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CAPITAL STRUCTURE DETERMINANTS OF LISTED PRIVATE AND STATE COMPANIES: EVIDENCE AND LESSONS FROM BOSNIA AND HERZEGOVINA

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ABSTRACT

Purpose. *The purpose of this paper is to determine and analyze the determinants of the capital structure of joint-stock companies in Bosnia and Herzegovina that are listed on the Banja Luka Stock Exchange. This study will answer the question as to which factors determine the capital structure of BiH companies and whether existing financial theories of the capital structure hold true in that context. The main research objective is to estimate the effects of a firm's level determinants on its capital structure measures in different ownership structures. Those findings will certainly advance our understanding of listed companies financing behavior.*

Methodology. *For the research, we took into account firm-specific characteristics and divided joint-stock companies into private and state-owned. The results of the research show that the capital structure of these two groups of enterprises is differently affected by individual determinants.*

Findings and implications. *While state-owned enterprises rely more on borrowed resources to finance both short-term and long-term assets, private enterprises even finance part of their short-term assets with their own capital. However, the most important determinant in both groups of enterprises is the share of inventories in short-term assets, which confirms that short-term liabilities, i.e. free sources of financing in the form of liabilities to suppliers are the determinant that most positively affect the indebtedness of all enterprises. Unlike previous research that observed enterprises according to their size or affiliation to individual industries, the focus of our research is enterprises of different ownership structures. The empirical statistical results provide basis for logical conclusion and appropriate policy implications. The study points to the specifics of the capital structure in private and publicly listed joint-stock companies. The stated opposite influence of certain ratios on the indebtedness of the enterprises is explained by a number of factors.*

Limitations. *This study focuses only on the presentation of the recent indicators of capital structure of listed companies - listed on the Banja Luka Stock Exchange, which is one of its major limitations. The limitation of this search is the sample size which can be considered low. Further research may be conducted by using other capital markets to explore more information regarding the effect of the variables affecting the capital structure. In addition, further research may also be conducted by using other proxies or by adding more variables, sample size, and research period to get a better result.*

Originality. *The study is an original research paper. It has not been published in any other peer-reviewed journal not under consideration for publication by any other journal. The paper adds to the existing literature on Bosnia and Hezegovina by giving an overview of recent developments in the flexi purity concept, pointing out the areas that require policy response.*

1. INTRODUCTION

The decision on how to finance the business is important in maximizing the value of the enterprise. During the last two decades, numerous researches have been made on how enterprises choose the ratio of own and borrowed capital. However, scientists have been dealing with these issues for many years. One of the most frequently asked questions related to capital structure is to identify the factors that crucially influence the choice of one of the two possible sources of financing: debt and capital. Stakeholders will want to reinvest their resources in a company with "clear corporate governance practices, which ensures that the cost of capital is minimal and hence service as a determinant of firm financial performance" (Amole et al., 2001).

Usually, the factors that affect the capital structure of a firm are classified as external factors and internal factors. External factors represent the inflation rate, the average interest rate, and other macroeconomic conditions that are specific to a particular country and that enterprises cannot influence. Internal factors are those that are specific to a particular enterprise, such as profitability, size of the enterprise, asset structure, and others. For enterprises operating in one country, macroeconomic factors are common for them and they affect all enterprises in the same way. For example, statistically significant relationship between four factors (inflation, GDP growth rate, GDP, index of protection of the creditors and debtors rights) and the strength and direction of the impact of internal factors on the capital structure has been found (Jaworski & Czerwonka, 2019). Among the internal factors that have been found to have a positive correlation with the level of debt are: the size of enterprise (Frank and Goyal, 2009, Rajan and Zingales, 1995, Booth et al., 2001) collateral (Harris and Raviv, 1991, Rajan and Zingales, 1995, Kremp, Elma and Gerdesmeier, 1999, Frank and Goyal, 2009) and profitability. Gallegos Mardones and Ruiz Cuneo find a positive relationship between financial performance, growth, and size of the company (Gallegos Mardones & Ruiz Cuneo, 2020). As researches shows, the influence of certain factors also depends on the size of the enterprise, majority ownership, and belonging to certain branches but also on the development of the markets in which they operate. For example, research in developing countries shows a negative correlation between collateral and leverage (Nivorozhin, 2002, Cornelli, Portes, & Schaffer, 1996). Most studies realized in European transition economies consistent with the pecking order theory, find a negative relationship between profitability and capital structure (Nivorozhkin, 2004, Joeveer, 2008, Črnigoj & Mramor, 2009). Research conducted in Serbia during the crisis period from 2008 to 2011 shows a significant negative impact of the quick ratio, the cash gap and the revenue quality on leverage and a positive and statistically significant impact of the free cash flow variable and its volatility on leverage (Denčić-Mihajlov, Malinić, Grabinski, 2015).

The other literature review conducted by Kumar et al. (2020) including 262 articles published in the years 2012-2017 proved that one of the most prevalent topic in the literature concerns determinants of SME capital structure. At the same time, the authors indicated that it would be worth extending this research to other determinants, not covered by studies carried out so far (Kumar, Sureka & Colombage, 2020)

However, many firms experience financial distress and even bankruptcy because they are wrong in taking their capital structure policies, especially debt decisions. The increase in excess debt impacts liquidity because the interest-bearing is higher, thus disrupting the firm's working capital (Santosa, 2020).

The only research, which is similar to our work is a paper by Czerwonka, L. et. al. (2021). Even though they have a comparable approach, our research includes a more updated dataset and more importantly, our research also includes micro enterprises, whereas the research of Czerwonka and contributors excludes microenterprises from the sample. Particularly, Czerwonka et al. state that although previous works show that some capital structure differences can be explained by modern capital structure theory in mature market economies, the capital structure decision in transition markets is still an open question for investigation.

In former socialist countries, such as Bosnia and Herzegovina, joint-stock companies were created by the transformation of socially-owned enterprises by transferring shares in socially-owned enterprises to citizens/employees for nominal compensation to create broad ownership of shares, and insider owners emerged as owners of the socially-owned property. With the emergence of the capital market, the further transformation of joint-stock companies was sought in such a way as to provide owners willing and able to make additional investments in existing companies, but mostly in this way transformed joint-stock companies were bought by a small number of investors, where companies became family businesses, and where joint-stock companies were re-registered from open to closed companies or limited liability companies. At the same time, strategic companies remained in majority state ownership.

