The purpose of this paper is to discover and understand factors that lead to small and medium-sized enterprises (SMEs) shutdown in transitional economies, such as the economy of Bosnia and Herzegovina (B&H). The paper provides some findings about main influencing factors that lead to SMEs shut down in the first years of operation from entrepreneurs’ and managers’ perspective and suggests certain measures that should be taken to secure their survival, development and growth.

For the purpose of this paper, empirical research was conducted, using stratified sampling of 110 SMEs from Republic of Srpska (49% of B&H territory). The section on methodology explains the entry criteria for the study population and methods of data analysis. Respondents from the research sample identified the following factors as the main obstacles to successful development of their businesses: difficulties in the collection of receivables from debtors, complicated legal procedures that regulate the work and business operations of enterprises, high rates of taxes and contributions on wages, the negative impact of the global economic crisis and expensive and complicated procedures for obtaining loans from commercial banks. Respondents didn’t evaluate their personal traits, level of formal and informal knowledge from business management field or lack of entrepreneurial spirit and readiness for being proactive, innovative or risk acceptance as potential causes of business failure. With its limitation, the paper contains novel information and insights about SMEs business obstacles and
challenges in economy of Bosnia and Herzegovina as a solid base for more comprehensive future researches.

Key words: Small and medium-sized enterprises (SMEs), Entrepreneurship, Transition, Failure, Economic development.

1. INTRODUCTION

A recent report from the European Commission (2015, p. 6) finds that a minority of SMEs expands their business and the number of employees, with the SMEs creating 58% of total added value and 67% of employment in the non-financial business sector in 2014. Small business is especially important in developing countries (Rao, 2014; Ratten, 2014; Ul Haq et al., 2014 as stated in Hyder and Lussier, 2016). In Bosnia and Herzegovina (B&H) as a developing transitional country, SMEs represent more than 99% of enterprises in non-financial business sector (Agency for Statistics of Bosnia and Herzegovina, 2015).

In order to stimulate the development and growth of SMEs, various instruments and models of financial and non-financial support to this sector have been developed (Grover and Suominen, 2014; OECD, 2014; Petković and Tešić, 2013). At the heart of the transitional process is entrepreneurial supporting institutions building as well as entrepreneurship and SMEs development (Hisrich et al., 2016; Trivić and Petković, 2015). Relevant institutions in a number of developed world economies, to a lesser or greater extent, stimulate growth and development of SMEs and entrepreneurship through adjusting business environment to defined needs of the SME sector, the rule of law or through the direct monetary incentives (Erastus et al., 2014).

Unfortunately, despite all the institutional support in developed countries, the failure rate of small businesses is high globally. About 50% of new businesses fail during their first five years. Many smaller enterprises are also under increasing pressure from the companies they supply to meet new standards and design requirements linked to improved resource efficiency and recyclability (European Commission, 2013, p.10).

The better understanding of reasons for entrepreneurial failure should provide additional assistance in increasing the success of new entrepreneurs, although it has been proved as difficult to predict which ventures will succeed or fail (Hyder and Lussier, 2016, p. 82). One of the main problems that SMEs are facing in transition countries such as B&H is access to external sources of financing (Hisrich et al., 2016; Balling et al., 2009; Burk and Lehmann, 2006).
There is a rather weak recovery in the SME sector, as related to entrepreneurs’ access to capital (OECD, 2014). Guaranteed loans remain the most widely used instrument at governments’ disposal to ease SMEs’ access to finance (OECD, 2015).

In the Republic of Srpska (RS), one of two B&H entities, where we have conducted empirical research, in addition to the lack of available alternative external sources of financing for start-ups and existing SMEs, such as angel investors, venture capital funds, factoring, mezzanine financing, crowdfunding, etc., there are a number of other factors, which could cause increasing failure rate of companies (Hisrich et al., 2016). During 2014, in the Republic of Srpska 3,242 new individual entrepreneurs were registered, while 4,965 were shut down. In addition, 839 new SMEs were registered, while 569 SMEs were shut down (Agency for development of small and medium-sized enterprises of the Republic of Srpska, 2015, p. 5).

Although enormous efforts are being invested in order to create a conductive business environment for the growth of newly formed and development of existing SMEs, due to the impact of a number of different factors, of both internal and external nature, many companies shut down during the first years of existence (Chittithaworn et al., 2011). The most challenging problems, faced by 4,928 young businesses in the US, which were surveyed by the Kauffman Firm Survey include slow or lost sales (36 percent) and unpredictable business conditions (28 percent) (Robb and Farhat, 2013). Shut down of SMEs results from the inability of the business founders, entrepreneurs and managers to provide the company’s operations over the long term in accordance with the relevant legal provisions. There are a large number of reasons why companies fail to make their business operations long-term. The most common reasons according to Corman and Lussier (1996) are inadequate managerial skills, inadequate financing and weak competitive position, causes of personal nature, unfavorable business environment, market elements and neglecting entrepreneurship. Regardless of the fact that there was huge number of recent studies on SMEs failure causes (García-Gallego et al., 2015; Arasti et al., 2014; Fatoki et al., 2014; Chittithaworn et al., 2011) there were no similar studies of SMEs failure reasons in B&H.

On the other hand, many other studies have already been conducted in transitional / emerging economies (Bilal et al., 2016; Artinger and Artinger, 2015; Lussier and Halabi, 2010) which will be a solid base for a discussion and comparison with results of the research in B&H. One of the strategic objectives of the relevant institutions in B&H should be reducing the rate of shut down of
SMEs to the lowest possible level and systematic support for the development of entrepreneurship and the establishment of new enterprises.

