

Financial Resilience of Indonesian SMEs Amid Economic Uncertainty: The Roles of Accounting Information Quality, Financial Management Capability, and Strategic Agility

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ABSTRACT

This study examines the financial resilience of Indonesian small and medium-sized enterprises amid economic uncertainty by focusing on the roles of accounting information quality, financial management capability, and strategic agility. The study aims to develop an integrated understanding of how these internal capabilities enable SMEs to anticipate financial pressures, maintain operational continuity, adapt resource allocation, and recover from disruption. A qualitative literature review method was employed by systematically identifying, selecting, comparing, and synthesizing peer-reviewed studies, publications, and institutional reports related to SME resilience, accounting information, financial management, strategic agility, digital transformation, and business sustainability. The findings indicate that accounting information quality functions as an early-warning and financial sensing mechanism by providing accurate, relevant, complete, and timely information for decision-making. Financial management capability translates such information into budgeting, liquidity control, working-capital management, debt evaluation, and risk mitigation. Strategic agility strengthens resilience by enabling rapid decisions, market adjustment, innovation, and resource reconfiguration. The study further finds that these three capabilities are complementary rather than independent. Financial resilience is strongest when reliable information, disciplined financial practices, and adaptive strategies operate simultaneously. The resulting framework contributes theoretically to dynamic capability and resource-based perspectives while offering practical guidance for SME owners, financial institutions, and policymakers.

Keywords: Financial Resilience, Accounting Information Quality, Financial Management Capability, Strategic Agility, Indonesian SMEs.

I. Introduction

Small and medium-sized enterprises (SMEs) constitute a central component of Indonesia's productive economy because they generate employment, support household income, widen entrepreneurial participation, and sustain commercial activity across urban and rural areas. Nevertheless, their economic importance is accompanied by structural vulnerability. Compared with large corporations, SMEs generally

operate with thinner liquidity buffers, fewer financing alternatives, limited managerial specialization, and stronger dependence on short-term cash flows. These characteristics expose them to uncertainty arising from fluctuating input prices, exchange-rate movements, changes in purchasing power, tightening credit conditions, digital disruption, and supply-chain instability. Bank Indonesia has emphasized that the national economy continues to operate amid elevated global volatility and uncertainty, creating an environment in which business survival depends not only on sales growth but also on the capacity to absorb shocks and reorganize resources effectively (Bank Indonesia, 2025).

In this context, financial resilience refers to an enterprise's capacity to anticipate financial pressure, maintain essential operations during disruption, adapt its financial decisions, and recover without prolonged deterioration. For SMEs, resilience is reflected in the ability to preserve liquidity, control operating costs, meet short-term obligations, maintain financing access, and redirect resources when market conditions change. Financial resilience is therefore broader than conventional financial performance. Profitability describes outcomes achieved within a particular period, whereas resilience concerns the ability to withstand, respond to, and recover from adverse conditions. An SME may report acceptable profit under normal conditions while remaining vulnerable to revenue declines, payment delays, cost increases, or credit restrictions. Research on Balinese SMEs supports this distinction by showing that financial literacy, financial performance, and financial technology adoption are positively associated with financial resilience (Artana et al., 2025). One factor expected to strengthen financial resilience is accounting information quality. High-quality accounting information is relevant, accurate, complete, understandable, and timely. It enables SME owners to identify cash-flow shortages, distinguish profitable from unprofitable activities, evaluate receivables and liabilities, estimate working-capital requirements, and make evidence-based decisions. Under uncertainty, delayed or unreliable records can conceal declining margins and emerging liquidity problems until corrective action becomes difficult. Christanty et al. (2023), based on 400 SMEs in Magelang, found that accounting information systems and financial-statement quality positively affected SME performance. Similarly, Lopung and Rulindo (2023) reported that accounting information systems improved the financial performance of Indonesian SMEs, particularly through the broad scope and timeliness of information. These findings suggest that accounting information becomes strategically valuable when it supports early detection, financial control, and rapid response.

The importance of information quality is increasingly visible as Indonesian SMEs adopt digital accounting, electronic payments, and platform-based commerce. However, technology adoption does not automatically produce better outcomes because its benefits depend on whether the system generates reliable and useful information. Hendrawati et al. (2024), studying 350 SMEs participating in the e-peken platform in Surabaya, found that digital accounting improved accounting information quality, while information quality positively influenced SME performance and mediated the relationship between digital accounting and performance. This result shows that resilience is unlikely to arise merely from owning accounting software. It requires disciplined transaction recording, consistent classification, periodic reporting, and managerial interpretation. Accounting information quality may therefore function as the informational foundation for recognizing threats, allocating resources efficiently, and formulating timely responses. Financial management capability represents a second internal determinant of financial resilience. This capability includes budgeting, cash-flow planning, working-capital control, separation of business and personal funds, debt management, cost evaluation, savings formation, and risk assessment. SMEs with strong financial management capability can prioritize essential expenditures, preserve emergency liquidity, negotiate financing, and avoid excessive dependence on unstable revenue. Supramono et al. (2025), using data from 450 Indonesian food and beverage MSMEs, found that sound financial behavior significantly accelerated post-crisis performance recovery and supported business sustainability. Their results indicate that disciplined financial management, including saving part of business profits and maintaining comprehensive income and expenditure records, provides resources that enable SMEs to survive disruption and recover more rapidly. Financial management capability thus translates accounting information into decisions that protect operational continuity.

