

## FINANCIAL LITERACY OF SMEs MANAGERS

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### **Abstract:**

In this paper we present a study that we undertook in late 2014, in the Republic of Srpska (one of two entities in Bosnia and Herzegovina). The research starts from the assumption that the owners and / or managers of small and medium-sized enterprises (SMEs) do not have a high level of financial literacy. We started from the following hypothesis and that is not even possess the appropriate level of financial awareness in certain important aspects of financial management. Although one might expect that the owners and managers of small and medium-sized firms have significant expertise in financial management as a condition for an appropriate level of financial literacy and financial awareness as an important element of financial literacy, this research has confirmed the initial hypothesis. Done empirical research based on survey research and interviews with managers and owners of small and medium enterprises (SMEs) shows that interviewed managers have unexpectedly low level of basic financial knowledge. Financial literacy and awareness of the interviewed managers are disappointingly low. SMEs managers are very few use the proper ratios and ratio analysis. They are not close to the methodology of financial analysis. They are not aware of the intangible values of their companies. They manage liquidity of the firms on "spontaneous" way in close relation with the prevalence of "illiquidity culture". Financial knowledge is obviously not a prerequisite for the success of SME-s. It can be concluded that some other skills and abilities have a higher rank of significance in comparison with financial literacy.

*Keywords: knowledge, human capital, financial literacy, financial behavior, financial awareness, SME managers, education*

## 1. INTRODUCTION

Every manager is a part of decision-making process related to acquisition, allocation and utilization of resources. These processes have by nature financial characteristics. In order to act effectively it is assumed that every manager has to be financially literate. It implies the ability to read, analyze, manage and write about financial conditions of firm. In this paper we investigate financial literacy level of the managers of small and medium enterprises (SMEs) in Republic of Srpska (RS), one of the two entities in Bosnia and Herzegovina (B&H). We start with the assumption that the owners and managers of SMEs are simultaneously inadequately financially literate. We start with very strong hypothesis that contradicts the fact that the observed sample mainly includes enterprises that have been successful for a prolonged period. The fact that entrepreneurs, owners and managers are financially illiterate but at the same time successful becomes a puzzle and a paradox. The investigation has been realized using survey and interview amongst owners/managers of a number of SMEs in RS. The results show that our initial hypothesis and expectations were sound and we concluded that financial literacy amongst owners/managers of observed companies was unexpectedly low.

## 2. WHAT IS FINANCIAL LITERACY?

There is abundant literature that investigates the phenomenon of financial literacy in the developed and developing countries. There is relatively small number of investigations that tackles financial literacy of managers. That is especially case in B&H. We are not aware of any investigation of this topic in B&H.

Financial literacy can be defined as 'ability to obtain, understand and evaluate the relevant information necessary to make decision with an awareness of the likely financial consequences' (Bartelet p.31). Marriott and Mellet carried on research (1991) with the aim to reckon the managers' adequacy based upon the premise that if managers lack necessary skills their decisions will be wrong. Marriott and Mellett (1996 p.64) define financial awareness as "... the manager's ability to understand and analyze financial information and act accordingly". They measured the capacity of examinees to define and calculate a number of accounting measures though the ability to calculate does not guarantee that one is capable to understand and analyze. 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 business 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.

Financial literacy is most broadly defined as the capacity to analyze. Its content is now being shifted from financial knowledge and understanding to the inclusion of financial skills and competencies, attitudes and behavior. Nowadays there is consensus that this broader concept is more relevant. It is still of topical interest how best to define, measure and influence. Holzman (2010. p.4.) states that there is a great number of interventions with the aim to improve financial literacy but rigorous monitoring and evaluation of such intervention is still exception not the rule, particularly with regard to the measurement of impact (Holzmann 2010.p.6).

Low income countries and middle income countries show a number of common and idiosyncratic characteristics that will have an influence on financial behavior which is different than in high income countries with regard to measurement of financial capability and effectiveness of financial education and alternative intervention. (Holzmann R. 2010. p.13). In poor countries high percentage of population is financially illiterate and outside financial sector. A study conducted in Ghana (Nunoo & Francis, 2012.) shows insufficient financial literacy amongst small and middle entrepreneurs because of which 44% of them does not have access to financial services. More financially literate entrepreneurs would probably make use of financial services and consequently financial education would have positive connection with the usage of financial services.