The capital structure research studies were highly focussed on developed economies, with time, research studies in developing markets are increasing (Bajaj, Kashiramka & Singh, 2020). Bearing in mind the characteristics of enterprises in Bosnia and Herzegovina, the objectives of this study are to seek and explore the main determinants of capital structure and to identify factors specific to enterprises in developing countries that significantly influence decisions on borrowing, i.e., financing, and to construct an appropriate econometric model.

For the purposes of the research, we have analyzed enterprises listed on one of the two stock exchanges in the BiH - Banja Luka Stock Exchange. This study will answer the question as to which factors determine the capital structure of BiH companies and whether existing financial theories of the capital structure hold true

in that context. The main research objective is to estimate the effects of a firm's level determinants on its capital structure measures in different ownership structures. Therefore, we have answer on a research question: "What internal factors dominantly affect the indebtedness of private and state-owned enterprises listed on the Banja Luka Stock Exchange?" In view of all the above, we formulate the hypothesis according to which, there is no linear relationship between the specific indicators and the debt ratio in listed companies in Bosnia and Herzegovina. Based on the problem analysis above, the study formulated the following main hypothesis of this research: "There is no linear relationship between the specific indicators and the debt ratio in listed companies in Bosnia and Herzegovina."

Similar research has not been done in Bosnia and Herzegovina, and we believe that this paper will provide new insights into the dominant factors that determine the capital structure of joint-stock companies in developing countries, both public and private. To the best of our knowledge, this is one of the first comprehensive studies of capital structure choice in Bosnia and Herzegovina (as a small and open economy) for listed companies.Our study also may have a significant impact on policymaking for the countries in the region. Moreover, our data set allows us to divide the analysis based on ownership structure, and thus, we can find out the important factors that affect the capital structure from the ownership perspective. Overall, we believe that the paper makes a significant contribution to understanding capital structure determinants in the context of listed private and state companies.

We extend this literature by shedding light on several issues related to capital structure in a region characterized by a different institutional environment and that has received little if any, attention in the capital structure literature. Secondly, this research provides a comprehensive study of capital structure choices with the latest dataset and empirical evidence on the determinants of capital structure.

Furthermore, the results of our study complement and strengthen some of the findings to date. Overall, we believe that the paper makes a significant contribution to understanding SME finance in the context of Visegrad Group.

2. LITERATURE REVIEW

The capital structure of companies differs between developed and developing countries (Kuč & Kaličanin, 2021). There are several well-known but different theories of capital structure: Modigliani-Miller's theorem (Modigliani & Miller, 1958), trade-off theory, pecking order theory, agency theory, and market timing theory (Serghiescu & Văidean, 2004, Ahmadimousaabad, Bajuri, Jahanzeb, & Karami, 2013, Czerwonka & Jaworski, 2021). For the SMEs sector, the two main capital structure theories are prevalent in the literature (the trade-off theory and the pecking order theory (Martinez, Scherger & Guercio, 2019). Albart et al. (2020) explained that the capital structure is the amount of short-term debt, both permanent

and non-permanent, long-term debt, preferred stock, and common stock used to finance the firm.

The essence of Modigliani-Miller's theorem is that they make two claims: the first claims that the level of leverage of a company does not affect its market value, which is constant regardless of the proportions of debt and equity chosen in financing the company. The second proposition describes the weighted average cost of an enterprise as being unaffected by the company's leverage (Serghiescu & Văidean, 2004). Tradeoff theory explains that a company strives for a debt that balances tax advantages of additional debt against the cost of possible financial distress (Myers, 2001). As explained by Myers and Mayloof (1984), the key order of pecking order theory argues that because of the information asymmetry between shareholders, managers, and investors, companies prefer to finance their investments first with internal resources, then with borrowed capital, and ultimately using capital provided by shareholders (Myers and Majloof, 1984). The main result of the analysis of the sample comprises 141 of the largest Serbian companies in the period after the global economic crisis in 2008. over the period 2009-2017 indicates that these companies, mostly financed by short-term debt, predominantly belong to the 'pecking order' theory (Kuč & Kaličanin 2021). On the other side, research from Serbia shows that neither of the two competing theories exclusively and completely explain the financing behaviour of the analysed companies, and that inflation and development of the banking sector are important factors that affect the corporate leverage level (Pepur, Ćurak & Poposki, 2016).

Contrary to the theories presented before, agency theory assumes that the interests of managers and shareholders are not perfectly aligned and that managers, although acting as shareholder representatives, will not always act in the best interests of investors, but will pursue their personal benefits (Jensen and Meckling, 1976). Baker and Wurgler (2002) proposed the 'market timing theory' which does not define an optimal capital structure, but shows that some specific capital market conditions and macroeconomic conditions within a country may affect the capital structure of listed companies (Baker & Wurgler, 2002). Kang Li et. al. (2019); Kenourgios et. al. (2019) analyze SME capital structure decisions for European countries and identify differences in the determinants of firms' capital structure across the various countries. Those authors suggest the differences are probably better explained by firm-specific factors than by country-specific factors. In their work Jaworski et.al (2019), they state that there are two factors, namely the size of the enterprise and its growth, has a positive impact on capital structure. The larger the company and/or faster the company grows, the higher the share of debt in the capital structure.

The free cash flow theory says that dangerously high debt levels will increase value, despite the threat of financial distress, when a firm's operating cash flow significantly exceeds its profitable investment opportunities (Myers, 2001). The most important finding of these studies is the determination of factors influencing

capital structure (Graham & Leary, 2011, Parsons & Titman, 2007). The mentioned researches differ according to the number of observed enterprises, their size and the industry to which they belong to, the statistical methods used, the scope in terms that they refer to only one country or cover several countries, and similar. Among the numerous researches, we singled out the following. Czerwonka et. al. (2021) confirmed the dominant role of firm-specific factors. Industry and country variables explain only 4% of the debt variability of the surveyed companies. Using the multiple linear regression model, concluded that the structure of capital (debt-to-asset ratio) is influenced by the following factors: tangible assets, company size, growth and profitability. In addition, they showed that there is a positive relationship between the debt-to-assets ratio and tangible assets, company size and growth, while on other hand, there is a negative relationship between profitability and debt-to-assets. Jõeveer used data collected from companies from nine European countries covering the period from 1995 to 2002 (Jõeveer, 2006). Jõeveer studied the importance of the impact of determinants specific for companies of a certain country and specific for macroeconomic factors on debt-to-asset ratios. In his study, he pointed how factors specific to a country influenced the debt-to-assets ratio of small companies, while factors specific to companies affected the debt-to-assets ratio of large companies.

