

**THE EFFECT OF LIQUIDITY RATIO ON FINANCIAL
PERFORMANCE VIEWED FROM RETURN ON ASSETS (ROA)
IN SUB COMPANIES OF CONSTRUCTION AND BUILDING
SECTOR LISTED ON THE INDONESIAN
STOCK EXCHANGE OF 2016-2020**

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Abstract

The success of a company hinges on the collective performance of its employees. Thus, it becomes imperative for companies to enhance the quality of their workforce's performance. Numerous factors exert influence over employee performance, among them are teamwork, work motivation, and job satisfaction. These factors collectively kindle individuals' commitment towards accomplishing tasks to their fullest potential within the company. This study is conducted to reveal the impact of teamwork, work motivation, and job satisfaction on employee performance, specifically examining the case of the J&T Sibuhuan-Sosa office. Employing an associative research approach with a quantitative methodology, this study encompasses the entire employee population of the Sibuhuan-Sosa J&T office, totaling 30 participants. The analysis employs multiple linear regression via SPSS 22. The findings of the partial analysis reveal that both teamwork and work motivation yield a positive and noteworthy influence on the performance of J&T Sibuhuan-Sosa employees. Conversely, job satisfaction appears to lack significant impact on these employees. Notably, when taken together, teamwork, work motivation, and job satisfaction demonstrate a significant effect on the employees of J&T Sibuhuan-Sosa.

Keywords: Cash Ratio, Current Ratio, Financial Performance, ROA, Quick Ratio

1. INTRODUCTION

The company is a place where the production of goods or services occurs with the aim of making a profit. One way to find out if a company is earning a profit/loss can be seen from the company's financial performance. The financial performance of a company in general is an achievement that has been achieved by the company in managing the company's finances in a certain period.

In the dynamic and ever-changing realm of corporate finance, the assessment of liquidity and its profound influence on financial performance emerges as a pivotal and captivating subject. Enterprises navigate an intricate landscape of economic challenges, market fluctuations, and operational intricacies, placing paramount significance on the pursuit of an optimal equilibrium between short-term liquidity and long-term financial well-being (Sebastian et al., 2020). The interaction between a company's present assets and obligations, encapsulated in liquidity ratios, guides strategic financial choices and orchestrates the symphony of operational efficiency.

The object of research is construction and building sub-sector companies listed on the Indonesia Stock Exchange (IDX). The reason this sub-sector was chosen as the object of research is because of its role in supporting Indonesia's economic growth. The growing construction sector has played a significant role in Indonesia's economy, with a 5.01% growth in 2017 and a GDP increase of 10.38%, surpassing the previous year. In 2018, the total value of construction projects in Indonesia, excluding the oil and gas sector, was predicted to reach IDR 451.337 billion (USD 32.2 billion). The Indonesian construction sector has been growing at a rate of 7-8% annually, driven by key infrastructure projects that are crucial for its expansion. Between 2017 and 2022, the construction market in Indonesia is projected to grow by 6.6%. Notably, in 2017, the construction sector contributed 10.38% to the GDP. Civil construction is expected to further grow by 4%, reaching IDR 293.827 billion (USD 21 billion) in 2018, while building construction (especially in the residential and industrial sectors) is projected to increase by 1% in 2018, amounting to IDR 157.511 billion (USD 11.3 billion). Furthermore, Indonesia stands as a top Asian country for construction market growth.

While the evolving construction sector exhibits positive trends, financial challenges remain integral to construction companies, as their success hinges on sound financial conditions depicted in financial reports. Financial performance signifies the culmination of achievements resulting from various endeavors. It implies an assessment of how effectively a company has implemented sound financial practices. Among the essential performance indicators is the Profitability Ratio, which gauges a company's capacity to generate profit or income within a specific period. This ratio reflects management efficiency through the profit derived from sales and investments. Achieving a satisfactory profit requires the effective utilization of assets or capital, which can be evaluated using the Return on Assets (ROA).

The Return on Assets (ROA) measures a company's ability to generate net profit from its asset utilization. A higher ROA indicates better performance. According to (Sanjaya & Sipahutar, 2019), ROA represents a company's capability to generate profit through its diverse capacities and resources, encompassing sales activities, asset utilization, and capital utilization. ROA unveils the virtuosity with which a company deploys diverse assets to generate profits, providing a comprehensive measure of financial acumen (Rostami et al., 2016). It transcends numerical values, embodying the strategic utilization of resources, effectiveness of managerial decisions, and overarching resilience in the face of market fluctuations. Consequently, ROA epitomizes a comprehensive symbol of a company's financial vitality.

