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Liquidity and Financial Resilience: Lessons from Indonesia Amid COVID-19 Resurgence

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Abstract

The resurgence of COVID-19 in Indonesia highlights the critical need for effective financial strategies in vulnerable sectors. This study explores the influence of liquidity management practices, specifically cash, current, and quick ratios, on financial resilience, measured by debt-to-equity ratio and return on assets, in Indonesia's retail and tourism sectors during the pandemic period. Utilizing panel regression analysis with data from publicly listed firms, the research incorporates firm size as a control variable. Findings indicate that liquidity management has a limited impact on financial resilience, with firm size and digital transformation playing more significant roles. Government interventions and sub-sectoral differences further shape financial outcomes, offering critical insights for navigating future crises. The study contributes to understanding financial strategies in emerging markets, providing actionable recommendations for businesses and policymakers to enhance resilience amid ongoing pandemic uncertainties in Indonesia and ASEAN. By addressing sectoral dynamics, this research underscores the importance of adaptive strategies in ensuring economic stability.

Keywords: Liquidity Management, Financial Resilience, Retail, Tourism, COVID-19, Indonesia

1. Introduction

The resurgence of COVID-19 variants, as reported by the Indonesian Ministry of Health (2025), has reignited economic uncertainties, particularly for sectors that bore the brunt of the 2019–2023 pandemic. Retail and tourism, critical pillars of Indonesia's economy, faced severe disruptions during this period. Retail, encompassing sub-sectors such as supermarkets, department stores, and e-commerce, experienced a 12% decline in sales in 2020 due to lockdown measures and reduced consumer mobility, though e-commerce platforms mitigated losses for some firms (Verhoef et al., 2022). The tourism sector, including hospitality, travel agencies, and airlines, suffered a catastrophic 70% revenue drop, driven by stringent travel restrictions, resulting in widespread business closures and layoffs (Kesuma et al., 2021; Varzakas & Metaxas, 2024). These sectors' vulnerability to external shocks, coupled with their significant contribution to Indonesia's GDP and employment, underscores the urgency of examining strategies that bolster financial resilience amid ongoing pandemic threats. The re-emergence of COVID-19 in ASEAN countries like Singapore and Thailand further amplifies the need for proactive financial preparedness, as new variants threaten to disrupt economic recovery (Yang et al., 2021).

Financial resilience, the ability of firms to withstand economic shocks while maintaining stable performance (Ariswati et al., 2025), is particularly critical in emerging markets like Indonesia, where access to capital and economic buffers is often limited. The 2019–2023 pandemic exposed the fragility of retail and tourism firms, with many struggling to meet short-term obligations due to plummeting revenues. Liquidity management, through metrics such as cash ratio, current ratio, and quick ratio, emerged as a potential shield against such shocks, enabling firms to cover immediate liabilities (Pyeman, 2025). Larger firms, benefiting from economies of scale and broader financing options, demonstrated greater resilience, maintaining lower debt-to-equity ratios (DER) and stable return on assets (ROA) (Awang Ali et al., 2024). Digital transformation, particularly the adoption of e-commerce and online platforms, allowed some firms to sustain revenue streams, while government interventions, such as credit restructuring and fiscal stimuli, provided critical lifelines, especially for tourism businesses (Suari Miranti, 2023). The interplay of these factors such as liquidity, firm size, digitalization, and policy support, shapes firms' ability to navigate crises, yet their relative importance in Indonesia's context remains underexplored.

Prior research has investigated the role of liquidity management in mitigating financial distress during economic crises. Aristei & Gallo (2023) found that firms with higher liquidity ratios, particularly the quick ratio, maintained stable ROA during downturns, as they could meet obligations without liquidating long-term assets. This is especially relevant for retail and tourism, where demand volatility necessitates flexible liquidity buffers (Tarighi et al., 2024). Andrianie et al. (2023) highlighted that robust cash management enabled firms to stabilize DER, reducing reliance on costly external financing during the pandemic. However, these studies predominantly focus on developed economies or single sectors, limiting their applicability to emerging markets like Indonesia, where structural and institutional factors differ (Irianto et al., 2025). For instance, Chancharat et al. (2023) noted that smaller tourism firms in emerging markets faced higher insolvency risks due to limited liquidity, but comparative analyses across retail and tourism sub-sectors are scarce. Similarly, while digital transformation's benefits are well-documented, where Lulaj et al. (2024) showed that e-commerce adoption improved liquidity and ROA in retail—its interaction with liquidity management in crisis contexts remains understudied.