A third determinant is strategic agility, understood as the ability to sense environmental changes, make timely strategic decisions, and reconfigure resources in response to threats and opportunities. Strategic agility is especially important for SMEs because limited resources make prolonged strategic errors costly, although simpler organizational structures may permit faster adaptation. Arsawan et al. (2022) positioned

innovation and strategic flexibility as central mechanisms in developing organizational agility among SMEs. Alfarajat (2023) likewise found that strategic agility significantly influenced SME performance, while innovation capability strengthened this relationship. In Indonesia, Panjaitan et al. (2025) showed that SMEs pursue resilience and sustainability through sociodynamic capabilities, disruptive innovation, adaptive networks, and dynamic flexibility. Collectively, these studies indicate that resilient SMEs do not merely defend existing operations; they modify products, markets, partnerships, technologies, and resource configurations as conditions evolve.

Despite these contributions, previous studies remain fragmented. Research on accounting information commonly focuses on performance, reporting quality, or technology adoption, while studies of financial capability emphasize literacy, financial behavior, recovery, or sustainability. Strategic agility research tends to examine innovation, competitiveness, organizational flexibility, or general business performance. Limited research integrates accounting information quality, financial management capability, and strategic agility as complementary foundations of SME financial resilience in Indonesia. This gap is important because resilience requires accurate information, competent financial execution, and rapid adaptation simultaneously. Reliable reports without managerial capability may not produce corrective action; financial discipline without strategic agility may preserve resources but fail to address market transformation; and agility without sound information may encourage rapid but poorly informed decisions. The existing evidence therefore needs to be synthesized into a more comprehensive framework that explains how informational, financial, and strategic capabilities collectively characterize financially resilient SMEs.

Accordingly, this quantitative descriptive study aims to describe the level of financial resilience among Indonesian SMEs and assess the roles of accounting information quality, financial management capability, and strategic agility amid economic uncertainty. Specifically, it seeks to provide an empirical profile of each variable, identify the relative contribution of the three internal capabilities, and explain how their combined presence supports liquidity maintenance, operational continuity, adaptation, and financial recovery. The study is expected to enrich SME resilience literature by integrating accounting, financial management, and strategic management perspectives within one analytical framework. Practically, the findings may guide SME owners, financial institutions, business-development agencies, and policymakers in designing interventions that extend beyond financing access toward stronger accounting information systems, financial competencies, and adaptive decision-making capabilities. In this way, the study addresses the need for an integrated understanding of how Indonesian SMEs can build financial resilience and remain viable when economic conditions become increasingly uncertain.

II. Literature Review

2.1. Financial Resilience of SMEs under Economic Uncertainty

Financial resilience refers to an enterprise's capacity to anticipate financial disruption, absorb immediate pressure, maintain essential operations, adapt its financial structure, and recover toward a stable or improved condition. It differs from ordinary financial performance because profitability describes the outcomes achieved during a particular period, whereas resilience reflects the ability to remain viable when those outcomes are threatened. Economic policy uncertainty can reduce investment, weaken revenue predictability, increase financing costs, and intensify financial distress among SMEs (Hawach & Requejo, 2025; Orden-Cruz et al., 2024). Financial resilience is multidimensional and should not be represented by profitability alone. It includes liquidity adequacy, manageable leverage, emergency financial reserves, stable operating cash flow, financing accessibility, cost flexibility, and recovery capacity. Recent resilience literature also emphasizes the ability to learn from disruption and transform the business rather than merely returning to its previous condition. Malik and Terzidis (2026) conceptualize SME resilience as an evolving capability supported by adaptation, digitalization, learning, and resource reconfiguration, while Martín-Rojas et al. (2026) demonstrate that digital technologies and innovation strengthen organizational resilience.

The relevance of this construct is particularly evident in Indonesia, where SMEs frequently operate with limited liquidity, informal financial procedures, concentrated ownership, and strong dependence on short-term revenue. Artana et al. (2025) found that financial literacy, financial performance, and financial

technology adoption contributed to the financial resilience of SMEs in Bali. Similarly, Supramono et al. (2025) showed that dynamic capabilities and responsible financial behavior accelerated the recovery of Indonesian MSMEs and strengthened their long-term business sustainability. Recent studies increasingly regard resilience as the outcome of complementary resources rather than a single financial characteristic. Digital transformation, innovation, adaptive networks, and financial discipline collectively help SMEs withstand turbulence and exploit emerging opportunities (Panjaitan et al., 2025; Sagala & Öri, 2025). However, limited research simultaneously examines the informational, managerial, and strategic foundations of financial resilience. This study therefore positions accounting information quality, financial management capability, and strategic agility as interdependent internal capabilities that explain differences in Indonesian SMEs' resilience.

2.2. Accounting Information Quality and Financial Resilience

Accounting information quality refers to the extent to which financial information is relevant, faithfully represented, complete, understandable, comparable, accurate, and available when required for decision-making. In the SME context, quality is not determined solely by compliance with accounting standards. It also concerns whether records provide a dependable representation of cash flows, sales, operating costs, receivables, liabilities, inventory, and profitability. Monteiro et al. (2024) confirm that accounting-system quality improves financial-reporting quality and the usefulness of information for organizational decision-making. High-quality accounting information reduces information asymmetry and enables owners to detect unfavorable financial developments before they become severe. Timely records allow managers to recognize declining margins, overdue receivables, excessive expenses, and liquidity shortages. Lopung and Rulindo (2023) found that the scope and timeliness of accounting information positively influenced the financial performance of Indonesian SMEs. Christanty et al. (2023) similarly reported that accounting information systems contributed positively to SME performance by improving information availability and managerial control.