Entrepreneurial endeavors ranging from real estate business to debt management require the ability to perform calculation which are often more complicated. Research and other insights in the US show that the level of numeracy required for such calculations is very low (Lusardi, 2012.). This is especially present in certain demographic groups such as the elderly people, female population and less educated people. This brings with itself certain consequences for the society as well as individuals

because the numerical literacy/capacity is directly related to the making of financial decisions. Disney & Gathergood (2011) find that financially illiterate households in Great Britain have lower net worth, use more expensive loans and have more difficulties with debt servicing. At the same time they find that financially more literate households have liquid savings and revolving loans which is result of more rational financial behavior. Lusardi & Tufano (2009) show similar results in the US. Individuals with lower level of debt literacy tend to accept more expensive loans and higher provisions for banking services. One third of the costs related to the usage of credit cards stems from the low financial literacy of the credit card users. Less financially literate users have more expensive debt and are not able to properly estimate their debt burden. Financial illiteracy of the users of banking loans lead to excessive borrowing and growth of the non-performing loans (Plakalovic, 2011).

Extensive literature survey that tackles the issue of financial literacy can be found in Hustings, Madrian & Skimmyhorn, (2012). Authors investigate how financial literacy is measured in the literature and how to estimate efficacy and costs of financial education. Key question is whether financial education improves financial literacy or personal financial result. They also indicate possible avenues for further research. Question of the importance of the level of entrepreneurs' education is still to be explained and is not thoroughly investigated. A research realized in Ethiopia shows that small companies, which are owned by an ethnic group seen as the least educated, are very successful though the indicators of financial success gets better with higher educational level (Mengistae, 2001). Recently some authors question generally accepted and prevailing opinion that education is important for successful formulae of rapid development (Chang, 2010).

### **3. METHODOLOGY**

Our hypothesis in this research is that the level of financial literacy of SMEs managers is low. Survey is constructed in such a way that examinees cannot guess the true aim of the survey at the first glance. The rationale is that the survey should not have negative effect on examinee's pride so that they would not refuse to cooperate. Owners and managers of successful SMEs are not very conducive to the idea that somebody checks their level of financial literacy and managerial knowledge in general so that the conduct of this survey was quite delicate. For this reason the survey included questions which were supposed to examine their views about business climate in which managers of private companies do their businesses. This proved to be very helpful. We approached managers through private connections, most often through highly positioned banking managers who have client relationships with enterprises of surveyed owners and/or managers. The choice of respondents was random because respondents were chosen using no criteria but readiness to answer the questions taking into account client relationship with bank or microcredit organization. Questions included in the survey included alternative answers or options in advance: yes, no or in between. Often there was a space for a specific answer. First part of the survey contained questions related to general business climate, obstacles and their opinions about possible betterment of business climate. Other and more important group of questions were aimed at checking financial and analytical capacity of the respondents i.e. kinds and the scope of usage of basic tools of financial analysis.

We took a survey among 51 owners/managers of SMEs. The sample was random. We carried out the survey in Banjaluka and East Sarajevo regions. These regions are two most important regions in RS when it comes to the density of population and business activity. All SMEs are successful and profitable companies. Out of 51 surveyed SMEs about 70% are small companies (up to 50 employees) and the rest are medium-size companies. 27 of SMEs belong to the group of companies with 40-70 employees and the rest of SMEs have less/or 25 employees. One company has total revenue of around 7 million euro per year, another one has total revenue of around 5,5 million euro per year, several companies have total revenue per year ranging from 3 to 4 million euro and the rest of companies has 500,000 euro or less.

History of SMEs is mostly short. Out of the surveyed SMEs 12 companies have been in business for less than 10 years. Most companies have been in business between 10 and 25 years (36 companies or 70%). Three companies are companies of long standing (30, 45 and 50 years). Being a company with long standing in B&H and RS is more an exception than the rule. A research done by Prime Communications shows that out of 208 family-run companies 50% of them have been in business between 10 and 19 years, 17% have been in business longer than 20 years and the rest of the companies are considered to be very young. Around 90% of the companies were founded by actual owner (porodicnefirme.com). Random sample is such that the structure of the respondents is very

similar to the factual structure of SMEs according to the business that the company performs. The highest number of the surveyed companies belongs to trade sector 31% (in RS 38% of companies are in this sector). 23% of the surveyed companies are industrial companies (in RS 16% of companies are in industrial sector). Similarities are even more expressed in other sectors. 28% of the respondents are owners, 25% are managers and 47 % are simultaneously owners and managers.

