

The Effect of Current Asset Turnover and Digital Transformation on Company Profitability in the Banking Sector on The Indonesia Stock Exchange

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ABSTRACT

Maintaining profitability in the face of rapid technological innovation and economic changes is a major problem for the banking industry listed on the Indonesia Stock Exchange. In this regard, effective current asset management and the adoption of digital transformation have emerged as two critical strategic elements that improve financial performance and competitiveness. The purpose of this study is to investigate how digital transformation and current asset turnover (CATO) affect banking profitability as determined by return on assets (ROA). The 2020–2024 timeframe's secondary data was used in a quantitative manner. CATO, digital transformation, liabilities, equity, and operating expenses are among the elements that are examined. According to statistical study, CATO positively affects ROA, suggesting that efficient current asset management greatly boosts profit production. Additionally, digital transformation increases market reach, boosts operational effectiveness, and enhances service quality—all of which contribute to increased profitability. These results demonstrate that in order for banks to adjust to changes in the market and maintain a competitive edge in the digital age, an integrated approach combining effective financial management and technology adoption is necessary.

Keywords: Current Asset Turnover, Digital Transformation, Profitability, Return On Assets.

1. INTRODUCTION

One of the key metrics used to evaluate a business's performance, particularly in the banking industry, is profitability. It is a crucial metric for regulators, investors, and creditors since it shows how well the bank manages its resources and assets to produce revenue (Kasmir, 2019). Return on Assets (ROA) is one of the most well-known profitability metrics since it shows how well a company uses all of its assets to create a profit.

Due to liquidity limitations and quickly changing digital environments, Indonesian banks have been under more and more pressure to sustain profitability in the post-COVID-19 period. In light of these conditions, preserving operational stability and service quality now depends on the effective management of current assets, including marketable securities, short-term loans, and deposits (Horne & Wachowicz, 2016). One important metric that assesses how well these short-term assets are being used to produce income is the current asset turnover (CATO) ratio (Harahap, 2020).

Even though a lot of research has looked at the connection between asset efficiency and profitability (Sartono, 2018), most of it concentrates on total or fixed assets, ignoring the function of current assets, which are more liquid and strategically adaptable in the banking

setting. Simultaneously, the emergence of digital transformation, encompassing online services, mobile banking, and artificial intelligence, has radically altered the way banks function and allocate resources (Haryadi & Purwanto, 2021). Better asset utilization and cost efficiency could be supported by these technologies, thereby increasing profitability.

Furthermore, according to the Resource-Based Theory (RBT), competitive advantage is achieved when firms acquire and manage internal resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). In the banking industry, both current asset efficiency and digital capabilities can be viewed as strategic internal resources that drive financial performance when effectively leveraged. While current asset turnover reflects the ability to manage liquid financial resources for short-term profitability, digital transformation represents an intangible asset that enables improved operational execution and service delivery. Mikalef, Krogstie, Pappas, and Giannakos (2020) emphasize that digital capabilities, when treated as firm-specific strategic resources, can enhance performance outcomes across industries, including finance. However, as highlighted by Barney, Ketchen, and Wright (2011), merely possessing such resources is not sufficient—they must be fully integrated into organizational routines and aligned with firm strategies to generate sustainable returns. Thus, in line with RBT, banks must not only possess but also deploy and combine these resources strategically to outperform competitors in dynamic environments.

In this context, digital transformation may serve as a reinforcing mechanism that supports better use of current assets by streamlining operations, enhancing risk assessment, and improving customer service—all of which contribute to improved ROA. Papula, Volná, Papulová, and Zelený (2022) suggest that firms must constantly reconfigure their internal resource portfolios to adapt to technological shifts and market demands, a perspective that underscores the relevance of digital transformation as a complement to traditional financial management practices.

Nevertheless, there are very few empirical studies that look at how profitability, digitalization, and current asset turnover interact in the Indonesian banking industry. The majority of studies often address these factors separately, neglecting to examine how they interact to affect financial results.

This study intends to close that gap by examining the relationship between current asset turnover and profitability as determined by ROA and if digitalization mitigates it for banks listed on the Indonesia Stock Exchange (IDX). The study is anticipated to make both theoretical and practical contributions: theoretically, by confirming the significance of internal resource management in the digital era, and practically, by giving bank managers information to help them create strategies that increase profitability through asset efficiency and digital adoption.

