Influence of Working Capital Management on the SME’s Profitability - Evidence from Kosovo

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Abstract

The study aims to show the impact of working capital management on the profitability of 98 SMEs operating in Kosovo, mainly in the manufacturing and construction sectors. The data are taken from the financial statements of these companies for the period 2010 - 2020, while the Ordinary least square (OLS) was used to confirm the hypotheses. 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, four control variables (business size, current ratio, sustainable growth, and leverage) are included, which are not important to the study but can affect the results. The findings show that SMEs boost profitability by lowering INTP and raising TRCP, TPP, and CCC. This study concludes that managing working capital correctly and efficiently is crucial for increasing a company's profitability.

Keywords: Profitability, Working capital management, SMEs, Financial statements, Kosovo.

Introduction

Profit maximization is the primary goal of each company and thus the increase of shareholders' wealth. Therefore, the factors that affect profitability have been managers' and researchers' primary concerns. Working capital management and liquidity are the primary factors that directly impact a company's profitability (Singhania et al., 2014). 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 critical and delicate issue for businesses of any nature, especially in maintaining the optimal levels of essential components of assets and current liabilities through inventory management, cash, receivables, and payables.

In the modern operating environment of companies, available resources are limited, so it is believed that working capital management has a crucial role in achieving a high profitability level through using these resources (Osazevbaru et.al., 2021). This 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 (e.g., inventory and receivables) represent a significant part of company assets (Arunkunar & Ramanan, 2013) or cash, prepaid expenses, short-term investments, inventory, and receivables (Ponsian et al. 2014).

Working capital management, as stated by (Gitman & Zutter, 2016), is a crucial factor that reflects in more outstanding sales and improved outcomes to achieve an appropriate level of liquidity and profitability. In this regard, there is an urgent need to maximize working capital management, which involves firms concentrating more on the reasonable and fair use and control of their resources, i.e., having total management of their short-term assets and liabilities. Working capital management is critical because it reveals the nature of the link between the manner and cost of financing assets, as current assets are often funded with short-term cash. Net working capital is the gap between current assets and current obligations, which, if financed by long-term sources, may increase the company's responsibilities and expenses, negatively affecting its profitability (Subramanyam, 2014; Nguyen et al., 2020).

Minimizing used capital and increasing the effectiveness of using short-term assets, including cash, inventory, receivables, and payables, are the fundamental principles of working capital management (Lamichhane, 2019). The more carefully the working capital is managed, the lower the risk to the optimal possession of the size of cash, inventory, receivables, and payables, which are necessary for the proper functioning of various business activities. Working capital optimization reduces the need for working capital financing while increasing the company's income and wealth. Effective working capital management aims to ensure that a company has good cash access to the funds required for daily operating expenses while also ensuring that company assets are financed productively.

Kosovo's economy, especially the private sector, faces many factors that can hinder the return of resources used by companies. As a result, proper management of these resources is required, while working capital is the essential
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. Of this number of companies, manufacturing companies participated with 14.5% of the total number of companies, 17.7% of employees, and 12.9% of the total turnover. In comparison, construction companies participated with 9.59% of the total companies, 11.4% of employees, and 10.6% of total turnover (https://ask.rks.gov.net). The above statistics show that manufacturing and construction companies with 24.09% of the entire company structure and 23.5% of the total turnover despite not being given enough attention and support. Since these companies are the primary 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.

**Literature Review**

The importance of working capital management is closely related to the ability of companies to invest large sums of money in current assets relying on current liabilities as a frequent source of their financing. By managing working capital, companies manage the decision-making process related to managing and determining the optimal amounts, mainly of cash, receivables, inventory, and payables (or even any account that can be treated as an asset or short-term liability). By managing these amounts, companies can shorten their time to carry out their operating activities and thus increase profitability.

Several empirical studies support one or the other capital structure theory. Researchers attempt to identify key capital structure determinants, but empirical evidence often contradicts itself, even for basic facts (Khaki and Akin, 2020). Most of these empirical studies have been conducted to support the desired perspective based on the theory used to define and manage working capital. Despite the approaches 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 with 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 corporate financing determinants was necessary for the US and other G-7 countries. Even researchers (Ryan and Zingales, 1995; Wald, 1999; Ozkan, 2001) focused their research on studying these determinants in US companies or developed countries with institutional similarities to the US. Initially, the focus was on large companies because the company size is essential in setting perceptions of working capital management (Nobanee and Abraham, 2015). Still, due to the small and non-representative sample, subsequent studies have focused on SMEs because they have represented a much larger number of companies. In countries, these have dominated the total number of companies in different sectors. In most developing countries, SMEs have their primary source of economic growth. Kosovo is also considered a developing country, so our study focuses on SMEs and working capital management and its relationship with profitability and sustainable development.