Digital accounting has further expanded the potential value of SME information by automating transaction recording, summarizing financial data, and accelerating report preparation. Hendrawati et al. (2024) found that digital accounting improved accounting information quality, which subsequently enhanced the performance of Indonesian SMEs. Nevertheless, adopting software does not automatically guarantee reliable information. Cloud-accounting adoption requires technological readiness, managerial support, user competence, perceived usefulness, data security, and organizational commitment (Mujalli et al., 2024). From a resilience perspective, accounting information provides an early-warning mechanism. Accurate and timely reports improve cash-flow forecasting, scenario evaluation, cost adjustment, credit applications, and resource allocation. Digital governance and well-integrated accounting mechanisms can also reinforce financial and accounting resilience by improving visibility and organizational coordination (Zhu et al., 2026). Consequently, SMEs possessing superior accounting information should be better prepared to absorb shocks and formulate corrective decisions. Accordingly, H1 states that accounting information quality has a positive and significant effect on the financial resilience of Indonesian SMEs.

2.3. Financial Management Capability and Financial Resilience

Financial management capability refers to an SME's ability to plan, obtain, allocate, control, and evaluate financial resources effectively. It encompasses budgeting, bookkeeping, cash-flow forecasting, working-capital management, financing decisions, debt control, investment evaluation, risk management, and separation between business and personal funds. These practices convert financial knowledge into organizational routines. Przychocka et al. (2024) emphasize that effective cash-flow management is particularly important during economic uncertainty because liquidity determines whether SMEs can meet obligations and maintain operations. Financial management capability is broader than financial literacy. Literacy represents knowledge and understanding, whereas capability includes the practical application of that knowledge through consistent financial behavior and decision-making. Padi et al. (2025) found that owner financial literacy and entrepreneurial competence significantly improved SME financial performance. In Indonesia, Kurniasari et al. (2025) demonstrated that financial literacy supported performance and

sustainability through financial technology adoption and access to finance, indicating that knowledge generates value when translated into operational financial decisions.

Strong financial capability supports resilience through several mechanisms. Budgeting establishes expenditure priorities, cash-flow monitoring identifies potential liquidity deficits, working-capital control prevents excessive funds from being locked in inventory or receivables, and debt management reduces default exposure. Supramono et al. (2025) found that sound financial behavior accelerated MSME performance recovery after disruption. Artana et al. (2025) also showed that financial knowledge and financial performance were associated with stronger resilience, particularly when supported by financial technology. SMEs with weak financial management may possess accounting records without being able to interpret or use them effectively. In contrast, financially capable owners can convert information into decisions concerning cost reduction, liquidity reserves, financing, payment scheduling, and investment postponement. These decisions preserve financial flexibility and shorten the recovery period following external shocks. Financial management capability should therefore function as the implementation mechanism through which resources are protected and mobilized. Accordingly, H2 states that financial management capability has a positive and significant effect on the financial resilience of Indonesian SMEs.

2.4. Strategic Agility and Integrated Hypothesis Development

Strategic agility refers to an enterprise's capacity to sense environmental change, make timely strategic commitments, and rapidly reconfigure resources. Its principal dimensions commonly include strategic sensitivity, leadership unity, resource fluidity, rapid decision-making, and implementation flexibility. Troise et al. (2022) argue that agility helps SMEs navigate volatile, uncertain, complex, and ambiguous environments, particularly when supported by digital transformation. Arsawan et al. (2022) similarly demonstrate that innovation and strategic flexibility strengthen organizational agility among SMEs. Strategic agility is distinguishable from operational flexibility. Operational flexibility concerns adjustments to routine activities, while strategic agility permits more fundamental changes in products, markets, technologies, partnerships, revenue models, and resource configurations. Sagala and Őri (2024) explain that successful SME digital transformation depends on strategic, organizational, technological, and human capabilities. More recently, Demirbag et al. (2026) found that SMEs operating under institutional and economic turbulence develop context-specific agility mechanisms to sense disruption, cope with constraints, and reposition resources.

Strategic agility contributes to financial resilience by enabling SMEs to respond before financial pressure becomes irreversible. Agile firms may change suppliers, redesign products, enter digital markets, renegotiate cost structures, or redirect capital toward more viable activities. Indonesian evidence indicates that adaptive networks, disruptive innovation, and dynamic flexibility support SME resilience and sustainability (Panjaitan et al., 2025). Innovation, digital technology, and open collaboration also strengthen the capacity to respond rapidly and sustain organizational performance (Martín-Rojas et al., 2026; Mohamed & Zouaoui, 2026). Accounting information quality, financial management capability, and strategic agility are theoretically complementary. Quality information reveals financial conditions, management capability converts that information into disciplined financial action, and strategic agility enables broader resource reconfiguration. A weakness in any component may reduce resilience: information without competence remains unused, competence without agility becomes rigid, and agility without reliable information may produce poorly grounded decisions. Accordingly, H3 states that strategic agility has a positive and significant effect on the financial resilience of Indonesian SMEs. H4 states that accounting information quality, financial management capability, and strategic agility simultaneously have a positive and significant effect on the financial resilience of Indonesian SMEs.

