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The impact of working capital management on SME profitability – evidence from Kosovo*

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Abstract

The study attempts to show the impact of working capital management on the profitability of ninety-eight Kosovo-based SMEs, primarily in the manufacturing and construction sectors. The data were obtained from the financial statements of these companies for the years 2010 through 2020, and the assumptions were verified using the Ordinary least square (OLS) method. To express SMEs profitability, return on assets (ROA) is taken as a dependent variable, while to express working capital management, independent variables are taken: the inventory turnover period (INTP), receivables collection period (TRCP), trade payable period (TPP), and cash conversion cycle (CCC). In addition, are taken four control variables (size of companies, current ratio, sustainable growth, and leverage), which are not a variable of interest in the study but could influence the outcomes. The results reveal that SMEs increase profitability by decreasing the cash INTP and increasing TRCP, TPP, and CCC. By analyzing the effect of working capital management on profitability in the context of SMEs in Kosovo, this research contributes new knowledge to the existing literature.

Key words: *profitability, working capital management, SMEs, financial statements, Kosovo*

JEL classification: *G30, G31, G32*

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1. Introduction

Profit maximization is the main goal of each company and thus, the increase of shareholders' wealth. Therefore, the factors that affect profitability have been the main concern of managers and of various researchers. The leading component that directly affects the company's profitability is working capital management and liquidity. While working capital management is about managing current assets and current liabilities, on the other hand, the company's ability to pay these current liabilities has expressed its liquidity. For these reasons, working capital management has become a crucial and delicate issue for businesses of any nature, especially in maintaining the optimal levels of key components of assets and current liabilities, respectively, via inventory management, cash, receivables, and payables.

In the modern operating environment of companies, available resources are limited, so working capital management is believed to have a key role in achieving a high level of profitability via the use of these resources. That means that the company's liquidity largely determines its profitability, while liquidity and profitability are not the same, but are the essential objectives of a company. Attentive managing of working capital is very important, especially for manufacturing companies, because current assets (eg. inventory and receivables) represent a major part of their assets (Arunkunar and Ramanan, 2013) or cash, prepaid expenses, short-term investments, inventory, and receivables (Ponsian et al., 2014).

As stated by Gitman and Zutter (2016), working capital management is an important element that reflects in increased sales and in achieving better results to have an optimal level of liquidity and profitability. In this regard, there is an urgent need to optimize working capital management, requiring companies to focus more on reasonable and fair use and control of their resources, ie to have comprehensive management of their short-term assets and liabilities.

The basic principles of working capital management are minimizing used capital and improving efficiency in the use of short-term assets such as cash, inventories, receivables, and payables (Lamichhane, 2019). The more carefully the working capital is managed, the lower the risk of the optimal possession of the size of cash, inventory, receivables, and payables, which are very necessary for the proper functioning of various business activities. Working capital optimization minimizes the demand for working capital financing and maximizes the income and wealth of the company. Effective working capital management intends to ensure that a company has good cash access to the funds needed for daily operating expenses, while at the same time ensuring to finance of company assets most productively.

Kosovo's economy, especially the private sector, faces many factors that can hinder the speed of return of resources used by companies. As a result, proper

management of these resources is required, while working capital is the most important resource.

While in most developed countries, the manufacturing and construction sectors are the main drivers of sustainable development, in Kosovo's economy, the sectors mentioned below are the main drivers for sustainable development and the main contributors to the country's GDP. In Kosovo in 2020, 40,056 different companies were active with a total of 191,021 employees. In this number of companies, according to Statistical Agency of Kosovo, manufacturing companies participated with 14.5% of the total number of companies, with 17.7% of employees and 12.9% of the total turnover, while construction companies participated with 9.59% of the total number of companies, with 11.4% of employees and 10.6% of total turnover. The above statistics show that manufacturing and construction companies with 24.09% of the total company structure and 23.5% of the total turnover despite not being given enough attention and support. Since these companies are the main carriers of economic development in all developed and developing countries, our work is focused on analyzing working capital management and its impact on profitability. The analysis results are also expected to show an attractive situation for potential investors in the SME sector in manufacturing and construction.