This empirical research is aiming to seek for answers to the following question: Why in B&H a large number of SMEs were shut down in the first years of business operations and what measures should be taken to ensure their survival, growth and development? The research subject of this paper is theoretical and empirical analysis of the factors affecting shut down of SMEs in B&H. The research area was geographically focused on the RS as a specific economic space and one of two entities in B&H. For the purpose of this paper a research was conducted using stratified sampling method from the APIF\textsuperscript{1} database on the territory of 5 cities and 14 municipalities in the RS, in the period from 12\textsuperscript{th} December 2013 to 14\textsuperscript{th} March 2014 when questionnaires were collected from 110 SMEs. We examined the role, influence and the importance of certain factors that could cause a company to stop its operations. The paper consists of four parts: literature review, results of empirical research, discussion and conclusions with recommendations.

2. LITERATURE REVIEW

There are different reasons why in some countries SMEs and entrepreneurship development are on higher or lesser level of development. The most important factors, influencing performance include enterprise size and age. They are more important than strategy and the owner’s entrepreneurial characteristics. Having a business plan was also found to be important (Blackburn et al., 2013). Various researchers have attempted to find relationships between firm size (as measured by the number of employees in the firm) and that firm’s performance. The number of employees is important for the activity and performance of managers and companies, more research is needed, before reaching final conclusions (Lussier and Sonfield, 2015, p. 382). According to the enterprise survey conducted by the World Bank in 2007 (Yang, 2011 as state Hyder and Lussier, 2016) the top barriers that business firms in Pakistan consider as obstacles to business performance are the lack of consistent electricity and political instability.

Business failure, like business creation, is part of a dynamic, healthy market. In the EU, most bankruptcies are caused by late payments, or other objective problems, i.e. by ‘honest failures’, without any fraud attempted by the entrepreneur (European Commission, 2013, p.18). In addition, ‘second starters’

\textsuperscript{1} APIF – Intermediary Agency for IT and financial services (see at http://www.apif.net/index.php/en/about-us.html)
are more successful and survive longer than average start-ups; they grow faster and employ more workers (Stam et al., 2008). The digital technologies have become cheaper and more accessible, which changes the communication and marketing practices, as well as the interaction with the marketplace. These changes diminish the barriers for SMEs to adopt new technologies and enhance their strategic position on the global marketplace (Stankovska et al., 2016). A robust body of research has been done on success and growth factors of new firms (e.g., Barber et al. 1989; Audretsch, 1995; van Praag, 2003; Kakati, 2003 as state Arasti et al., 2014). In contrast, little has been done to examine underperformance factors of newly established SMEs.

2.1. Causes of small business failure

The rate of nascent start-ups and death of enterprises is calculated as follows: the number of established and closed enterprises in one year divided by total number of active enterprises in the country in one year (European Commission, 2011a). The vast majority of small businesses were severely affected by the financial crisis and the Great Recession, including facing tight credit constraints (Kennickell et al., 2015). At the beginning of the global financial and economic crisis, in 2009, the net rate of establishment was high only in France (4.7%). In Germany, Italy and the UK, the net rate of establishment ranged from -0.5% to 1.3% (Carnazza, 2011). The easiest way to understand and to measure this meaning is legal failure, where a small company is formally liquidated or in the case of an unincorporated enterprise the owner becomes bankrupt for business reasons. An alternative approach is to relate failure to the exit rate of owners or firms from the small business sector. Such discontinuances may include loss cutting procedures (to dispose of a business to avoid further losses), or because of a financial “failure to make a go of it” (Cochrane, 1981) which would include, but not be limited to, legal failures (Peacock, 2000). According to the literature, the variables that explain firm failure can be grouped into four broad categories: (1) firm specific, (2) industry specific, (3) macro-economic, and (4) spatial or geographic factors (Maoh and Kanaroglou, 2007). As many as 50% of European enterprises do not survive the first five years of existence (European Commission, 2011a). This information has a secondary effect on other entrepreneurs who often do not want to start their own business because of the fear of enterprise shutdown. Similar statistics were noticed with companies in developing transitional countries. In Croatia in 2011, the biggest drop was recorded in the category of medium enterprises (6.3%), small enterprises (5.7%) and in the category of large enterprises (4.3%) (Development policy center of SMEs and entrepreneurship, 2012, p.13). In Serbia, in 2012, a growth of 266 companies was accomplished compared to
2011 (Statistical Office of the Republic of Serbia, 2013). In the RS in B&H, from 01st January till 30th June 2015 there were 518 new registered enterprises, while in the same period in 2014 that number was 632 (APIF, 2015). According to the Central Bank of B&H official data, the inflow of Foreign Direct Investments in 2013 in B&H was 214 million EUR, which is 21.6% less than previous year (Central Bank of B&H, 2014). Investors are facing with great tangible and hidden obstacles which could lead to a company shut down. Companies in the RS must comply with over 20 laws relating to the payment of various fiscal and para-fiscal levies and about 30 laws which, if not adhered to, can lead to penalty provisions. In the course of one year the company is obliged to submit 150 various reports and forms (Austrian Development Agency, 2011, p. 86). There are a number of interesting conclusions concerning the rate of shut down of enterprises in the EU (European Commission, 2011b; Carnazza, 2011):

1. The rate of shut down of enterprises is, as a rule, higher in services than in the manufacturing sector;
2. The largest variations in the rate of shut down of enterprises are linked to the countries that have recently joined the European Union (Lithuania, Slovakia, Hungary, Estonia and Romania);
3. The impact of the great economic crisis on the rate of shut down of enterprises is still not clear. It takes a certain time distance so that they are fully and clearly identified;
4. The rates of shutdown of the enterprises were higher in micro enterprises compared to enterprises with 10 or more employees.