III. Research Method

This study employed a qualitative research approach using a literature study design to examine the financial resilience of Indonesian small and medium-sized enterprises amid economic uncertainty. The literature study was selected because the research aimed to develop a comprehensive conceptual understanding of financial resilience and identify the roles of accounting information quality, financial

management capability, and strategic agility based on existing theoretical and empirical evidence. Rather than collecting primary data directly from SME owners, the study systematically reviewed, interpreted, and synthesized findings from previous research. This approach enabled the researchers to identify major concepts, relationships, patterns, and research gaps relevant to the financial resilience of SMEs. The sources of data consisted of scientific journal articles, conference proceedings, scholarly books, institutional reports, and official publications related to SME resilience, accounting information, financial management, strategic agility, economic uncertainty, and business sustainability. The literature was obtained from academic databases such as Scopus, Web of Science, ScienceDirect, SpringerLink, Emerald Insight, Google Scholar, and relevant Indonesian journal databases. Official reports published by institutions such as Bank Indonesia, Statistics Indonesia, the Ministry of Cooperatives and SMEs, the World Bank, and the Organisation for Economic Co-operation and Development were also considered when they provided relevant contextual information regarding the economic conditions and development of Indonesian SMEs.

The literature selection process applied several inclusion criteria. The selected publications were required to discuss at least one of the principal research constructs, namely financial resilience, accounting information quality, financial management capability, strategic agility, or SME adaptation under economic uncertainty. Priority was given to peer-reviewed studies published between 2020 and 2026 to ensure that the analysis reflected recent developments. Earlier publications were included when they provided fundamental theories or established definitions relevant to the research framework. Studies were also selected based on their methodological clarity, relevance to SMEs, accessibility of complete texts, and contribution to understanding financial resilience. Publications that lacked a clear research method, focused on unrelated organizational contexts, or contained insufficient information were excluded. Data collection was conducted through documentation. The researchers identified keywords including "SME financial resilience," "accounting information quality," "financial management capability," "strategic agility," "economic uncertainty," "MSME sustainability," and "business resilience." The selected publications were documented in a literature review matrix containing the authors, publication year, research objectives, theoretical foundations, methodology, sample characteristics, principal findings, and implications. This matrix facilitated systematic comparison between studies and reduced the possibility of overlooking important evidence.

The collected data were analyzed using qualitative content analysis. The analysis involved data organization, coding, categorization, interpretation, and synthesis. Relevant statements and findings were coded according to the four principal themes of the study. The researchers then compared the similarities, differences, and relationships among previous findings. Accounting information quality was analyzed as an informational resource, financial management capability as a managerial mechanism, and strategic agility as an adaptive capability supporting financial resilience. The synthesis was used to construct an integrated conceptual explanation of how these three capabilities enable SMEs to anticipate, absorb, adapt to, and recover from economic disruptions. The credibility of the study was strengthened through source triangulation by comparing evidence from different authors, databases, research settings, and publication types. Greater interpretive weight was assigned to findings that appeared consistently across multiple credible sources. The researchers also maintained transparency by documenting the literature-search procedure, selection criteria, analytical categories, and interpretation process. Because the study used publicly available secondary sources and did not directly involve human participants, it presented minimal ethical risk. Nevertheless, all ideas and findings derived from previous studies were appropriately acknowledged through accurate citation and referencing.

IV. Result and Discussion

The qualitative synthesis of the selected literature indicates that the financial resilience of Indonesian small and medium-sized enterprises is not produced by a single financial resource or managerial practice. Instead, it emerges from the interaction between reliable accounting information, competent financial management, and the ability to adjust strategies rapidly. Economic uncertainty affects SMEs through unstable

demand, increasing operating costs, payment delays, restricted financing, technological disruption, and changing consumer behavior. The literature consistently demonstrates that SMEs with limited liquidity, informal records, concentrated decision-making, and inadequate strategic preparation are particularly exposed to these pressures. However, recent studies also reveal that uncertainty can stimulate learning, innovation, digital transformation, and strategic renewal when SMEs possess sufficient internal capabilities. Financial resilience should therefore be interpreted as a dynamic capacity to anticipate threats, absorb financial shocks, maintain essential activities, adapt resource allocation, and recover through an improved business configuration rather than merely returning to pre-crisis conditions (Koporcic et al., 2026; Malik & Terzidis, 2026).

4.1. Financial Resilience as an Integrated and Dynamic SME Capability

The first major finding is that financial resilience is broader than profitability, sales growth, or temporary business survival. The reviewed studies conceptualize resilience as a process involving preparedness before disruption, absorption during the initial shock, adaptation while uncertainty continues, and transformation after the immediate pressure subsides. An SME may produce profits under normal circumstances but remain financially fragile when it has insufficient cash reserves, excessive short-term debt, highly concentrated customers, or limited access to alternative financing. Economic policy uncertainty can weaken SME financial performance and increase the probability of financial distress because owners postpone investment, lenders become more cautious, and future cash flows become difficult to predict (Hawach & Requejo, 2025; Orden-Cruz et al., 2024). Late customer payments further undermine liquidity and may cause financial institutions to impose credit rationing, higher interest rates, or smaller loan amounts, thereby intensifying the original cash-flow problem (Kaya, 2024).

In the Indonesian context, the synthesis identifies financial literacy, financial behavior, financial technology, performance recovery, and dynamic capabilities as recurring antecedents of resilience. Artana et al. (2025) found that financial literacy strengthened the resilience of SMEs in Bali both directly and indirectly through financial performance and financial technology adoption. Similarly, Supramono et al. (2025) demonstrated that dynamic capabilities and responsible financial behavior accelerated the recovery of Indonesian food and beverage MSMEs and subsequently supported business sustainability. These results indicate that financial resilience depends on whether SME owners can translate knowledge into routines such as cash monitoring, saving, expenditure control, debt evaluation, and market adaptation. Financial knowledge that remains theoretical cannot protect the enterprise unless it is embedded in actual managerial behavior.