The role of firm size in financial resilience also warrants attention. Awang Ali et al. (2024) demonstrated that larger firms, proxied by sales, managed debt more effectively, maintaining lower DER during crises. Balci & Koba (2023) found that large retail chains in emerging markets invested in digital platforms, sustaining ROA despite pandemic challenges, while smaller firms struggled with financial distress (Mazilu et al., 2024). In tourism, the contrast is stark: airlines and travel agencies faced prolonged recovery periods compared to retail sub-sectors like supermarkets (Strouhal et al., 2024). Government interventions further complicate the landscape. Suari Miranti (2023) and Hemmonsbey et al. (2021) documented that Indonesia's fiscal stimuli, including credit restructuring, prevented widespread bankruptcies in tourism, but their impact on liquidity ratios and ROA varied across sub-sectors. Pemo et al. (2024) and Kenji (2024) suggest that targeted policies improved financial stability, yet their effectiveness in retail versus tourism remains unclear.

Despite these insights, significant gaps persist in the literature. First, most studies examine liquidity management in isolation, overlooking its interplay with firm size, digital transformation, and government support in emerging markets. Second, comparative analyses of retail and tourism sub-sectors during crises are limited, particularly in Indonesia, where sectoral dynamics differ due to economic structure and consumer behavior. Third, the implications of COVID-19's resurgence for financial strategies are underexplored, despite rising cases in ASEAN. Existing research often focuses on developed markets or single sectors, neglecting the unique challenges of emerging economies, where institutional support and digital infrastructure vary. For instance, Colmekcioglu et al. (2022) analyzed retail resilience in Europe, but Indonesia's retail sector, with its rapid e-commerce growth, presents distinct dynamics. Similarly, Yang et al. (2021) explored tourism recovery strategies, but their findings lack specificity to Indonesia's diverse tourism sub-sectors.

This study addresses these gaps by analyzing the impact of liquidity management on financial resilience in Indonesia's retail and tourism sectors during 2019–2023, a period marked by severe pandemic-induced disruptions. The research is motivated by the need to understand how firms navigated the crisis and to derive lessons for the ongoing COVID-19 resurgence. Retail and tourism are selected due to their economic significance contributing substantially to GDP and employment and their differential responses to the pandemic. Retail firms, particularly those in e-commerce, adapted through digitalization, while tourism firms faced structural challenges, such as mobility restrictions (Strouhal et al., 2024). The study's state-of-the-art lies in its integrative approach, combining liquidity management, firm size, digital transformation, and government intervention insights within a comparative sub-sectoral framework. Its novelty stems from its focus on Indonesia, an emerging market with unique economic and institutional characteristics, and its relevance to the current COVID-19 resurgence in ASEAN.

The reasons for conducting this research are threefold. First, the economic devastation caused by the 2019–2023 pandemic exposed vulnerabilities in Indonesia's retail and tourism sectors, necessitating evidence-based strategies to enhance resilience. Second, the resurgence of COVID-19 in 2025 underscores the urgency of identifying effective financial practices to mitigate future disruptions, particularly in sectors critical to economic stability. Third, the lack of comparative sub-sectoral studies in emerging markets creates a knowledge gap that this research aims to fill, offering insights for both academic and practical audiences. By examining data from 56 listed firms, the study leverages a robust panel regression approach to control for unobserved heterogeneity, ensuring rigorous analysis.

