



FINANCIAL LITERACY AS A FACTOR IN REDUCING ENTREPRENEURIAL RISK

Goran Avlijaš¹, Radoslav Avlijaš², Milenko Heleta²

¹ Faculty of Business in Belgrade, Singidunum University, Belgrade, Serbia

² Faculty of Technical Sciences, Belgrade, Singidunum University, Belgrade, Serbia

Abstract:

Identification of factors that may affect the entrepreneurial success is an important issue for researchers and practitioners, especially in economies where lack of capital and institutional support impose severe restrictions on the business growth. This paper aims to investigate the impact of comprehensive business and financial literacy of entrepreneurs on financial performance of their businesses. Based on previous research it has been found that different types of education and training provide different results in terms of business outcome. Although it was not proven that subsequently acquired financial literacy can significantly influence business survival, it may still contribute to the improvement of business practices in terms of better investment, loans and hence better financial results.

Key words:

financial literacy,
entrepreneurship,
risk,
business training.

1. INTRODUCTION

The increasing number of studies related to business literacy training for entrepreneurs reflects current political and economic standpoints which recognized the importance of business literacy for economic development. Literature finds two reasons for this: (1) large number of people in developing countries make a living from small enterprises, unlike developed countries, where the majority of population are wage and salary workers; (2) recent studies note the importance of “managerial and business skills”, as the key driver of enterprise growth and productivity, along with already known factors, such as access to the capital and external financing [1] [2].

The increasing interest for identifying new enterprise growth factors in academic community is followed by numerous initiatives and investments in training programs that should provide financial and business skills improvement for entrepreneurs. Government agencies and private organizations throughout the world invest significant resources in financial literacy programs. In spite of the above mentioned initiatives, there is still no clear understanding of what structure and content such training programs should have, and what kind of benefits can be expected and by whom.

Entrepreneurs should be able to make complex financial decisions every day, in all areas of life – from personal, referring to retirement savings and household management, to business decisions, which involves more or less complicated business financial management. Yet, previous results that can be found in the practice and the literature indicate that the most of entrepreneurs are still fully or partially incapable of making quality decisions in the field of financial management.

The objective of this paper is to examine the influence of financial and comprehensive business literacy of entrepreneurs on entrepreneurial risk alleviation and improvement of financial results of their businesses. Apart from the definition of financial literacy and method of its measurement, along with causal link that may occur between entrepreneurs’ financial literacy and success of their businesses, the paper also examines results that can be expected from various types entrepreneurs’ financial literacy training programs.

2. DEFINITION AND MEASUREMENT OF FINANCIAL LITERACY

Entrepreneurial financial literacy can be directly correlated to the general financial literacy of population. Policy makers in developed and developing parts of the world emphasize the importance of financial literacy and invest significant resources in the financial education programs. Comprehensive national initiatives and programs financed by the World Bank and other donors are currently underway in nearly all parts of the world. Prior to any sort of analysis covering such programs, financial literacy term needs to be defined.

The term financial literacy involves several different concepts: financial awareness and knowledge in terms of financial products, institutions and concepts; financial skills, such as the ability to calculate complex interest rate; and finally, general financial capability in terms of managing money and financial planning [3]. Here should be noted that some of these concepts commonly overlap in everyday practice and can have different implications, depending on the country income level.

In developed economies, the term financial literacy usually refers to the means of customer protection. Thus, one of the main objectives of financial education is to enable an individual to understand numerous financial products, including savings and credits, and to make the right decisions. On the other hand, in developing economies there are not too many quality employment options, and most of the people get streamlined towards micro-entrepreneurship. Therefore, managerial knowledge and business skills development become more important component of financial capability.

Measuring financial literacy itself is a complicated task, since it is generally hard to determine how people process economic information and make financial decision. Having in mind the broad financial literacy concept, another issue can be collecting all relevant information using a single instrument, i.e. reasonable length questionnaire. The authors [4] have developed a simple questionnaire with three questions, which is commonly used in the practice. These questions test provides understanding of three fundamental financial concepts: interest rate, inflation and risk diversification (Figure 1).



- (1) You have deposited \$100 to the savings account, with 2 % annual interest rate. If you make no withdrawals, how much do you think you would have after 5 years? Less than \$102; More than \$102; Exactly \$102.
- (2) Annual interest rate for your savings is 1%, and annual inflation is 2%. After one year, will you be able to buy more, less or the same quantity of products using the money from this account?
- (3) Is the following statement true: Buying single company's stock provides safer return than purchasing mutual fund stock? True; False; I do not know.