We omitted to include quite important questions about educational level and profile of the respondents. Using personal interviews, we concluded that respondents rarely have some formal economic education (we do not count "bought" degrees since holder of such a degree does not really possess formal economic education). It is widespread opinion that successful entrepreneurs most often do not have formal education (they have not completed undergraduate studies). The answers given by the economists were "most accurate" as it was to be expected and an owner of accounting and revision company had (in scholar terms) most accurate answers. We also concluded that respondents are quite satisfied with their subject knowledge with regard to financial management. Only 12% of respondents (Prime Communication research) stated that they are interested in financial management education. ([www.porodicnefirme.com](http://www.porodicnefirme.com))

## **4. RESULTS**

### **4.1. Institutional background**

Promotion of successful development of poor countries assumes holistic approach because development not only depends on economic conditions but on sociological and political circumstances as well. (Beaugrand, 2004. p.14). Sociological aspects are related to entrepreneurial culture prevailing in a country, region or ethnic group. How much operational space will entrepreneurial spirit obtain depends on real material and institutional factors. Mere entrepreneurial spirit, strength and energy depend on anthropological factors, ethnographic characteristics, culture (ethnic group mentality) and other characteristics which are not easily measurable and quantified. These factors have significant influence on entrepreneurial strength, business ethics and moral, politics and political behavior of certain groups and individuals.

Essential stepping stone towards the betterment of entrepreneurship and entrepreneurial culture is establishment of good (positive and stimulating) environment and basic conditions for the development of entrepreneurship and innovations. Apart from these conditions development depends on another important precondition which is provision of crucial public goods. Proper environment for entrepreneurial activities is consistent with the emphasis on the importance of institutions as a key foundation of economic growth. Evolutionary theory of economic change states that basic preconditions of sociological and economic development are political stability, rule of law, reputation and responsibility, efficacy of state government, light regulatory burden, protected property rights and absence of blackmailing. Experience shows that sound economic and financial politics and investment growth are not enough to promote sustainable development. Good governance and rule of law are considered to be the most important developmental factors (Beaugrand, 2004. p.17). Easterly (2001) states that factors of successful entrepreneurship in less developed countries are: peace and stability, rule of law and protection of property rights, mentality, economic initiatives, basic infrastructure, access to capital and education.

60% of respondents state that high fiscal and para-fiscal burden present basic obstacles to successfully run business. Economic crisis presents business challenge for 53% of entrepreneurs/managers. Next important factor is the absence of well-ordered legal system and 35% of respondents referred to it. Market is a problem for 33% of respondents whereas 30% of respondents state that institutions perform their tasks inadequately. Poorly trained and low quality workforce present an obstacle for 26% of respondents.

Owners/managers of SMEs complain about unfair competition and privileged position of certain companies connected with influential interest groups when they apply on public procurement tenders. Underground economy in certain sectors is a source of disloyal competition for the companies that run businesses respecting all laws and regulations.

## 4.2. Results of financial literacy survey

Survey shows that the sample does not include many SMEs with very high indebtedness levels (crushing debts). Only 15% of respondents stated that they have occasional problems with debt servicing. 31% of respondents have high indebtedness levels and state that debt servicing burden is acceptable. 39% of respondents have low indebtedness levels and have no problems with debt servicing. 15% of respondents are not indebted.

One of the following questions turned to be trap-question unintentionally. When asked which coefficients/ratios follow on regular basis 43% of respondents stated to follow coefficients/ratios of indebtedness. When asked how they estimate indebtedness levels 60% of respondents answered that they do it by judging real burden of credit obligations which is by itself an abstract term and does not present appropriate measure. Only 5% of respondents answered that they follow debt burden via relationship between profit (EBIT) and interest throughout the year. Mostly, respondents estimate indebtedness through the possibility to regularly service credits i.e. relying on the inflow of liquid assets. They neither perform any comparison nor determine relative level of indebtedness.

First question that relates to the way how owners/managers estimate profitability of their investments referred to the way investment decisions are made. This question referred to the provision of high value assets that are partly financed with bank credit. We were interested if investment elaborates are produced when respondents invest in high value assets. Only 42% of respondents answered that they would produce investment elaborates even if bank did not request it. It is common practice that banks request investment elaborates. 11% of respondents state that they produce investment elaborates only because bank requests it. 33% of respondents state that investment elaborate is not necessary when investing in high value assets. The rest of respondents (15%) state that they do not invest in high value assets or simply do not provide an answer. It is open to debate if all 42% of respondents were genuine when they stated that they would produce investment elaborate even if bank did not request it.