The main purpose of this paper is to evaluate the impact of working capital management on the profitability of SMEs operating in Kosovo, comparing the achieved results of working capital management and the levels of the performance indicator expressed through return on assets (ROA). With this in mind, we propose the following research hypotheses:

> H_1 – Inventory turnover period and the company profitability have a significant relationship between them.
>
> H_2 – The relationship between the trade receivable collection period and the company's profitability will be significant.
>
> H_3 – The trade payable period and the company's profitability have a significant relationship between them.
>
> H_4 – The cash conversion cycle and the company's profitability have a significant relationship between them.

The structure of the paper is as follows: After introducing the subject matter of this research in the first section, the second section discusses the impacts of working capital management on Kosovo SMEs' profitability and provides a literature review that summarizes the relevant research. The third section describes the research methodology of data collecting and analysis. The fourth section focuses on empirical data and provides an in-depth analysis of the impact of working capital

management on the profitability of SMEs operating in Kosovo. The fifth section explains the results and their economic significance, discussing the process of evaluating the hypotheses formulated at the beginning of the research. The sixth section, Conclusion, summarizes the research objectives, elaborates on the research results and contributions to the scientific field, provides practical implications, and gives recommendations for further research.

2. Literature review

Working capital management is essential for organizations to be able to routinely borrow money from current liabilities while investing substantial sums in current assets. Working capital management gives businesses control over the decision-making process involved in determining the best amounts of, primarily, cash, receivables, inventories, and payables (or even any account that can be treated as an asset or short-term liability). By keeping control of these amounts, businesses can shorten the time it takes to execute their operational tasks and increase profitability.

Several empirical research on this topic supports one or the other theory of capital structure. Researchers are trying to identify key capital structure determinants, but we often find empirical evidence that contradicts each other, even for basic facts (Khaki and Akin, 2020). Most of these empirical studies have been conducted to provide support for the desired perspective based on the theory used to define and manage working capital. Despite the theories used and the extensive empirical literature available on the subject, there is a consensus on the tendency of firms to have an optimal capital structure, but not on the key determinants that influence corporate financing behavior.

Most studies on working capital management have focused on companies operating in the US. These researchers recently expanded the search to test US capital structure theories in developed countries that have similar structures and characteristics to generate a consensus on the factors influencing corporate financing behavior. Ryan and Zingales (1995) through their study, make the first attempts in this direction, to conclude that the same group of determinants of corporate financing, was important for both the US and other G-7 countries. Even researchers Ryan and Zingales (1995), and Ozkan (2001), focused their research primarily on studying these determinants in companies in the US or even in developed countries that have institutional similarities to the US. In the beginning, the focus has been on large companies, because the company size is an important factor in setting perceptions of working capital management (Nobanee and Abraham, 2015), but due to the small and non-representative sample, subsequent studies have focused on SMEs because they have represented a much larger number of companies, and

in most countries, these have dominated the total number of companies in different sectors. In most developing countries, SMEs have their main source of economic growth. Kosovo is also considered a developing country, so the focus of our study is SMEs and working capital management and its relationship with profitability and sustainable growth.

Several studies have concentrated on analyzing the relationship between working capital management and profitability, both theoretically, and empirically. Empirical research has rapid development, especially in recent years as evidenced in the literature on this issue (Prasad et al., 2019; Naumoski, 2019; Vukovic and Jakšic 2019; Chalmers et al., 2020; Sensini, 2020), etc. Within these studies, various constructions for working capital management have been used. The most specific components of the WCM structure encountered in most studies are the inventory turnover period, trade receivables period, trade payable period, and cash conversion cycle (Prša, 2020; Ramos et al., 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021; Mazanec, 2022).