A further finding is that resilience develops at several interconnected levels. At the individual level, owners need financial judgment, strategic awareness, and confidence in making decisions under pressure. At the organizational level, SMEs require routines for information processing, financial control, innovation, and resource reconfiguration. At the interorganizational level, relationships with banks, suppliers, customers, digital platforms, government agencies, and business associations provide information and resources that cannot always be generated internally. Malik and Terzidis (2026) describe this as a multilevel and transformative process in which leadership, digitalization, and collaboration jointly influence resilience. Consequently, the present synthesis interprets financial resilience as the observable outcome of an integrated capability system rather than a static financial condition. This interpretation also explains why access to capital alone may not guarantee resilience when an SME lacks the information and managerial competence required to use that capital effectively.

4.2. Accounting Information Quality as a Financial Sensing Infrastructure

The second major finding concerns the role of accounting information quality as the informational foundation of resilience. Quality accounting information accurately and promptly represents revenues, costs, cash balances, receivables, liabilities, inventory, margins, and business obligations. Such information allows

owners to distinguish actual financial conditions from subjective impressions. Afifa and Nguyen (2024) found that the quality of accounting information was associated with stronger SME financial outcomes, while Nuraliati et al. (2025) demonstrated that accounting information quality and management accounting systems contributed to financial performance. These findings suggest that accounting information is not merely an administrative output. It is a strategic sensing mechanism through which SMEs identify weakening liquidity, unprofitable products, excessive operating expenses, and emerging financial risks.

Digital accounting has strengthened this sensing function by accelerating transaction recording and report preparation. Hendrawati et al. (2024), based on 350 SMEs participating in the e-peken platform in Surabaya, found that digital accounting improved accounting information quality and that information quality subsequently improved SME performance. Importantly, digital accounting did not directly enhance performance when the resulting information was not sufficiently useful. This finding supports the conclusion that technological adoption should not be treated as resilience in itself. Software can increase the speed of data processing, but resilience arises only when the information is complete, relevant, understandable, and incorporated into managerial decisions. Monteiro et al. (2024) similarly linked accounting-system quality and financial-reporting quality to organizational outcomes, emphasizing the importance of information reliability and decision usefulness.

The literature also reveals several limitations that can reduce the resilience value of digital accounting. SMEs may lack qualified personnel, standardized procedures, data security, sufficient technological infrastructure, or the willingness to change established routines. Mujalli et al. (2024) identified organizational readiness, managerial support, technological considerations, and perceived benefits as important elements in cloud-accounting adoption. Restrepo-Morales et al. (2024) found that inadequate financial resources, high technology costs, employee resistance, skills shortages, security requirements, and the absence of a digital-oriented culture restricted SME digitalization. Sagala and Őri (2024) further argued that successful digital transformation requires alignment among organizational, information-system, and financial dimensions. Therefore, digital accounting investments should be accompanied by training, standardized classifications, periodic reconciliation, internal controls, and managerial interpretation.

These findings lead to the specific interpretation that accounting information quality increases financial resilience through early warning, decision accuracy, and financial transparency. Timely information allows SMEs to forecast cash shortages, revise purchasing decisions, accelerate debt collection, renegotiate payment schedules, and reduce nonessential costs before financial deterioration becomes irreversible. Reliable reports can also improve the credibility of SMEs when seeking financing because lenders can evaluate their repayment capacity using better evidence. Nevertheless, future research should distinguish between accounting-system adoption and actual information quality. Studies should examine whether information quality mediates the relationship between digital accounting and resilience, and whether this mediation differs according to business size, age, sector, digital maturity, and owner education.

4.3. Financial Management Capability as the Mechanism of Resource Protection

The third major finding is that financial management capability functions as the mechanism that converts accounting information into protective action. This capability includes budgeting, cash-flow forecasting, working-capital management, cost control, debt management, financing selection, financial risk assessment, and the separation of business and household funds. Padi et al. (2025) found that the financial literacy and entrepreneurial competencies of SME owners improved financial performance, although governance affected the effectiveness of these resources. Ridhwan et al. (2026), using evidence from nearly 10,000 Indonesian enterprises, found that financial literacy was positively associated with sales, profitability, and productivity, with innovation, digital technology, and access to bank loans operating as important mechanisms. These findings reinforce the argument that resilience requires both financial understanding and the organizational ability to apply that understanding consistently.

The synthesis nevertheless identifies an important qualification: financial literacy alone does not always produce sustainable outcomes. Rohaeni et al. (2026) found among MSMEs in Banten that financial literacy and financial technology adoption improved financial inclusion, but financial literacy did not directly improve financial performance or sustainability. Financial inclusion became an important mechanism through which knowledge and technology generated concrete financial outcomes. This result suggests that capable owners may still face structural constraints, including insufficient collateral, unsuitable credit products, weak infrastructure, and limited institutional support. Financial capability should thus be measured through observable practices rather than knowledge alone, including whether SMEs prepare budgets, monitor cash flows, maintain reserves, control receivables, review debt costs, and conduct scenario analysis.

Financial management capability enhances resilience by preserving liquidity and increasing resource flexibility. Cash-flow planning enables owners to estimate when shortages are likely to occur, while working-capital management prevents excessive funds from becoming trapped in inventory or overdue receivables. Budgetary control helps distinguish essential from postponable expenditure, and debt management reduces the risk that short-term liabilities will exceed repayment capacity. These practices are especially important during uncertainty because SMEs generally have fewer opportunities than large firms to absorb prolonged losses. The evidence from Artana et al. (2025) and Supramono et al. (2025) indicates that disciplined financial behavior, financial technology use, and performance monitoring can shorten recovery and improve sustainability.