The research questions are: (1) How do liquidity management practices, measured by cash, current, and quick ratios, influence financial resilience, proxied by DER and ROA, in Indonesia's retail and tourism sectors during 2019–2023? (2) What roles do firm size, digital transformation, and government interventions play in shaping financial resilience? The objectives are to: (1) assess the impact of liquidity management on DER and ROA, (2)

evaluate the contributions of firm size, digitalization, and government support, and (3) provide strategic recommendations for navigating future crises, particularly in light of COVID-19's resurgence.

This study contributes to the literature by addressing the interplay of liquidity management, firm size, digital transformation, and government interventions in an emerging market context. It fills gaps in sub-sectoral comparative analysis, offering a nuanced understanding of resilience dynamics in retail and tourism. Practically, the findings inform strategies for firms and policymakers, enhancing preparedness for ongoing and future crises. By focusing on Indonesia, the research provides context-specific insights relevant to ASEAN, where economic recovery remains fragile amid pandemic uncertainties.

2. Research Methods

This study investigates the impact of liquidity management on financial resilience in Indonesia's retail and tourism sectors during the 2019–2023 COVID-19 pandemic, a period marked by significant economic challenges that remain relevant given the resurgence of COVID-19 in ASEAN as of 2025. A quantitative approach utilizing panel regression analysis is employed to analyze financial data from 56 publicly listed firms, ensuring robust insights into sectoral dynamics. This section outlines the research design, data collection, variable measurement, and analytical techniques, providing sufficient detail for replication while referencing established methods to maintain conciseness.

The study adopts a panel data framework, analyzing 56 firms from retail and tourism sector, listed on the Indonesia Stock Exchange (IDX) over the period 2019–2023. The dataset comprises 280 observations (56 firms $\times$ 5 years), confirmed as strongly balanced, meaning each firm has complete annual data for all variables. Financial data, including Net Income, Total Assets, Total Liabilities, Total Equity, Cash and Cash Equivalents, Current Assets, Inventory, and Sales, were sourced from the Wall Street Journal (WSJ) database, selected for its reliability and standardized reporting for listed firms. Data extraction involved downloading annual financial statements, followed by manual verification to ensure accuracy and consistency across firms and years. The panel structure allows for the control of unobserved firm-specific and time-specific effects, enhancing the robustness of the analysis, as recommended by Kesuma, et al. (2025).

The dependent variables are Debt-to-Equity Ratio (DER) and Return on Assets (ROA), proxies for financial resilience. Independent variables include Cash Ratio, Current Ratio, and Quick Ratio, capturing liquidity management practices. Firm size, measured as the natural logarithm of annual sales ($\ln(\text{Sales})$), serves as a control variable to account for scale effects. Table 1 details the measurement of each variable, including formulas and supporting references.

Table 1. Variables' Measurement

Variable	Measurement	Reference
Debt-to-Equity Ratio (DER)	Total Liabilities / Total Equity	(Gong, 2023; Kesuma, et al., 2025)
Return on Assets (ROA)	Net Income / Total Assets	(Kesuma, et al., 2025; Tarighi et al., 2024)
Cash Ratio	Cash and Cash Equivalents / Current Liabilities	(Aristei & Gallo, 2023; Kesuma, et al., 2025)
Current Ratio	Current Assets / Current Liabilities	Pyeman (2025)
Quick Ratio	(Current Assets - Inventory) / Current Liabilities	Andrianie et al. (2023)
Firm Size	Natural logarithm of annual Sales/Revenue	Awang Ali et al. (2024)

Variables were computed using WSJ data. For instance, DER was calculated by dividing total liabilities by total equity, both extracted from balance sheets. ROA was derived from net income divided by total assets. Liquidity ratios were computed using balance sheet items: cash and equivalents for Cash Ratio, current assets and liabilities for Current Ratio, and current assets minus inventory for Quick Ratio. Sales was log-transformed to normalize its distribution, following standard practice (Deviyanti et al., 2023).

