to make correct decisions because they have not received a sound personal financial education. The survey of financial literacy among college students in the U.S. show that only 53 % of students gave the right 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, the students

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<sup>1</sup> The members of National Foundation for Credit Counseling (NFCC) are oldest nonprofit network of agencies for credit counseling. The agencies 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).

and their youth do not allow them to enter "significantly" in the financial sphere. Elderly students are better versed in financial matters. Students who study economics and related disciplines are better informed than students in other studies (Chen & Volpe, 1998, p. 114).

Experimental studies show that financial education only is not enough unless it is supported with advice when making financial decisions. Education and consulting are complementary and not substitutes (Carlin & Robinson, 2010). Over half of employees in the U.S. participate in some programs of financial education. In most cases they learned about the importance of saving and investment from the retirement schemes programs.

In BiH, 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.

Own survey of the author of this paper conducted by the students of economics at various locations in the Republic of Srpska (Pale and Bijeljina) indicated that the vast majority of students, even though they are studying economics, are practically financially illiterate<sup>2</sup>. As it might be expected the situation is even worse for students in other degree programs. Nowhere at the universities in BiH there is a subject or a scientific discipline related to personal finance. People who have already stepped into the working world also have weak financial literacy. It is reflected in a priori and non-critical, 'heedlessly' accepting all the conditions offered by banks. There is a lack of informing and researching of conditions offered by competing banks. It can be sometimes explained by the need for credit, and sometimes perhaps the conscious acceptance of adverse conditions following the credit contract because of the need for funds. It is recognized as phenomena "*unconsciousness of costs*" and "*interest insensitivity*".

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

General euphoria and the expansion of bank credit, asset prices and performance of foreign investors (mostly from the region) on the stock exchanges in BiH, had to feed small domestic financially illiterate investors in the stock exchange. Many "outsiders" were buying on the stock exchange contrary to the logic of buying when it is cheap but they invested with the highest prices. In one moment literate insiders withdraw and small outsiders experienced shooting of a classic bubble and the losses. So the stock exchanges in BiH operated on the principle of Ponzi financing scheme which will extend the time of its taking on the role it should have in the funding.

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<sup>2</sup> And respondents have an awareness of currency risk but not a strong preference for borrowing. The respondents would take loan only in ultimate need. They perceived the importance of 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. The 66% of respondents would invest their own savings in a number of alternative options which is evidence of risk awareness and understanding of the importance of investment diversification. Just about 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 BiH.

Financial ignorance provides very fertile ground for the existence of fraud schemes such as pyramidal savings that are apparently eternal<sup>3</sup>.

### 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<sup>4</sup>. Large demand for loans from the banks provided that they are more comfortable when contracting loans in the sense that they themselves allowed interest rate changes according to their "needs". Banks are often increasing interest up but not the other way down. Interest rates in domestic banks were sticky or rigid in their way down. 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 was that the banks increased interest rates acting in this way pro-cyclically, thus making the way out of the recession difficult.

It is somewhat paradoxical that the interest rates on loans (short and long term) indexed in foreign currency have been in 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. Currency clause is included in the loan agreement, although Bosnia and Herzegovina has a currency board system and although the rate of local currency is fixed to the euro (by Law) which is guaranteed by the Central Bank of BH. This indicates the distrust of banks in the currency board system. In this way the risk of the exchange rate switches to the final users of credit for what these latter ones 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 in principle to "take it or live it" in relation to the conditions offered by the bank.

What is the domestic banking market like, can be illustrated by the example of Pale. It is a center of municipality close to Sarajevo. Municipality is populated with 30,000 inhabitants. Ten different organizational units of banks operate in Pale concentrated in a radius of 500 meters. A large number of banks, side by side, offer 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 (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 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). It is a difference of nearly 50 %. The first bank has no penalties for early repayment of a loan while with another bank these penalties

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<sup>3</sup> That type of scam is apparently always present in these regions and in isolated enclaves there appear firms that "act as" agents of Foreks" (in Serbia savings over the "Elite International", which damaged people by more than 50 million euro). Investments in fraudulent investment funds based on Ponzi schemes. There is also multilevel marketing. All this is going on due to financial ignorance of victims and warm state action.