In this study, the company's inventory level is expressed as the ratio of the inventory value multiplied by the number of days in the previous year to the cost of sales. The company needs to track the amount of inventory and not create underloads and overloads with inventory, even though researchers declare pro et contra. According to researchers Eroglu and Hofer (2011), Ching et al. (2011), and Mathuva (2013), inventory underloads lead to reduced productivity, efficiency, and productivity, although maintaining a smaller amount of inventory is related to an aggressive inventory management policy. According to researchers, small amounts of inventory, followed by an aggressive policy can increase productivity as it causes reducing storage costs (Nazir and Afza, 2009; Tauringana and Afrifa, 2013). On the contrary, inventory overload is related to a traditional inventory management policy, which seems that the more inventory we have the less the risk of not meeting the demand of buyers and that it has a positive impact on profitability. Researchers Corsten and Gruen (2004), Kieschnick et al. (2013), Aktas et al. (2015) also favor maintaining a larger inventory even though inventory overload increases its maintenance and financing, and interest costs and higher credit risk. In their study, they found the positive impact of inventory on profitability.

The role and impact of accounts receivable on the profitability of the company have been analyzed in various studies (Banos-Caballero et al., 2014; Abuhommous, 2017; Altaf and Shah, 2018; Dary and James, 2019). The nature of this impact depends on whether the company pursues a traditional or aggressive policy in applying accounts receivable when selling (Garcia-Teruel and Martinez-Solano, 2007; Afza and Nazir, 2009; Tauringana and Afrifa, 2013). The company's traditional policy can increase accounts receivable and thus reduce cash flow as well as profitability because there are times when those accounts receivable often lead to bad debt. An

aggressive policy pursued by the company for accounts receivable, can increase cash flow and thus, profitability.

The third important factor for working capital management is accounts payable. Various researchers, in their research, came to different conclusions, concluding that accounts payable have positive but also negative effects on the profitability of the company. They argue the positive effect of accounts payable on profitability with transaction costs, which means that by reducing these costs, companies increase their operational efficiency and consequently their profitability (Sharma and Kumar, 2011; Bhatia and Srivastava, 2016). By delaying the payment of payables, respectively by increasing the days of accounts payable, companies reduce transaction costs and thus increase profitability. Also, other authors find that late payment of accounts payable offers a cheap alternative source of short-term financing to the company (Yazdanfar and Manhman, 2016). Some other researchers declare the opposite by finding that delayed payables may attract interest on overdue debts (Tryfonidis, 2006; Garcia Jeruel and Martinez-Solano, 2007; Cuñat, 2007; Giannetti et al., 2011).

The Cash conversion cycle (CCC), which is a comprehensive indicator of working capital management, is the fourth crucial component. In other words, the CCC is the result of the addition of TRCP and INTP and the deduction of TPP. Depending on the traditional or aggressive application policy to the constituent components of the CCC, the same will apply to the CCC. An aggressive CCC policy means a shorter period for collecting accounts receivable and maintaining inventory as well as a longer period for paying accounts payable. Applying an aggressive policy is interpreted by researchers as a negative relationship between CCC and profitability (Sharma and Kumar, 2011; Enqvist et al., 2014; Bhatia and Srivastava, 2016). The opposite would be a traditional CCC policy. The long CCC period allows the company to increase sales, eliminate stock out and improve customer relations (Baños-Caballero et al., 2014).

3. Research methodology

The study is descriptive research using secondary sources of data from audited financial statements of mainly manufacturing and construction companies in Kosovo for the period 2010 – 2020 published by the Kosovo Financial Reporting Council. The sample was made by 98 companies in Kosovo, culminating in 1,078 firm-year observations. Company data were used to enable the researcher to conduct an in-depth study of the sample taken for the selected period to study the WCM influence of these companies on profitability.

