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Does Working Capital Efficiency Drive Profitability? Evidence from a Listed Telecommunications Company

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ABSTRACT

This study examines the association between working capital turnover and profitability in a publicly listed telecommunications company over 2018–2024, spanning pre-pandemic (2018–2019), pandemic (2020–2021), and post-pandemic (2022–2024) phases. Using secondary data from audited annual financial statements and stock-exchange filings, the analysis applies ratio and trend techniques to assess how liquidity management relates to earnings performance amid shifting demand and investment cycles. The results indicate an inverse pattern: periods of higher working capital turnover did not coincide with higher profitability, while lower turnover was accompanied by improved profitability. This outcome aligns with the sector's capital-intensive, subscription-driven cash cycle, where rapid turnover can reflect tighter working capital positions that constrain service quality and margin capture, whereas more moderate turnover is consistent with capacity expansion, disciplined receivables management, and stronger margins. The pandemic and its aftermath amplified these dynamics as surging data usage, network investments, and pricing pressures reshaped short-term liquidity needs and returns. The study contributes sector-specific evidence on liquidity–profitability trade-offs across a systemic shock and underscores that accelerating working capital turnover is not universally profit-enhancing in telecommunications. Managerially, the findings point to calibrating working capital policies to demand volatility, maintaining liquidity buffers, and aligning receivables and "inventory-like" network capacity with profitability targets.

1. INTRODUCTION

The Covid-19 pandemic has created a significant opportunity for the telecommunications sector to expand network capacity and enhance the quality of its services (Abubakar et al., 2020; Naz et al., 2021; Xiang et al., 2021). Throughout 2020, the industry recorded substantial growth due to the surge in internet usage and shifts in traffic configurations across telecommunications networks (Kementerian Komunikasi dan Informatika Republik Indonesia, 2021). The situation in Indonesia, as well as globally, has brought profound lifestyle changes in governance, work patterns, social interaction, and cultural behavior (Sundawa et al., 2021). These developments require telecommunications companies and related stakeholders to adopt adaptive and responsive strategies. As the industry continues to evolve and new operators offering digital services emerge, service providers must identify strategic opportunities to strengthen their network capacity and uphold reliable, high-quality telecommunications services.

The pandemic has also reshaped public needs and daily habits, making society increasingly dependent on stable and accessible internet connection (Yan, 2020; Brem et al.,2021; Khalifa et al., 2021). At the same time, the government has intensified efforts to accelerate digital infrastructure

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development across Indonesia, signaling strong optimism that the telecommunications sector can play a pivotal role in driving national economic recovery. This positive outlook is further supported by the growth experienced by several Indonesian telecommunications companies during the pandemic period, demonstrating the sector's resilience and its strategic importance in supporting digital transformation (Ssenyonga, 2021; Bachtiar et al., 2023; Putritamara et al., 2023).

In addition to supporting digital connectivity during the pandemic, the telecommunications sector has also become a critical enabler of various essential activities such as online learning, remote work, digital health services, and e-commerce expansion. These activities rely heavily on stable and high-capacity networks, further reinforcing the strategic importance of the telecommunications industry in sustaining societal functions amid mobility restrictions. As digitalization accelerates across multiple sectors, telecommunications companies are increasingly positioned not only as service providers but also as key drivers of innovation and economic resilience. This growing reliance on digital infrastructure suggests that the industry will continue to maintain its relevance and play a central role in shaping Indonesia's digital future beyond the pandemic period.

One illustrative case is PT Telkom Indonesia Tbk (TLKM), which managed to maintain strong financial performance during 2020 by recording positive growth in revenue, EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization), and net profit. Telkom's net profit increased by 11.5% to Rp 20.80 trillion in 2020, compared with Rp 18.66 trillion in 2019, while revenue also grew by 0.7% from Rp 135.57 trillion to Rp 136.46 trillion (Annual Report of PT Telekomunikasi Indonesia Tbk, 2021). This performance demonstrates the telecommunications sector's capacity to support national economic growth even in challenging circumstances. Nevertheless, companies must ensure that operational acceleration is supported by effective and efficient management of working capital (Louw & Pradhan, 2022; El-Ansary & Al-Gazzar, 2021; Natnadiandi & Yuliandhari, 2018; Bado et al.,2025).

Excessive working capital that exceeds actual operational needs reflects inefficient fund utilization, potentially reducing the company's ability to seize investment opportunities such as land acquisition (Aldubhani et al., 2022; Morshed, 2020). Therefore, one of the crucial challenges faced by businesses is the effective management of working capital. Working capital management (WCM) ensures an adequate level of liquidity that enables firms to meet short-term financial obligations arising from their operations, thereby supporting business continuity, strengthening the company's operational stability, and maximizing profitability.

Given the strategic role of telecommunications companies in supporting digital transformation, optimizing working capital becomes even more essential to maintain competitiveness and operational agility. As service demand continues to rise alongside technological innovation, firms like PT Telkom Indonesia Tbk must balance liquidity, investment capacity, and cost efficiency to sustain long-term performance. Sound working capital management will not only improve financial resilience but also enhance the company's ability to innovate, expand its infrastructure, and contribute to Indonesia's broader digital ecosystem.