A relevant direction for continuing research is to examine financial management capability as a multidimensional construct rather than an extension of financial literacy. Future studies could separately measure planning capability, liquidity capability, financing capability, risk-management capability, and financial-control capability. Longitudinal research would be particularly valuable for determining whether these capabilities protect SMEs before a crisis or are developed reactively after a disruption. Researchers should also investigate whether accounting information quality improves resilience directly or primarily through financial management capability. Such analysis would clarify whether good information becomes valuable only when owners possess the competence and authority to transform it into timely action.

4.4. Strategic Agility and the Future Architecture of SME Resilience

The fourth major finding is that strategic agility extends financial resilience beyond defensive financial control. Strategic agility represents the capacity to sense environmental change, make timely strategic commitments, and reconfigure resources. Troise et al. (2022) found that digital technology, relational capability, and innovation capability supported SME agility in volatile and uncertain environments. Arsawan et al. (2022) similarly demonstrated that innovation and strategic flexibility were central to organizational agility. These studies imply that an SME may have accurate records and disciplined financial practices but remain vulnerable when it cannot adjust its products, distribution channels, suppliers, technologies, or business model as market conditions change.

Recent Indonesian evidence confirms this adaptive function. Suryani and Dwiputra (2025) found that organizational agility and digital strategy significantly affected the resilience of food and beverage SMEs, while organizational adaptability became the strongest predictor in their model. Panjaitan et al. (2025) likewise emphasized adaptive networks, dynamic flexibility, and disruptive innovation in strengthening Indonesian SME resilience and sustainability. At the international level, Awad and Martín-Rojas (2024) found that digital transformation supported organizational resilience through learning and innovation, while Martín-Rojas et al. (2026) demonstrated that digital technologies, transformational leadership, and innovation capability were important drivers of SME resilience.

The integrated discussion indicates that the three principal constructs perform different but complementary functions. Accounting information quality enables financial and environmental sensing. Financial management capability enables disciplined resource allocation and protection. Strategic agility enables rapid reconfiguration when existing products, processes, or markets are no longer viable. Resilience

weakens when one component is absent. High-quality information without financial competence may remain unused; financial competence without agility may preserve cash but fail to address market transformation; and agility without reliable information may encourage rapid but financially unsound decisions. The combined model therefore offers a stronger explanation of SME resilience than studies that examine financial, technological, or strategic variables independently.

Future research should test this integrated architecture using mixed methods and longitudinal designs across Indonesian provinces and sectors. Quantitative studies could examine the direct and combined effects of the three capabilities, while qualitative case studies could explain how owners actually use information and reorganize resources during disruption. Economic uncertainty could be tested as a moderator because these capabilities may become more influential when inflation, interest rates, demand volatility, or policy uncertainty intensify. Financial inclusion, digital maturity, organizational learning, and innovation capability may also act as mediators. Comparative research between Java and non-Java regions, formal and informal SMEs, and traditional and digitally enabled enterprises would reveal whether resilience pathways differ across institutional environments. Such research would move the field from fragmented explanations toward a context-sensitive model of how Indonesian SMEs can not only survive uncertainty but also learn, transform, and achieve sustainable financial continuity.

V. Conclusion

This study concludes that the financial resilience of Indonesian small and medium-sized enterprises amid economic uncertainty is a multidimensional and dynamic capability developed through the interaction of accounting information quality, financial management capability, and strategic agility. Financial resilience cannot be understood solely through profitability, sales growth, or short-term business survival because these indicators do not fully reflect an enterprise's capacity to anticipate, absorb, adapt to, and recover from financial disruption. The literature synthesis demonstrates that high-quality accounting information provides SME owners with accurate, relevant, complete, understandable, and timely evidence concerning cash flows, costs, liabilities, receivables, inventories, and profitability. However, such information produces limited value when owners lack the financial management capability needed to translate it into budgeting, liquidity control, debt management, working-capital decisions, and risk mitigation. Strategic agility further strengthens resilience by enabling SMEs to recognize environmental changes, accelerate strategic decisions, modify products and business models, diversify markets, reorganize supply networks, and reallocate resources. Therefore, resilient SMEs are not merely those that possess sufficient financial reserves, but those that combine reliable information, disciplined financial practices, and adaptive strategic responses within an integrated managerial system.

The theoretical implication of this study lies in the development of a more comprehensive explanation of SME financial resilience by integrating accounting, financial management, and strategic management perspectives. Previous studies have often examined accounting information quality in relation to financial performance, financial literacy in relation to business sustainability, and strategic agility in relation to innovation or competitiveness as separate research streams. This study connects these perspectives by positioning accounting information quality as a financial sensing infrastructure, financial management capability as a resource-protection and decision-execution mechanism, and strategic agility as a resource-reconfiguration capability. The proposed framework supports the dynamic capabilities perspective by showing that resilience depends on the enterprise's ability to sense financial and environmental change, seize appropriate opportunities, and transform resources and organizational routines. It also extends the resource-based view by demonstrating that internal resources generate resilience only when they are valuable, usable, complementary, and embedded in managerial processes. Future empirical studies should test the direct, indirect, and simultaneous relationships among these variables using longitudinal or mixed-method designs. Financial management capability may be examined as a mediator between accounting information quality

and financial resilience, while economic uncertainty, digital maturity, financial inclusion, firm size, sector, and business age may be tested as moderating variables.