2. METHODS

This study is using quantitative test to search the result. The study's data came from the official websites and financial reports of banks that were listed between 2020 and 2024 on the Indonesia Stock Exchange (IDX). Current Asset Turnover (CATO), Digital Transformation (DT), Company Size (SIZE), Leverage (LEV), Corporate Governance (CG), Current Assets (CA), and Return on Assets (ROA) are the independent factors that make up the variables. In order to investigate the moderating influence of digital transformation, the interaction term CATO*DT is also added.

Current Asset Turnover is a ratio used to measure how efficiently a company, particularly in the banking industry, utilizes its current assets to generate revenue or sales.

The bank is becoming more effective at managing its current assets to produce income if the current asset turnover ratio is rising. To put it another way, the higher this ratio, the more current assets contribute to the company's increased profitability, which is determined in this study by Return on Assets (ROA). A ratio that is too high, nevertheless, should also be taken cautiously because it can mean that the business does not now have enough assets to cover its operational requirements in the future.

Effective current asset management typically increases a bank's ability to extend loans, satisfy liquidity needs, and boost profitability. Furthermore, effective management of present assets has emerged as a critical component in preserving competitiveness and improving financial performance in the face of fierce competition and the growing need for digitalization.

Four control variable—Company Size, Leverage, Corporate Governance (CG), and Current Assets (CA)—are included in this study in addition to the primary variables. These variables may have an impact on bank profitability as determined by Return on Assets (ROA). The natural logarithm of total assets is frequently used as a proxy for company size. This measure is typically linked to economies of scale and wider access to resources, which may result in increased profitability. However, complexity can lead to inefficiencies for businesses that are too big. Leverage measures the proportion of a company's assets that are financed by debt. While moderate levels of leverage can improve ROA through tax benefits, excessive leverage can raise financial risk and lower profitability.

For management and accountability to be effective, corporate governance is essential. Strong auditing procedures and independent boards are examples of sound governance that can reduce agency conflicts and improve decision-making, which will improve financial results. Despite their short-term nature, current assets are crucial for operational liquidity. While excessive idle assets may impede optimal returns, efficient utilization of CA improves daily banking operations and helps preserve profitability. When examining the factors that influence bank performance, these control variables must be taken into consideration.

The analysis is conducted by calculating Return on Assets (ROA) and Current Asset Turnover for each banking company.

ROA is calculated by dividing the entire net income made over a given time period, usually one year, by the total assets owned by the business during that same time period.

Stakeholders can evaluate overall financial performance and resource utilization efficacy with the help of the outcome, which shows the proportion of profit made from each unit of asset.

Current Asset Turnover (CATO) measures how well a business generates income from its current assets, which include cash, short-term investments, and receivables. This ratio is calculated by dividing the average amount of current assets retained during a given period by the total revenue or net sales generated during that same period. For banks that mostly depend on short-term assets for everyday transactions and lending activities, a higher current asset turnover shows that the business is effectively using its liquid assets to sustain operations and produce income.

A higher CATO suggests strong liquidity management and operational efficiency, while a lower CATO may reflect underutilized assets and reduced profitability.

Furthermore, information about digitalization projects—like the introduction of online banking services, digital banking apps, electronic payment systems, and other technological advancements—is examined to see how they affect profitability.

Digital Transformation involves adopting digital technologies to improve processes, decision-making, and customer experience. Effective DT enhances efficiency and asset utilization, which can positively impact profitability metrics like ROA.

The population of this study consists of all banking companies listed on the Indonesia Stock Exchange (IDX). The research sample includes 35 banking companies selected and the data come from 2020-2024 periods.

Models

$$\text{Model 1 : ROA} = \beta_0 + \beta_1 \text{ CATO} + \beta_2 \text{ DT} + \beta_3 \text{ Size} + \beta_4 \text{ Lev} + \beta_5 \text{ CG} + \beta_6 \text{ CA} + \epsilon$$

$$\text{Model 2 : ROA} = \beta_0 + \beta_1 \text{ CATO} + \beta_2 \text{ DT} + \beta_3 \text{ CATO} * \text{DT} + \beta_4 \text{ Size} + \beta_5 \text{ Lev} + \beta_6 \text{ CG} + \beta_7 \text{ CA} + \epsilon$$

CATO : Current Asset Turnover

DT : Digital Transformation

Size : Company Size

CG : Corporate Governance

Lev : Leverage

CA : Current Asset

This study examines the following three hypotheses:

H1: Current Asset Turnover has a positive effect on ROA. The faster the turnover of a bank's current assets, the higher the bank's profitability.

H2: Digital Transformation has a positive effect on ROA. Banks that have implemented digital transformation have higher profitability compared to banks that have not.

