

The Influence of Risk Based Management Accounting on Organizational Resilience

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ABSTRACT

This conceptual article examines how risk-based management accounting may strengthen organizational resilience. A focused narrative review integrates management accounting, enterprise risk management, and resilience research. The analysis develops a framework linking risk-informed budgeting, cost analysis, performance measurement, and resource allocation to anticipation, coping, and adaptation. Three mechanisms explain the proposed relationship: improved visibility of exposure, faster resource mobilization, and learning from disruptions. Information quality, managerial discretion, and coordination condition these mechanisms. The article contributes an accounting-specific explanation of resilience and proposes relationships for empirical testing. Managers can use the framework to connect risk assessments with financial decisions. No primary data or statistical effect estimates are reported.

INTRODUCTION

Organizations must decide how much to invest in efficiency, contingency resources, and recovery capacity. These decisions involve costs today and uncertain benefits tomorrow. A budget may meet its financial target while leaving essential operations exposed to supplier failure, system interruption, or a sudden loss of cash inflows. This creates an accounting problem: managers need information that connects expenditure decisions with the ability to maintain and restore critical activities. Risk-based management accounting addresses this problem by incorporating exposure, uncertainty, and response options into internal financial decisions. In this article, the term refers to a set of practices rather than a universally standardized accounting technique. Its scope includes budgeting, cost analysis, forecasting, performance measurement, and resource allocation when these practices explicitly use risk information. Organizational resilience concerns the capacity to anticipate disruption, respond during disruption, and adapt afterward. Duchek (2020) provides the capability-based foundation for this temporal distinction.

Recent research establishes a basis for examining the connection. Braumann et al. (2024) position enterprise risk management within the organizational control package. Weber et al. (2024) connect management controls with resilience measures and capabilities. Bracci and Tallaki (2021) offer case-based evidence on controls and resilience under financial pressure. Pham and Vu (2025) examine integrated accounting controls and risk governance in public organizations. Together, these studies show that the relationship already has a substantial research foundation. The analytical gap addressed here concerns the financial decisions through which risk information can support resilience. General evidence about management controls does not specify whether a scenario changes a budget, whether an estimated interruption cost changes an investment ranking, or whether a risk threshold activates spending authority. These links deserve explicit treatment. The contribution of this article is a decision-level framework that maps accounting practices to resilience mechanisms and identifies conditions under which those mechanisms may fail. It does not claim to establish a previously unstudied relationship.

The article asks how risk-based management accounting may support organizational resilience, which mechanisms connect accounting practices with resilience capabilities, and which implementation conditions affect that connection. It develops conceptual propositions and a practical framework for subsequent empirical investigation. The analysis offers no estimate of causal influence because it does not use organizational observations or experimental data.

LITERATURE REVIEW

Dynamic Capabilities as the Theoretical Foundation

Teece (2007) explains dynamic capabilities through sensing opportunities and threats, seizing opportunities, and reconfiguring resources. This perspective helps explain why the availability of a financial report alone cannot ensure resilience. Managers must interpret information, commit resources, and change routines. In the proposed framework, management accounting provides inputs to these processes. Scenario analysis informs sensing, contingency funding supports timely commitment, and post-disruption analysis informs resource reconfiguration. These mappings are the present article's theoretical interpretation rather than an empirical finding from Teece's study.

Risk Based Management Accounting

The defining feature of risk-based management accounting is the use of exposure information in a financial choice. A conventional cost comparison asks which alternative costs less. A risk-informed comparison also asks which alternative preserves essential capacity under plausible adverse conditions. The approach may combine monetary estimates with qualitative judgments where the organization cannot credibly estimate probabilities. It therefore requires explicit assumptions and documented uncertainty rather than a risk score attached to every number.

Ittner and Michels (2017) find an association between sophisticated risk-based forecasting and planning and more accurate external earnings forecasts in publicly traded US companies. Their evidence supports an information-quality argument. It does not establish that forecasting sophistication causes organizational resilience. Hiebl (2024) distinguishes routes for integrating risk and management control and emphasizes influences across analytical levels. These perspectives motivate examination of both the design of an accounting practice and its actual use in decisions.