Figure 1: Questionnaire testing financial literacy

Although the appropriateness of this questionnaire have been questioned, it served as the foundation for many researches in various forms, and can form useful basis for comparison of results across countries. Unexpectedly, researches throughout the world constantly indicate low financial literacy level in the countries with high income per capita. Although less data is available for medium and low income economies, they indicate that the financial literacy level there is even lower. Summary results of national researches are shown in the Table 1 [3].

Researches of business and financial literacy with entrepreneurs and in enterprises showed equally poor result. For instance, research in Zambia conducted in 2010 indicates that 73% of enterprises had no access to financing sources, since they do not keep accounting records in an appropriate manner. Similar research in South Africa indicates that more than 50% of enterprises were not even formally registered, with only 46% of registered enterprises keeping accounting records. As reasons for "black market" operation most owners indicated enterprise size, while as much as 18 % of entrepreneurs had no knowledge how to register their enterprise [3].

Country / Income	Question 1	Question 2	Question 3	Sample
High income				
USA	65%	64%	52%	1,488
Italy	40%	60%	45%	3,992
Germany	82%	78%	62%	1,059
Japan	71%	59%	40%	5,268
New Zealand	86%	81%	27%	850
Middle income				
Russia	36%	51%	13%	1,366
Romania	24%	43%	--	2,048
Azerbaijan	46%	46%	--	1,207
Chile	2%	26%	46%	13,054
Low income				
Indonesia	78%	61%	28%	3,360
India	59%	25%	31%	1,496
West Bank & Gaza	51%	64%	--	2,022

Table 1: Results of global financial literacy research

3. FINANCIAL LITERACY AS RISK ALLEVIATION FACTOR

Unfavorable business environment and high interest rates which make efficient use of borrowed funds more difficult increase the significance of business and financial training, especially in developing countries. It is clear that business training programs have the potential not only to improve individuals' living standard, but also to promote economic growth. The unknown issue is relative efficiency of various training types and relative significance of limited financial capital against the human capital. Effects of training programs can vary depending on

Research	Sample	Training	Result
Bruhn i Zia (2011) [5]	445 users of micro-credits (age 18-35) in Bosnia and Herzegovina	Basic business concepts, accounting, investments and growth strategies	Better business practice, investments, loan terms, and higher turnover No effect on enterprise survival or new startups
Karlan i Valdivia (2011) [6]	3000 female micro-credit users in Peru	Weekly training in basic business and financial skills	Improved business knowledge, record keeping and retaining customers No changes in business results, revenues and employment
Drexler et al. (2014) [7]	1200 users of micro-credits in Dominican Republic	Comparison of traditional and practical accounting training	Practical training had significantly improved bookkeeping practice, measuring of periodical results and turnover
Mano et al. (2012) [8]	167 entrepreneurs in Ghana metal industry	Training in entrepreneurship, manufacturing, quality and accounting	Positive influence on business practice and result, however very heterogeneous
Klinger i Schünderln (2011) [9]	655 small entrepreneurs in Guatemala, Nicaragua and Salvador	Training program for writing business plan, with \$6-15,000 prize for the most successful attendees	Positive effect on starting new or expanding the existing business Reward provides higher probability of business entry by females than males
McKenzie et al. (2008) [10]	1,256 existing and potential female entrepreneurs in Sri Lanka	Generating ideas, starting and improving business, financial prizes for the best ones	Positive influence on existing entrepreneurs' business practice and profit, no influence on survival Speeding up business startup for new entrepreneurs
Calderon et al. (2013) [11]	850 female micro-entrepreneurs in Mexico	Sixteen weeks long training in business practice and finance	Major influence on increase in revenues, number of clients, profit and formal accounting 7 – 8 months after training

Table 2: Influence of financial literacy programs for entrepreneurs



result measured (i.e. improved knowledge, enterprise growth, etc.) and selected sample (literacy level, gender, etc.).

If we were to ask a question how successful business training programs are, the right answer would be – it depends. In spite of accelerated growth, the existing literature in this field is not sufficient, with the results varying depending on context, demographic properties and training types. Table 2 provides summary results of researches, which could be relevant for our region. In general, for developing countries, results indicate increase in knowledge, especially among male population, along with the significant variations regarding business outcomes.

Studies listed indicate that various types of training can have different impact on business results. Considering the attendees' gender, study by Klinger and Schündeln indicates that for females, limited funding turns out to be greater issue than knowledge. Study by McKenzie, de Mel and Woodruff indicates that training improves business practice, but not financial result among females. However, when training involves prize, there is a significant impact on financial result increase.

Considering business outcomes among all attendees, Drexler et al. had tested the effect of change in training content, and results indicated that simplified practical training in accounting provides short term positive effect on business practice and result, unlike the traditional training that includes accounting fundamentals. This can be of particular importance for the entrepreneurs with limited time and capacities and standpoints closer to employees than entrepreneurs.