H3: Digital Transformation strengthens the positive effect of Current Asset Turnover on ROA. The increase in ROA resulting from an increase in Current Asset Turnover is greater in banks that have implemented digital transformation compared to those that have not.

3. RESULTS AND DISCUSSIONS

A. Model 1

Model 1 : $ROA = \beta_0 + \beta_1 CATO + \beta_2 DT + \beta_3 Size + \beta_4 Lev + \beta_5 CG + \beta_6 CA + \epsilon$

Purpose : Testing H1 & H2

Statistical Test Result :

	Mean	Median	S.D.	Min	Max
ROA	0,0034	0,0056	0,0255	-0,1806	0,0441
CATO	0,2404	0,066	0,5974	0,0008	4,033
DT	0,5655	1	0,4974	0	1
SIZE	19,6	19,1	3,055	14,59	30,11
LEV	0,7612	0,8298	0,2132	0,0008	1,767
CG	847,6	0,0589	10626	-1	1,3966
CA	0,1993	0,1594	0,1382	0,0001	1,128

Image 1. Statistical Test Result

The heteroskedasticity issue found in the regression model was addressed analytically in this study using the Weighted Least Square (WLS) approach. White's Test findings for the heteroskedasticity test showed that heteroskedasticity was present.

Model 9 : WLS, Using 145 Observations

Included 35 cross sectional units

Dependent Variable : ROA

	COEFFICIENT	STD. ERROR	T-RATIO	P-VALUE
CONTS	0,0018	0,0044	0,4245	0,6719
CATO	0,0077	0,0010	7,304	2,0333
DT	0,0015	0,0008	1,821	0,0708
SIZE	4,2253	0,0001	0,3154	0,7529
LEV	-0,0010	0,0036	-0,2812	0,7790
CG	0,0019	0,0011	1,736	0,0847
CA	0,0006	0,0037	0,1671	0,8675

Image 2. WLS Test Result for H1 & H2

Statistic Based On the Weighted Data :

Sum Squared Resid	: 121,0984	S.E of regression	: 0,9367
R-Squared	: 0,3089	Adjusted R-Squared	: 0,2789
F(6,138)	: 10,2840	P-Value (F)	: 2,1333
Log-likelihood	: -192,6866	Akaike Criterion	: 399,3732
Schwarz Criterion	: 420,2104	Hannan-Quinn	: 407,8401

Statistic Based on the Original Data :

Mean Dependent Variable	: 0,0034	S.D. Dependent Variable	: 0,0255
Sum Squared Resid	: 0,0903	S.E. of Regression	: 0,0255

In the first test, the effect of current asset turnover (CATO) and digital transformation (DT) on the profitability of banking companies as measured by return on assets (ROA) was examined. The results of the statistical test showed that CATO significantly increases ROA

(H1), with a significance level below 5% (Sig < 0.05). According to this research, a bank's profitability often rises in tandem with the turnover rate of its current assets. This finding lends credence to the idea that good current asset management improves a business's financial success, particularly in the banking industry, which heavily relies on liquidity.

Furthermore, the test results show that Digital Transformation (DT) has a favorable impact on ROA (H2) at a significance level below 10% (Sig < 0.10). This suggests that digitally transformed banks are more profitable than their non-digital counterparts. This outcome is consistent with past research that demonstrates how digitalizing financial services, such as online and mobile banking and operational process automation, may expand client base, raise productivity, and ultimately increase profitability.

B. Model 2

$$\text{Model2:ROA} = \beta_0 + \beta_1 \text{CATO} + \beta_2 \text{DT} + \beta_3 \text{CATO} * \text{DT} + \beta_4 \text{Size} + \beta_5 \text{Lev} + \beta_6 \text{CG} + \beta_7 \text{CA} + \epsilon$$

Purpose : Testing H3

Model 13 : WLS, Using 145 Observations

Included 35 cross sectional units

Dependent Variable : ROA

	COEFFICIENT	STD. ERROR	T-RATIO	P-VALUE
CONTS	0,0022	0,0045	0,4984	0,6190
CATO	0,0060	0,0031	1,955	0,0526
DT	0,0012	0,0009	1,337	0,1835
SIZE	3,1230	0,0001	0,2356	0,8141
LEV	-0,0009	0,0037	-0,2530	0,8027
CG	0,0020	0,0011	1,785	0,0765
CA	0,0004	0,0038	0,1225	0,9027

Image 3. WLS Test Result for H3

Statistis Based On the Weighted Data :

