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THE IMPACT OF THE COVID-19 CRISIS ON THE FINANCIAL HEALTH OF INDONESIAN CONSTRUCTION FIRMS: EVIDENCE FROM 2020 TO 2022

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Abstract

The Covid-19 pandemic has had a significant impact on Indonesia's economic sector, including construction companies, which have experienced declines in stock prices and financial performance. This study aims to analyze the financial performance of five construction firms listed on the Indonesia Stock Exchange from 2020 to 2022. The analysis employs financial ratios covering liquidity, solvency, return on investment, asset utilization, and operational performance. The results show that although there were improvements in liquidity and asset utilization efficiency, companies continue to face challenges in solvency and profitability. High dependence on debt and a decline in net profit margins were major obstacles for construction firms during the pandemic. This study contributes to the development of literature on financial management in the construction sector during crisis conditions, providing strategic guidance for management to enhance financial stability. The findings recommend reducing reliance on debt by diversifying funding sources to improve solvency.

Keywords: Covid-19, financial performance, construction firms, financial ratios, solvency.

Introduction

The Coronavirus Disease 2019 (Covid-19), which originated in Wuhan, China, at the end of 2019, quickly spread to other countries, including Indonesia. The first confirmed case in Indonesia was reported in early March 2020, believed to have been contracted by Patient 01 from a Japanese national who was already infected (Ministry of Health of the Republic of Indonesia, 2020). By October 25, 2021, the number of cases in Indonesia had reached 4,240,019 (Covid-19 Task Force, 2021).

The Covid-19 pandemic has had significant impacts on various sectors, including health, social life, and the economy. Many countries, including Indonesia, implemented policies such as quarantine measures, social distancing, and temporary closures of certain economic sectors to contain the virus's spread (WHO, 2020). These measures, while necessary for public health, caused a major loss of investor confidence, leading to adverse effects on market performance. Fiscal and monetary policies became crucial to stimulate economic recovery, as the global economic slowdown deeply affected Indonesia, including a decrease in exports, which further hampered the nation's economy.

In Indonesia, the economic uncertainty created by the pandemic led to delays or cancellations of many construction projects. This, in turn, severely impacted the financial performance of construction companies in terms of revenue, profitability, and their ability to meet financial obligations (Hakim et al., 2021). On average, stock prices of companies in the construction sector declined due to the pandemic, reflecting diminishing investor confidence in construction firms. Investors, perceiving below-normal returns, began to withdraw or hold back investments.

Construction companies in Indonesia, which had previously benefited from positive growth driven by infrastructure development, suddenly faced enormous challenges in maintaining operations. A combination of reduced demand, supply chain disruptions, and rising operational costs due to the need to implement stringent health protocols (Wardhana et al., 2021) severely hindered their performance.

The operational performance of construction firms cannot be effectively assessed without a solid analytical basis. Financial ratio analysis provides an essential method to evaluate the financial health of construction companies during the pandemic. Financial ratios offer a comparative analysis of key items in the financial statements over time, providing insights into the company's financial stability (Brigham & Houston, 2022). For shareholders, financial statements are critical for investment decision-making, including considerations of rights issues (Setiawan, 2021). Consequently, these reports play a significant role in influencing shareholder decisions, especially in assessing strategies like rights issues, which directly affect capital allocation.

Through financial statements, external parties can evaluate the financial performance of companies. This evaluation not only reflects the company's economic activities but also provides an assessment of its operational efficiency, quality, and effectiveness. By comparing financial statement items over a specific period, external parties can gather necessary data to inform their future strategies.

One effective method for assessing financial performance is through financial ratio analysis, which involves comparing related items in the company's financial statements. This analysis helps provide a clear picture of the company's financial health, especially during crisis situations like the Covid-19 pandemic.

Methods

This study employs a quantitative approach, utilizing numerical data from secondary sources, specifically the annual financial reports of five construction companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. These reports were audited by independent auditors, ensuring their validity and reliability. The data was obtained from the official IDX website and the respective companies' annual publications. This data is crucial for analyzing the financial performance of construction companies during the Covid-19 pandemic, particularly in evaluating the impact of economic uncertainty on liquidity, solvency, profitability, and operational efficiency.

The study uses purposive sampling to select five construction companies in the sector based on the following criteria:

1. Listed on the Indonesia Stock Exchange with available financial statements for the years 2020–2022, ensuring consistent and valid data throughout the pandemic period.
2. Operating in the Building and Construction Services sub-sector, which was directly impacted by social distancing measures and project delays during the pandemic.
3. Having the largest market capitalization as of December 2019, ensuring that the selected companies are stable and representative of the construction sector's condition during the pandemic.

