The Influence of Financial Ratios and Intellectual Capital on Financial Difficulties in Construction Companies

Hasanuddin*  
University of Muhammadiyah Palopo  
dhienlies74@gmail.com

M. Risal  
University of Muhammadiyah Palopo  
mrisal@umpalopo.ac.id

Muhammad Aqsa  
University of Muhammadiyah Palopo  
muhammadaqsa@umpalopo.ac.id

Abstract. The research aims to investigate the influence and relationship of financial ratios with the liquidity ratio indicators, leverage, profitability, activity, growth, and intellectual capital indicators with Human Capital, Structure Capital, and Customer Capital on financial difficulties (financial distress) with cash flow analysis indicators, corporate strategy, financial statements on construction companies. Therese was conducted in Sengkang, Wajo District, South Sulawesi using non-probability sampling and purposive sampling. The data analysis technique used is double linear regression analysis. The results of the research findings proved that both simultaneous and partial intellectual ratios of the financial and capital have no significant effect on financial difficulties. In comparison, the correlation analysis shows the ratio of financial and intellectual capital simultaneously not significant to financial distress or negative relation where the greater the variable of financial and intellectual capital ratio, the greater the decrease in the value of variables of financial difficulties.

Keywords: financial ratio, Intellectual capital, financial distress

INTRODUCTION

Increased financial performance in developing a company can be done by maximizing the potential of its resources and performing effectively and efficiently to avoid a situation that could lead to financial difficulties or even bankruptcy. If those unexpected situations happen, it could affect the owner and all parties associated with the company, such as investors, creditors, suppliers, consumers, employees, and the government [1].

The management of the company needs to analyze the financial performance periodically to obtain realistic information so that the company can take precautions before the larger problems appear. The precautions could be in the forms of restructuring debts, reducing production costs and employees, doing mergers with other companies, being taken over, or selling certain assets to maintain company existence [2].

In keeping the company's performance, financial statements are indispensable to provide information about the state of the company's financial performance that has been achieved periodically. The analysis used to promote financial difficulties is the analysis of financial ratios as measuring instruments and media that can demonstrate actual financial performance [1].

The financial situation of the company should be supervised carefully to avoid inefficient and ineffective use, which could cause problems. The financial condition of the company needs to be maintained because it relates to partners and the government. Financial ratios consist of liquidity ratio, leverage, profitability, activity, and growth [1].

While keeping the company in maximizing the effectiveness and efficiency in achieving goals that have been planned, it is also necessary to develop invisible resources through increased knowledge, competence, creativity, innovation, integrity, and patterns. In addition, building a good relationship between employees and the company, known as the Capital Confidential, consisting of human capital, structural capital, and relational capital [3].

Some of these factors require strategic management in determining the best solution to avoid financial difficulties. Therefore, the researchers investigate the extent of “the influence of financial ratios and Intellectual Capital to financial difficulties (financial distress) in the company” in which the impacts could maintain the sustainability of financial performance and corporate productivity, and also as precautions before any problems occur in the company.

To maintain operational sustainability, a company should have bargaining power as a business. Maximizing the company’s value equals to maximizing the main purpose of the enterprise, which is maintaining the financial performance of the company by ensuring the risk management as a control function [1], [4], [5].
Structural Capital (SC) is the company's ability to create conditions desired by employees, and to promote available potential to create a corporate culture in fulfilling the company's activity processes through recruitment and training employees to work with each other in realizing and determining the goals set by the company [8, 10].

Relational Capital (RC) or Customer Capital (CC) is the company's ability to maintain good relations with its network, including suppliers, investors, creditors, or other parties cooperated with the company [8].

Limitations of financial hardship are the company's crisis conditions due to its inability to pay financial obligations at the due date. If the condition lasts for the long-term, it could lead to bankruptcy. Variables that can indicate the state of financial difficulty are cash flow, corporate strategy, and financial statements, [1], [6], [11], [12], [13].

Cash flow analysis is a statement of cash flows reporting the company's cash flows in the current period as well as describing future cash flows. The difficulty of cash flows is due to the disbalance between the flow of money and the expenditure for spending and the error of the management of cash flows (Cash Flow) in financing the company's operations [14].

The company's strategic analysis is a series of decisions and managerial actions that determine the company's performance. It emphasizes on the observation and evaluation with the principle of transparency, accountability, value for money, and environmental threats by looking at the strengths and weaknesses of the company in the form of risk management implementation [13], [14], [15].

A financial report is the management's responsibility to give financial information to those who have instilled some funds into the company. The financial statements cover the results of a balanced report, cash flow, profit or loss, and equity changes that can
provide information about the current condition of the company [16].

Based on theoretical and empirical studies, conceptual frameworks among the variable relationships can be described as in Figure 1.

**METHOD**

The current research used associative quantitative research to identify the influence and the relationship between two or more variables, while the data collection was conducted using interviews and questionnaires. The research is located in the village of Tempe District Wajo Regency of South Sulawesi. The research population is a medium-sized company engaged in construction or contracting selected using nonprobability sampling using the purposive sampling technique, which is an unrandomized sample selection technique with information obtained from 10 companies.

**RESULT & DISCUSSION**

After going through several tests, the results can be concisely described as in Table 1.