Nivorozhkin used data on 667 Bulgarian and 596 Czech companies from 1993 to 1997 (Nivorozhkin, 2004). Nivorozhkin used the ratio of total debt to the sum of total debt and shareholders' equity as a dependent variable, while for independent variables he used income variability, profitability, tangible assets, size, trade payables, trade receivables and distance. He separately assessed the dynamic model for Bulgaria and the Czech Republic and came to the conclusion that Bulgarian companies were adapting faster than Czech companies to the desired level of capital structure.

Serghiescu and Vaidean examined the relative importance of five factors on the capital structure of Romanian companies listed on the Bucharest Stock Exchange and operating in the construction sector (Serghiescu & Văidean, 2004). The analysis is based on the estimation of panel data from a sample of 20 companies, observed over three years (2009-2011). The study used traditional explanatory variables, including profitability, company size, assets, liquidity, and asset turnover. Using simple and multiple linear regression, they showed that the profitability and liquidity ratio negatively affect the overall debt ratio of the observed companies. On the other hand, the size of the company and the turnover of assets have a positive correlation with the result.

Honggang et al. observed 127 listed companies in China from 2009 to 2016 using linear regression (Honggang, Chen, & Zhong, 2019). The results show that the capital structure of listed companies has a significant positive correlation with profitability, growth capacity, company size, and cash flow and that the capital structure of companies listed on the Stock Exchange is negatively correlated with

dividend policy. Factors specific to the industry in which the company operates have a great impact on the capital structure. However, De Jong, Kabir & Nguyen showed back in 2008 that the determinants of impact for the same industries, for example for companies in the construction sector, differ by country (De Jong, Kabir, & Nguyen, 2008). Unlike previous authors who observed companies only within one country Rajan and Zingales test for the G7 countries, the theoretical and empirical lessons learned from the US studies (Rajan & Zingales, 1995). These authors find similar levels of leverage across countries, thus refuting the idea that firms in bank-oriented countries are more leveraged than those in market-oriented countries. They find that the determinants of capital structure that have been reported for the USA (size, growth, profitability, and importance of tangible assets) are important in other countries as well.

Among several factors, that most research identifies to determine the capital structure, the share of tangible assets in total assets as the basis for collateral recognized is certainly one. Most empirical studies conclude a positive relation between collaterals and the level of debt (Rajan & Zingales, 1995; Kremp, Elma, & Gerdesmeier, 1999; Frank & Goyal, 2009). Based on the agency problems between managers and shareholders, (Harris & Raviv, 1991) suggests that firms with more tangible assets should take more debt. This is due to the behavior of managers who refuse to liquidate the firm even when the liquidation value is higher than the value of the firm as a going concern. Indeed, by increasing the leverage, the probability of default will increase which is to the benefit of the shareholders. In an agency theory framework, debt can have another disciplinary role: by increasing the debt level, the free cash flow will decrease (Grossman & Hart, 1982, Michael & Jensen, 1986, Stulz, 1988). As opposed to the former, this disciplinary role of debt should mainly occur in firms with few tangible assets, because in such a case it is very difficult to monitor the excessive expenses of managers. From a pecking order theory perspective, firms with few tangible assets are more sensitive to information asymmetries. These firms will thus issue debt rather than equity when they need external financing (Harris & Raviv, 1991) leading to an expected negative relationship between the importance of intangible assets and leverage. The importance of collateral increases in cases where businesses are newly established and have no close ties to creditors. These arguments suggest a positive relationship between tangibility and a firm's leverage. Indeed, the results for developed countries (Titman & Wessels, 1988; Rajan & Zingales, 1995) uniformly confirm this. On the other side, conclusions from developing countries are mixed. Booth et al. (2001) find a negative relationship in the case of developing countries (Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001). The findings of Nivorozhkin 2002, Dragotta & Semenescu, 2008, Joeveer, 2006, Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001 and Berk, 2006) indicate a negative and statistically relevant correlation between tangibility and leverage in firms operating in European transition countries.Gan, Wei, Zheng, & Wang in a sample of Chinese

companies proved that if the transaction cost is lower, companies showed the tendency to target capital structure adjustment; when the cash flow is not enough to adjust the capital structure deviation part, companies showed deviation from the target capital structure. (Gan, Wei, Zheng, & Wang, 2018).

Other theories complement previous studies that use entrepreneurship management and innovation as drivers of company profitability (Rico & Cabrer-Borrás, 2018). For example, Kyvik (2018) incorporates the business model, creativity, and management and financial control as key variables in his analysis.

Research on the SMEs' capital structure in CEE markets does not have a long tradition and is not as developed as in Western Europe (Belas et al., 2018, Kenourgios et al., 2019).

Comparative analysis regarding capital structure determinants of firms in transition economies located in CEE has been performed in several papers (Cornelli, Portes, & Schaffer, 1996, Nivorozhkin, 2002, Klaper et al., 2002, De Haas & Peeters, 2006, Jõeveer, 2006, Delcoure, 2007, Triandafil & Brezeanu, 2010). Malinić et al (2013) mostly report that, with respect to firm-level characteristics, firms' capital structure in CEE economies follows a different pattern compared to Western European structure (Delcoure, 2007). Although every research has contributed to formulating and testing the determinants of the capital structure all authors caution on the difficulty of finding suitable proxies for the determinants of capital structure. At the same time, the authors indicated that it would be worth extending this research to other determinants, not covered by studies carried out so far (Czerwonka & Jaworski, 2021).

3. THE DATA AND METHODOLOGY

The methodological elements presented in this work concern the measurement of variables, the characteristics of the sample, and the collection of data as well as the statistical tools used.

The firm's capital structure can be determined through several factors. Those observable elements for leverage should be linked to the theories on capital structure since they are the assumed proxy for the forces that underpin theories, such as financial distress and information asymmetry costs. However, this relationship is not always clear, and hence it is important to resolve the elements that are reliable and economically important in order to predict the leverage. Some of the attributes which affect the choice of capital structure are the same for firms within the same industry. However, the effects of some of these attributes, for example, type of output market and type of products, are not testable because these attributes themselves are not easily measurable (Table 1). In this table, TBT refers to the tax-bankruptcy static trade-off theory. POT denotes the pecking order theory. ST refers to the signaling theory. The + (-) sign shows the expected positive (negative) relationship between

the leverage and the designated variable. The (+/-) sign signifies the possibility that plausible arguments could be made for a positive as a negative relationship using a given theory.