Citizens of B&H rank corruption as the fourth most important problem facing their country, after unemployment, the performance of the Government and poverty or low standard of living (UNODC, 2011). In B&H, beside rather high level of corruption at all levels, entrepreneurial infrastructure is still not built enough (Petković and Tešić, 2013), educational system does not promote self-employment as a career option and entrepreneurship could be seen as some of systematic causes of rather high start-up failure rate. It is in line with Fatoki’s (2014) findings which suggest that the failure of new SMEs may be affected by factors such as crime, corruption, weak property rights and contract enforcements and an education system that does not promote entrepreneurship. Another barrier that is significant for SMEs is lack of knowledge and skills. Adopting new technologies and systems is usually related to employees’ knowledge, experience and personality (Stankovska et al., 2016). According to Oparanma et al. (2010), external factors such as poor economic conditions and inadequate infrastructure were the most crucial factors.
2.2. How to reduce SMEs business failure rate?

In the current business environment, the personality of entrepreneur plays a key role in achieving business success. Following positive characteristics of entrepreneurs, as stated in Deakins (1996), contribute to the success of enterprise: orientation towards success, acceptance of calculated risk, high level of self-control, innovativeness, risk tolerance and vision. In the digital era, except for some specific technologies that have a potential to deliver competitive advantage, ICT for the SMEs proves to be a tool, decreasing costs, i.e. enhancing efficiency (Anon Higon, 2012).

Formal education provides the knowledge that can be found in textbooks. However, the rate of development of new knowledge seems to make current textbooks insufficiently current. Therefore, non-formal education plays a significant role in the development of entrepreneurs (Loewen, 2011). The probabilities that a small business will succeed, fail or be created at all originate from characteristics of founders (or current owners), enterprises themselves, the industries to which they belong, but also to the overall financial and economic environment (Kennickell et al., 2015).

The business environment has an enormous influence in the operation of SMEs. Unpredictable business conditions is one of the most problematic influenced factors that cause SMEs shut down in the USA in the period from 2004 till 2011 (Robb and Farhat, 2013). In most cases, a stimulating business environment will extend the lifespan of the company. Guided by this thought, the competent institutions must make efforts to continuously improve the business environment. The existence of adequate financial support to the SME sector is necessary but not sufficient condition for its successful operation (Hisrich et al., 2016). Entrepreneurial infrastructure plays an enormous role in ensuring the successful start of business and the subsequent development of enterprises (Petković and Tešić, 2013).

SMEs in the EU economy are subject to financial, nonfinancial and more often, combined systematic support. Entrepreneurship is one of the main levers of the economy in modern societies and it receives even greater significance with the current crisis which began in mid-2007 and which has branched into various forms (Adriano et al., 2013).

The facts show that the economic crisis had a negative effect on the operation of SMEs, i.e. that it increased the failure rate of SMEs (European Commission, 2013). The competent institutions of many countries and regional
integration institutions have taken measures to prevent the negative effects of the global economic crisis. Only in the period between 2010 and 2012, the EU member states have implemented a total of 2,400 measures of support to the SME sector, or an average of 800 measures per year, or 90 measures per Member State (European Commission, 2013, p. 8). Many states, in response to the economic crisis, introduced austerity measures, cuts in wages and consumption. Reduction of consumption among a wide range of the population or reduction of budget spending reduces a demand for products and services of SMEs, which leads to reduced revenues and accelerates time for company to shut down.

In order to evaluate the success or failure of any business, there are numerous prediction models (García-Gallego et al., 2015), following the work of Beaver (1966) and Altman (1968), who are considered to be pioneers in this field (Wu, 2010). To develop these Such predictive models are based on different statistical methods, using both financial ratios and non-financial issues as independent variables (Mures-Quintana and García-Gallego, 2012). In research conducted in Singapore, the Lussier model accurately predicted 85.6% of the surveyed firms and explained 25% of the variance of contributing factors to S/F, and the exploratory model explained 86.3% and 38% of the same, respectively (Teng et al., 2011).

3. EMPIRICAL RESEARCH

For this research, we have conducted a survey using an online questionnaire. Survey was carried out in five cities and 14 municipalities in the RS. In the period from 12th December to 31st December 2013 we collected 62 questionnaires. From 20th January 2014 to 14th March 2014 the remaining 48 questionnaires were collected.

SMEs in B&H are not treated equally in legislation, due to complex constitutional structure of the state consisted of two entities with high level of political autonomy (the Republic of Srpska as one territorial unit and Federation of B&H with ten cantons as other territorial unit) and Brčko district.

In this paper, SMEs will be treated according to the EU definition presented in the above table. Sole entrepreneurs, micro, small and medium sized enterprises will be treated as SMEs.
Table 1. SME definition in European Union, the Republic of Srpska and Federation of Bosnia and Herzegovina

<table>
<thead>
<tr>
<th>Criteria</th>
<th>European Union</th>
<th>Republic of Srpska</th>
<th>Federation of Bosnia and Herzegovina</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micro</td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
<td>&lt;10</td>
<td>&lt;50</td>
<td>&lt;250</td>
</tr>
<tr>
<td><strong>Income Statement</strong></td>
<td>≤2 mill. €</td>
<td>≤10 mill. €</td>
<td>≤50 mill. €</td>
</tr>
<tr>
<td><strong>Balance Sheet</strong></td>
<td>≤2 mill. €</td>
<td>≤10 mill. €</td>
<td>≤43 mill. €</td>
</tr>
<tr>
<td><strong>Independency</strong></td>
<td>More than 25% of capital or rights cannot be controlled by the public institutions.</td>
<td>Independency in business according to this Law means that other individuals or legal entities, individually or collectively, are not owners of the capital and do not participate in decision-making with more than 25% in SMEs.</td>
<td></td>
</tr>
</tbody>
</table>


3.1. The research sample

To achieve the representativeness of the sample, we sought to collect the completed questionnaires from the largest possible number of municipalities and cities in the RS. We have measured the attitudes of respondents and
examined the facts, using 58 questions. The questionnaire included closed questions, questions with multiple-choice answers, open questions, as well as questions with a scale from one to ten, where the option one indicated the highest priority and the option ten indicated the lowest priority.