Four practice domains define the construct proposed here. Budgeting connects scenarios with contingency funding and spending triggers. Cost analysis evaluates interruption losses and recovery alternatives. Performance measurement links financial results with indicators of exposure and continuity. Resource allocation compares investments using financial affordability, operational criticality, and recovery requirements. An organization may apply these practices selectively; maturity requires coherent use across decisions rather than simply possessing all four tools.

Organizational Resilience

Duchek (2020) treats resilience as a capability that involves anticipation, coping, and adaptation. This article uses those dimensions to distinguish preparation before a disruption, the organization's response while it unfolds, and learning afterward. Financial stability and resilience overlap, but they are not identical. A firm can preserve cash temporarily by postponing maintenance while increasing its vulnerability to later failure. Consequently, resilience assessment should consider operational continuity and learning alongside liquidity and budget compliance.

Evidence from Previous Research

Table 1. Selected Research and Its Relevance

Study	Evidence or approach	Relevance and boundary
Ittner and Michels (2017)	Survey and disclosed forecasts	Risk-informed planning relates to forecast accuracy; resilience is not the outcome tested.
Bracci and Tallaki (2021)	Public sector case study	Facilitating controls support coping and adaptation; context limits generalization.
Braumann et al. (2024)	Review of empirical ERM research	ERM should be examined within the control package; direct resilience effects remain a separate question.
Monazzam and Crawford (2024)	Swedish mining company case	Risk practices and resilience capabilities develop together during strategic transformation.
Weber et al. (2024)	Systematic review	Links control practices with resilience; provides a basis for specifying accounting mechanisms.
Pham and Vu (2025)	Qualitative and quantitative research	Reports positive relationships between integrated control and risk-governance components and resilience in public organizations.

The case examined by Monazzam and Crawford (2024) shows that ERM practices and resilience capabilities develop over time during a mining company's strategic transformation. This temporal evidence cautions against treating resilience as the immediate consequence of installing a system. Across the selected studies, methods and organizational settings differ. Their findings justify conceptual development, but they do not provide a pooled effect size or a uniform causal conclusion.

Conceptual Propositions and Framework

- P1: *The use of risk information in management accounting decisions is positively related to organizational resilience when managers act on that information.*
- P2: *Exposure visibility, resource mobilization, and organizational learning explain the proposed relationship.* P3: *Information quality, managerial discretion, and coordination affect whether these mechanisms operate effectively.*

These propositions guide future testing; the present article does not accept or reject statistical hypotheses.

Conditions: information quality, managerial discretion, coordination

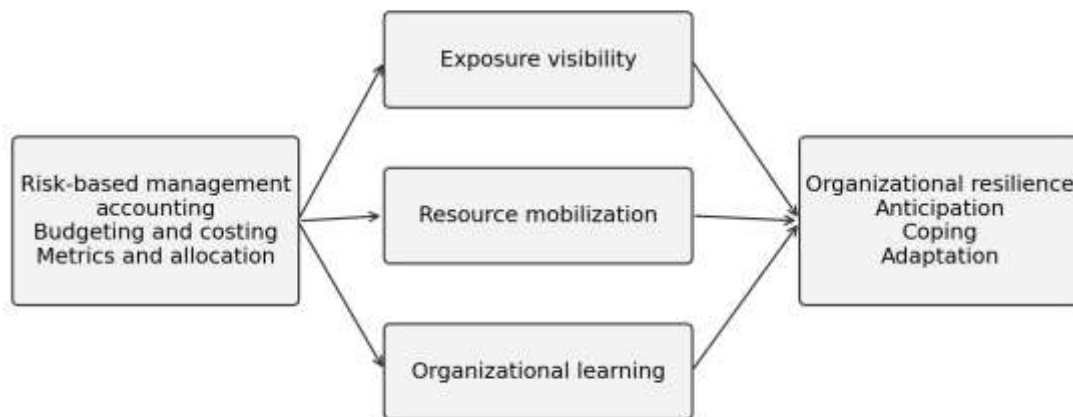


Figure 1. Proposed Accounting and Resilience Framework

Source: Author-developed conceptual framework informed by the selected literature.