Maintaining excessively high levels of working capital may result in the company earning suboptimal returns on its short-term investments. Conversely, insufficient working capital exposes the firm to operational disruptions and financial difficulties, heightening liquidity risk and limiting its ability to fulfill short-term obligations. Such conditions can weaken managerial performance and jeopardize business stability. Therefore, establishing an appropriate working capital policy is essential, as it enables firms to enhance profitability and generate greater value for investors (Nguyen et al., 2020).

Moreover, inadequate working capital has the potential to impede day-to-day operational activities, which in turn lowers business profitability. Over the long term, continuous working capital shortages may threaten the firm's sustainability due to weak strategic decision-making in financial management, a factor identified as a major contributor to corporate failure (Anindita & Elmanizar, 2019). These

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considerations motivate the authors to further examine the influence of working capital turnover on profitability, particularly in the context of PT Telekomunikasi Indonesia Tbk.

Considering the pivotal role of working capital in ensuring operational stability, financial resilience, and long-term growth, it becomes increasingly important to understand how efficiently working capital is utilized within large telecommunications enterprises. PT Telekomunikasi Indonesia Tbk, as one of the nation's leading digital service providers, offers a relevant setting for analyzing this relationship. By exploring how working capital turnover affects profitability, this study aims to contribute meaningful insights to both academic discourse and managerial practice, while laying the foundation for evidence-based strategies that support the company's competitive performance in the digital era.

2. METHOD

2.1 Variable Operational Definitions

The operational definition of variables is formulated to ensure clarity and consistency in understanding the concepts used in this study. By defining each variable operationally, the research minimizes the possibility of misinterpretation and ensures that the measurement process aligns with the objectives of the study. The variables examined in this research consist of working capital turnover and profitability, each of which plays a significant role in assessing the financial performance of PT Telekomunikasi Indonesia Tbk during the analysis period.

Working capital turnover refers to the company's ability to utilize its net working capital—defined as current assets in excess of current liabilities—to support operational activities within a specific period. This variable illustrates how effectively PT Telekomunikasi Indonesia Tbk manages short-term assets and liabilities to generate revenue. Working capital turnover is measured using the working capital turnover ratio, expressed in the number of times the capital rotates within one financial cycle. A higher turnover ratio indicates more efficient utilization of working capital in generating sales or operational income.

Profitability, on the other hand, represents the company's ability to generate profit within a given period. In this study, profitability is assessed using the Net Profit Margin (NPM), which measures the proportion of net profit earned relative to total revenue. The NPM is presented in percentage (%) and serves as an indicator of how effectively PT Telekomunikasi Indonesia Tbk converts its revenue into net income. A higher NPM suggests better financial management, stronger operational performance, and more efficient cost control within the organization.

2.2 Sample, Data Types, and Data Sources

The sample used in this study consists of the balance sheet and income statement of PT Telekomunikasi Indonesia Tbk for the period 2018–2024. The data employed in this research is secondary data. According to Sugiyono (2014), secondary data refers to information obtained indirectly through intermediary sources that have been collected and documented by other parties. In this study, the secondary data originates from the published financial reports of PT Telekomunikasi Indonesia Tbk, which are accessible through the Indonesia Stock Exchange (IDX) website at www.idx.co.id.

The data collection technique applied in this study is documentation. This method involves gathering company documents relevant to the research problem, particularly balance sheets and annual reports issued by PT Telekomunikasi Indonesia Tbk. The use of documentation ensures that the data used in the analysis is authentic, verifiable, and aligned with the financial performance indicators required for examining working capital turnover and profitability.

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2.3 Data Analysis Technique

Based on the formulation of the problem and the hypothesis that has been put forward, to prove the hypothesis in this study using data analysis as follows:

Analysis of Working Capital Turnover

To find out the amount of working capital turnover in a company, the following formula can be used:

$$\textit{Working Capital Turnover (WTC)} = \frac{Net\ Sales}{Net\ Working\ Capital}$$

Analysis of Profitability

To determine the level of profitability, the following formula is used:

$$\textit{Net Profit Margin (NPM)} = \frac{Net\ profiit\ after\ tax}{Net\ Sales} \text{ x } 100\%$$

3. RESULTS AND DISCUSSION

Based on the table containing financial data of PT Telekomunikasi Indonesia Tbk over the past seven years, it can be observed that the company's working capital turnover generally increased from 2018 to 2022. The highest level of working capital turnover was recorded in 2022, reaching 3.25 times. In contrast, the company's profitability, measured by net profit margin, showed an increase from 2018 to 2020, with its peak in 2020 at 25.50%. However, the growth in profitability over these years was not particularly significant when compared with fluctuations in working capital turnover.