Respondents who were owners or managers of the companies independently completed a questionnaire, which was created in a way that it could be completed in 10 to 15 minutes. The survey was conducted on a stratified sample of 110 SMEs in the RS. The sample included companies with less than 250 employees, which are SMEs according to the Law on SMEs development (Official Gazette of the Republic of Srpska, 2013) and sole entrepreneurs (Official Gazette of Republic of Srpska, 2011). Taking into account that the total number of SMEs and sole entrepreneurs in 2014 was 38,324 (Agency for development of small and medium-sized enterprises of Republic of Srpska, 2015, p.4), the number of collected questionnaires is relatively small compared to the statistical weight (0.28%) but because of the way of sampling, this fact does not significantly diminish the quality of empirical research. Anyway, all conclusions from this research shouldn’t be interpreted for the whole statistical population. That might be the main limitation of this research.

3.2. Limitations of the research

There are several limitations that have slowed down the pace of the research and reduced the total number of collected questionnaires as well as quality of interpretation of collected data:

- the lack of interest of a large number of owners and managers of SMEs to complete the questionnaire, which showed a lack of understanding for academic research;
- a certain level of subjectivity and the imposition of personal opinions and attitudes of the respondents, which should be taken with a certain level of caution;
- the last analysis of the SMEs sector in the Republic of Srpska relates to 2011 and 2014 (no data available for 2012, 2013 and 2015);
- relatively small sample;
- this is not a panel study with longitudinal data, such as one, conducted by Kauffman Firm Survey in the US (Robb and Farhat, 2013). This is more a snapshot of the current situation in the SME sector in one part of B&H.
3.3. Research results

The questionnaire, which was used to collect data on the attitudes and opinions of respondents, was consisted of the following parts:

1. General information about the company;
2. Formal and non-formal education of the key management staff;
3. Business environment and market characteristics;
4. Level of financial and non-financial support to the SMEs sector.

In the following lines, we will present some results of the research relevant to discuss and prove the research hypotheses.

2.1.1. General information about the companies

The average age of companies from the sample was 13.88 years. The oldest company in the sample was established in 1948, while 6 companies were established in 2013. However, this information cannot be considered entirely relevant, because the standard deviation is high at 9.93. We will, therefore, in order to obtain relevant data, use the mode and median as measures of central tendency.

The median is related to the year of 2001, and we conclude that 50% of companies in the sample were established before 2001, and 50% of companies after 2001. Most companies (10 or 9.1%) in the sample were established in 2007. Of the total number of companies, 51 companies (46.36%) belong to the group of micro-enterprises, 42 companies (38.18 %) belong to the group of small enterprises, while 17 companies (15.45%) belong to the group of medium-sized enterprises.

When it comes to the legal form of companies in the sample, limited liability companies dominate (85 or 77.27%), followed by joint stock companies (11 or 10%), self-employed (10 or 9.09%), three cooperatives and one public institution. Private companies (90.91%) were dominant in the sample. Regarding the activities of companies in the sample, primacy was given to companies from the field of wholesale and retail trade (24.55%), wood processing and wood products (12.73%). The sample included companies from twenty other fields. Data on the number of employees in the companies in the sample are shown in the following table:

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2 Questionnaire is available on request to corresponding author.
Table 2. Statistical data on employees in the sample companies

<table>
<thead>
<tr>
<th>STATISTICAL INDICATORS</th>
<th>OVERALL PATTERN</th>
<th>COMPANY’S LEGAL FORM</th>
<th>OWNERSHIP STRUCTURE OF THE COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Joint-stock company</td>
<td>A limited liability company</td>
</tr>
<tr>
<td>Average number of employees</td>
<td>29.00</td>
<td>75.27</td>
<td>26.85</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>42.80</td>
<td>55.18</td>
<td>40.38</td>
</tr>
<tr>
<td>Modus</td>
<td>2.00</td>
<td>#N/A^3</td>
<td>2.00</td>
</tr>
<tr>
<td>Median</td>
<td>10.00</td>
<td>70.00</td>
<td>11.00</td>
</tr>
</tbody>
</table>

Source: Authors.

Most of the companies have 2 employees (15 companies). It is clear that the majority of companies that are joint stock companies and are in mixed ownership belong to the group of medium-sized enterprises and individual entrepreneurs are mostly representatives in the group of micro-enterprises.

3.4. Hypothesis testing

In this paper, we set up one main and three auxiliary hypotheses. Verification of auxiliary hypotheses will lead to clarification of the main hypothesis: reducing the rate of shut down, i.e. the number of closed SMEs, will contribute to the prosperity of the economy of the RS and B&H, which will be manifested through employment growth, increased economic growth and increased domestic and foreign investments.

The first auxiliary hypothesis (H1):

Education of entrepreneurs and use of consulting services in the first years of the company existence will enable the company to move towards higher phases in the life cycle of the company.

^3 It is not possible to calculate the mode of the number of employees in joint-stock companies and companies with mixed ownership, because there are no most common data in the data series.
Founders’ and/or owners’ characteristics, which have sometimes been found to be important are the age, education, financial endowment, management experience, attitude toward risk, access to credit and credit quality, previous experience in starting a new firm, gender and race (Kennickell et al., 2015, p.14). A turning point in the life cycle of the company is the point at which the company shifts from the go-go phase to the phase of adolescence (Adizes, 1999). At this phase, the founder of the company, who until then had been an absolute "culprit" for all the successes and failures of the company, can choose two scenarios for his or her company. First, the company remains in the go-go phase and the founder continues to successfully manage his/her company without ambitions for further growth and development. Alternatively, the company enters the second phase of adolescence, involving significant changes in organization and management. In our case, we distinguish two groups of companies, based on the following questions:

1. Does the owner or manager of a company have formal education in economics and/or management field?
2. Is the company managed by professional management? Does the company at the beginning of operating have developed business plan?
3. Does the company use consulting services?