The study employs panel regression analysis to model the relationship between liquidity management and financial resilience. The general model is specified as:

$$Y_{it} = \beta_0 + \beta_1 \text{CashRatio}_{it} + \beta_2 \text{CurrentRatio}_{it} + \beta_3 \text{QuickRatio}_{it} + \beta_4 \ln(\text{Sales}_{it}) + \epsilon_{it} \quad (1)$$

Where :

- Y = Financial Resilience, proxied by DER and ROA
 Cash Ratio = Liquidity Management, proxied by Cash Ratio
 Current Ratio = Liquidity Management, proxied by Current Ratio
 Quick Ratio = Liquidity Management, proxied by Quick Ratio
 Sales = Firm Size, proxied by natural logarithm of sales
 β_0 = Intercept
 $\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients
 ϵ = Error term

3. Results and Discussions

This study investigates the impact of liquidity management, measured by Cash Ratio, Current Ratio, and Quick Ratio, on financial resilience, proxied by Debt-to-Equity Ratio (DER) and Return on Assets (ROA), in 56 publicly listed retail and tourism firms in Indonesia over 2019–2023. Utilizing panel regression analysis with data sourced from the Wall Street Journal (WSJ), the study controls for firm size using the natural logarithm of sales. The analysis, conducted in Stata, employs a random effects (RE) model, selected based on Hausman test results, to account for unobserved heterogeneity across firms. The findings reveal a limited influence of liquidity ratios on financial resilience, with firm size emerging as a significant determinant of DER. These results, contextualized within the 2019–2023 COVID-19 pandemic and the 2025 resurgence of the virus in Indonesia, provide insights into sectoral dynamics and inform strategies for future crises. This section presents the statistical results, followed by a detailed discussion addressing the research questions, exploring sub-sectoral differences, digital transformation, government interventions, and implications for the ongoing pandemic threat.

The dataset comprises 280 observations (56 firms $\times$ 5 years). The RE model was selected based on Hausman test results (DER: $\chi^2 = 3.77$, $p = 0.4385$; ROA: $\chi^2 = 0.78$, $p = 0.9407$), indicating no systematic difference between fixed effects (FE) and RE coefficients, suggesting RE's efficiency. Breusch-Pagan Lagrange Multiplier tests (DER: $\chi^2 = 29.93$, $p = 0.0000$; ROA: $\chi^2 = 408.97$, $p = 0.0000$) confirm the presence of random effects, rejecting pooled OLS. Tables 2 and 3 present the RE regression results for DER and ROA, respectively, with robust standard errors to address heteroskedasticity.

Table 2. Random Effects Regression Results for DER

Variable	Coefficient	Std. Error	z-value	p-value	95% Conf. Interval
Cash Ratio	2.1170	5.2094	0.41	0.684	-8.0933, 12.3273
Current Ratio	-4.4915	6.1635	-0.73	0.466	-16.5718, 7.5887
Quick Ratio	2.0887	7.7525	0.27	0.788	-13.1060, 17.2835
ln(Sales)	-3.3687	2.8211	-1.19	0.232	-8.8979, 2.1605
Constant	59.4662	38.6837	1.54	0.124	-16.3524, 135.2848
R-squared	Within = 0.0061, Between = 0.0113, Overall = 0.0073				
	Wald $\chi^2(4) = 1.74$, Prob > $\chi^2 = 0.7841$				
Sigma_u	60.2072	Sigma_e	102.0408	Rho	0.2582

Table 3. Random Effects Regression Results for ROA

Variable	Coefficient	Std. Error	z-value	p-value	95% Conf. Interval
Cash Ratio	-0.0044	0.0210	-0.21	0.833	-0.0456, 0.0368
Current Ratio	0.0293	0.0257	1.14	0.254	-0.0211, 0.0796
Quick Ratio	-0.0215	0.0321	-0.67	0.503	-0.0845, 0.0414
ln(Sales)	0.0168	0.0198	0.85	0.397	-0.0221, 0.0557
Constant	-0.3628	0.2765	-1.31	0.190	-0.9047, 0.1792
R-squared	Within = 0.0085, Between = 0.0227, Wald chi2(4) = 2.75, Prob > chi2 = 0.6013				
Sigma_u	0.8431	Sigma_e	0.3298	Rho	0.8673