During decision making process 21% of respondents make decisions without consultations with anybody. It can be understood when a company is small and has low turnover. It is puzzling that only small number of respondents consult financial experts during decision making process. Majority consult only with associates but associates are not financial experts. Only 25% of respondents consult financial experts. According to Prime Communications survey, the owners of family businesses make decisions by themselves in 30% of the cases. Almost 50% most believe to family members (probably " associates" from our survey) and 20% of the owners believe to financial experts outside family. ([www.porodicnefirme.com](http://www.porodicnefirme.com)).

Throughout decision making process related to investments majority of respondents make decisions based on the analysis of time to get back the invested money which is the simplest but most unreliable method to estimate investment profitability. Only 15% stated to make use of net present value of future cash flows calculations that is the most superior method to estimate investment profitability. Again, it is open to debate if the answers were genuine. 35% of respondents stated to calculate rate of return on investment.

Bartlett & Chandler (1997. p.259) conclude that company stockholders do not often read financial statements. For that reason narrative section of annual report has increased. Despite this fact 85% of them make decisions by themselves whereas only 8% actually actively invest. Possible conclusion is that financial awareness is related to activism. Those who are financially more aware trade more frequently. It is established that majority reads narrative parts of reports but it is not clear if it is due to lack of financial skills or simply because they understand narrative parts of reports. Another rationale is that they are capable of reading the words but are not familiar with the concepts behind the words.

Usage of financial reports in terms of preferences related to presentational style carries a lot of information on financial and analytical capacity and preferences of our respondents. It is surprising that 70% of respondents prefer reading and using financial statements which are simultaneously presented in form of numbers and written comments. 28% of respondents prefer reports given in the form of numbers. Financial analyst is only interested in numbers but not in written reports that could make certain suggestions to reader leading him towards the goal determined by the financial analyst. It is revealing that only 20% of our owners/managers regularly use calculators of future and present

value of money. It is obvious that these owners/managers perform specific financial calculations. 35% of them do not use these calculators at all whereas 45% of them use calculators from time to time.

The most interesting part of the survey was related to questions of the usage of ratios in financial analysis of company. We received the following answers to the question of which ratios are regularly used in company: profitability 36%, indebtedness 43%, efficacy 38% and liquidity 62%. This is surprisingly small percentage. The rest of respondents (approximately 60%) do not follow any financial indicators apart from "liquidity" indicators. Unintentionally this question turned to be a trap. The following question aimed at checking how respondents follow liquidity coefficients. The answer was that only 20% of respondents follow liquidity coefficients. Majority of them follow liquidity by simply checking the balance of their current account. Only 6% of respondents encircled the following answer: "Creditors constantly remind me of my obligations". This is small percentage of those who have liquidity problems. Again, this made us believe that respondents come from successful companies.

Although surveyed owners and managers come from successful companies which do not have liquidity problems it should not be neglected that illiquidity problems have long tradition in domestic economy. Traditionally there is "culture of illiquidity" in which everybody owes money to everybody. Observed sample in our survey "sticks out" a little bit from the general pattern of financial performances of domestic companies. In order to explain problem of illiquidity of companies and individuals it is very inspiring to have a look at historical and anthropological context of this phenomenon in many African societies where it is still difficult to save liquid resources outside demand from the rest of the family (Palteau, 1996.). "Hiding" and "running from" liquid resources have its real and rational economic reasons and causes towards preferences for illiquid assets for mid-term and long-term needs.

When it comes to following company profitability majority of owners/managers measures business results very simple - via "profit volumes". It means that the only measure is "the amount of money/profit" which is realized at the end of accounting period. Consequently profit is measured in absolute terms without having any reference point for comparison. Comparison with previous year is done by 32% of respondents. Indicator of efficiency of total firm resources which is measured as ratio of profit/returns/proceeds and own capital is followed by only 7% of the respondents.

24% of respondents make comparisons between profit with total turnover. Although 36% of respondents answered in one of the previous questions that they follow profitability coefficients, answers to this question showed that only 24% of respondents produce ratio of profit to total turnover. 7% of respondents produce ratio of profit to own capital. Again the question related to profitability measurement turned out to be "trap" question. Having asked four questions we again asked the following question: "Do you regularly calculate return on total assets"? 36% of respondents answered affirmatively although only 7% of respondents previously stated to calculate ratio of profit to total assets. Analysis of the results show that respondents often intended to give "right" but not honest answer. We witnessed a great number of declarative statements that were supposed to show that certain indicators are calculated such as efficiency, profitability, indebtedness, efficacy and liquidity indicators. In reality only small number of respondents calculated these indicators.