We applied nonparametric Mann-Whitney\(^4\) U test to financial performance (ROS-Return on Sales\(^5\)) for the respondents, who had a business plan at the beginning of operations, versus those who did not have one. Financial indicators in this and the following calculations were used from APIF’s database for the year 2012.

Since the calculated significance of Mann-Whitney U test is less than 0.05 (p = 0.001), we conclude that there is a statistically significant difference between the firm's operating profit margin (ROS) of businesses that had a business plan at the time of establishment and the firm's operating profit margin (ROS) of businesses that did not have a business plan at the time of establishment. The same test was applied to the financial indicators of respondents, who have conducted the business planning independently, versus those whose business planning has been conducted by consultants.

\(^4\) Mann-Whitney U test is used when the conditions for the application of Student's t test have not been met. In the case of our study the requirement of a normal distribution is not fulfilled, and the results of the Student's t test are not relevant.

\(^5\) Return on sales (ROS) is a ratio used to evaluate a company's operational efficiency; ROS is also known as a firm's operating profit margin. This measure provides insight into how much profit is being produced per dollar of sales.
Table 3. Mann-Whitney U test (enterprises that had a business plan at the beginning of business vs enterprises that did not have a business plan at the start of business)

<table>
<thead>
<tr>
<th>Possession of a business plan</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35</td>
<td>4,2554</td>
<td>10,48568</td>
<td>1,77240</td>
</tr>
<tr>
<td>No</td>
<td>47</td>
<td>-6,6643</td>
<td>38,77781</td>
<td>5,65632</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS (Return on Sales)</td>
<td>391,500</td>
<td>562,500</td>
<td>-3,329</td>
<td>.001</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.

In this case, it can be concluded (p <0.05; p = 0.037) that there is a statistically significant difference between the financial indicators of the two groups of companies.

Also, we must note that the characteristics of companies in the higher phases of their life cycle are: existence of a professional management, managers who have a broad formal and non-formal education, then the use of consulting services based on company needs, etc.

From the analysis of empirical research results, we’ve obtained the following findings:

1. There is a statistically significant difference between the financial indicators (ROS – return on sale) of companies whose owners and managers have acquired formal education in the field of economics or management and financial indicators of companies whose owners and managers have not acquired formal education in these fields (p = 0.008).

2. There was a statistically significant difference between the financial indicators of enterprises (ROS) which use the services of consultants and companies which do not use these services (p = 0.015).
It is interesting to note that 63.64% of respondents would not accept the advice of professional consultants, if they are different from their attitude. In such cases it is better not to engage consultants and prevent the formation of the cost of this type. Business owners, in any case, have the right to act exclusively on their own.

Table 4. Mann-Whitney U test (enterprises that made a business plan on their own vs enterprises that have a business plan made by consultants)

<table>
<thead>
<tr>
<th></th>
<th>Business planning performed by an external consultant</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS (Return on Sales)</td>
<td>Yes</td>
<td>18</td>
<td>2.8761</td>
<td>7.97862</td>
<td>1.88058</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>73</td>
<td>0.3232</td>
<td>32.85660</td>
<td>3.84557</td>
</tr>
</tbody>
</table>

ROS (Return on Sales)  
Mann-Whitney U: 460.000  
Wilcoxon W: 631.000  
Z: -2.091  
Asymp. Sig. (2-tailed): .037  

Source: Authors’ calculation

Table 5. Mann-Whitney U test (limited companies, whose owners have a degree in economics and management vs. companies, whose owners do not have such a degree)

<table>
<thead>
<tr>
<th></th>
<th>Possession of an economics/ management degree</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS (Return on Sales)</td>
<td>Yes</td>
<td>42</td>
<td>-9.8557</td>
<td>39.75986</td>
<td>6.13508</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>61</td>
<td>-5.6049</td>
<td>37.69354</td>
<td>4.82616</td>
</tr>
</tbody>
</table>

ROS (Return on Sales)  
Mann-Whitney U: 883.000  
Wilcoxon W: 1786.000  
Z: -2.671  
Asymp. Sig. (2-tailed): .008  

Source: Authors’ calculation
However, very often the business situation requires a higher level of knowledge than that held by the owner. In such cases, owners' awareness of the need for hiring a consultant must be at a high level, so that the company survives the crisis period and enters the advanced stages of the life cycle of the company. Sometimes the owner cannot accept the fact that someone else can have the best solution for crisis situations in which the company matured. Refusal to accept advice of consultants can be one of the reasons for increased rates of SMEs shut down. In support of this contention is the fact that there is a statistically significant difference between the financial indicators (net margin) of companies that use the services of consultants and companies that do not use these services, (p <0.05; p = 0.015).

Table 6. Mann-Whitney U test (enterprises that use consultancy services vs enterprises that do not use them)

<table>
<thead>
<tr>
<th></th>
<th>Using consultancy services</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROS (Return on Sales)</td>
<td>Yes</td>
<td>21</td>
<td>-9.9971</td>
<td>30.93294</td>
<td>6.75012</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>84</td>
<td>1.5974</td>
<td>31.93590</td>
<td>3.48449</td>
</tr>
</tbody>
</table>

Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>ROS (Return on Sales)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>578,000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>809,000</td>
</tr>
<tr>
<td>Z</td>
<td>-2.436</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.015</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation

To further discuss the association between the basic elements that are determinants of higher phases of the life cycle, the following empirical findings have to be considered. Of the 46 companies managed by professional management (42% of the total sample), in 27 companies (24.5% of the total sample or 58.7% of the number of companies managed by professional management) the owner had acquired formal education in the field of economics or management. On the other hand, in 64 companies (58% of the total sample) there was no professional management, only in 15 companies (13.6% of the total sample or 23.4% of companies that are not managed by a...
professional management) the owner had acquired formal education in the field of economics or management. The situation is similar when it comes to the ratio of the acquired formal education of the CEO and the representation of professional management.