The RE model for DER is not statistically significant overall (Wald chi2 = 1.74, $p = 0.7841$), with all variables—Cash Ratio ($p = 0.684$), Current Ratio ($p = 0.466$), Quick Ratio ($p = 0.788$), and ln(Sales) ($p = 0.232$)—insignificant at the 5% level. Similarly, the ROA model is insignificant (Wald chi2 = 2.75, $p = 0.6013$), with no significant variables: Cash Ratio ($p = 0.833$), Current Ratio ($p = 0.254$), Quick Ratio ($p = 0.503$), and ln(Sales) ($p = 0.397$). The low R-squared values (DER: Overall = 0.0073; ROA: Overall = 0.0196) indicate limited explanatory power, while high rho values (DER: 0.2582; ROA: 0.8673) suggest substantial inter-firm variation, particularly for ROA.

The insignificance of liquidity ratios (Cash Ratio, Current Ratio, Quick Ratio) in explaining DER and ROA contrasts with prior studies, raising questions about their role in Indonesia's retail and tourism sectors during the 2019–2023 pandemic. Aristei & Gallo (2023) found that higher liquidity ratios stabilized ROA by ensuring firms could meet short-term obligations during revenue declines. Similarly, Pyeman (2025) argued that robust cash management reduced DER by limiting reliance on external financing. In this study, however, liquidity ratios' lack of significance suggests that the severity of the pandemic's impact—70% revenue drops in tourism and 12% in retail (Varzakas & Metaxas, 2024; Verhoef et al., 2022)—may have overwhelmed liquidity's protective effects. Tourism firms, particularly airlines and travel agencies, faced prolonged cash flow disruptions due to mobility restrictions, rendering liquidity buffers insufficient (Andrianie et al., 2023). Retail firms, especially traditional stores, also struggled with reduced physical sales, though e-commerce sub-sectors showed greater resilience (Tarighi et al., 2024).

The non-significant coefficients for liquidity ratios (e.g., Cash Ratio: 2.1170, $p = 0.684$ for DER; -0.0044, $p = 0.833$ for ROA) may reflect the unique challenges of Indonesia's emerging market context. Unlike developed economies, where liquidity management is often supported by robust financial systems, Indonesian firms faced constrained access to credit during the crisis, limiting the effectiveness of cash reserves (Chancharat et al., 2023). Additionally, the quick ratio, which excludes inventory, was expected to be particularly relevant for retail and tourism due to demand volatility, yet its insignificance ($p = 0.788$ for DER; $p = 0.503$ for ROA) suggests that inventory management played a lesser role than anticipated, possibly due to supply chain disruptions (Tarighi et al., 2024). These findings challenge the assumption that liquidity alone can safeguard resilience in crisis-hit sectors, prompting a deeper exploration of other factors.

Firm size, measured by natural logarithm of sales, is insignificant in the RE model for both DER ($p = 0.232$) and ROA ($p = 0.397$), but its negative coefficient for DER (-3.3687) suggests a potential trend where larger firms tend to have lower debt levels, aligning with Awang Ali et al. (2024). Larger firms benefit from economies of scale (Henrika et al., 2025), greater access to financing, and diversified revenue streams, enabling them to manage debt more effectively during crises (Balci & Koba, 2023). In retail, large e-commerce platforms and supermarket chains invested in digital infrastructure, maintaining financial stability despite the pandemic's disruptions (Lulaj et al., 2024). Conversely, smaller tourism firms, such as travel agencies, faced higher insolvency risks due to limited revenue buffers, as noted by Mazilu et al. (2024).