Several studies have concentrated on analyzing the relationship between working capital management and profitability, both theoretically and empirically. Empirical research has a rapid development, especially in recent years, as evidenced in the literature on this issue (Prasad et al., 2019; Naumovski, 2019; Vukovic and Jakšić, 2019; Chalmers et al., 2019; Dary and James, 2019; Banos-Caballero et al., 2014; Prša, 2020; Prasad et al., 2019; Sensini and Vazquez, 2021; Hossain, 2021; Almomani et al., 2021; Panda et al., 2021; Mazanec, 2022)

For this study, the company’s inventory level is expressed as the ratio of the value of inventory 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 & Hofer, 2011; Ching et al., 2011; 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 by maintaining storage costs (Prša, 2020; Afza, 2009; Tauringana & Afrifa, 2013). On the contrary, inventory overload is related to a traditional inventory management policy. The more inventory we have, the less the risk of not meeting buyers’ demand, positively impacting profitability. Researchers (Blinder & Maccini, 1991; Corsten & Gruen, 2004; Kieschnick et al., 2013; Aktas et al., 2015) also favor maintaining a more extensive inventory even though inventory overload increases its maintenance and financing, and interest costs and higher credit risk. Their study found that the positive impact of inventory on profitability can lead to higher interest costs and credit risk. In this regard, we have put forward the following hypothesis:

H1 - Inventory turnover period (INTP) and the company profitability have a significant relationship.

The role and impact of accounts receivable on the company’s profitability have been analyzed in various studies (Banos-Caballero et al., 2014; Abuhumous, 2017; Altal and Shah, 2018; Dary and James, 2019). This impact depends on whether the company pursues a traditional or aggressive policy in applying accounts receivable when selling (Garcia-Teruel & Martinez-Solano, 2007; Afza & Nazir, 2009; Tauringana & 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. On the other hand, an aggressive accounts receivable policy also directly impacts accounts payable and increases the confidence of the company’s suppliers, which is closely linked to higher profits in the long run. Based on the above discussion, we can identify
the following hypothesis:

H2 - The trade receivable collection period (TRCP) and the company’s profitability have a significant relationship.

The second 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 adverse effects on the profitability of the company. They argue the positive impact 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). Companies minimize transaction costs and thus increase profitability by delaying payables payments. 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 Martínez Solano, 2007; Curiat, 2007; Giannetti et al., 2011). Based on the above discussion, this study establishes the following hypothesis:

H3 - The trade payable period (TPP) and the company’s profitability have a significant relationship.

The cash conversion cycle (CCC) is a comprehensive measure of working capital management. In other words, the CCC results from 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 and a more extended period for paying accounts payable. Applying an aggressive approach is interpreted by researchers as a negative relationship between CCC and profitability (Sharma & Kumar, 2011; Enqvist et al., 2014; Bhatia & Srivastava, 2016). The opposite would be a traditional CCC policy. The long CCC period allows the company to increase sales, eliminate stock, and improve customer relations (Báhos-Caballeró et al., 2014). Based on the relationship between the cash conversion cycle and profitability, we have supposed following hypothesis:

H4 - The cash conversion cycle (CCC) and the company’s profitability have a significant relationship.

Research Methodology

The study is descriptive research using secondary data sources, namely data from audited financial statements of mainly manufacturing and construction companies in Kosovo for 2010 - 2020, published by the Kosovo Financial Reporting Council (KCFR). 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 the SMEs profitability is Return on Assets (ROA). ROA enables researchers to calculate returns and expenses related to financial and non-financial assets (Braimah et al., 2021).