Arrows represent proposed relationships, not statistically established effects. The three mechanisms can interact; the diagram separates them to make their roles examinable.

This article uses a focused narrative review and theory-driven conceptual analysis. The review is purposive rather than exhaustive. Scholarly sources were located through web searches on 1 October 2026 using combinations of management accounting, risk-based forecasting, enterprise risk management, management control, and organizational resilience. Publisher pages and institutional research repositories provided source verification. Searches and reference links identified work relevant to the accounting-risk-resilience connection. Selection prioritized sources that define resilience, explain risk integration with accounting and control, or provide evidence on mechanisms relevant to internal financial decisions. Foundational theory was retained where it supported the framework. Nine sources form the cited conceptual corpus: eight topic-specific works published from 2017 to 2025 and one foundational dynamic-capabilities article published in 2007. The corpus is not presented as a representative sample of all published research.

The analysis compared sources across five questions: the accounting practice examined, the role of risk information, the decision process involved, the resilience dimension addressed, and the evidential boundary. The synthesis then separated source-reported findings from author-developed mechanisms. For sources available only through abstracts or bibliographic records, interpretation remained limited to those reported claims. No independent reanalysis of the underlying datasets took place.

Conceptual development proceeded by defining the constructs, mapping accounting decisions to resilience stages, identifying implementation conditions, and formulating propositions. The resulting framework is an analytical output of the review. It is not a systematic review, meta-analysis, survey, or causal evaluation. There is no respondent population, primary sample, data-collection timeline within an organization, or statistical testing procedure in this study.

RESEARCH RESULT

Exposure Visibility Supports Anticipation

The first proposed mechanism concerns the visibility of exposure before disruption. A risk register describes a threat, but a financial decision also requires information about the activities affected, available alternatives, funding needs, and consequences of delay. Management accounting can connect these elements through scenario budgets and sensitivity analysis. The output should show which assumptions drive vulnerability and which commitments managers can still change. For example, a supplier interruption scenario may connect material shortages with idle capacity, substitute procurement costs, and delayed customer receipts. This is an illustrative application, not a reported observation. Managers can then compare the affordability of preventive stock, alternative suppliers, or contractual protections. Visibility supports anticipation only when the analysis reaches decision makers early enough to affect those choices.

Resource Mobilization Supports Coping

The second mechanism concerns access to resources during disruption. A contingency reserve has little practical value when managers cannot authorize its use, identify eligible expenditures, or verify that cash remains available. The proposed accounting contribution combines funding with decision rights. Budget rules should specify who can release funds, what events activate a response, and how the organization records emergency commitments. Coping also requires rapid comparison of alternatives. Managers may need to choose between temporary outsourcing, overtime, reduced service levels, or accelerated restoration. Internal reports can compare cash requirements and continuity consequences across these options. The appropriate decision need not minimize immediate expenditure. It should preserve essential activities within the organization's financial capacity and documented priorities.

Learning Supports Adaptation

The third mechanism connects disruption experience with revised accounting assumptions. A post-event cost report should distinguish direct recovery expenditure, revenue interruption, deferred obligations, and the consequences of response decisions. Managers can compare actual outcomes with the scenario assumptions that guided preparation. Where estimates failed, the review should identify whether the cause involved missing information, changing conditions, or an ineffective response rule. Adaptation occurs when this assessment changes future budgets, contracts, indicators, or investment choices. A retrospective report that leaves planning assumptions intact offers limited support for resilience. The proposed mechanism therefore requires a

documented decision following the review. Examples include changing reserve policies, funding recovery tests, or revising the criteria used to rank continuity investments.