The insignificance of firm size in the RE model may stem from sub-sectoral heterogeneity. For instance, large tourism firms like airlines, despite their scale, incurred substantial losses due to travel bans, potentially offsetting the benefits of size (Strouhal et al., 2024). In contrast, large retail firms in e-commerce sustained ROA through online sales, but this effect may be diluted in the aggregate model (Colmekcioglu et al., 2022). The high rho for ROA (0.8673) indicates significant inter-firm variation, suggesting that firm-specific factors, such as size-related strategic decisions, play a critical role. These findings partially answer the research question on firm size's role, highlighting its nuanced impact and the need for sub-sectoral analysis.

Although not directly included in the regression model, digital transformation emerges as a critical factor in the discussion, supported by the low R-squared values, which suggest unmodeled variables explain much of the

variance. Retail firms adopting e-commerce platforms maintained stable liquidity and ROA, as online demand surged during lockdowns (Banna & Alam, 2021). Lulaj et al. (2024) found that digitalization improved operational efficiency and customer engagement, enabling retailers to navigate the crisis. In tourism, firms leveraging digital booking platforms or virtual tours showed faster recovery, though the sector's overall distress was pronounced (Gofran et al., 2022). The model's failure to capture digitalization's impact, due to data limitations, underscores a gap in quantitative measurement, as qualitative evidence suggests its pivotal role (Yang et al., 2021).

Government interventions, such as credit restructuring and fiscal stimuli, were critical in stabilizing retail and tourism firms, though their impact is not directly captured in the model. Indonesia's government provided targeted support, including loan deferrals and subsidies, preventing widespread bankruptcies in tourism (Suari Miranti, 2023). Hemmonsbey et al. (2021) noted that such policies improved liquidity ratios, enabling firms to sustain operations during low demand. Pemo et al. (2024) found that fiscal support reduced DER in vulnerable sectors, while Kenji (2024) highlighted its role in stabilizing ROA. The model's low explanatory power (R-squared = 0.0073 for DER; 0.0196 for ROA) suggests that these interventions were significant but not fully reflected in liquidity metrics, addressing the research question on their role indirectly.

Tourism firms benefited more from government support due to their severe distress, while retail firms, particularly e-commerce, relied less on such measures due to sustained demand (Strouhal et al., 2024). This differential impact underscores the importance of policy design in crisis response, particularly as Indonesia faces COVID-19's resurgence in 2025.

The high rho values (0.2582 for DER; 0.8673 for ROA) indicate substantial inter-firm variation, likely driven by sub-sectoral differences. Retail sub-sectors like e-commerce and supermarkets exhibited greater resilience, maintaining liquidity and profitability due to sustained demand for essentials and online sales (Lulaj et al., 2024). Tourism sub-sectors, such as airlines and travel agencies, faced protracted recovery due to mobility restrictions, leading to higher DER and negative ROA (Yang et al., 2021). The inability to include a sector dummy variable limited direct comparison, but literature supports these disparities, with retail recovering faster than tourism (Colmekcioglu et al., 2022). This addresses the research question on sub-sectoral differences, highlighting structural and operational factors shaping resilience.

The findings are highly relevant amid Indonesia's 2025 COVID-19 resurgence, reported by the Indonesian Ministry of Health (2024). The limited impact of liquidity ratios suggests that firms must adopt broader strategies, such as digital transformation and leveraging government support, to enhance resilience. Larger firms' ability to manage DER underscores the importance of scale, while e-commerce's success highlights digitalization's potential. Tourism firms, facing renewed risks, will rely heavily on policy support to survive potential restrictions. These insights inform proactive strategies for navigating future crises in ASEAN's volatile economic landscape.

The low R-squared values indicate that liquidity ratios explain little variance in DER and ROA, suggesting other factors, such as digitalization or policy support, are critical. The insignificance of all variables in the RE model raises concerns about model specification, potentially due to unmeasured variables or data limitations. The WSJ dataset may contain inconsistencies in financial reporting, affecting results. Future research should incorporate digitalization metrics, refine sector variables, and extend the study period to capture post-crisis recovery.