<sup>4</sup> Because of the perception of risk investment in the domestic market, banks accrue interest margin significantly so in 2010 interest margin or the difference between the lending rates of commercial banks in and the twelfth month EURIBOR was 7,01 percentage points (Bulletin of Central Bank of BiH, No.3.2010, p. 70).

amount to 2 % and with some other even to 5 %. Banks offer different conditions for their clients and for those who are not (do not receive their salary through the bank for example) attaching to credits, for example, insurance and similar that carry additional costs for the borrower. The conclusion is that although there are so many banks in the 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 bank offers very different conditions in Pale, then the situation is similar in the 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 the 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 standard currency risk (which is equally present in BiH in terms of other currencies other than euro), while the banks obviously do not "believe" in the stability and durability of the currency board and fixed exchange rate and domestic currency against the euro which has been in force in BiH since 1997. That customers are not interested in a more favourable credit terms is shown by the fact that to our public notice on credit counselling services (assistance in choosing the best credit conditions) there was not a single response<sup>5</sup>.

#### **4. NONPERFORMING LOANS**

After coming of the financial crisis and recession it can be expected to have deterioration in the bank asset quality. Lending activity is largely reduced due to reduced demand and harder conditions for lending. The growth of bad assets in BiH ("nonperforming loans") was not of concern in the midst of the crisis, but experience from the past crises tells us that the problems arise mainly with the time lag. It can be seen in BiH and in the region, 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 to total credit portfolio. In the Republic of Srpska 15 % of the loan portfolio of enterprises are bad loans (categories C and D). It is predicted that the bad loans will have even greater share in the near future. Companies in BiH do not return the loans in 11.7 percent of cases. At the same time 6 % of household 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 account does not include only the outstanding credits, but also those whose return was prolonged. Companies complain about the high interest rates while the bankers come with complaints of bad business plans and actions of businessmen. Key problem is that businessmen borrowed funds based on the reckless business plans and use of borrowed funds out of business purpose buying expensive cars and luxury consumer goods. Although there are no studies on this subject and it is difficult to argue this

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<sup>5</sup> A large number of citizens in BiH are incapable in terms of credit criteria of commercial banks, which has influenced the dynamic development of microcredit institutions in BiH that by the number of loan accounts even surpass 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 losses for these institutions.

claim, the fact is that the companies established after the conflict in BiH, 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 inappropriate use of borrowed funds. In addition, moral hazard was present in some banking circles (the cases of Hypo Alpe Adria Bank, state owned Development Banks and others).

## 5. 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. Situation in this field in BiH is very bad. It is especially emphasized by the sudden entry of people into the financial system with market rules with inadequate institutional environment. 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 problems of the borrower as a boomerang back to banks. Financial literacy of the population is the public interest because the adequate behaviour 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 place for professional educators, banks and international financial institutions. We 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 level as well as problems in the financial sector as a whole. There is a largely unexplored area of this problem that has not yet been adequately perceived or investigated by the management structure and policy makers and other interested parties in the country and it have to be devoted much more attention in the future. Financial literacy and education is the interest of educators, community groups, businesses, government agencies, organizations and policy makers.

Central activities related to education of a wider population could be handled by the Central Bank that would provide incentives for commercial banks to engage in these activities, ranging from the introduction of courses for children up to the wide form of activity. In this way it would be ensured that over time people become aware of the increased costs of using credit cards, problems arising from excessive debt, they would take care of their own retirement (the introduction of private insurance) and the importance of insurance schemes. This should raise awareness on the importance of savings and what it promotes. It should help them in investing their savings and have 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 behaviour of consumers of banking and financial services. It is true that the Central Bank pays particular attention to 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 to guide and encourage financial institutions to engage in the education system and inform the population about financial services and 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 decision rules and regulations that to a large extent protect the rights of consumers and consumers of financial services because they are sometimes exposed to inadequate offering of banking services.

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