Table 1. Regression Equation

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Model</th>
<th>Unstandardized Coefficients Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>1 Constant</td>
<td></td>
<td>10.537</td>
</tr>
<tr>
<td>R. FINANCE (X1)</td>
<td>-0.086</td>
<td>0.085</td>
</tr>
<tr>
<td>M. INTELLECTUAL (X2)</td>
<td>-0.117</td>
<td>0.140</td>
</tr>
</tbody>
</table>

Based on data analysis through SPSS, it can be seen a constant value of 10.537 with an interpretation that the financial ratio and intellectual capital value is 0, the financial difficulties value is 10.537, so the regression equation acquired $Y' = a + b_1X_1+ b_2X_2 ; Y' = 10.537-0.086X_1 -0.117X_2$. From the table above, the regression coefficient of a financial ratio is -0.068, and an intellectual capital ratio is -0.068. In this research, both financial ratios and intellectual capital variables have a coefficient of negative value, meaning that the negative relationship occurs. In other words, the greater the financial and intellectual ratio, the greater the decrease in the value of the financial difficulties variable.

**Double correlation Analysis (R)**

Based on the Table 2, it is obtained R number of 0.396. It indicates that the link between the financial ratios and intellectual capital is simultaneously difficult, which is closer to the value of 0, and the lower relationship is the opposite.

Table 2. Double Correlation Analysis Results

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>R Square</td>
</tr>
<tr>
<td>1</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Analysis of Determinations ($R^2$)

Based on the table above (Model Summary), it was obtained $R^2 (r)$ Square at 0.156 or (15.6%). It can be interpreted that the donation percentage influences the variable effect of the financial ratios and intellectual capital simultaneously on variables of the financial difficulties of 0.156 or 15.6%. While 84.4% is influenced by other variables not included in this study, meaning that the low influence of the variable donation percentage of the financial ratio and intellectual capital simultaneously to the variable financial difficulties (not significant). In other words, the closer the value to 0, the more influence that occurs, or vice versa.

**Test Coefficient of Regression Together (Test F)**

From the output of the regression analysis, it can be known the F values as in the following table:

Table 3. F test Result

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
<td>DF</td>
<td>Mean Square</td>
<td>F</td>
</tr>
<tr>
<td>Regression</td>
<td>141</td>
<td>2</td>
<td>71</td>
<td>0.649</td>
</tr>
<tr>
<td>Residual</td>
<td>751</td>
<td>7</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>902</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 3, the Anova t count $F = 0.649$, at the significance of $\alpha = 5\%$ Based on the criteria, Ho is accepted when $F$ count $< F$ table, $t$ table = 4.1028, and the interpretation of the Compare $F$ count with $F$ table. The value of $F$ count $< F$ table $(0.649 < 4.1028)$, then Ho is accepted. It can be explained that there is no significant effect between financial ratios and intellectual capital against financial difficulties.

**Partial Regression Coefficient Test (Test T)**

The variable regression coefficient of the financial ratios test

Based on the table coefficient above, $t$ count = -0.1037, on the significance of $\alpha = 5\%$, $t$ table = 2.20499. The Ho test criteria are Ho is accepted if
T table < T count < T table, and Ho is rejected if T count < -t table or T count > t table, then compare T count with T table. As can be seen from the table, T-value count < T table (-1.037 < 2.20499) then Ho is accepted. If Ho is accepted, it means that there is no significant effect between the financial ratio and financial difficulties.

**Testing of variable regression coefficient of intellectual capital**

Based on the table, coefficient t count = (-0, 785), at the significance of α = 5%, t table = 2.365, Ho criteria is accepted if t table ≤ t count ≤ t, and Ho is rejected if T count < -t table or T count > t table, then compare T count with T table. From the table, the T count > t Table (-0, 785 < 2.365), thus Ho is accepted, meaning that financial ratio did not significantly influence the intellectual capital of financial difficulties.

The results of the study show that the intellectual ratio and the intellectual capital have negative influences on the difficulties in construction companies at Wajo District. The greater the ratio will decrease the current financial difficulties. It also indicates the contribution percentage of 15.6% from the influence of independent variables (financial ratio and intellectual capital) to the dependent variable. Therefore, the company management needs to improve its financial performance to maximize the effectiveness and efficiency of companies to avoid financial difficulties.

**Conclusion**

Based on the results of the research findings and data analysis, the current study draws the following conclusions:

1. The coefficient of negative value means that there is a negative relationship between the financial ratio and intellectual capital variable to the financial difficulties variable. The increase of the financial ratios and intellectual capital variables will decrease the value of the distress financial variable.
2. The low relationship (insignificant) between the financial ratio and the intellectual capital could lead to financial difficulties due to the R-value is 0.396.
3. The low influence of the variable donation percentage on independent financial ratio and intellectual capital to dependent variables (financial difficulties), where the number R² (r Square) amounted to 0.156 or (15.6%).
4. The financial ratio of intellectual and capital is not a simultaneous influence which affects the financial difficulties in the construction company in Wajo District, because of F count < f table (0.649 < 4.1028).
5. Partial financial ratios and intellectual capital do not affect the financial difficulties in the company's construction in Wajo District. It is due to the value of T counts < T table.

**References**