According to several studies, working capital management (WCM) includes the independent variables inventory turnover period (INTP), receivable account collection period (TRCP), payable account payment period (TPP), and cash conversion cycle (CCC) (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; Alttag 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. The statistical model used for this study is as follows:

\[ ROA_{it} = \beta_0 + \beta_1 INTP_{it} + \beta_2 L_TA_{it} + \beta_3 SG_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \epsilon_{it} \] (1)

\[ ROA_{it} = \beta_0 + \beta_1 TRCP_{it} + \beta_2 L_TA_{it} + \beta_3 SG_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \epsilon_{it} \] (2)

\[ ROA_{it} = \beta_0 + \beta_1 TPP_{it} + \beta_2 L_TA_{it} + \beta_3 SG_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \epsilon_{it} \] (3)

\[ ROA_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 L_TA_{it} + \beta_3 SG_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \epsilon_{it} \] (4)

\[ ROA_{it} = \beta_0 + \beta_1 INTP_{it} + \beta_1 TRCP_{it} + \beta_1 TPP_{it} + \beta_1 CCC_{it} + \beta_2 L_TA_{it} + \beta_3 SG_{it} + \beta_4 CR_{it} + \beta_5 LEV_{it} + \epsilon_{it} \] (5)

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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Return on assets</td>
<td>Net profit after taxes / Total assets</td>
</tr>
<tr>
<td>INTP</td>
<td>Inventory turnover period</td>
<td>Inventories multiplied by the number of days in the year/ Cost of sales</td>
</tr>
<tr>
<td>TRCP</td>
<td>Trade receivables period</td>
<td>( Receivables multiplied by the number of days in the year / Total sales value</td>
</tr>
<tr>
<td>TPP</td>
<td>Trade payable period</td>
<td>(Payables multiplied by the number of days in the year / COGS</td>
</tr>
</tbody>
</table>
| CCC     | Cash | TRP + INVP - PPP | (Prša, 2020; Sensini & Vazquez, 2021;
Table 1. Measurements of Dependent and Independent Variables:

<table>
<thead>
<tr>
<th>Control variable</th>
<th>L_TA</th>
<th>Firm size</th>
<th>Natural logarithm of total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>CR</td>
<td>Current ratio</td>
<td>Current assets/Current liabilities</td>
</tr>
<tr>
<td>SGR</td>
<td>SGR</td>
<td>Sustainable Growth</td>
<td>Return on equity subtracting the rate of earnings retention</td>
</tr>
<tr>
<td>LEV</td>
<td>LEV</td>
<td>Leverage</td>
<td>Total debt divided by Total Assets</td>
</tr>
</tbody>
</table>

Table 2: Descriptive Statistics

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

During the research period, the mean for the dependent variables (ROA) is 0.09, suggesting that most SMEs would not generate a good ROA. The maximum value of the current asset to total asset ratio, which indicates the investment philosophy, is 1.672, while the minimum value is (0.438), indicating that some SMEs lose money while others make money. The mean for TRCP is 121.84 days, which means that to accumulate accounts receivable, SMEs need 121.84 days. This implies that businesses will have a tough time recovering debts. The maximum and minimum of TRCP are 668.67 and 3.89, respectively. The mean of TPP is 102.97 days, meaning that SMEs need an average of 102.97 days to repay their loan suppliers, while the maximum and minimum values are 779.52 and 4.41, respectively. The mean for INTTP is 149.41 days; its maximum and minimum values are 838.89 and 2.32, respectively. The inventory turnover ratio varies substantially across the sample SMEs, indicating that most SMEs struggle to manage their inventories. 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. In comparison to other research (Deloof, 2003), the average CCC is much greater than the results among Belgian enterprises (44.5 days) and (Yazdanfar & Öhman, 2016) findings among Swedish SMEs (47.3 days). The average CCC, however, is lower than the findings of (Jose et al., 1996) among listed US enterprises (164 days) and (Lazaridis & Tryfonidis, 2006) among listed Greek firms (189 days). The firm size mean (L_TA) is 9.77.

Empirical Results and Discussion

Table 2 reports the minimum, maximum, mean, and standard deviation statistics. This study uses data from 98 firms over an 11-year period, of which total observations equate to 1,078.