Table 1. Working Capital Turnover

Year	Working Capital Turnover	Net Profit Margin
2018	2,14	22,78
2019	2,44	25,07
2020	2,70	25,50
2021	3,02	20,63
2022	3,25	20,35
2023	2,93	21,66
2024	2,34	23,70

Source: Data processed, 2025

The data also indicate that in 2022, despite the company achieving its highest working capital turnover of 3.25 times, the resulting profitability was only 20.35%. This figure is considerably lower than the profitability recorded in 2020, when the working capital turnover was relatively lower at 2.70 times, yet the company managed to generate a much stronger profitability level of 25.50%. These findings suggest that higher working capital turnover does not always translate into higher profitability, indicating the influence of other financial and operational factors on profit outcomes.

Furthermore, in 2023, the company experienced a slight decrease in working capital turnover to 2.93 times, accompanied by an increase in net profit margin to 21.66%. However, in 2024, both indicators moved in opposite directions: working capital turnover declined further to 2.34 times, while net profit margin also fell to 23.70%. These dynamics imply that while working capital efficiency is an

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important financial metric, its relationship with profitability may not always be linear and can be influenced by broader strategic, operational, and economic conditions.

The variations observed between working capital turnover and profitability over the seven-year period indicate that increases in turnover do not automatically lead to higher profit margins. This suggests that PT Telekomunikasi Indonesia Tbk relies not only on the efficiency of short-term asset utilization but also on broader financial and operational strategies. Factors such as revenue growth, cost efficiency, investment in digital infrastructure, and changes in consumer behavior may have had a greater impact on profitability than working capital turnover alone. Therefore, profitability appears to be influenced by a more complex interaction of financial components rather than solely by working capital efficiency.

The inconsistency between working capital turnover and profitability across the years reflects the company's ability to maintain strong financial performance even when working capital efficiency fluctuates. For instance, the high profitability achieved in 2020—despite relatively moderate turnover—may be attributed to increased demand for digital services during the pandemic, cost optimization initiatives, and strategic expansion of digital infrastructure. This pattern suggests that PT Telekomunikasi Indonesia Tbk possesses strong resilience and adaptive capabilities that allow it to sustain profitability under varying operational conditions.

Overall, the data trends imply that while working capital turnover remains an important indicator of operational efficiency, its effect on profitability at PT Telekomunikasi Indonesia Tbk is not dominant. Instead, the company's profitability is more strongly shaped by strategic decisions, technological investments, and the rapidly evolving telecommunications landscape. These findings emphasize the importance of integrating working capital management with broader corporate strategies to enhance long-term financial performance and maintain competitiveness within Indonesia's digital economy.

The data indicate that periods of high working capital turnover are not consistently associated with higher profitability, while lower turnover in some years corresponds with stronger profit levels. Ideally, a high level of working capital turnover suggests that a company is utilizing its working capital efficiently, allowing its short-term assets to generate greater returns (Celestin, 2018; Seth et al., 2021). However, the findings in this study show that such a relationship does not always occur in practice, highlighting the presence of other factors influencing profitability beyond the efficiency of working capital utilization alone.

Working capital management (WCM) represents a managerial concept focused on determining the optimal level of cash, inventory, and accounts receivable, while minimizing these levels at the lowest possible cost to ensure smooth daily business operations. According to Brigham and Houston (2009) dan Salehi et al. (2019), companies must maintain sufficient working capital to fund current liabilities while avoiding excessive idle resources that reduce overall efficiency. Effective WCM ensures that the firm balances liquidity with cost efficiency to support operational continuity.

Businesses therefore need to manage current assets and current liabilities with precision. As Ehrhardt and Brigham (2011) and Talonpoika et al. (2016) emphasize, each component of working capital requires distinct strategies, and the quality of management for each factor—whether cash, receivables, or inventory—has a direct impact on the company's profitability. When these elements are managed effectively, firms are more capable of enhancing operational performance and maximizing returns; however, when managed poorly, profitability may decline even if working capital turnover appears favorable.

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4. CONCLUSIONS AND RECOMMENDATIONS

The main conclusion of this study indicates that working capital turnover does not show a linear relationship with profitability at PT Telekomunikasi Indonesia Tbk. A high working capital turnover is not necessarily accompanied by increased profitability, while a lower turnover in certain years corresponds with higher profit levels. This finding highlights that profitability is influenced by factors beyond working capital efficiency, suggesting that operational dynamics, strategic decisions, and external market conditions collectively shape financial outcomes. The study contributes to the understanding that effective profitability management requires a broader perspective that integrates both internal financial policies and external business environments.

Based on these conclusions, several recommendations can be offered. Future researchers are encouraged to include additional independent variables—such as fixed asset turnover, firm age, or alternative profitability proxies like ROE or ROI—and to expand the research scope with a broader sample and longer observation period to produce results that more accurately capture real financial dynamics. For companies, improving profitability requires close attention to working capital turnover, firm size, and overall operational performance to maintain business sustainability. Meanwhile, investors are advised to carefully evaluate a company's financial performance, particularly indicators related to profitability and capital management, before making investment decisions.

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