4. CONCLUSION

Results shown can provide a starting point for creation of financial education program for entrepreneurs. Researches at global level have indicted significant necessity for training in the field of financial management, primarily for the entrepreneurs, and for the rest of the population. Although previous research did not confirm that financial training can play a crucial role in an enterprise survival and success, results clearly indicate it may contribute to the growth and improvement in business operation, thus increasing competitiveness and entrepreneurship risk alleviation. In order to provide highest possible efficiency of education program, it is necessary to adjust content and format of the program to the target group and consider complementary practical actions. This should result in tangible and measurable benefits for all programs' attendees.

FINANSIJSKA PISMENOST KAO FAKTOR SMANJENJA PREDUZETNIČKOG RIZIKA

Goran Avlijaš¹, Radoslav Avlijaš², Milenko Heleta³

¹ Poslovni fakultet u Beogradu, Univerzitet Singidunum, Danijelova 32, Beograd, Srbija, gavlias@singidunum.ac.rs

² Tehnički fakultet, Univerzitet Singidunum, Danijelova 32, Beograd, Srbija, ravlijaš@singidunum.ac.rs

³ Tehnički fakultet, Univerzitet Singidunum, Danijelova 32, Beograd, Srbija, mheleta@singidunum.ac.rs

Apstrakt:

Identifikacija faktora koji mogu uticati na ostvarenje preduzetničkog uspeha predstavlja važno pitanje za istraživače i praktičare, naročito u privredama gde nedostatak kapitala i institucionalne podrške nameće stroga ograničenja za rast poslovanja. Ovaj rad ima za cilj da istraži uticaj finansijske i sveobuhvatne poslovne pismenosti preduzetnika na rezultate njihovog poslovanja. Na osnovu dosadašnjih istraživanja utvrđeno je da različiti tipovi obuka i treninga mogu dati različite rezultate u pogledu uspešnosti preduzetnika. Iako nije dokazano da naknadno stečena finansijska pismenost može značajno uticati na preživljavanje poslovanja, ona ipak može uticati na poboljšanje poslovne prakse u pogledu boljeg investiranja, zaduživanja i samim tim boljeg finansijskog rezultata.

Ključne reči:

finansijska pismenost, preduzetništvo, rizik, poslovne obuke.

REFERENCES

- [1] M. Bruhn, D. Karlan, A. Schoar, "What Capital Is Missing in Developing Countries?" *American Economic Review*, vol. 100, no. 2, 2010, pp. 629-33.
- [2] N. Bloom, A. Mahajan, D. McKenzie, J. Roberts, "Why Do Firms in Developing Countries Have Low Productivity?" *American Economic Review*, vol. 100, no. 2, 2010, pp. 619-23.
- [3] L. Xu, B. Zia, "Financial Literacy around the World: An Overview of the Evidence with Practical Suggestions for the Way Forward", World Bank Policy Research Working Paper Series, 2012.
- [4] A. Lusardi, O. S. Mitchel, "Financial Literacy around the World: An Overview", Working Paper, Center for Research on Pensions and Welfare Policies, 2011, Turin.
- [5] M. Bruhn, B. Zia, "Stimulating managerial capital in emerging markets: the impact of business and financial literacy for young entrepreneurs", World Bank Policy Research Working Paper Series, 2011.
- [6] D. Karlan, M. Valdivia, "Teaching entrepreneurship: Impact of business training on microfinance clients and institutions." *Review of Economics and Statistics*, vol. 93, no 2, 2011, pp. 510-527.
- [7] A. Drexler, G. Fischer, A.S Schoar, "Keeping it simple: Financial literacy and rules of thumb", *American Economic Journal: Applied Economics*, vol. 6, no.2, 2014, pp. 1-31.
- [8] Y. Mano, A. Iddrisu, Y. Yoshino, T. Sonobe, "How can micro and small enterprises in Sub-Saharan Africa become more productive? The impacts of experimental basic managerial training", *World Development*, vol. 40, no. 3, 2012, pp. 458-468.
- [9] B. Klinger, M. Schündeln. "Can entrepreneurial activity be taught? Quasi-experimental evidence from Central America", *World Development*, vol. 39, no.9, 2011, pp. 1592-1610.
- [10] D. McKenzie, C. Woodruff, "Experimental Evidence on Returns to Capital and Access to Finance in Mexico", *World Bank Economic Review*, vol. 22, no. 3, 2008, pp. 457-482.
- [12] G. Calderon, J.M. Cunha, G. De Giorgi, "Business Literacy and Development: Evidence from a Randomized Controlled Trial in Rural Mexico", National Bureau of Economic Research, 2013.