Table 2: Descriptive Statistics

| Source: Author’s computations |

During the research period, the mean for the dependent variables (ROA) is 0.09, suggesting that most SMEs would not generate a good ROA. The maximum value of the current asset to total asset ratio, which indicates the investment philosophy, is 1.672, while the minimum value is (0.438), indicating that some SMEs lose money while others make money. The mean for TRCP is 121.84 days, which means that to accumulate accounts receivable, SMEs need 121.84 days. This implies that businesses will have a tough time recovering debts. The maximum and minimum of TRCP are 668.67 and 3.89, respectively. The mean of TPP is 102.97 days, meaning that SMEs need an average of 102.97 days to repay their loan suppliers, while the maximum and minimum values are 779.52 and 4.41, respectively. The mean for INTTP is 149.41 days; its maximum and minimum values are 838.89 and 2.32, respectively. The inventory turnover ratio varies substantially across the sample SMEs, indicating that most SMEs struggle to manage their inventories. 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. In comparison to other research (Deloof, 2003), the average CCC is much greater than the results among Belgian enterprises (44.5 days) and (Yazdanfar & Öhman, 2016) findings among Swedish SMEs (47.3 days). The average CCC, however, is lower than the findings of (Jose et al., 1996) among listed US enterprises (164 days) and (Lazaridis & Tryfonidis, 2006) among listed Greek firms (189 days). 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).
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 toprevent difficulties associated with multicollinearity. Return on assets has a negative correlation with INTP at the 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). 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 3: The Pearson Correlation analyses of the study variables
Source: Author’s computations

| Variables | ROA  | INTP | TRCP | TPP  | CCC  | L_TA | SGR  | CR   | LEV 
|-----------|------|------|------|------|------|------|------|------|------
| ROA       | 1    | -.180** | -.108* | -.013 | -.209** | -.125** | -.513** | -.120* | 0.006 
| Sig. (2-tailed) | 0.000 | 0.023 | 0.788 | 0.000 | 0.008 | 0.000 | 0.012 | 0.899 |
| INTP      | -.180** | 1    | -.239** | .463** | .731** | -.270** | 0.024 | .198** | -.099* 
| Sig. (2-tailed) | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.822 | 0.001 | 0.037 |
| TRCP      | -.108* | .239** | 1    | .314** | .701** | 0.047 | -.013 | .316** | -.043 
| Sig. (2-tailed) | 0.023 | 0.001 | 0.001 | 0.001 | 0.001 | 0.324 | 0.778 | 0.001 | 0.366 |
| TPP       | -.013 | .463** | .314** | 1    | -.095 | -.167** | -.089 | -.190** | -.157** 
| Sig. (2-tailed) | 0.788 | 0.001 | 0.001 | 0.046 | 0.001 | 0.062 | 0.001 | 0.001 |
| CCC       | -.209** | .731** | .701** | .095* | 1    | -.103* | 0.053 | .458** | -.183** 
| Sig. (2-tailed) | 0.001 | 0.001 | 0.001 | 0.046 | 0.001 | 0.303 | 0.270 | 0.001 | 0.001 |
| L_TA      | -.125** | .270** | .047 | -.167** | -.103* | 1    | 0.030 | -.009 | -.021 
| Sig. (2-tailed) | 0.008 | 0.001 | 0.324 | 0.001 | 0.031 | 0.524 | 0.852 | 0.655 |
| SGR       | -.513** | .024 | -.013 | -.089 | 0.053 | 0.030 | 1    | 0.046 | -.158** 
| Sig. (2-tailed) | 0.001 | 0.622 | 0.778 | 0.062 | 0.270 | 0.524 | 0.332 | 0.001 |
| CR        | -.120* | .198** | .316** | -.190** | .458** | -.009 | 0.046 | 1    | -.288** 
| Sig. (2-tailed) | .012 | 0.001 | 0.001 | 0.001 | 0.001 | 0.852 | 0.332 | 0.001 |
| LEV       | .006 | -.099* | -.043 | .157** | -.183** | -.021 | -.158** | -.288** | 1 
| Sig. (2-tailed) | .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 

Table 4: Variance inflation factor (VIF)

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTP</td>
<td>1.350</td>
<td>0.741</td>
</tr>
<tr>
<td>TRCP</td>
<td>1.691</td>
<td>0.591</td>
</tr>
<tr>
<td>TPP</td>
<td>1.527</td>
<td>0.665</td>
</tr>
<tr>
<td>L_TA</td>
<td>1.104</td>
<td>0.906</td>
</tr>
<tr>
<td>SGR</td>
<td>1.435</td>
<td>0.697</td>
</tr>
<tr>
<td>CR</td>
<td>1.142</td>
<td>0.876</td>
</tr>
<tr>
<td>LEV</td>
<td>1.034</td>
<td>0.967</td>
</tr>
</tbody>
</table>

ROA is a dependent variable; CCC - is an excluded variable management and the profitability of Kosovo SMEs.