Financial ratio analysis is employed to evaluate the financial performance of these companies during the pandemic. This method is particularly useful as it offers a comprehensive view of the company's financial health from various perspectives, including liquidity, solvency, profitability, and operational efficiency. The ratios analyzed include:

- Liquidity Ratios: These measure the company's ability to meet short-term obligations, a critical factor during the pandemic due to cash flow disruptions.
- Solvency Ratios: These assess the company's reliance on debt to finance its operations, which can affect long-term financial stability.
- Return on Investment (ROI): This measures the return on investment as an indicator of the company's profitability.
- Asset Turnover: This evaluates how efficiently the company uses its assets to generate revenue, which is particularly important during periods of reduced construction demand.
- Net Profit Margin (NPM): This ratio measures the company's net profitability, serving as a benchmark for cost management effectiveness during the pandemic.

Results

Based on the analysis conducted on five construction companies—PT Waskita Karya (Persero) Tbk, PT Wijaya Karya (Persero) Tbk, PT PP (Persero) Tbk, PT Totalindo Eka Persada Tbk, and PT Wijaya Karya Bangunan Gedung Tbk—the following financial ratio data for the period of 2020 to 2022 was obtained:

Table 1 Average Financial Ratios for 2020-2022

Ratio	2020	2021	2022
Current Ratio	1.21	1.40	1.47
Quick Ratio	1.13	1.20	1.24
Debt-to-Equity	3.46	2.97	3.08
Debt-to-Asset	2.11	1.87	1.95
Return on Asset	0.69	0.91	0.94
Return on Equity	2.17	2.55	2.26
Asset Turnover	10.94	11.38	12.48

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Net Profit Margin	0.77	0.66	0.37

Source: Data processing results, 2024

1. Current Ratio

The Current Ratio for the construction companies studied showed a steady increase from 1.21 in 2020 to 1.47 in 2022. This improvement indicates that the companies were gradually able to accumulate more liquid assets to cover their short-term liabilities. The increase in the current ratio reflects improved liquidity and financial stability, which helped these companies face the economic challenges posed by the Covid-19 pandemic.

2. Quick Ratio

The Quick Ratio, which measures a company's ability to meet short-term obligations without relying on inventory sales, also improved over the period. It rose from 1.13 in 2020 to 1.24 in 2022. This upward trend suggests that the companies were better able to manage their immediate liabilities with liquid assets (excluding inventories). This improvement would have enhanced creditor confidence regarding short-term liquidity.

3. Debt-to-Equity Ratio

The Debt-to-Equity Ratio exhibited fluctuations during the period under study. It decreased from 3.46 in 2020 to 2.97 in 2021, but then slightly increased to 3.08 in 2022. While this ratio demonstrates a high reliance on debt financing, it indicates that the companies were still significantly dependent on debt to fund their operations. A high debt ratio increases financial risk, particularly in times of economic uncertainty, such as during the pandemic.

4. Debt-to-Asset Ratio

The Debt-to-Asset Ratio (DAR) showed a slight decline, from 2.11 in 2020 to 1.87 in 2021, and then slightly increased to 1.95 in 2022. This marginal decrease indicates that the companies were making efforts to reduce their debt reliance and improve their financial structure. However, despite the improvement, the relatively high value suggests that the proportion of debt in the companies' total assets remained substantial.

5. Return on Assets (ROA)

The Return on Assets (ROA) increased over the three-year period, from 0.69 in 2020 to 0.94 in 2022. Although the ROA remained relatively low, this upward trend suggests that the companies were becoming more efficient at generating profits from their assets. This is a positive sign, even though profitability challenges remained within the construction sector during the pandemic.

6. Return on Equity (ROE)

The Return on Equity (ROE) showed a generally positive trend, with an increase from 2.17 in 2020 to 2.55 in 2021, before slightly declining to 2.26 in 2022. This ratio indicates the companies' ability to generate profits relative to shareholders' equity. Despite the pandemic, the construction companies managed to maintain a stable level of return, although the decline in 2022 may reflect a decrease in profitability during the recovery phase post-pandemic.

7. Asset Turnover

The Asset Turnover ratio showed a consistent improvement, rising from 10.94 in 2020 to 12.48 in 2022. This indicates that the companies were becoming increasingly efficient in utilizing their assets to generate revenue, which is particularly important during times when demand for construction projects was lower due to the pandemic.