In this study, the dependent variable of SMEs profitability is Return on Assets (ROA). The use of ROA enables researchers to calculate returns and expenses

related to financial and non-financial assets (Braimah et al., 2021).Based on several studies, working capital management (WCM), contain inventory turnover period (INTP), receivable account collection period (TRCP), payable account payment period (TPP), and the cash conversion cycle (CCC), which are the independent variable (Prša 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021; Mazanec, 2022). Also based on the analyzed literature (Sharma and Kumar, 2011; Bhatia and Srivastava, 2016; Altaf and Shah, 2018), to influence the profitability of the company we included control variables (the size of the company, sustainable growth, current ratio, and the financial leverage). These variables were summarized and analyzed in different components using the multiple regression equation, assisted by SPSS to test the relationship between them. Ordinary Least Squares (OLS) regression model is used:

$$ROA_{it} = \beta_0 + \beta_1 INTP_{it} + \beta_2 L\_TA_{it} + \beta_3 SGr_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (1)$$

$$ROA_{it} = \beta_0 + \beta_1 TRCP_{it} + \beta_2 L\_TA_{it} + \beta_3 SGr_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (2)$$

$$ROA_{it} = \beta_0 + \beta_1 TPP_{it} + \beta_2 L\_TA_{it} + \beta_3 SGr_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (3)$$

$$ROA_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 L\_TA_{it} + \beta_3 SGr_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (4)$$

$$ROA_{it} = \beta_0 + \beta_1 INTP_{it} + \beta_1 TRCP_{it} + \beta_1 TPP_{it} + \beta_1 CCC_{it} + \beta_2 L\_TA_{it} + \\ + \beta_3 SGr_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (5)$$

Table 1 details the approved definitions and basis for the dependent, independent, and control variables.

Table 1: Measurements of Dependent and Independent Variables

Acronym		Measurement	Source
Dependent variable			
ROA	Return on assets	Net profit after taxes / Total assets	Prša 2020; Ramos et al., 2020; Wijaya and Atahau, 2021; Sensini and Vazquez, 2021; Hossain, 2021;
Independent variable			
INTP	Inventory turnover period	Inventories multiplied by the number of days in the year/ Cost of sales	Prša 2020; Ramos et al., 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021; Mazanec, 2022;
TRCP	Trade receivables period	(Receivables multiplied by the number of days in the year / Total sales value	Prša 2020; Ramos et al., 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021; Mazanec, 2022;
TPP	Trade payable period	(Payables multiplied by the number of days in the year / COGS	Prša 2020; Ramos et al., 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021; Mazanec, 2022;
CCC	Cash Conversion Cycle	TRP + INVP – PPP	Prša 2020; Ramos et al., 2020; Sensini and Vazquez, 2021; Hossain, 2021; Al-Momani et al., 2021; Panda et al., 2021;
Control variable			
L_TA	Firm size	Natural logarithm of total assets	Prša 2020; Wijaya and Atahau, 2021; Hossain, 2021; Al-Momani et al., 2021;
CR	Current ratio	Current assets/Current liabilities	Hossain, 2021; Braimah, 2021; Mazanec, 2022; Yousaf and Bris, 2021;
SGR	Sustainable Growth	Return on equity subtracting the rate of earnings retention	Nastiti et al., 2019; Wijaya and Atahau, 2021;
LEV	Leverage	Total debt divided by Total Assets	Wijaya and Atahau, 2021; Sensini and Vazquez, 2021; Al-Momani et al., 2021; Braimah et al., 2021;

Source: Author's elaboration

4. Empirical data and analysis

This section focuses on the interpretation of data on the impact of working capital management on the profitability of SMEs operating in Kosovo, including descriptive statistics, Pearson's correlation analysis as well as regression analysis through the least squares method, therefore, the discussion of the results of the process of evaluating the hypotheses formulated at the beginning of the research.

Table 2 reports the descriptive statistics, minimum, maximum, mean, and standard deviation. In total, 1,078 observations from 98 firms during an 11-year period were used in this study.