OLS model, using 1.078 observations, Dependent variable: ROA
Table 5 displays the results of the ROA regression analysis. The coefficient of determination R-square measures the proportion of variability in the dependent variable explained by independent variables. The model shows that the R-square for each model is 0.353, 0.303, 0.305, and 0.328, indicating a 32 percent 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 influence the profitability of Kosovo SMEs. 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. While analyzing these relationships, we found 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 H1 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 significance level of 1%. This result is consistent with (Sharma & Kumar, 2011; Enquist et al., 2014; Bhatia & Srivastava, 2016). In addition, the overall model with an F value of 43.75 is statistically significant, and the adjusted R2 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 has a 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. It means that the higher 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 & Shah, 2018). 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.” The TPP coefficient is positive at 0.001 and significantly different from zero (p-value = 0.028) according to the regression results. Based on this, the third hypothesis is accepted, and TPP is statistically significant at a significance level of 5%. This implies that the longer a company extends its supplier-billing period, the more opportunities it has to increase its working capital; from there, profitability rises. In other words, to increase profits, businesses must extend the payment time of goods within their allowances so that they are not penalized for late 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 this model explains 29.7% of the company variation in ROA. 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, Yazdanfar & Öhman, 2016; Ho, Le, and Le, 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." 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 (Gill, Biger, and Mathur, 2010) who found a positive relationship between CCC and profitability.

Model 5 is a model where all the variables are included in determining the most significant ones affecting the ROA. The model shows that INTP, L_TA, SGR, and LEV are significant and TRCP, TPP, and CR are not substantial. 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 control variables influence the regression models for ROA as a proxy of firm profitability. There is a significant positive relationship between L_TA and ROA in all models; this indicates that firms can increase ROA by decreasing the company size. In addition, there is also a significant negative relationship between SR and LEV with ROA. There is an important relationship between CR and ROA; this indicates that a higher current ratio of firms negatively affects ROA.

Conclusion

The primary purpose of this article is to evaluate the influence of working capital management policies on the profitability of Kosovo SMEs. The example firms were mostly SMEs in the manufacturing and construction industries and retailers. The data was compiled from 98 SMEs’ financial statements produced between 2010 and 2020 by the Kosovo Council for Financial Reporting.

Descriptive statistics, Pearson correlation, VIF, and multiple regression analysis were used to examine the data. Regarding methodology, we employed the various WCM determinants (INTP, TRCP, TPP, and CCC) as independent variables, with ROA as a proxy for profitability as the dependent variable. In addition, we introduced control factors to impact the firm’s profitability (company size, sustainable growth, current ratio, and financial leverage).

The results offer several exciting insights. In particular, this study has found a significant positive relationship between INTP with ROA, which means that a shorter inventory turnover period to customers increases the firm’s profitability. It also found that TPP is positively related to ROA, meaning that the longer the payable period, the higher the profitability. The third independent variable, TRCP, does not significantly affect ROA, while CCC has high insignificant collinearity, which we consider negligible on WCM.

The study’s fundamental weakness is the lack of secondary financial data for Kosovo-based SMEs. Because the Kosovo Financial Reporting Council could not build a current website that would provide academics with easier access to these indicators, the financial data for each SME had to be retrieved independently.

The paper is significant for several reasons. First, the findings can assist entrepreneurs and SME managers develop and implementing working capital management strategies. This might be critical for enhancing profitability and, as a result, for the survival and development of SMEs in the examined industry, which is defined by a long time of inventory conversion, collection of receivables, and payment of payables. Even though the outcomes of this investigation are typical of emerging countries, their development will generate favorable circumstances for fresh investments in the areas covered.

In terms of research, the study paves the way for future studies based on financial data from SMEs in Kosovo. Integrating research findings and best practices of working capital management into the financial structure of SMEs will contribute to the optimization of business value. Consequently, this topic should be researched more in the future to provide an overview of the prospects for the survival and development of SMEs in Kosovo.

References


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QUALITY
Access to Success Vol. 24, No. 192/ January 2023 160