Table 1: Summary of the Capital Structure Theories Predictions

No	Variables	Static trade-off theory		Asymmetric information theory	
		TBT	Agency	POT	ST
1	Firm Size	+	+	-	+
2	Profitability	+	+	-	+
3	Growth opportunity	-	-	+	+
4	Asset tangibility	+	+	+/-	
5	Tax shield	-			
6	Risk	-	+	-	
7	Dividend policy	-	+	+/-	
8	Uniqueness of product	-			
9	Managerial equity ownership	-	+	+/-	

Source: Own construction

Fifty years after Modigliani and Miller's (1958) made their ground-breaking analysis, there is yet no unifying theory on the capital structure for corporate finance. Despite this, the applicable theories serve as analytical tools in order to probe the empirical findings. However, none are capable of explaining all the aspects of capital structure choice. Even though some of the stylized facts can be successfully accounted for in each theory, there are incongruities with some of the others. The current reference materials say that the most reliable elements explaining corporate leverage are the market-to-book ratio (-), tangibility (+), profitability (-), company size (+), expected inflation (+), and median industry leverage (+ effect on leverage). Frank and Goyal (2009) refer to these factors as the "core leverage factors" affecting the decisions on the capital structure. Furthermore, those six core factors provide a more powerful explanation of a market-based definition of leverage than a book-based definition of leverage. Empirical findings regarding the relationship between chosen firm-specific characteristics and leverage can be summarized in one table (Table 2).

Table 2: Summary of empirical evidence from selected empirical studies on determinants on capital structure

Author(s)	Firm size	Profitability	Growth opportunity	Asset tangibility	Risk
Rajan and Zingales (1995)	+	-	-	+	-
Fan, Titman and Twite (2012)	+	-	-	+	
Frank and Goyal (2009)	+	-	-	+	
Kremp et. el. (1999)	+	-	-	+	
Titman and Wessels (1988)	+	-	-	+	
Czerwonka et. al. (2021)	+	-	+		
Nivorozhkin (2004)		-			
Serghiescu & Văidean (2004		-			
Honggang et al. (2019)	+	+	+	+	

Source: Own construction

For the dependent variable, we determined the complete liabilities ratio defined as total liabilities divided by the total book value of assets. As Huang & Song (2006) point out, the total liabilities ratio represents appropriate measure for capital structure. As can be seen, we observed the ratio obtained from the information from the balance sheet in order to determine how much the structure of assets affects the sources of financing.

In Bosnia and Herzegovina, joint stock companies are listed on two Stock Exchanges: the Sarajevo Stock Exchange (SASE) and the Banja Luka Stock Exchange (BLSE). The shares of most of these companies are not actively traded on the Stock Exchange; i.e. in most companies one trading was at the moment of their transformation into joint-stock companies. On the Banja Luka Stock Exchange, only one joint-stock company was established by a public offering of shares, while all the others were created by the transformation of socially owned companies. According to data from 2019, 472 joint stock companies are listed on this Stock Exchange, of which 76 are in bankruptcy and 11 are in the process of liquidation. However, only 47 of them were traded for 10 or more days during 2020.

For the purposes of this research, we took into account joint stock companies listed on the Banja Luka Stock Exchange, which have publicly disclosed their financial statements for the period from 2015 to 2019. The empirical analysis focused on five years of data on a sample of public and private nonfinancial companies in order to test the relationship between the capital structure and the leverage determinants, combining all variables affecting the determination of the capital structure.

We divided the listed companies into joint stock companies in majority private ownership and joint stock companies in majority state ownership. By state-owned enterprises we imply those in which the state has a majority ownership of capital, i.e. participation in the share capital above 50%. The total sample of companies that submitted complete balance sheets for the observed period is 237. Of these, 163

are privately owned and 74 are in majority state ownership. There is no lag in the observed variables.

4. RESULTS AND DISCUSSION

The results obtained allow us to make several observations, including their scope and limits to guide future research. The equation of the estimate of our regression model can be as follows: $DR = \alpha + \beta_1 \cdot CL + \beta_2 \cdot FS + \beta_3 \cdot FC + \beta_4 \cdot CFI + \beta_5 \cdot SHC + \beta_6 \cdot CSTA + \beta_7 \cdot ICA + \beta_8 \cdot RETA + \beta_8 \cdot LOGI + \varepsilon$. Descriptive statistics of explanatory variables for private and state companies are presented in Table 3 and Table 4. There is no lag in these variables. The explanatory variables cover the period from 2015 to 2019. Focus of this study is on most the most commonly used indicators: debt ratio (abbreviation DR), liquidity - measured by current ratio (current assets/current liabilities; TL), fianancial stability ratio (long term assets/(capital+long term liabilities; FS), degree of coverage (capital / fixed assets;CFI), share capital / equity (SHC), cash and cash equivalents/ short-term assets (CSTA), inventories / current assets (ICA), real estate / total assets (RETA), log (Total assets) (LOGI).

Table 3: Indicators for state-owned enterprises

Abbreviation	Variable	Mean	Median	Std dev	Minimum	Maximum
DR	Debt ratio	0.28	0.18	0.29	-	1.02
CL	Liquidity is measured by current ratio (current assets/ current liabilities)	2.45	1.54	3.42	-	22.03
FS	Fianancial stability ratio (long term assets/(capital+long term liabilities)	0.79	0.95	0.52	-	1.94
CFI	Degree of coverage = capital / fixed assets	0.80	0.90	0.45	-	1.72
SHC	Share capital / equity	1.29	0.79	2.25	-	11.58
CSTA	Cash and cash equivalents/ short-term assets	0.12	0.04	0.19	-	0.87
ICA	Inventories / current assets	0.14	0.06	0.19	-	0.83
RETA	Real Estate / Total Assets	0.43	0.45	0.29	-	0.97
LOGI	log (Total assets)	6.75	6.91	2.01	-	8.99

Source: calculations made by the authors

For state-owned enterprises, it can be noticed that the largest deviation is observed in the current liquidity ratio, which reaches a maximum of 22.03. The mean of the debt ratio is 0.28 while the maximum value is 1.02 due to the existence of enterprises that have a loss above the amount of capital.