Numerous financial ratios are employed to assess a company's profit-generating capability, among which are liquidity ratios. Liquidity ratios ascertain a company's ability to meet short-term obligations that are due. Commonly used liquidity ratios include the current ratio, quick ratio, and cash ratio (Mahaputra & Adnyana, 2012). Utilizing liquidity ratios provides insights into the current and future status of a company's current assets and short-term obligations. These ratios assist in determining a company's financial health, as liquidity is closely linked to profitability. Liquidity reflects the availability of working capital required for operational activities. According to (Rudianto, 2019), "Liquidity ratios are used to assess the ability to pay short-term debt, comprising current ratio, quick ratio, and cash ratio."

The current ratio, as defined by Kasmir (2016), gauges a company's ability to meet short-term obligations or liabilities that will soon mature. In other words, it measures the availability of current assets to cover short-term obligations that will come due. Afriyanti & Chabachib (2011) noted a significant negative impact of the current ratio on return on assets, while Daeli (2017) found a positive and significant relationship between the two.

The quick ratio, also known as the acid test ratio, indicates a company's ability to meet short-term obligations without considering inventory. It reflects the company's capability to pay current liabilities quickly using its most liquid current assets. Tias et al. (2020) reported a significant negative impact of the quick ratio on return on assets, whereas Menhard (2017) found a positive and significant effect.

The cash ratio measures the amount of cash available to pay debts. It indicates the real ability of a company to settle short-term debts promptly. Putri & Sitohang (2019) demonstrated a significant negative impact of the cash ratio on return on assets, whereas Safrina (2018) found no significant effect.

Considering the aforementioned trends and prior research, this study aims to analyze the influence of liquidity ratios on financial performance within the construction and building sub-sector listed on the Indonesia Stock Exchange during the period 2016-2020. The study employs return on assets (ROA) as the instrument to measure financial performance, with the variables comprising the current ratio, quick ratio, cash ratio, and financial performance in terms of return on assets (ROA).

2. LITERATURE REVIEW

2.1. Current Ratio

The Current Ratio serves as a crucial financial metric aimed at assessing a company's capability to fulfill its short-term financial obligations that are impending for settlement (Menhard, 2017). This ratio is instrumental in depicting a company's adeptness in managing its immediate financial commitments by leveraging the aggregate value of its current assets. By utilizing the total sum of current assets, a company gauges its readiness to meet forthcoming short-term financial responsibilities that are poised to mature in the near future. Essentially, the Current Ratio unveils a snapshot of the company's financial health, revealing its capacity to meet impending liabilities promptly.

2.2. Quick Ratio

The Quick Ratio delves into the realm of a company's liquidity by scrutinizing the relationship between its readily available current assets and its current liabilities (Tias et al., 2020). Often referred to as the Acid-Test Ratio, this metric offers insights into the company's ability to address its immediate financial obligations using its most liquid assets. It encompasses assets like cash, cash equivalents, and marketable securities, which can be promptly converted into cash to cover existing debts or current liabilities. This ratio thus encapsulates the company's capability to promptly address financial commitments using its most liquid resources.

2.3. Cash Ratio

The Cash Ratio assumes a role as a vital tool designed to gauge the quantum of cash accessible to satisfy its obligations. In essence, this metric evaluates the extent to which a company possesses readily available cash or cash equivalents, such as funds in checking

accounts or bank savings, that can be withdrawn at any point in time (Ernayani & Sari, 2017). By assessing the Cash Ratio, an understanding of the company's direct cash availability for meeting its financial commitments is gleaned, thus portraying its immediate financial viability.

2.4. Financial Performance

Financial Performance stands as a comprehensive portrayal of a company's fiscal well-being over a specified period. This multifaceted assessment encompasses not only the acquisition and allocation of funds but also delves into the company's ability to manage its resources effectively. It is gauged through a combination of key financial ratios, including capital adequacy, liquidity, and profitability (Nizam et al., 2019). By analyzing these metrics, a holistic representation of the company's financial achievements and operational efficacy is attained. This overarching evaluation serves as a measure of the company's competence in navigating financial complexities and generating profits. It encapsulates the culmination of strategic decisions, operational proficiency, and adaptability to market fluctuations, providing an encapsulated representation of the company's financial success over a defined timeframe.

3. RESEARCH METHODS

This research aims to analyze the impact of liquidity ratios on financial performance, specifically focusing on Return on Assets (ROA). The variables under scrutiny include the Current Ratio, Quick Ratio, Cash Ratio, and Financial Performance as measured by Return on Assets. Employing a quantitative approach, this study utilizes secondary data and employs a panel data regression analysis method.

The research population comprises companies operating within the construction and building sub-sector, all of which are listed on the Indonesia Stock Exchange (IDX). A total of 21 companies were selected as the sample, employing a proportional sampling technique that adhered to specific criteria: (a) Inclusion in the Indonesia Stock Exchange (IDX) listing between the years 2016 and 2020. (b) Availability of comprehensive financial statements spanning from 2016 to 2020. (c) Maintenance of positive net profit (profit after tax) in financial reports across the period from 2016 to 2020.