Sum Squared Resid	: 120,5902	S.E of regression	: 0,938201
R-Squared	: 0,2585	Adjusted R-Squared	: 0,2206
F(6,138)	: 6,8247	P-Value (F)	: 5,9222
Log-likelihood	: -192,3817	Akaike Criterion	: 400,7635
Schwarz Criterion	: 424,5773	Hannan-Quinn	: 410,4398

Statistic Based on the Original Data :

Mean Dependent Variable	: 0,0034	S.D. Dependent Variable	: 0,0255
Sum Squared Resid	: 0,0902	S.E. of Regression	: 0,0256

The next test sought to ascertain whether digitalization enhances the relationship between current asset turnover and profitability (H3). The results of the WLS test show that the interaction between CATO and DT has a p-value of 0.5650, which is above the 5% significance level. As a result, the third hypothesis (H3) has no statistical backing. This suggests that there is insufficient evidence in this study to support the claim that banks that have embraced digitalization benefit more from current asset turnover in terms of profitability than those that have not.

H3 was not proven for a variety of reasons. One explanation might be that certain banks are still in the early phases of digitalization or have not completely included it into their current asset management procedure. Additionally, it's probable that the study's analysis of short-term financial performance does not fully capture the long-term impacts of digitalization on current asset management.

4. CONCLUSION

The findings of this study provide strong empirical support for the Resource-Based Theory (RBT), which posits that a firm's competitive advantage and performance are driven by its ability to acquire, develop, and deploy valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). In the context of banking, both current asset turnover (CATO) and digital transformation (DT) represent strategic resources that contribute to firm profitability when managed effectively. The significant positive effect of CATO on return on assets (ROA) suggests that banks with superior internal resource efficiency—particularly in managing short-term assets—are better positioned to convert these into income-generating activities. As liquidity is central to banking operations, the ability to maximize the productivity of current assets reflects a firm's operational strength. This finding aligns with previous studies that emphasize the role of working capital efficiency in driving profitability (Altat & Shah, 2018). Within the RBT framework, this supports the argument that CATO is not merely a financial ratio but a reflection of how well a bank utilizes its tangible resources to gain operational advantages over competitors.

Digital transformation, as an intangible resource, also shows a positive—though smaller—effect on ROA. This suggests that digital capabilities such as online banking platforms, automation, and data systems may serve as unique and firm-specific assets that contribute to profitability. From the RBT perspective, these digital capabilities can be considered strategic resources when they are difficult to replicate and embedded within organizational processes. Mikalef, Krogstie, Pappas, and Giannakos (2020) argue that digital assets enhance performance when treated as valuable resources that enable responsiveness and innovation. However, the relatively lower impact of DT found in this study may indicate that not all banks have achieved full digital maturity or effectively aligned these capabilities with their core operations. RBT stresses that ownership of a resource alone is insufficient—firms must also have the capacity to deploy and exploit it effectively within their strategic context (Barney, Ketchen, & Wright, 2011). Therefore, the variation in how banks apply digital tools may explain the modest profitability gains observed.

Interestingly, the study found no significant moderating effect of DT on the relationship between CATO and ROA. This suggests that the presence of digital resources does not automatically amplify the impact of asset efficiency on profitability. From an RBT viewpoint, this underscores the importance of resource configuration—performance benefits arise not simply from possessing multiple resources, but from how they are uniquely combined and applied. The lack of moderation may indicate that banks are not yet leveraging digital capabilities to directly enhance asset management functions. As RBT asserts, competitive advantage emerges when firms integrate and apply resources in ways that are both unique and difficult for competitors to imitate. In this case, unless digital tools are deeply embedded in operational decision-making and aligned with efficiency strategies, their interaction with tangible resources like CATO may remain limited.

Several limitations are relevant when interpreting these findings within the RBT framework. First, the study used a broad, undifferentiated measure of digital transformation, without capturing levels of digital maturity or specific technological investments. This contradicts the RBT principle of resource heterogeneity, which holds that firms vary significantly in the nature and effectiveness of their resource portfolios. Second, the time frame of the study (2020–2024) may be too short to capture the full performance implications of digital investments, which often require longer time horizons to yield measurable outcomes. Finally, other firm-specific resources that are emphasized in RBT—such as managerial capabilities, organizational culture, and knowledge systems—were not included, though they may influence how CATO and DT affect performance.

To strengthen the resource-based understanding of banking profitability, future studies should adopt more granular measures of digital transformation, differentiating between types of technology, depth of integration, and levels of digital readiness. Incorporating longer time frames, qualitative insights (e.g., managerial perceptions), and additional firm-level resource variables may offer a more comprehensive view of how banks convert tangible and intangible resources into sustained financial performance

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