Table 4: Indicators for private-owned enterprises

Abbreviation	Mean	Median	Std dev	Minimum	Maximum
DR	0.20	0.01	0.27	-	0.99
CL	2.82	1.10	6.70	-	69.30
FS	0.57	0.38	0.86	-	8.01
CFI	1.05	0.94	1.11	-	9.43
SHC	2.45	0.90	10.57	-	138.20
CSTA	0.12	0.02	0.21	-	0.98
ICA	0.27	0.13	0.30	-	1.00
RETA	0.36	0.32	0.32	-	0.99
LOGI	6.07	6.49	1.93	-	8.93

Source: calculations made by the authors

In private enterprises, in addition to the current liquidity ratio, the high standard deviation is also expressed in the ratio of share capital to total capital. The mean of debt ratio is 0.20 while the maximum amount is 0.99.

Observing the indebtedness ratio, we notice that state-owned enterprises are financed more from borrowed than from their own capital. There are a correlation matrix with all observed variables (Table 5 and Table 6). Multivariate analysis through the study of correlations indicates that there is no problem of multicollinearity between the independent variables of the model since the correlation coefficients between the explanatory variables are all less than 0.7. Indeed, the presence of the multicollinearity problem is a sign of redundancy of information in the model and deteriorates its quality.

Table 5: Correlation matrix - state-owned enterprises

	DR	CL	FS	CFI	SHC	CSTA	ICA	RETA	LOGI
DR	1,00	-0,27	0,37	-0,53	0,47	-0,25	-0,00	-0,16	0,11
CL	-0,27	1,00	-0,09	0,30	-0,09	0,05	-0,12	0,16	0,27
FS	0,37	-0,09	1,00	-0,08	0,09	-0,17	0,29	0,19	0,49
CFI	-0,53	0,30	-0,08	1,00	-0,30	0,27	0,06	0,22	0,40
SHC	0,47	-0,09	0,09	-0,30	1,00	-0,05	-0,09	-0,04	0,02
CSTA	-0,25	0,05	-0,17	0,27	-0,05	1,00	-0,16	0,00	0,07
ICA	-0,00	-0,12	0,29	0,06	-0,09	-0,16	1,00	0,19	0,36
RETA	-0,16	0,16	0,19	0,22	-0,04	0,00	0,19	1,00	0,41
LOGI	0,11	0,27	0,49	0,40	0,02	0,07	0,36	0,41	1,00

Source: calculations made by the authors

Table 6: Correlation matrix - private-owned enterprises

	DR	CL	FS	CFI	SHC	CSTA	ICA	RETA	LOGI
DR	1,00	-0,19	0,65	-0,22	-0,02	-0,16	0,17	0,01	0,32
CL	-0,19	1,00	-0,14	0,26	-0,04	0,09	-0,04	-0,12	0,12
FS	0,65	-0,14	1,00	-0,22	-0,06	-0,09	-0,00	0,08	0,30
CFI	-0,22	0,26	-0,22	1,00	-0,11	0,23	0,03	-0,11	0,25
SHC	-0,02	-0,04	-0,06	-0,11	1,00	-0,08	0,21	-0,08	-0,00
CSTA	-0,16	0,09	-0,09	0,23	-0,08	1,00	-0,27	0,10	0,17
ICA	0,17	-0,04	-0,00	0,03	0,21	-0,27	1,00	-0,04	0,25
RETA	0,01	-0,12	0,08	-0,11	-0,08	0,10	-0,04	1,00	0,33
LOGI	0,32	0,12	0,30	0,25	-0,00	0,17	0,25	0,33	1,00

Source: calculations made by the authors

The results of the correlation matrix among state-owned enterprises show that FS, CFI, and SHC have a significant (at the conventional level of significance of p=0.05) negative (positive) impact on DR. The results of the correlation matrix among private enterprises show that FS, CFI, and LOGI have a significant (at the conventional level of significance) negative (positive) impact on DR.

Table 7 shows the multiple regression where we notice that the ratio of multiple correlation (R) in state-owned enterprises is 0.72 and in private enterprises 0.73, i.e. that the ratio of determination in state-owned enterprises is 0.51 and in private enterprises 0.54.

The adjusted ratio of multiple determination (less biased estimate of the ratio of multiple determination in the population - Adjusted R Square) shows about what percentage of variability of the criterion variable in the population can be explained on the basis of knowledge of variability in predictor variables. In the case of state-owned enterprises, it amounts to 0.45 and, therefore, suggests that based on the observed indicators (taken together), about 45.1708% of individual differences in terms of the debt ratio can be explained. Similarly, in private enterprises this indicator is equal to 0.51 (51.318%). Std. error of the estimate in the case of state-owned enterprises is about 15.13% and in the case of private enterprises it is 17.79%.

Table 7: Comparative representation of multiple regression

Regression Statistics	State-owned	Private
Multiple R	0.72	0.73
R Square	0.51	0.54
Adjusted R Square	0.45	0.51
Standard Error	0.15	0.18
Observations	74	163
Heteroscedasticity Breusch-Pagan Test	20.74	37.73
Durbin-Watson autocorrelation	1.72	2.22

Source: calculations made by the authors

Critical values are more than 20.09 at level 0.05. For state-owned enterprises, this value is 20.74 and for private-owned it is 37.73. We reject the thesis that heteroscedasticity is not present (Table 7). There is no sufficient evidence to conclude that heteroscedasticity is not present. The result is expected because the samples include companies from different sectors and industries. The Durbin-Watson statistics show that there is no problem with autocorrelation.

In order to verify the correctness of the obtained predictions, ANOVA test was performed (Table 8 and Table 9) in which the null hypothesis is discussed, which in our case states that in the population there is no linear relationship between the observed indicators on the one hand and the indebtedness ratio on the other.

Table 8: ANOVA overview for state-owned enterprises

	df	SS	MS	F	Significance F
Regression	8	1.56	0.20	8.52	0.00
Residual	65	1.49	0.02		
Total	73	3.05			

Source: calculations made by the authors

Table 9: ANOVA overview for private enterprises

	df	SS	MS	F	Significance F
Regression	8	5.66	0.71	22.35	0.00
Residual	154	4.87	0.03		
Total	162	10.53			

Source: calculations made by the authors

In both cases, the value of Significance F is below the value of F and we can conclude that the null hypothesis is wrong, therefore we can say that in the population there is a linear relationship between the observed indicators and the debt ratio and that it makes sense to use a regression model to explain the situation in the population.