The intricate interplay between the dependent variable and the independent variables is elucidated in the diagram below:

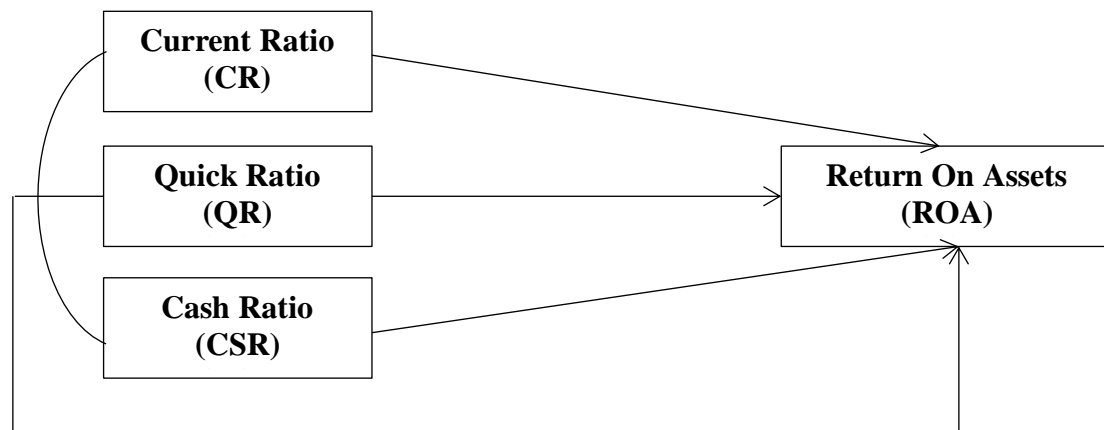


Figure 1. Relationship Between Independent and Dependent Variables

4. RESULTS AND DISCUSSION

4.1. Research Result

4.1.1. Descriptive Statistics

Table 1. Descriptive Statistics

	X1 (CR)	X2 (QR)	X3 (CSR)	Y (ROA)
Mean	1.486450	1.364091	0.381134	0.038801
Median	1.411303	1.304243	0.344723	0.037431
Maximum	2.070909	2.070127	0.768664	0.082762
Minimum	1.086317	0.864143	0.053398	0.000622
Std. Dev.	0.267786	0.331761	0.174939	0.022541
Skewness	0.810989	0.674731	0.177749	0.179401
Kurtosis	2.748359	2.877136	2.510829	2.144672
Jarque-Bera	3.367672	2.295177	0.457083	1.075406
Probability	0.185660	0.317401	0.795693	0.584088
Sum	44.59351	40.92274	11.43401	1.164039
Sum Sq. Dev.	2.079579	3.191896	0.887505	0.014734
Observations	30	30	30	30

Based on the descriptive statistics table, it can be explained as follows:

- a. Current Ratio (X1) has the lowest value of 1.08, the highest value of 2.07. Meanwhile, the average current ratio (X1) is 1.48 and the standard deviation is 0.267.
- b. Quick Ratio (X2) has the lowest value of 0.86 and the highest value of 2.07. Meanwhile, the average quick ratio (X2) is 1.36 and the standard deviation is 0.331.
- c. Cash Ratio (X3) has the lowest value of 0.05 and the highest value is 0.76, the average cash ratio (X3) is 0.38 and the standard deviation is 0.174.

- d. Return On Assets (ROA) (Y) Based on the descriptive statistics table above, the lowest value is 0.00 and the highest value is 0.08. Meanwhile, the average return on assets (Y) is 0.03 and the standard deviation is 0.022.

4.1.2. T Test

Tabel 2. Result of T Test

Variable	T-statistic	P-Value
Current Ratio (X1)	2.071814	0.0383
Quick Ratio (X2)	3.307741	0.0009
Cash Ratio (X3)	1.190559	0.2338

Based on the testing in Table 2, it is indicated that:

- The results of the test reveal that the t-statistic for the independent variable Current Ratio (X1) is 2.071814, whereas the t-table value with $\alpha = 5\%$ and $df = (n - k)$, $df = 27$, where the t-table value is 2.05183. This signifies that the calculated t-statistic value surpasses the t-table value ($2.071814 > 2.05183$). Furthermore, the probability value is also noteworthy, registering at 0.0383 or < 0.05 . Thus, it can be concluded that the Current Ratio (X1) significantly influences Return On Assets (Y). Given that the coefficient associated with the Current Ratio (X1) is negative (-), it can be deduced that the Current Ratio (X1) exhibits a significant negative impact on Return On Assets (ROA).
- The test outcomes indicate that the t- statistic for the independent variable Quick Ratio (X2) is 3.307741, which means that the t-statistic exceeds the t-table value ($3.307741 > 2.05183$). Moreover, the probability value of 0.0009 is noteworthy, indicating a significant effect of the Quick Ratio (X2) on Return On Assets. Given the positive coefficient of the Quick Ratio variable (X2), it can be concluded that the Quick Ratio (X2) exerts a positive and substantial influence on Return On Assets (ROA) (Y).
- The test outcomes demonstrate that the t-statistic for the independent variable Cash Ratio (X3) is 1.190559, indicating that the t-statistic is lower than the t-table value ($1.190559 < 2.05183$). Additionally, the probability value of 0.2338, which exceeds 0.05, suggests that the Cash Ratio (X3) has no significant impact on Return On Assets (ROA) (Y).

4.1.3. F Test

Table 3. Result of F-Test

F-statistic	3.733266
Prob (F-statistic)	0.000689

The test results indicate that the F-statistic results for the Current Ratio (X1), Quick Ratio (X2), and Cash Ratio (X3) amount to 3.733266. This signifies that the F-statistic value surpasses the F-table value ($3.733266 > 2.98$). Consequently, it can be inferred that the independent variables X collectively exert a significant influence on the dependent

variable Y. This assertion is further supported by the prob.(F-statistic) or prob.(Rn-squared statistic) value of 0.000689, which falls below the threshold of 0.05.

4.2. Discussion

Based on the conducted hypothesis testing, it is essential to perform an analysis of the regression outcomes to understand the relationships among X1, X2, X3, and financial performance in terms of ROA (Y). The following conclusions can be summarized regarding the impacts of the independent variables (X1, X2, and X3) on the dependent variable (Y).

The research analysis results reveal a significant influence of the Current Ratio (X1) on Return On Assets (Y). This implies that a higher X1 value signifies improved liquidity for the company, enabling it to fulfill short-term obligations using its current assets.

The Quick Ratio (X2) exhibits a significant impact on Return On Assets (Y). The positive and significant correlation observed in X2 indicates that elevating its value within construction and building sub-sector companies leads to increased profits as gauged by ROA. A heightened X2 value reflects the availability of quick assets to settle current liabilities, particularly driven by accounts receivable, which constitutes a substantial portion of total current assets in these companies.

The findings of this study demonstrate an absence of significant influence between Cash Ratio (X3) and Return On Assets (Y). This suggests that the cash ratio variable does not affect construction and building sub-sector companies, where available cash or cash equivalents fail to sufficiently cover current liabilities or short-term debt.

The simultaneous analysis of the independent variables (X1, X2, and X3) reveals a substantial impact on the dependent variable (Y). With a coefficient of determination of 0.497594, corresponding to a 49% explanatory power, it can be concluded that the independent variables collectively account for 49.75% of the variation in the dependent variable. The remaining 50.25% variability is attributed to external variables not encompassed by the model utilized in the research.

5. CONCLUSION

Based on the analysis of liquidity ratios using Current Ratio, Quick Ratio, and Cash Ratio on Return On Assets (ROA) in construction and building sub-sector companies listed on the Indonesia Stock Exchange (BEI) during the period of 2016-2020, several important findings have been revealed. Firstly, it was found that the Current Ratio (X1) has a significant influence on ROA, highlighting the importance of a company's ability to meet short-term obligations with current assets. Secondly, the Quick Ratio (X2) has a positive and significant impact on ROA, indicating that increased profitability can be achieved through an improvement in quick liquidity ratios. However, Cash Ratio (X3) does not have a significant influence on ROA, suggesting that a company's ability to meet short-term obligations with cash or cash equivalents is not the primary determinant of financial performance.

Based on the conclusions drawn from the analysis of liquidity ratios within the construction and building sub-sector companies listed on the Indonesia Stock Exchange during the period 2016-2020, several noteworthy suggestions can be delineated. Firstly, it is imperative for companies to place strategic emphasis on optimizing their Current Ratio (X1), as its significant influence on Return On Assets (ROA) underscores the

importance of meeting short-term obligations with current assets. Secondly, the observed positive and significant impact of the Quick Ratio (X2) on ROA signifies that augmenting profitability can be attained through meticulous enhancement of quick liquidity ratios, warranting meticulous management of inventory and receivables. While the Cash Ratio (X3) displayed no substantial influence on ROA, the judicious upholding of an adequate cash reserve remains prudent to address unforeseen exigencies. Embracing a comprehensive approach to liquidity management, consonant with industry benchmarks, transparent financial reporting, and a forward-looking orientation, is poised to further amplify overall financial performance.

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