We have established an association between the level of education of business owners and the use of consulting services. Of the 42 companies (38.2% of the total sample) whose owner had acquired formal education in the field of economics or management, 9 companies (8.2% of the total sample or 21.4% of the companies whose owner has acquired education in the field of economics or management) use the consulting services. On the other hand, of the 66 companies (60% of the total sample) whose owners had not completed their formal education in economics or management, only 10 companies (9.1% of the total sample or 15.2% of the companies whose owners have not completed their formal education in the field of economics or management) use the consulting services.

Taking into account the above findings and statistically significant relationships that we have established by empirical analysis, the authors believe that the first auxiliary hypothesis was confirmed. The fact that there is no statistically significant relationship between the net margin of limited liability companies which have professional management and net margins of limited liability companies which do not have professional management can be somewhat depreciated by the high level of relation between the degree of formal education of the owner or manager of the company and a positive financial result (p = 0.008).

The second auxiliary hypothesis (H2):

*Adapting the business environment to defined needs of the SME sector will motivate growth in the total number of SMEs.*

In order to stimulate the development and growth of SMEs, various instruments and models of financial and non-financial support to this sector have been developed (Grover and Suominen, 2014; OECD, 2014; Petković and Tešić, 2013). The question is what the needs of the SME sector are. In what way are they manifested? In which direction to go in adapting the business environment toward SMEs needs?

Respondents from the sample assigned the following unique values to individual limitations of their business:
1. Difficulties in the collection of receivables from debtors (53.83);
2. Complicated legal procedures that regulate the work and business operations of enterprises (42.25);
3. High rates of taxes and contributions on wages (41.88);
4. The negative impact of the global economic crisis (25.98);
5. Expensive and complicated procedures to obtain loans from commercial banks (25.10);
6. Strong competition in the industry branch in which the company operates (24.05);
7. Weak support from relevant institutions to the SME sector (23.67);
8. High and unique VAT rate (18.15);
9. Complicated procedures for obtaining guarantees in guarantee funds (13.93);
10. We do not have quality standards (e.g. ISO, HACCP, HALAL, CE) (11.39).

The needs of the SME sector can be identified with the elimination of the causes of these limitations. Also, it is clear that each of these limitations negatively affect the quality of the company's business operations. Resolving the causes of these restrictions will increase the quality of business, reduce the possibility of shutdown of companies and increase the motivation of entrepreneurs to open new businesses. For each of these constraints it is necessary to propose certain measures whose implementation will reduce the negative impact on the company's business operations. Based on the aforementioned, we conclude that the second auxiliary hypothesis was confirmed.

The third auxiliary hypothesis (H3):

"Creation and improvement of models and instruments of financial and non-financial support to SMEs will create a positive climate for major investment in this sector."

We confirm the third auxiliary hypothesis by using the results of empirical research from the section of the questionnaire, related to financial and non-financial support to the SME sector.

The instruments of financial and non-financial support to the SME sector in the RS are at a very low level. Many of the developed instruments of financial and non-financial support to the SME sector were not represented in the RS. Many entrepreneurs and managers in the RS are not familiar with them.
If they have information that the world has developed instruments of financial and non-financial support for the SME sector, then they are not familiar with the way of their functioning and impact on SMEs. The results of our empirical research show this. 69.09% of respondents are familiar with the term Guarantee Fund, while only 53.64% of respondents are familiar with the fact that in the RS there is the guarantee fund. Only 24.55% of respondents know about the operation of the guarantee fund. It is clear that the Guarantee Fund of the RS does not fully meet its role or did not sufficiently adapt to the needs of potential users. Only 47.27% of respondents are aware of the concept of financing from venture capital funds. Only 26.36% of respondents are aware of the concept of financing from angel investors, and only 13.64% of respondents are familiar with mezzanine financing. 21.82% of respondents do not know whether a local agency for SME development even exists in their city. Below half of the respondents (49.09%) would agree to become a member of the cluster if in their industry there is a possibility for clustering.

A large percentage of respondents (80.91%) believe that it is necessary to exclude commercial banks from the process of granting loans from state owned Investment Development Bank of the RS (IRB RS) in order to reduce the final interest rate. On the other hand, 83.64% of respondents believe that there should be a state-owned bank in the RS market. Only 26.37% of respondents are very satisfied or satisfied with the work of the IRB RS, although lending conditions are not worse than in other banks (interest rate is usually lower). Only 7 respondents (6.36% of the total sample) would renounce the majority share of ownership in the company in exchange for working capital.

Certain institutions supporting the SME sector in the RS (IRB RS and RS Guarantee Fund) continue to be perceived by the public as institutions that are closely linked to those in power. It is believed that they often operate on non-market principles, which to some extent takes away the purpose of the existence of such institutions. There is a significant room for improvement here.

Taking into account the above mentioned, we believe that the third auxiliary hypothesis is confirmed because there is a huge space to create new and improve existing instruments of financial and non-financial support to the SME sector. The growth of availability and quality of these instruments would motivate entrepreneurs to invest in the creation of new SMEs and the expansion of existing SMEs. After checking the auxiliary hypotheses that are accepted as true, the main hypothesis was accepted as true.
4. DISCUSSION AND CONCLUSIONS

During the data collection about the number of SMEs in the Republic of Srpska and their structure, we have sent written requests to the Institute of Statistics of the Republic of Srpska (RZSRS), the Agency for Development of Small and Medium-Sized Enterprises of the Republic of Srpska (RARS), the Intermediary Agency for IT and Financial Services of the Republic of Srpska (APIF) and the Tax Administration of the Republic of Srpska (PURS). Unfortunately, results on the number of SMEs were different from one source to another.