Table 2: Descriptive Statistics

Variables	N	Mean	Std. Deviation	Minimum	Maximum
ROA	1,078	0.090	0.171	(0.438)	1.672
TRCP	1,078	121.841	125.147	3.897	668.675
TPP	1,078	102.975	90.923	4.414	779.528
INTP	1,078	149.406	150.218	2.316	838.894
CCC	1,078	168.272	188.905	0.223	891.435
L_TA	1,078	9.766	1.159	6.928	12.240
SGr	1,078	(1.174)	13.193	(261.186)	0.250
CR	1,078	1.280	1.391	0.092	14.619
LEV	1,078	0.486	0.254	0.018	0.993
Valid N (listwise)	1,078				

Source: Author's calculation

In Table 2 we present descriptive statistics for dependent, independent, and control variables. The mean for the dependent variables (ROA) during the study period is 0.09. The mean for TRCP is 121.84 days, which means that to accumulate accounts receivable, SMEs need 121.84 days. The mean of TPP is 102.97 days which means that SMEs need an average of 102.97 days to repay their loan suppliers. The mean for INTP is 149.41 days. Overall, the mean for CCC of SMEs sampled is 168.27 days. As the inventory turnover period, the collection (payment) period of receivables (payables) is longer than 100 days due to installment sales by construction companies, which also affects the length of the period of payment of payables. The firm size mean (L_TA) is 9.77. The mean for the Current ratio (CR) is 1.28 suggesting that the current assets of SMEs on average can cover their current liabilities 1.28 times. During the period, SMEs in Kosovo have a mean for leverage is 0.49 (49.0%), while the mean of sustainable growth is negative (- 1.17).

Table 3: The Pearson Correlation analyses of the study variables

Variables		ROA	INTP	TRCP	TPP	CCC	L_TA	SGR	CR	LEV
ROA	Pearson Corr.	1								
	Sig. (2-tailed)									
INTP	Pearson Corr.	-0.180**	1							
	Sig. (2-tailed)	0.001								
TRCP	Pearson Corr.	-0.108*	0.239**	1						
	Sig. (2-tailed)	0.023	0.001							
TPP	Pearson Corr.	-0.013	0.463**	0.314**	1					
	Sig. (2-tailed)	0.788	0.001	0.001						
CCC	Pearson Corr.	-0.209**	0.731**	0.701**	0.095*	1				
	Sig. (2-tailed)	0.001	0.001	0.001	0.046					
L_TA	Pearson Corr.	-0.125**	-0.270**	0.047	-0.167**	-0.103*	1			
	Sig. (2-tailed)	0.008	0.001	0.324	0.001	0.031				
SGR	Pearson Corr.	-0.513**	0.024	-0.013	-0.089	0.053	0.030	1		
	Sig. (2-tailed)	0.001	0.622	0.778	0.062	0.270	0.524			
CR	Pearson Corr.	-0.120*	0.198**	0.316**	-0.190**	0.458**	-0.009	0.046	1	
	Sig. (2-tailed)	0.012	0.001	0.001	0.001	0.001	0.852	0.332		
LEV	Pearson Corr.	0.006	-0.099*	-0.043	0.157**	-0.183**	-0.021	-0.158**	-0.288**	1
	Sig. (2-tailed)	0.899	0.037	0.366	0.001	0.001	0.655	0.001	0.001	
	N	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078

Source: Author's calculation

The Pearson correlation measures the strength of the linear relationship between two variables. For the sake of result clarification, Pearson's correlation coefficient is used to find the degree of the linear relationship between two continuous variables. Table 3 contains the results of the correlation analysis, which is based on the relationship between the dependent and independent variables. This point demonstrates that all explanatory variables are correlated. In other words, this is an attempt to prevent difficulties associated with multicollinearity. Return on assets has a negative correlation with INTP at significant level of 99.9% (r = – 0.180, p = 0.001). Like INTP, TRCP has a negative correlation with ROA at the significant level of 97.7%, TRCP (r = – 0.108, p = 0.023). TPP has a negative correlation but not significant with ROA at the level of 21.2% (r = – 0.013, p = 0.788), while CCC at significant level of 99.9% (r = -0.209, p = 0.001). In analyzing the independent variables and the relationships between them, we can conclude that the independent variables have a positive relationship with each other. What is worth emphasizing, is the estimated coefficients between the Independent variables are all less than 0.75, indicating, the absence of potential multicollinearity (Gujarati, 2004), and for that, problems of multicollinearity between variables are not observed. Also, the article examined multicollinearity using the VIF, and the results suggested that the VIF value is less than five and that the reciprocal of the VIF is greater than 0.20. These numbers revealed the absence of multicollinearity. These findings are summarized in Table 4.