The managerial implications indicate that SME owners should establish an integrated resilience system rather than relying on isolated financial or technological initiatives. Managers need to implement standardized bookkeeping, periodic financial reporting, cash-flow forecasting, receivables monitoring, inventory control, debt evaluation, and the separation of personal and business finances. Digital accounting applications should be adopted according to business needs and accompanied by employee training, data-verification procedures, internal control, and regular interpretation of financial reports. SME managers should also maintain emergency liquidity, diversify financing sources, evaluate cost structures, and prepare alternative financial scenarios for possible changes in demand, inflation, interest rates, or supply conditions. At the strategic level, managers need to strengthen environmental scanning, accelerate decision-making, develop flexible supplier and customer networks, and remain prepared to adjust products, distribution channels, technologies, and revenue models. Government agencies, financial institutions, professional associations, and SME-support organizations should complement financing programs with accounting assistance, financial-management education, digital capability development, and strategic-agility training. Such coordinated interventions can help Indonesian SMEs move beyond reactive crisis management toward systematic preparedness, adaptive transformation, sustainable financial continuity, and stronger long-term competitiveness.

References

- Afifa, M. A., & Nguyen, N. M. (2024). An investigation of antecedents and outcomes of accounting information quality: Evidence from SMEs. *Vision: The Journal of Business Perspective*. Advance online publication. <https://doi.org/10.1177/09722629241231419>
- Alfarajat, J. M. (2023). Strategic agility and supply chain agility: Potential antecedents of SMEs performance. *Uncertain Supply Chain Management*, 11(3), 875–884. <https://doi.org/10.5267/j.uscm.2023.5.011>
- Arsawan, I. W. E., Hariyanti, N. K. D., Atmaja, I. M. A. D. S., Suhartanto, D., & Koval, V. (2022). Developing organizational agility in SMEs: An investigation of innovation's roles and strategic flexibility. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), Article 149. <https://doi.org/10.3390/joitmc8030149>
- Artana, I. M., Wiksuana, I. G. B., Artini, L. G. S., & Dewi, S. K. S. (2025). Financial resilience of small and medium enterprises in Bali. *Uncertain Supply Chain Management*, 13(1), 97–110. <https://doi.org/10.5267/j.uscm.2024.7.011>
- Awad, J. A. R., & Martín-Rojas, R. (2024). Digital transformation influence on organisational resilience through organisational learning and innovation. *Journal of Innovation and Entrepreneurship*, 13, Article 69. <https://doi.org/10.1186/s13731-024-00405-4>
- Bank Indonesia. (2025). Bank Indonesia annual meeting 2025: Synergy to foster higher and resilient economic growth. Bank Indonesia. No DOI assigned.
- Christanty, L., Nugroho, W. S., Nurcahyono, N., & Maharani, B. (2023). Accounting information systems and financial literacy impact on SMEs' performance. *Maksimum: Media Akuntansi Universitas Muhammadiyah Semarang*, 13(1), 59–69. <https://doi.org/10.26714/mki.13.1.2023.59-69>
- Demirbag, M., Nurgabdeshev, A., Golgeci, I., Nair, S. R., Khan, Z., Pillai, K. G., & Zahoor, N. (2026). Unpacking strategic agility in SMEs from transitional periphery economies: Exploring its manifestations and mechanisms. *Multinational Business Review*. Advance online publication. <https://doi.org/10.1108/MBR-04-2025-0119>
- Hawach, F., & Requejo, I. (2025). Financial distress likelihood of European SMEs in times of economic policy uncertainty: The role of family ownership and performance aspirations. *International Review of Financial Analysis*, 105, Article 104418. <https://doi.org/10.1016/j.irfa.2025.104418>
- Hendrawati, E., Kholidiah, K., & Pramudianti, M. (2024). Optimizing digital accounting to improve MSME performance through the quality of accounting information. *International Journal of Social and Management Studies*, 5(6), 1–13. <https://doi.org/10.5555/ijosmas.v5i6.438>
- Kaya, O. (2024). The impact of late payments on SMEs' access to finance: Evidence from credit rationing and loan terms. *Economic Modelling*, 141, Article 106896.