Table 10: Ratios for state-owned enterprises

	Ratios	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
DR	-0.37	0.36	-105.07	0.30	-108.35	0.34
CL	0.00	0.00	0.32	0.75	-0.00	0.00
FS	0.26	0.07	3.490.189	0.00	0.11	0.41
CFI	-0.01	0.03	-0.56	0.58	-0.07	0.04
SHC	0.02	0.03	0.50	0.62	-0.05	0.08
CSTA	0.12	0.10	1.141.951	0.26	-0.09	0.33
ICA	0.67	0.09	7.177.215	0.00	0.49	0.86
RETA	0.06	0.08	0.73	0.47	-0.10	0.22
LOGI	0.02	0.04	0.47	0.64	-0.06	0.10

Source: calculations made by the authors

Table 11: Ratios for private enterprises

	Ratios	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
DR	0.66	0.19	3.392.185	0.00	0.27	1.037.467
CL	-0.01	0.00	-449.64	0.00	-0.02	-0.01
FS	-0.04	0.03	-157.68	0.12	-0.10	0.01
CFI	-0.04	0.02	-213.27	0.03	-0.09	-0.00
SHC	0.06	0.02	2.991.081	0.00	0.02	0.09
CSTA	0.03	0.06	0.44	0.66	-0.10	0.15
ICA	0.44	0.05	8.191.704	0.00	0.34	0.55
RETA	-0.30	0.06	-473.98	0.00	-0.42	-0.17
LOGI	-0.03	0.02	-1.00	0.16	-0.08	0.01

Source: calculations made by the authors

The empirical statistical results provide basis for logical conclusion and appropriate policy implications. Such results point to a need for a more detailed analysis of country-specific and macroeconomic variables that potentially cause different financial behavior of observed companies.

5. CONCLUSION

In our study the recent we identified advances and challenges in the literature and suggests some directions for future research. The results obtained allow us to make several observations, including their scope and limits to guide future research. The aim of our study was to research the capital structure of the listed companies in Bosnia and Herzegovina and identify the typical capital structure and its key determinants.

The subject of this study is the capital structure of the listed companies in bosnia And Herzegovina in the period before the global pandemic in 2020. This research on the capital market of a developing country shows that state and private enterprises behave differently when choosing the source of financing. The results of the research on private and state enterprises listed on the Banja Luka Stock Exchange are specific. Unlike previous research that observed enterprises according to their size or affiliation to individual industries, the focus of our research is enterprises of different ownership structures.

We reject the main hypothesis. So, there is a significant linear relationship between the specific indicators and the debt ratio in listed companies in Bosnia and Herzegovina. It can be concluded that there are no symptoms of heteroscedasticity in the regression model.

In general, we can say that both groups of enterprises have a low debt ratio; in state-owned enterprises, total assets are financed on average from borrowed funds of 28%, while this percentage in private enterprises is 20%. The low indebtedness of state-owned enterprises can be explained by the fact that no significant funds have been invested in these enterprises. On the other side, the state is borrowing from most utility companies in order to acquire assets for these companies, giving them the assets for disposal mainly free of charge. Observing the ratio of share capital and total capital, we can see that private enterprises have a higher ratio of share capital to total capital. Furthermore, Bosnia and Herzegovina belongs to the group of common law countries that are traditionally financed from bank loans.

The study points to the specifics of the capital structure in private and publicly listed joint-stock companies. The first thing observed in the regression model of these two groups of enterprises is the opposite sign of intercept; while in private enterprises it is 0.66 in state enterprises it is -0.37. In addition to the intercept, other explanatory variables have different effects on the indebtedness ratio of these enterprises. The growth of the current liquidity ratio and the financial stability ratio leads to an increase in the indebtedness of state-owned enterprises, while in the case of private enterprises the growth of these ratios reduces the indebtedness. The negative relation between leverage and liquidity in cases of Croatia, Hungary and Poland was found by De Jong et al. (De Jong, Kabir, & Nguyen, 2008) and confirmed by Sarlija & Harc (2012) in the Croatian case. With the growth of the ratio of real

estate and total assets, the indebtedness of state-owned enterprises is growing, while that of private companies is declining.

The stated opposite influence of certain ratios on the indebtedness of the enterprises can be explained by a number of factors. State-owned enterprises emerged in the privatization process when social ownership was transformed into state-owned, with no additional capital increase by the state. In the case of borrowing, state-owned enterprises find it easier to obtain borrowed capital due to guarantees are given by the government to banks for loans to these enterprises. The only way in which the capital of these companies increases (apart from withholding profits) is the revaluation of fixed assets, which leads to both an increase in assets and an increase in capital. Through the influence of the ratio of financial stability, we notice that state-owned enterprises finance the growth of long-term assets from borrowed sources, while with private companies the situation is reversed. Also, the higher the share of real estate in total assets with state-owned enterprises, the higher the indebtedness. In the case of private enterprises, the situation is reversed mainly due to the fact that real estate is financed from the owner's own funds, taking into account that the most illiquid part of the assets should be mostly financed from their own sources.

Observing only at state-owned enterprises, we see that the largest impact on indebtedness within the observed variables has the ratio of inventories and current assets (0.67). With the growth of this ratio, i.e. the share of inventories in short-term assets, there is an increase in indebtedness, which mainly refers to short-term liabilities to suppliers. The next is the ratio of financial stability, i.e. financing of fixed assets with long-term sources. On average, 79% of long-term assets are covered by long-term sources while the rest is financed from borrowed sources. Further growth of this ratio leads to an increase in indebtedness since the state does not have the funds for further investments in these companies. The results of our research on the positive correlation between fixed assets and indebtedness are correlated with the results (Ryan & Zingales, 1995, Kremp, Elma, & Gerdesmeier, 1999, Frank & Goyal, 2009, Titman and Wessels, 1988). Consequently, with the growth of capital towards long-term assets, there is a decrease in indebtedness.

The most important explanatory variable of indebtedness in private enterprises as well as in state-owned enterprises is the share of inventories in short-term assets, with the influence of this ratio being less expressed in private enterprises. Enterprises in Bosnia and Herzegovina use spontaneous sources of financing, i.e. financing liabilities to suppliers, as well as other free sources is very expressed as stated in the research of Malinić et al. (2013).