Table 4: Variance inflation factor

Variables	VIF	1/VIF
INTP	1.350	0.741
TRCP	1.691	0.591
TPP	1.527	0,655
L_TA	1.104	0.906
SGR	1.435	0.697
CR	1.142	0.876
LEV	1.034	0.967

Note: ROA is a dependent variable; CCC – is an excluded variable

Source: Author's calculation

After conducting the preliminary analysis, the study evaluates the panel data model for determining the effect of independent variables on banks' liquidity risk.

Table 5 presents the estimated statistics of equations 1, 2, 3, and 4 that report the relationship between working capital management and the profitability of Kosovo SMEs.

Table 5: Regression Results on the Effect of WCM on profitability (ROA) OLS model, using 1,078 observations, Dependent variable: ROA

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value
Const	0.418	0.001[a]	0.306	0.001[a]	0.343	0.001[a]	0.353	0.001[a]	0.408	0.001[a]
INTP	-0.001	0.001[a]							0.000	0.001[a]
TRCP			0.000	0.052[c]					-0.000	0.258
TPP					0.001	0.028[a]			0.000	0.470
CCC							0.000	0.001[a]		
L_TA	-0.025	0.001[a]	-0.016	0.007[a]	-0.019	0.002[a]	-0.020	0.003[a]	-0.024	0.001[a]
SGR	-0.007	0.001[a]	-0.007	0.001[a]	-0.007	0.001[a]	-0.007	0.001[a]	-0.007	0.001[a]
CR	-0.012	0.057[b]	-0.013	0.020[b]	-0.019	0.001[a]	-0.005	0.343	-0.009	0.142
LEV	-0.086	0.009[a]	-0.076	0.009[a]	-0.073	0.012[b]	-0.086	0.005[a]	-0.087	0.002[a]
R-square		0.335	0.303		0.305		0.328		0.337	
Adjust. R-square		0.327	0.295		0.297		0.320		0.327	
F – value		43.75	31.43		36.44		37.59		31.41	
p-value (F)		0.000[a]	0.000[a]		0.000[a]		0.000[a]		0.001[a]	

[a, b] and [c] – denote statistical significance at 1%, 5%, and 10%, respectively

Source: Author's computations from 2010 – 2020 companies' data

Table 5 presents the results of the regression analysis for ROA. The coefficient of determination R-square measures the proportion of variability in the dependent variable that is explained by independent variables. The model shows that the R-square for each model is 0.335, 0.303, 0.305, and 0.328 respectively, which indicates around 32% of the relationship between the variance of profitability and the variance of independent variables (INTP, TRCP, TPP, and CCC). In this case, there will be another factor (control variables) that can contribute to the effect of the profitability of Kosovo SMEs.

5. Results and discussion

A wide range of research findings have been provided by the literature on the effect of working capital management on SME profitability. Based on the above models, we can comment on the results of the impact of working capital management on SME's profitability. Thus, model 1 in Table 5 examines the relationship between the Inventory turnover period (INTP) and Return on Assets (ROA). Results show that Model 1 explains 33.5% of the variation in ROA. During the analysis of these relationships, we found that there is a negative and significant relationship between INTP and ROA with a coefficient of 0.001 and p-value = 0.001. This also leads

us to the conclusion that the H_1 hypothesis according to which *Inventory turnover period (INTP) and the company profitability have a significant relationship between them* is accepted and it is concluded that INTP is statistically significant at a level of 1%, but due to the small beta coefficient, is economically insignificant. This result is consistent with Sharma and Kumar (2011), Enqvist et al. (2014) Bhatia and Srivastava (2016). In addition, the overall model with an F value of 43.75 is statistically significant, and the adjusted R^2 implies that this model explains 32.70% of the change in the company's profitability.