8. Net Profit Margin

The Net Profit Margin showed a decline over the three-year period, from 0.77 in 2020 to 0.37 in 2022. This decrease suggests a reduction in profitability, possibly due to increased costs associated with implementing stringent health protocols, delays in projects, and reduced demand in the construction sector. Despite the improvement in other ratios, the declining net profit margin reflects ongoing challenges in cost control and profit generation during the pandemic.

The analysis of the financial ratios indicates that the construction companies faced significant challenges during the pandemic. While there were improvements in liquidity (Current Ratio and Quick Ratio), asset efficiency (Asset Turnover), and profitability (Return on Assets), the companies still struggled with high debt levels, as indicated by the Debt-to-Equity and Debt-to-Asset ratios. The declining Net Profit Margin further underscores the ongoing profitability challenges that construction companies had to navigate during this period.

Discussion

This study analyzes the financial performance of five construction companies listed on the Indonesia Stock Exchange (IDX) during the COVID-19 pandemic, with a focus on liquidity, solvency, profitability,

and operational efficiency. The findings of this study demonstrate significant fluctuations in key financial ratios, reflecting the challenges faced by the sector in navigating the economic uncertainties induced by the pandemic. These results are consistent with broader trends observed globally, where the construction industry faced similar setbacks due to disruptions in supply chains, labor shortages, and government-imposed restrictions (Larasati et al., 2021; Susanti et al., 2021).

Liquidity: Current and Quick Ratios

The study shows an overall improvement in the Current Ratio and Quick Ratio from 2020 to 2022, indicating a gradual strengthening of the companies' liquidity positions. The Current Ratio increased from 1.21 in 2020 to 1.47 in 2022, suggesting that the construction firms had a sufficient amount of current assets to meet their short-term liabilities. This trend reflects the efforts of these companies to enhance their liquidity amid the uncertain economic environment caused by the pandemic. The Quick Ratio, which measures the ability of the companies to meet their short-term obligations without relying on inventory, also improved steadily from 1.13 in 2020 to 1.24 in 2022. This improvement suggests that, despite the challenges posed by COVID-19, companies were better able to manage their immediate financial obligations with liquid assets, thus enhancing their short-term financial stability.

The improvement in liquidity is also consistent with findings from Susanti et al. (2021), which indicated that construction firms in Indonesia adopted various liquidity-enhancing strategies during the pandemic, such as optimizing working capital management and negotiating payment deferrals. Furthermore, these improvements align with global observations where construction firms focused on strengthening liquidity to survive the economic turbulence caused by COVID-19 (Bukhari et al., 2024).

Solvency: Debt-to-Equity and Debt-to-Asset Ratios

In contrast, the Debt-to-Equity and Debt-to-Asset ratios reveal a concerning trend of sustained high reliance on debt. Although the Debt-to-Equity Ratio decreased from 3.46 in 2020 to 2.97 in 2021, it slightly rebounded to 3.08 in 2022. This suggests that while companies may have attempted to reduce their leverage, they still remain highly dependent on debt to finance their operations. This continued reliance on debt is a significant risk factor, particularly in an environment characterized by economic uncertainty and market volatility (Zhang et al., 2024).

Similarly, the Debt-to-Asset Ratio showed a slight decline from 2.11 in 2020 to 1.87 in 2021, before rising again to 1.95 in 2022. While the slight decrease in this ratio could indicate some reduction in debt reliance, the overall high levels of debt-to-asset suggest that construction firms have not significantly improved their solvency during the pandemic. These findings are in line with global challenges reported by Salman (2023) and Syaferi et al. (2021), who highlighted that many construction firms struggled with high debt levels, exacerbating financial stress during the COVID-19 crisis.

Profitability: Return on Assets and Return on Equity

In terms of profitability, the study found modest improvements in Return on Assets (ROA) and Return on Equity (ROE) from 2020 to 2022, reflecting a gradual recovery in the companies' ability to generate profits from their assets and equity. ROA increased from 0.69 in 2020 to 0.94 in 2022, signaling that companies were becoming more efficient in utilizing their assets to generate profits. However, these figures still remain low, reflecting the ongoing challenges in maintaining profitability in a sector severely affected by the pandemic's economic fallout.

The ROE also showed an improvement from 2.17 in 2020 to 2.55 in 2021, before slightly declining to 2.26 in 2022. While this improvement is a positive sign, the relatively low ROE values suggest that the construction sector continued to face difficulties in generating returns for shareholders during this period of crisis. This finding aligns with the literature indicating that the construction industry globally experienced considerable financial strain, marked by declining revenues, rising costs, and delayed projects (Hesna et al., 2021; Khalfan & Ismail, 2020).