Of the seven variables observed, the growth of four variables has an inverse effect on indebtedness. Thus, the growth of short-term assets in short-term liabilities but also long-term assets in long-term sources leads to a decrease in indebtedness, which implies that private enterprises finance this growth from their own sources.

The same situation is with the share of real estate in total assets; as this share grows — indebtedness falls. The same conclusion was reached in the research of Romanian companies (Nivorozhkin, 2002) as well as Malinić et al. (2013) on Serbian companies. A lower level of indebtedness of private enterprises can be observed by analyzing the ratio of capital coverage of assets, where the average value of this ratio in private enterprises is above one, which indicates that one part of short-term assets is financed from the capital.

The sample used in this research is only the companies listed on the Banja Luka Stock Exchange. The limitation of this search is the sample size which can be considered low. Indeed, although the sample in this study is statically acceptable it is nevertheless limited and heterogeneous. This could affect the accuracy of the results and leave some doubts about the generalization of the study to all shareholders companies. In future studies we intend to investigate which factors determine the capital structure in sectors and industries. Future studies must conduct a comparative analysis of the affected countries to enhance the study's coverage. Further research may be conducted by using other capital markets to explore more information regarding the effect of the variables affecting the capital structure. In addition, further research may also be conducted by using other proxies or adding more variables, sample size, and research period to get a better result. For some future research, a pandemic crisis should be considered as well as its impact on the observed variables. Also, future researchers could overcome the limitations by combining the theoretical and empirical studies in a paper.

REFERENCES

Ahmadimousaabad Aiyoub, Norkhairul Hafiz Bajuri, Agha Jahanzeb, Meisam Karami, and Saif Ur Rehman. "Trade-off theory, pecking order theory and market timing theory: a comprehensive review of capital structure theories." *International Journal of Management and Commerce Innovations* 1, no. 1 (2013): 11-18

Albart, Nicko, Bonar Marulitua Sinaga, Perdana Wahyu Santosa, and Trias Andati. "The Effect of Corporate Characteristics on Capital Structure in Indonesia." *Journal of Economics, Business, & Accountancy: Ventura* 23, no. 1 (2020): 46-56

Amole, Bilqis Bolanle, Ik Muo, and Kamaldeen A. Lawal. "Corporate Governance and Financial Performance of Money Deposit Banks in Nigeria." *Review of Innovation and Competitiveness: A Journal of Economic and Social Research 7,* no. 1 (2021): 75-98

Bajaj, Yukti, Smita Kashiramka, and Shveta Singh. "Application of capital structure theories: a systematic review." *Journal of Advances in Management Research (2020)*

Baker, Malcolm, and Jeffrey Wurgler. "Market timing and capital structure." *The journal of finance 57,* no. 1 (2002): 1-32

Belas, Jaroslav, Beata Gavurova, and Peter Toth. "Impact of selected characteristics of SMES on the capital structure." *Journal of Business Economics and Management 19, no. 14* (2018): 592-608

Berk, Ales. "Determinants of leverage in Slovenian blue-chip firms and stock performance following substantial debt increases." *Post-communist economies* 18, no. 4 (2006): 479-494

Booth, Laurence, Varouj Aivazian, Asli Demirguc-Kunt, and Vojislav Maksimovic. "Capital structures in developing countries." The journal of finance 56, no. 1 (2001): 87-130

Cornelli, Francesca, Richard Portes, and Mark E. Shaffer. "The capital structure of firms in Central and Eastern Europe." (1996).

Črnigoj, Matjaž, and Dušan Mramor. "Determinants of capital structure in emerging European economies: Evidence from Slovenian firms." *Emerging Markets Finance and Trade* 45, no. 1 (2009): 72-89

Czerwonka, Leszek, and Jacek Jaworski. "Capital structure determinants of small and medium-sized enterprises: evidence from Central and Eastern Europe." *Journal of Small Business and Enterprise Development (2021).*

De Haas, Ralph, and Marga Peeters. "The dynamic adjustment towards target capital structures of firms in transition economies." *Economics of Transition 14,* no. 1 (2006): 133-169

De Jong, Abe, Rezaul Kabir, and Thuy Thu Nguyen. "Capital structure around the world: The roles of firm-and country-specific determinants." *Journal of banking & Finance 32,* no. 9 (2008): 1954-1969

Delcoure, Natalya. "The determinants of capital structure in transitional economies." *International Review of Economics & Finance 16,* no. 3 (2007): 400-415

Denčić-Mihajlov, Ksenija, Dejan Malinić, and Konrad Grabiński. "Capital structure and liquidity during the financial crisis in Serbia: implications for the sustainability of the economy." *Post-Communist Economies 27,* no. 1 (2015): 91-105

Dragota, Mihaela, and Andreea Semenescu. "A dynamic analysis of capital structure determinants. Empirical results for Romanian capital market." *Theoretical and Applied Economics* 4, no. 4 (2008): 65-80

Fan, Joseph PH, Sheridan Titman, and Garry Twite. "An international comparison of capital structure and debt maturity choices." *Journal of Financial and quantitative Analysis 47*, no. 1 (2012): 23-56

Frank, Murray Z., and Vidhan K. Goyal. "Capital structure decisions: which factors are reliably important?." *Financial management 38*, no. 1 (2009): 1-37

Gallegos Mardones, Juan, and Gonzalo Ruiz Cuneo. "Capital structure and performance in Latin American companies." *Economic research-Ekonomska istraživanja 33*, no. 1 (2020): 2171-2188

Gan, Lining, Pengzhen Wei, Xiaosong Zheng, and Junqiu Wang. "The effect of cash flow on the capital structure dynamic adjustment: evidence from Chinese listed companies." Transformations in Business & Economics 17 (2018), Vol. 17, No 3C (45C), pp. 453-468

Gaud, Philippe, Elion Jani, Martin Hoesli, and Andre Bender. "The capital structure of Swiss companies: an empirical analysis using dynamic panel data." *European financial management 11*, no. 1 (2005): 51-69

Graham, John R., and Mark T. Leary. "A review of empirical capital structure research and directions for the future." *Annu. Rev. Financ. Econ. 3*, no. 1 (2011): 309-345

Grossman, Sanford J., and Oliver D. Hart. "Corporate financial structure and managerial incentives." In *The economics of information and uncertainty*, pp. 107-140. University of Chicago Press, 1982.