RARS provided us with data taken from the annual reports for the area of small and medium-sized enterprises and crafts and entrepreneurial activities in the Republic of Srpska for 2012 and 2013, prepared by the Ministry of Industry, Energy and Mining of the Republic of Srpska and the Agency for Development of Small and Medium-Sized Enterprises, adopted by the Government of the Republic of Srpska. The explanation stated that the source of cited information is the Tax Administration of the Republic of Srpska.

![Number of SMEs in the Republic of Srpska from 2007 to 2013.](source: Petković and Tešić, 2013)

Comparing the APIF and RARS data we conclude that the number of SMEs, as represented by RARS, is increasing from one year to another, while
according to APIF data, the number of SMEs that submit financial reports is decreasing. In addition, there is a huge discrepancy among official data. Namely, the number of SMEs according to APIF and RARS differ significantly. So, according to RARS data 15,560 SMEs operated in the RS in 2013, while in the same period only 8,828 SMEs submitted their financial statements to APIF. The question is what happened with the difference of 6,732 SMEs which did not submit their financial statements? One logical explanation is that either the companies did not fulfil their legal obligation and did not submit their financial statements or simply they are out of business but not liquidated. Thus, there are no reliable indicators on the number of active companies in the RS, which significantly complicates the work on empirical research for the academic community.

According to data from the Directorate for Enterprise and Industry of the European Commission (2013), education is a crucial element of entrepreneurship. Studies show that students, attending entrepreneurship classes, are more likely to get a job, as well as to start their own business. Between 15% and 20% of high school students who participated in programs of simulation of mini companies established their own companies, which is as much as six times higher than in the total population, which shows the importance of entrepreneurship education in Europe. Even 78% of students who have had entrepreneurship education got a job immediately after graduation, as opposed to 58% of students who have not had entrepreneurial education (European Commission, 2013).

Providing quality conditions for the functioning of SMEs is one of the basic preconditions for achieving prosperity and progress for all EU citizens. However, even with the existence of a strong entrepreneurial culture, it will be difficult for SMEs to struggle for their survival and development if the economic environment is not adequate and favorable (Fotopoulos, 2012; Wennekers et al., 2010; Carree and Thurik, 2010). Strategic approach to SMEs development policies has become an integral part for the recovery plan and growth stimulation. Structural and financial policies, combined with an innovative-friendly environment and entrepreneurial culture, can provide better opportunities for the development of SMEs. In addition, this approach requires paying attention to macroeconomic and other structural factors, such as: conditions of demand, strong research base, fostering competition, together with the presence of other factors such as human resources, finance, infrastructure and services (European Commission, 2010; Frank et al., 2010; Miles et al., 2009). In this framework, the role of SMEs may be a key determinant in
ensuring rapid recovery from the economic crisis (European Commission, 2013, p. 11).

Problems with administrative regulations in the EU have taken second place on the scale of constraints on growth and development of enterprises (Unlocking business potential, especially of SMEs, 2009, p. 12), as well as in our research, where the second place has been taken by complicated legal procedures that regulate work and business operations of enterprises. In Croatia, which became the 28th member of the EU in 2013, according to data from the Development policy center of SMEs and entrepreneurship (2013, p. 37) that combines the results of many international studies which included Croatia, there are following obstacles for the development of SMEs: administrative barriers (time consuming and costly procedures for starting and liquidation of the company), judicial inefficiency, lengthy procedures for registration of ownership, poor focus on entrepreneurial education and lack of informal sources for financing business ventures start-ups.

According to GEM results, as stated by the Development policy center of SMEs and entrepreneurship (2013), to improve the entrepreneurial conditions in Croatia, it is necessary to improve the government's policy on the regulatory framework, entrepreneurial education and the transfer of results of research and development activities in the SME sector. According to the Global Competitiveness Report 2013-2014, the most problematic factors for doing business in Croatia are the low efficiency of public administration, corruption, policy instability, tax rates, restrictive labor legislation, access to finance sources, tax policy, and poor work ethic of the national labor force (Ibid., 2013, p. 38). According to the results of the research conducted by the Croatian Association of Employers, presented in the same report (Ibid., 2013, p. 40), the biggest obstacles to business operations are as follows: high taxes and contributions, inefficient public administration, unclear strategy for development of the country, inflexible labor legislation and insolvency. By using the Lussier model of business success and failure, with a sample of 143 small businesses results indicate that business planning, proper employee staffing, adequate capital inflows and partnerships are important for the viability and success of small businesses in Pakistan (Hyder and Lussier, 2016).

According to research conducted by ACCA® (2010, p. 5), in Australia and the UK, accountants have been recognized as fundamental advisors to SMEs. Accountants already have built certain business relationships with SMEs which

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facilitate their breakthrough to the market of business and advisory services. Many managers emphasized the importance of trust as a basis on which a good business relationship with their accountants is built. According to this research, the main factor determining the demand for business advice is manifested through the personality of the business owner. Entrepreneurs who have high self-esteem and business skills rarely seek business advice, except in the case of unforeseen events that can have a significant impact on business. On the other hand, entrepreneurs who have a need to reconsider their decisions more often use services of business advisors. In research conducted in Spain in 2010 amongst 3,014 Spanish SMEs (Priego et al., 2014), results reveal that stakeholders, including shareholders, employees, creditors, customers and suppliers, can contribute significantly to reduce the likelihood of business failure, based on their participation in the generation and distribution of value added. Therefore, the shareholders’ ability to recover their investments, the willingness of workers to increase their productivity, customer loyalty or the trust of the providers are key factors in helping to avoid business failure, as they affect the firm’s ability to generate value.

As the main obstacles to the successful development of their businesses in B&H, respondents identified the following factors: difficulties in the collection of receivables from debtors; complicated legal procedures that regulate the work and business operations of enterprises; high rates of taxes and contributions on wages; the negative impact of the global economic crisis; expensive and complicated procedures to obtain loans from commercial banks; strong competition in the industry branch in which the company operates; weak support of relevant institutions to the SME sector; high and unique VAT rate; complicated procedures for obtaining guarantees in guarantee funds; and not having quality standard certificates.