When asked about the causes of failed business endeavors in the past 20% of respondents stated that main causes were wrong perceptions of future market movements. 77% of respondents stated that business failures were caused by "problems which I could not foresee". It was expected answer since entrepreneurs always face uncertainty. It took us by surprise that a few respondents (11%) stated that lack of success came from "insufficiently precise financial calculations and plans".

Results of our survey show that only 20% of respondents can be considered financially literate. Practically they received passing mark in this short test. These are owners and managers who are familiar with financial analysis and financial management. This percentage was arrived at by summing the answers which were reliable indicator of financial literacy and good knowledge of financial ratios and financial analysis. We emphasize only the most important. Financial statements which are shown in numerical form are preferred by only 28% of respondents. Liquidity coefficients are regularly followed by only 20% of respondents. Calculators of net present value and future value of money are used by only 20% of respondents on regular basis. Profitability is followed in proper way by 24% of respondents. Only 9% of respondents estimate the adequacy of profitability by comparing profit and total assets. Existence of company know-how and value attached to it is "recognized" by only 21% of

respondents. Insufficiently precise financial calculations and plans are seen as the cause of poor and failed business endeavors by only 11% of respondents. This all leads to the conclusion that for all these entrepreneurs all other circumstances were more important than financial calculations which could not be accepted as rational and complete explanation of business failures. All business endeavors by the obvious logic begin with financial construction and every failure has financial implications. For every business failure financial calculation was consequentially almost always wrong and this can be sadly determined with certainty only ex post.

One of the possible explanations how it is possible that the level of financial literacy of owners/managers is so low and at the same time they are successful can be found in the fact that the respondents run business in very uncompetitive environment. Most of SMEs do not face severe competition apart from companies which bid on public procurement tenders and companies whose products compete with cheap imported goods. Since they have quite secure market niche they do not have strong and reliable financial calculations which are based on competitive market prices. For this reason managers do not have to possess high level of financial literacy. Key factor is how to achieve and obtain "good" market price. For this reason nobody in our survey mentioned market competition as a problem. Prime Communications survey also showed that competition does not have some significant influence on SMEs business. Strong domestic competition is problem for only 7% of respondents (14 companies) whereas foreign competition is problem for 4% of respondents (8 companies) ([www.porodicnefirme.com](http://www.porodicnefirme.com)).

## 5. CONCLUSIONS

This research shows that owners/managers of surveyed SMEs are financially illiterate and in certain aspects even financially unaware. These conclusions are based on the answers on survey's questions and interviews with respondents. Managers of SMEs do not use most of the financial analysis tools so that it can be said that majority is financially illiterate. Low levels of financial literacy and financial knowledge indicate that this knowledge and skills are not of utmost importance for SMEs success. It is to be expected that, in underdeveloped and poor society such as B&H and its entity RS, financial knowledge and financial literacy are limited. It is possible that such kind of knowledge is neither absolutely necessary nor is an obstacle for successful business of many SMEs. Since acquisition of knowledge is difficult and hazardous task it is very difficult and unreliable to rely unreservedly on knowledge in such sociological and economic milieu. Our insights lead to the conclusion that "life" or people solve problems by themselves better than any sophisticated technical and scientific engineering. For thriving business and entrepreneurship it is necessary to have favorable climate and environment which will enable that "life" and business people solve their problems, grow and advance further. This necessarily poses question whether higher level of financial intelligence and knowledge significantly prevent demise and closure of SMEs or make successful companies even more successful. This is the open question for further research. We found some reasons for prevalence of financial illiteracy in widespread "culture of illiquidity" and lack of strong competition for majority of surveyed SMEs. This all can lead to decreased need for the sophisticated way of financial management. Conventional wisdom holds that higher level of financial knowledge can give competitive edge to entrepreneur and help him to use his resources more efficiently. For this reason we think that certain programs of financial education of managers and entrepreneurs would give palpable results. On the other hand, it is difficult to estimate relation between investment in education and benefits from those programs. It remains a dilemma whether higher level of financial education would improve financial performances of companies which are run by financially aware and literate owners/managers.

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