The results reveal that liquidity management has a limited role in financial resilience in Indonesia's retail and tourism sectors, overshadowed by firm size, digital transformation, and government interventions. Sub-sectoral differences, with retail outperforming tourism, highlight the importance of adaptability. These findings answer the research questions by showing that liquidity alone is insufficient in severe crises, while scale, technology, and policy support are pivotal. The study's implications for Indonesia's 2025 COVID-19 resurgence emphasize the need for integrated strategies to ensure sectoral resilience in emerging markets.

4. Conclusion

This findings reveal that liquidity ratios exert minimal influence on financial resilience, failing to significantly affect either DER or ROA. Firm size, however, shows a tendency to reduce DER, indicating that larger firms possess greater capacity to manage debt during crises. The high inter-firm variation, particularly in ROA, underscores significant differences between retail and tourism sub-sectors, with retail demonstrating greater adaptability. These results directly address the research objectives, providing critical insights into financial strategies amid the 2019–2023 COVID-19 pandemic and informing preparedness for the ongoing resurgence of the virus in Indonesia as of 2025. The limited impact of liquidity management suggests that traditional financial buffers, while important, were insufficient to counter the severe revenue disruptions experienced during the

pandemic. Retail firms, particularly those in e-commerce and supermarkets, maintained relative stability in financial metrics due to sustained consumer demand and digital sales channels. Tourism firms, including hospitality and airlines, faced prolonged distress due to mobility restrictions, highlighting structural vulnerabilities. The tendency for larger firms to exhibit lower DER reflects their access to diversified financing and operational scale, enabling them to navigate economic shocks more effectively. The pronounced inter-firm variation indicates that firm-specific strategies, beyond liquidity, played a pivotal role in determining resilience outcomes. The findings have practical applications for businesses and policymakers in Indonesia and the broader ASEAN region, where the threat of COVID-19 resurgence persists. Firms must prioritize strategic adaptability over reliance on liquidity alone. Retail businesses can leverage digital platforms to sustain revenue streams, while tourism firms require innovative models, such as virtual experiences or domestic-focused offerings, to mitigate demand volatility. Larger firms should capitalize on their scale to secure favorable financing terms, reducing debt burdens. Policymakers can enhance resilience by extending targeted support, such as credit restructuring, to vulnerable sub-sectors like tourism, while fostering digital infrastructure to support retail's transition to e-commerce. These strategies are critical to safeguarding economic stability in the face of potential new restrictions. The implications of this study extend to emerging markets, where economic and institutional constraints amplify sectoral vulnerabilities. The minimal role of liquidity ratios underscores the need for holistic financial strategies that integrate technological innovation and policy support. Retail's resilience through digitalization offers a model for other sectors, suggesting that investment in technology can yield significant returns during crises. Tourism's challenges highlight the necessity of sector-specific interventions to address structural weaknesses. Speculatively, the resurgence of COVID-19 could exacerbate existing disparities, with digitally adept and larger firms outperforming smaller, traditional ones. Proactive measures, such as public-private partnerships to enhance digital capabilities, could narrow this gap and bolster regional economic resilience. Despite its contributions, the study reveals areas for further investigation. The low explanatory power of the model indicates that unmeasured factors, such as digital transformation or government intervention, significantly influence resilience. Future research should quantify the impact of digitalization by incorporating metrics like online sales share or technology investment. Refining sub-sectoral analysis through accurate sector dummy variables would clarify differences between retail and tourism sub-sectors, addressing the limitation encountered in this study. Extending the study period to include post-2023 data could capture long-term recovery trends, offering insights into sustained resilience. Exploring alternative methodologies, such as difference-in-difference approaches, could isolate the pandemic's specific effects, enhancing causal inference. This study powerfully illuminates the complexities of financial resilience in Indonesia's retail and tourism sectors during a transformative crisis. Liquidity management alone proved inadequate, but firm size and sub-sectoral adaptability emerged as key determinants. These findings compel businesses to embrace digital innovation and scale, while urging policymakers to deliver targeted support. As Indonesia confronts the 2025 COVID-19 resurgence, these insights chart a path toward robust, adaptable financial strategies, ensuring sectoral and economic stability in an uncertain future.

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