Difficulties in the collection of receivables from debtors have been identified as the primary factor that hinders business operations of enterprises in the RS and B&H. This means that the illiquidity of the economy is very high. Development of the factoring market could reduce the illiquidity of the RS economy. According to data of the Central Bank of B&H7, at the moment, only two companies in B&H provide factoring services and both are located in the Federation of B&H, the other B&H entity. A large number of laws and procedures that govern the operation and management of enterprises deter successful business development. Performing obligations prescribed by the present laws takes time and money that could otherwise be productively
utilized. It is therefore necessary to take measures that will lead to savings in time and money for businesses. Some of these measures may include the implementation of “guillotine of regulations” at all levels of the RS, increasing the degree of use of the software (electronic tax declaration, electronic banking, online marketing, online communication with customers and suppliers, etc.), the maximum streamline of the process of opening and closing a business, and introduction of electronic signatures to reduce the use of printed documents in business correspondence.

In the RS, burden on labor with taxes and contributions is rather high for weak transitional economy such as B&H economy (around 60% on net salary level). High rate of burden on labor affects the increase in overall unemployment and "motivates" employers to operate in a gray zone when it comes to the labor market. Therefore, we propose the application of a fiscal devaluation in the RS. Fiscal devaluation is the phenomenon of reducing the burden on labor while increasing taxes on consumption and luxury (VAT increase, the increase in excise tax and real estate tax). Shifting taxation away from labor would lead to employment growth and reduction of gray areas in the market place of work. The resulting reduction in budget revenues and income funds can be compensated by systemic savings in the budget and reduction of the gray economy. The excess of employees which undoubtedly exists in the public sector should be redirected to work in inspection and in the industry. After a certain period of lower tax rates and contributions implementation, by performing extensive and comprehensive inspection, the gray sector would be reduced to the lowest possible level. In the situation of existence of a unique rate of VAT in B&H, the fixed exchange rate and the absence of monetary policy, fiscal devaluation can produce positive effects on the balance of payments because it simulates the effects of devaluation (increases the price of imported products because of the higher VAT rate, and reduces the price of export products due to lower labor costs, especially in labor-intensive production).

Tax exemption of entrepreneur’s payment of a portion of taxes and contributions in the first two years of operation can be positively affected by the increase in the number of start-ups. This process is necessary to create mechanisms to control and protect the entrepreneurs, after two years, from reopening the company under a new name just because of the use of tax incentives.

The impact of the global economic crisis is recognized as the fourth factor to poor performance of SMEs. However, it is very difficult to quantify the
impact of the global crisis on economic trends in the RS. Measures to reduce the negative effects of the global economic crisis can be confused with measures to improve the business and economic environment.

High interest rates on loans in the RS significantly hamper the funding of SMEs. The establishment of the state-owned Investment Development Bank of the RS (IRB RS) and the formation of favorable credit lines for certain groups of companies, somewhat reduced the negative effect of high interest rates. However, it is known that the interest rates on loans that are placed out of the IRB RS consist of output rates and margins of commercial banks. We believe it is necessary to exclude the commercial banks from the process of granting loans to reduce the final interest rate. Respondents in a huge percentage (80.91%) believe that it is necessary to exclude commercial banks from the process of granting loans of IRB RS to reduce the final interest rate. IRB RS may establish its own sector that would work with users and thus substitute the role of commercial banks in the process of granting loans. The new role of the IRB RS is likely to motivate commercial banks to reduce their own interest rates and simplify the procedures for obtaining loans.

In what way it is possible to align the education system in the RS and B&H to the needs of the labor market? Will the SME sector gain support and conditions required for continued growth and development from the competent institutions? What needs to be done in order to create conditions for creating advanced instruments of financial and non-financial support to the SME sector in B&H? These are some of the many questions that need to be answered in the future.

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IZAZOVI MALIM I SREDNJIM PODUZEĆIMA U RANOJ FAZI RAZVOJA: REZULTATI IZ BOSNE I HERCEGOVINE

Sažetak

Ovim se radom žele otkriti i razjasniti faktori, koji vode prema zatvaranju malih i srednjih poduzeća (MSP) u tranzicijskim gospodarstvima, kao što je ono u Bosni i Hercegovini (BiH). U radu se izlažu rezultati istraživanja ključnih čimbenika, koji vode zatvaranju malih i srednjih poduzeća u prvoj godini poslovanja, i to iz perspektive poduzetnika te menadžera. Predlažu se mjere, kojima bi se moglo osigurati preživljavanje, razvoj i rast takvih poduzeća. Za potrebe ovog rada, izvršeno je empirijsko istraživanje 110 MSP iz Republike Srpske (49% BiH). Poglavlje o metodologiji istraživanja objašnjava kriterije za ulazak u populaciju, koja je obuhvaćena studijom i metode analize podataka. Sudionici u istraživanju utvrdili su sljedeće čimbenike kao ograničenja razvoja svog poslovanja: naplata potraživanja, složeni pravni postupci kojima se regulira poslovanje, visoke stope poreza i doprinosa, negativno djelovanje globalne gospodarske krize te složene i skupe procedure dobivanja kredita od komercijalnih banaka. Sudionici istraživanja nisu procjenjivali svoje osobne
karaktaristike, formalno i/ili neformalno poznavanje poslovnog okruženja, odnosno poduzetničkog duha, proaktivnost, inovativnost, odnosno preuzimanje rizika, kao potencijalne uzroke poslovnih propasti. Unutar ograničenja, u radu se iznose nove informacije i spoznaje o preprekama i problemima MSP-ima u BiH, koja predstavljaju dobru osnovicu za buduća istraživanja.