- <https://doi.org/10.1016/j.econmod.2024.106896>
- Koporcić, N., Kukkamalla, P. K., Marković, S., & Maran, T. (2026). Resilience of small and medium-sized enterprises in times of crisis: An umbrella review. *Review of Managerial Science*, 20, 301–329. <https://doi.org/10.1007/s11846-025-00883-0>
- Kurniasari, F., Abd Hamid, N., & Lestari, E. D. (2025). Unraveling the impact of financial literacy, financial technology adoption, and access to finance on small and medium enterprises' business performance and sustainability: A serial mediation model. *Cogent Business & Management*, 12(1), Article 2487837. <https://doi.org/10.1080/23311975.2025.2487837>
- Lopung, T. M., & Rulindo, R. (2023). Accounting information system and SMEs' financial performance in Indonesia. *Jurnal Akuntansi*, 15(2), 200–214. <https://doi.org/10.28932/jam.v15i2.6607>
- Malik, F. S., & Terzidis, O. (2026). The metamorphosis of organizational resilience: A strategic roadmap for SMEs in the digital age. *Review of Managerial Science*. Advance online publication. <https://doi.org/10.1007/s11846-026-01002-3>
- Martín-Rojas, R., Garrido-Moreno, A., & García-Morales, V. J. (2026). Building organizational resilience in SMEs: The key role of digital technologies, transformational leadership, and innovation. *Review of Managerial Science*. Advance online publication. <https://doi.org/10.1007/s11846-025-00965-z>
- Mohamed, F., & Zouaoui, S. K. (2026). Open innovation and strategic agility in business performance. *Management Decision*. Advance online publication. <https://doi.org/10.1108/MD-07-2025-2121>
- Monteiro, A. P., Vale, J., Leite, E., & Lis, M. (2024). Linking quality of accounting information system and financial reporting to non-financial performance: The role of women managers. *International Journal of Accounting Information Systems*, 54, Article 100692. <https://doi.org/10.1016/j.accinf.2024.100692>
- Mujalli, A., Wani, M. J. G., Almgrashi, A., Khormi, T., & Qahtani, M. (2024). Investigating the factors affecting the adoption of cloud-based accounting in SMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(2), Article 100314. <https://doi.org/10.1016/j.joitmc.2024.100314>
- Nuraliati, A., Astuti, A., Januarty, T. A., Johan, A., & Sudarmadi, D. (2025). An investigation of antecedents and outcomes of accounting information quality: Evidence from SMEs. *Jurnal Akuntansi dan Auditing Indonesia*, 29(1), 53–63. <https://doi.org/10.20885/jaai.vol29.iss1.art5>
- Orden-Cruz, C., Paule-Vianez, J., Sánchez-Escobedo, M. C., & Moutinho, V. (2024). EPU and SMEs' financial performance: Industry versus service sector. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), Article 100320. <https://doi.org/10.1016/j.joitmc.2024.100320>
- Padi, A., Musah, A., Blay, M. W., & Okyere, D. O. (2025). Small and medium scale enterprise owner financial literacy, entrepreneurial competencies and financial performance: The role of corporate governance. *Future Business Journal*, 11, Article 160. <https://doi.org/10.1186/s43093-025-00585-9>
- Panjaitan, J. M. P., Darwin, M., Sumiyana, S., Wivaquassaniyyah, W., & Setyowati, S. M. (2025). Measuring the Indonesian SMEs' capabilities for sociodynamic and disruptive innovation: The case for gaining resilience and sustainability. *Journal of Innovation and Entrepreneurship*, 14, Article 130. <https://doi.org/10.1186/s13731-025-00557-x>
- Przychocka, I., Sikorski, M., & Milewski, L. (2024). Cash flow management in small and medium enterprises in times of economic uncertainty. *European Research Studies Journal*, 27(2), 155–162. <https://doi.org/10.35808/ersj/3376>
- Restrepo-Morales, J. A., Ararat-Herrera, J. A., López-Cadavid, D. A., & Camacho-Vargas, A. (2024). Breaking the digitalization barrier for SMEs: A fuzzy logic approach to overcoming challenges in business transformation. *Journal of Innovation and Entrepreneurship*, 13, Article 84. <https://doi.org/10.1186/s13731-024-00429-v>
- Ridhwan, M. M., Suryahadi, A., Ingrid, & Santosa, C. M. P. (2026). Financial literacy and business performance: Evidence from Indonesia's ultra-micro, micro, small, and medium enterprises. *Journal of Industrial and Business Economics*. Advance online publication. <https://doi.org/10.1007/s40812-026-00406-2>
- Rohaeni, N., Meutia, M., Indriana, I., & Januarsi, Y. (2026). Financial literacy, FinTech, and inclusion for MSME growth in Banten Province. *Discover Sustainability*, 7, Article 591. <https://doi.org/10.1007/s43621-026-02869-8>
- Sagala, G. H., & Öri, D. (2024). Toward SMEs' digital transformation success: A systematic literature review. *Information Systems and e-Business Management*, 22, 667–719. <https://doi.org/10.1007/s10257-024-00682-2>
- Sagala, G. H., & Öri, D. (2025). Exploring digital transformation strategy to achieve SMEs' resilience and antifragility: A systematic literature review. *Journal of Small Business & Entrepreneurship*, 37(3), 495–524. <https://doi.org/10.1080/08276331.2024.2392080>
- Supramono, S., Damayanti, T. W., & Adhitya, D. (2025). Dynamic capabilities and financial behavior to

- accelerate MSME performance recovery and its impacts on business sustainability. *Journal of Innovation and Entrepreneurship*, 14, Article 10. <https://doi.org/10.1186/s13731-024-00456-7>
- Suryani, U., & Dwiputra, I. P. (2025). The impact of organizational innovation capability, organizational agility, and digital strategy on business resilience in food and beverage SMEs: The mediating role of adaptability and the moderating role of transformational leadership. *Indonesian Interdisciplinary Journal of Sharia Economics*, 8(1), 2941–2964. <https://doi.org/10.31538/ijjse.v8i1.6321>
- Troise, C., Corvello, V., Ghobadian, A., & O'Regan, N. (2022). How can SMEs successfully navigate VUCA environment? The role of agility in the digital transformation era. *Technological Forecasting and Social Change*, 174, Article 121227. <https://doi.org/10.1016/j.techfore.2021.121227>
- Zhu, M., Sharma, P., Almasabi, S. S., Chotia, V., Gregori, G. L., & Del Giudice, M. (2026). Reinforcing financial and accounting resilience in digital circular platforms: The strategic role of digital governance and organizational culture. *Technology in Society*, 85, Article 103239. <https://doi.org/10.1016/j.techsoc.2026.103239>