Model 2, examines the relationship between the Trade receivables period (TRCP) and Return on Assets (ROA) and the results show that this model explains 30.3% of the variation in ROA. The TRCP coefficient is 0.001 and it has a value of p = 0.052; this relationship has a statistical significance at a 10% level. In this model, we try to test the second hypothesis according to which *the relationship between the commercial receivables collection period (TRCP) and the company profit (ROA) will be significant*. Based on this, we conclude that TRCP is statistically significant, but beacuse of coefficient of 0.001, that there is no economic significance. It means that, the higher of TRCP, the better the profitability of these companies. This result is the opposite of many studies (Gul et al., 2013; Tran, 2015; Le et al., 2017; Altaf and Shah, 2018), etc. In addition, the overall model is statistically significant, with an F value of 31.43. The adjusted R square of 0.295 means that this model explains 29.5% of the ROA companies' variation.

Model 3 examines the relationship between Trade payable period (TPP) and Return on Assets, and the results show that model 3 explains 30.5% of the variation in ROA. The model presented in the table tests the third hypothesis according to which *the trade payable period (TPP) and the company's profitability (ROA) have a significant relationship between them*. Regression results show that the TPP coefficient is positive at 0.001 and is significantly different from zero (p-value = 0.028). Based on this, it can be concluded that the third hypothesis is accepted and it is concluded that TPP is statistically significant at a significance level of 5%. This suggests that the longer a company extends its supplier-billing period, the more opportunities it has to increase its working capital; from there, the profitability increases. In other words, to increase profits, companies need to extend the payment time of the goods within their allowances so that they are not penalized for overdue payments. In addition, the overall model is statistically significant, with an F value of 36.44 (p> 0.05). The adjusted R square model is 0.297, which means that 29.7% of the company variation in ROA is explained by this model. This result is the same as studies by Gul et al. (2013), Enquist (2014), Yunos (2015), Panda et al. (2020). However, it differs from the findings by Tran (2015); Le et al. (2016), Ho et al. (2017).

Model 4 examines the truthfulness of the fourth hypothesis that *the cash conversion cycle (CCC) and the company profitability (ROA) have a significant relationship between them*. The regression results show that the CCC coefficient is 0.00 with a

positive p-value of 1%. Results show that Model 4 explains 32.8% of the variation in ROA. This is in contrast to the research results of when who found a statisticaly positive relationship between CCC and profitability, but we cannot say that it has a pronounced economic significance.

Model 5 is a model where all the variables are included for finding out the most significant variables affecting the ROA. The model shows that INTP, L_TA, SGR, and LEV are very significant and TRCP, TPP, and CR are not significant. In this model, CCC is excluded from the model due to collinearity, INTP and TPP (even not significantly) are positively related to ROA, and TRCP, L_TA, SGR, CR, and LEV are negatively related to ROA. The adjusted square R of the model is 32.7%, with an F value of 31.41, which is very significant ($p < 0.01$).

The regression models for ROA as a proxy of firm profitability are influenced by the control variables. There is a significant positive relationship between L_TA and ROA in all models; this indicates that firms can increase ROA by decreasing the size of the company. In addition, there is also a significant negative relationship between SR and LEV with ROA. Between CR and ROA there is a (significant in models 1, 2, and 3) negative relationship, this indicates that a higher current ratio of firms negatively affects ROA.

The paper is important for a number of reasons. First, the findings can help business owners and SME managers create and put into practice working capital management plans. This could be crucial for increasing profitability and, consequently, for the survival and growth of SMEs, which does a lengthy process of inventory conversion, receivables collection, and payables payment characterize. Even if the findings of this inquiry are typical of developing nations, their growth will create ideal conditions for new investments in the sectors studied.

The current research creates a lot of space for future studies based on the financial statements of SMEs operating in Kosovo. Working capital management practices of SMEs in Kosovo can be integrated with their financing practices. Integrating research results and working capital management best practices with the SME financing structure can help maximize firm value. Therefore, this issue should be explored in the future to create an overview of the prospects of survival and development of SMEs in Kosovo.