Net Profit Margin: Declining Profitability amid Rising Costs

A particularly concerning trend is the sharp decline in the Net Profit Margin from 0.77 in 2020 to 0.37 in 2022. This decline reflects a significant reduction in the companies' profitability over the course of the pandemic. The drop in Net Profit Margin can be attributed to several factors, including the increased operational costs associated with implementing COVID-19 health protocols, the delays and cancellations of projects, and disruptions in supply chains (Susanti et al., 2021; Larasati et al., 2021). Furthermore, the rising cost of materials, labor shortages, and government budget cuts have placed additional financial strain on construction firms, preventing them from maintaining healthy profit margins (Syaferi et al., 2021; Bukhari et al., 2024). These findings resonate with the broader global trend, where construction companies faced rising costs and declining revenues as they navigated the disruptions caused by the pandemic (Arl et al., 2022; Zhang et al., 2024).

Therefore, the financial performance of construction companies during the COVID-19 pandemic reveals a mixed picture. On one hand, improvements in liquidity ratios indicate better short-term financial stability. On the other hand, high levels of debt and declining profitability underscore the challenges that these companies continue to face in managing solvency and profitability amidst a volatile and uncertain economic environment. These findings are consistent with both the national and global literature on the impact of the COVID-19 pandemic on the construction sector (Larasati et al., 2021; Zhang et al., 2024). Moving forward, companies in the construction sector should prioritize debt reduction, improve cash flow management, and explore alternative financing options to safeguard their financial health in the face of future economic uncertainties.

Conclusion

The COVID-19 pandemic has significantly impacted the financial performance of construction companies in Indonesia. Our study indicates improvements in liquidity ratios, such as the Current Ratio and Quick Ratio, signaling that companies were more capable of meeting their short-term obligations despite the challenging economic environment. However, the study also found that solvency ratios, particularly the Debt-to-Equity Ratio, remain high, reflecting the continued reliance on debt, which raises the financial risks for companies, especially in a period of economic instability.

Profitability, as measured by Net Profit Margin, has declined from 2020 to 2022, indicating difficulties in maintaining profitability amidst increasing operational costs and declining revenues. Despite this, the observed increase in Return on Assets (ROA) and Asset Turnover suggests that companies have improved the efficiency with which they utilize their assets. This reflects a positive trend in operational efficiency, even as the sector faces broader financial challenges. These findings emphasize the importance of cost management and profitability enhancement strategies for construction companies to remain competitive and resilient in the face of ongoing uncertainty.

Implication

The findings of this study offer several important implications for construction companies, investors, and policymakers, each of whom plays a crucial role in the recovery and future resilience of the construction sector.

For construction company management, the research highlights the critical need to strengthen financial resilience by reducing reliance on debt. The high Debt-to-Equity Ratio observed during the pandemic suggests that companies need to re-evaluate their capital structure. Moving forward, management should explore alternative financing strategies, such as issuing new equity or pursuing strategic partnerships and investments. In addition, improving operational efficiency is paramount. Embracing digital tools to streamline construction processes and enhance supply chain management can help reduce costs and increase productivity, providing a competitive edge. As economic volatility remains a possibility, companies must also prioritize liquidity management by maintaining adequate cash reserves. This will ensure they can weather unexpected disruptions, such as project delays or market downturns, without jeopardizing their financial stability.

For investors, the implications center on the need for careful risk assessment. While high debt levels may pose immediate concerns, investors should also consider the long-term potential of companies that are actively improving operational efficiency and optimizing asset usage. The improvements seen in Return on Assets (ROA) and Asset Turnover suggest that some companies are making strides in becoming more efficient in their operations, which can translate into future profitability. Therefore, investors should look beyond short-term risks and focus on the strategic adaptations that companies are implementing to navigate future challenges. A balanced approach to risk and long-term viability is key to making informed investment decisions in this sector.

For policymakers and government authorities, the research suggests that providing targeted fiscal support will be essential to sustaining the construction sector through the ongoing challenges. Offering tax deferrals, financial incentives, or subsidies can help alleviate some of the financial pressures that companies face, ensuring they can continue operations and retain their workforce. Furthermore, accelerating the rollout of strategic infrastructure projects can serve as a catalyst for the recovery of the sector, stimulating both economic activity and job creation. Governments should prioritize infrastructure projects that not only address immediate economic needs but also create a solid foundation for future growth. By doing so, policymakers can play a key role in supporting the long-term resilience of the construction industry and ensuring that it remains a pillar of economic development in the post-pandemic era.

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