Harris, Milton, and Artur Raviv. "The theory of capital structure." *the Journal of Finance 46*, no. 1 (1991): 297-355

Honggang, Cao, Chen Kai, and Zhong Xu. "The linear regression method of the influencing factors of cultural industry based on the classification of structural data sources." *Cluster Computing 22*, no. 3 (2019): 6123-6132

Jaworski, Jacek, and Leszek Czerwonka. "Meta-study on relationship between macroeconomic and institutional environment and internal determinants of enterprises' capital structure." *Economic research-Ekonomska istraživanja 32*, no. 1 (2019): 2614-2637

Jensen, Michael C., and William H. Meckling. "Theory of the firm: Managerial behavior, agency costs and ownership structure." In *Corporate Governance*, pp. 77-132. Gower, 2019.

Jõeveer, Karin. "Sources of capital structure: Evidence from transition countries." *CERGE-EI Working Paper 306 (2006).*

Kayhan, Ayla, and Sheridan Titman. "Firms' histories and their capital structures." *Journal of financial Economics 83*, no. 1 (2007): 1-32

Li, Kang, Jyrki Niskanen, and Mervi Niskanen. "Capital structure and firm performance in European SMEs: Does credit risk make a difference?." *Managerial Finance* 45, no. 5 (2018): 582- 601

Kenourgios, Dimitris, Georgios A. Savvakis, and Theofanis Papageorgiou. "The capital structure dynamics of European listed SMEs." *Journal of Small Business & Entrepreneurship 32*, no. 6 (2020): 567-584

Kremp, Elizabeth, Elmar Stöss, and Dieter Gerdesmeier. "Estimation of a debt function: evidence from French and German firm panel data." *Corporate finance in Germany and France. A joint research project of Deutsche Bundesbank and the Banque de France, SSRN working paper* (1999).

Kuč, Vukašin, and Đorđe Kaličanin. "Determinants of the capital structure of large companies: Evidence from Serbia." *Economic Research-Ekonomska Istraživanja 34*, no. 1 (2021): 590-607

Kumar, Satish, Riya Sureka, and Sisira Colombage. "Capital structure of SMEs: a systematic literature

review and bibliometric analysis." *Management Review Quarterly 70,* no. 4 (2020): 535-565

Kyvik, Oyvin. "The global mindset: A must for international innovation and entrepreneurship." *International Entrepreneurship and Management Journal 14,* no. 2 (2018): 309-327

Jaworski, Jacek, and Leszek Czerwonka. "Meta-study on relationship between macroeconomic and institutional environment and internal determinants of enterprises' capital structure." *Economic research-Ekonomska istraživanja 32,* no. 1 (2019): 2614-2637

Mac an Bhaird, Ciaran, and Brian M. Lucey. "Determinants of the capital structure of smes: A seemingly unrelated regression approach." *Available at SSRN 1018383 (2007).*

Martinez, Lisana B., Valeria Scherger, and M. Belén Guercio. "SMEs capital structure: trade-off or pecking order theory: a systematic review." *Journal of Small Business and Enterprise Development 26. No. 1* (2018): 105-132

Jensen, Michael C. "Agency costs of free cash flow, corporate finance, and takeovers." *The American economic review* 76, no. 2 (1986): 323-329

Modigliani, Franco, and Merton H. Miller. "The cost of capital, corporation finance and the theory of investment." *The American economic review* 48, no. 3 (1958): 261-297

Myers, Stewart C., and Nicholas S. Majluf. "Corporate financing and investment decisions when firms have information that investors do not have." *Journal of financial economics 13,* no. 2 (1984): 187-221

Myers, Stewart C. "Capital structure." *Journal of Economic perspectives 15,* no. 2 (2001): 81-102

Nivorozhkin, Eugene. "The dynamics of capital structure in transition economies." *Economics of Planning 37,* no. 1 (2004): 25-45

Nivorozhkin, Eugene. "Capital structures in emerging stock markets: the case of Hungary." *The Developing Economies 40,* no. 2 (2002): 166-187

Parsons, Christopher, and Sheridan Titman. "Empirical capital structure: A review." *Foundations and TrendsŽ in Finance 3,* no. 1 (2009): 1-93

Pepur, Sandra, Marijana Ćurak, and Klime Poposki. "Corporate capital structure: the case of large Croatian companies." *Economic research-Ekonomska istraživanja 29,* no. 1 (2016): 498-514

Rajan, Raghuram G., and Luigi Zingales. "What do we know about capital structure? Some evidence from international data." *The journal of Finance 50,* no. 5 (1995): 1421-1460

Rico, Belda and Bernardí Cabrer-Borrás. "Necessity and opportunity entrepreneurs: Survival factors." *International Entrepreneurship and Management Journal 14,* no. 2 (2018): 249-264

Santosa, Perdana Wahyu. "The effect of financial performance and innovation on leverage: Evidence from Indonesian food and beverage sector." *Organizations and Markets in Emerging Economies 11,* no. 2 (2020): 367-388

Šarlija, Nataša, and Martina Harc. "The impact of liquidity on the capital structure: a case study of Croatian firms." *Business Systems Research: International journal of the Society for Advancing Innovation and Research in Economy 3,* no. 1 (2012): 30-36

Serghiescu, Laura, and Viorela-Ligia Vńidean. "Determinant factors of the capital structure of a firm-an empirical analysis." *Procedia Economics and Finance 15 (2014): 1447-1457*

Stulz, RenéM. "Managerial control of voting rights: Financing policies and the market for corporate control." *Journal of financial Economics 20 (1988): 25-54*

Titman, S., and R. Wessel. "The Determinants of Capital Structure Choice" The Journal of Finance 43, no. 1 (1998): 1-19

Triandafil, Cristina Maria, and Petre Brezeanu. "CEE corporate finance peculiarities: comparative approach in relation with developed countries", *Management & Marketing* 5, no. 3 (2010): 77-92

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CAPITAL STRUCTURE DETERMINANTS OF LISTED PRIVATE AND STATE COMPANIES: EVIDENCE AND LESSONS FROM BOSNIA AND HERZEGOVINA
Grujić Miloš, Poljašević Jelena

IMPACT OF ENTREPRENEURIAL ACTIVITIES ON ORGANISATIONAL INNOVATIVENESS OF SMALL AND MEDIUM ENTERPRISES (SMES) IN OSUN STATE, NIGERIA
Nafiu Isola Badiru

QUALITY OF LIFE DEPENDENCE ON PUBLIC TRANSPORT ACCESSIBILITY
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