6. Conclusion

The paper's main objective is to evaluate the impact of working capital management policies on ninety-eight Kosovo SMEs' profitability for the period 2010-2020. The sample companies were selected mostly from manufacturing and construction SMEs, including retail ones. To achieve the objectives of the study, we used an

OLS regression model. Tests carried out on the estimates suggested that the model is reliable in explaining the effect of working capital management on profitability.

From a methodological point of view, we used the individual WCM determinants (INTP, TRCP, TPP, and CCC) as independent variables, while ROA, as a proxy of profitability, represented the dependent variable. In addition, to influence the profitability of the company, we included control variables (the size of the company, sustainable growth, current ratio, and financial leverage). We used panel data that were calculated through the small squares method, according to which we assessed the impact of individual determinants on the profitability of SMEs. The results provide some interesting insights.

In particular, even though SMEs in Kosovo operate with trade receivables in the short term, issuing a longer period of trade receivables (TRCP) does not affect profitability. However, the empirical findings should be interpreted according to the type of SME that was sampled for analysis. Many SMEs have little room for maneuvering in trade policy because they have a diverse clientele that also dictates the period of accounts receivable.

Based on previous research, the results of variables such as INVP and TPP, showed a negative relationship with return on assets, concluding that investing in inventories and extending the payables payment period increases costs that they are unable to compensate.

Because the CCC in model 5 has shown high collinearity, we consider the impact of this variable on WCM to be negligible.

Without questioning the significance of this paper for science, the main limitation of the study is the unavailability of secondary financial data for SMEs operating in Kosovo. Financial data for each SME had to be extracted separately from the Kosovo Financial Reporting Council website, as this agency has not been able to compile a modern website that would allow researchers much easier access to these signs. Therefore, we suggest that in the future study, the researcher should include the other sectors of Kosovo SMEs, increasing the sample size and use the dynamic model. Finally, future studies can add financial and non-financial variables expected to moderate the effect of working capital management on profitability, as may corporate governance.

By examining the relationship between effective working capital management and profitability, the study makes a contribution by taking into account sustainable growth. Additionally, the findings have practical implications for managers, investors, bankers and other stakeholders searching for the best way to increase business profitability through effective and efficient working capital management. Additionally, managers and financial institutions can utilize the study's findings to help them decide whether to finance working capital needs or invest in current assets.

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Utjecaj upravljanja obrtnim kapitalom na profitabilnost malih i srednjih poduzeća na primjeru Kosova

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Sažetak

Studija pokušava pokazati utjecaj upravljanja obrtnim kapitalom na profitabilnost devedeset osam malih i srednjih poduzeća sa sjedištem na Kosovu, prvenstveno u sektoru proizvodnje i građevinarstva. Podaci su dobiveni iz financijskih izvještaja ovih tvrtki za razdoblje od 2010. do 2020. godine, a pretpostavke su provjerene metodom običnog najmanjeg kvadrata (OLS). Za izražavanje profitabilnosti malih i srednjih poduzeća, povrat na imovinu (ROA) uzima se kao zavisna varijabla, dok se za izražavanje upravljanja radnim kapitalom uzimaju nezavisne varijable: razdoblje obrta zaliha (INTP), razdoblje naplate potraživanja (TRCP), razdoblje plaćanja prema dobavljačima (TPP) i ciklus konverzije gotovine (CCC). Osim toga, uzete su četiri kontrolne varijable (veličina poduzeća, tekući omjer, održivi rast i financijska poluga), koje nisu varijabla od interesa za studiju, ali bi mogle utjecati na ishode. Rezultati otkrivaju da mala i srednja poduzeća povećavaju profitabilnost smanjenjem gotovinskog INTP-a i povećanjem TRCP-a, TPP-a i CCC-a. Analizirajući učinak upravljanja obrtnim kapitalom na profitabilnost u kontekstu SMS-ova na Kosovu, ovo istraživanje pridonosi novim saznanjima postojećoj literaturi.

Ključne riječi: *profitabilnost, upravljanje obrtnim kapitalom, MSP, financijski izvještaji, Kosovo*

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