Table 2. Proposed Practices and Resilience Mechanisms

Accounting practice	Decision contribution	Resilience dimension
Scenario budgeting	Connect adverse conditions with funding gaps and preventive choices	Anticipation
Interruption cost analysis	Compare financial and continuity consequences of response options	Anticipation and coping
Contingency funding rules	Release resources through clear triggers and delegated authority	Coping
Risk-informed performance measures	Identify exposure and prompt review alongside financial targets	Anticipation and coping
Post-event variance review	Revise assumptions and future resource commitments	Adaptation

Conditions and Potential Failure Points

The framework identifies three conditions. First, information quality requires reliable inputs, disclosed assumptions, and timely updates. Precise-looking estimates can mislead when probabilities lack a credible basis. Second, managerial discretion enables action within defined boundaries. A detailed scenario has limited value when every response waits for prolonged approval. Third, coordination connects finance, operations, risk specialists, and the executives accountable for continuity. Failure can arise when risk reports and budgets use different time horizons, when departments duplicate loss estimates, or when performance targets discourage disclosure of vulnerabilities. These are analytically proposed failure points. They should be examined in organizational research before their prevalence or relative importance is asserted. The framework predicts that formally adopting tools without changing decision routines may produce weak resilience benefits.

DISCUSSION

The main conceptual conclusion is that management accounting may support resilience by changing how organizations decide under uncertainty. The proposed influence is conditional. Accounting practices produce useful information, but the organization must convert that information into preparation, response, and learning. This interpretation aligns with the control-package perspective of Braumann et al. (2024) and the resilience-oriented control perspective of Weber et al. (2024), while narrowing the analysis to internal financial choices. The framework also clarifies the contribution of dynamic capabilities. Its central question concerns how managers use accounting information to notice exposure, commit resources, and revise arrangements. These actions can help explain an association between accounting practices and resilience. However, an organization that already possesses strong resilience

capabilities may be more likely to adopt sophisticated accounting practices. Reverse causality remains plausible. Leadership, resources, and external support may also influence both constructs.

Different research settings require different interpretations. Bracci and Tallaki (2021) examine public sector financial pressure, whereas Monazzam and Crawford (2024) examine industrial strategic transformation. Pham and Vu (2025) provide evidence within public organizations. These contexts support consideration of the proposed relationship, but they do not validate it for every private company or Indonesian institution. Application should follow assessment of sector requirements, organizational scale, and actual decision authority. For an Indonesian organization, a practical starting point would be one critical process rather than immediate deployment across all units. The organization could map interruption scenarios, compare response costs, define funding triggers, and review outcomes after an exercise or actual incident. This recommendation follows from the proposed framework. It is not a claim that Indonesian organizations have implemented these practices or that such implementation has already improved their resilience.

A central managerial tension concerns efficiency and preparedness. Redundant capacity, backup arrangements, and liquidity reserves impose visible costs. Their value depends on the consequences they help the organization manage. Managers should therefore assess their contribution to critical operations rather than classify them automatically as avoidable inefficiency. Excessive reserves can also restrict investment and create opportunity costs. Risk-informed accounting should make these trade-offs explicit instead of treating higher preparedness expenditure as invariably desirable. The framework offers a basis for empirical measurement without equating accounting maturity with resilience. Indicators for the explanatory construct should capture actual use of scenarios, interruption costs, risk thresholds, and contingency funding in decisions. Outcome indicators should capture continuity, recovery, and changes made after disruption. Using identical items for both constructs would create conceptual overlap and could inflate the observed relationship.

CONCLUSIONS AND RECOMMENDATIONS

This conceptual analysis proposes that risk-based management accounting can support organizational resilience through exposure visibility, resource mobilization, and learning. Risk-informed budgeting and cost analysis may improve anticipation. Clear funding rules may support coping. Post-event review may support adaptation when it changes future decisions. The argument depends on information quality, managerial discretion, and coordination. It provides a theoretically reasoned framework rather than proof of a statistically significant or causal effect. Managers should connect selected risks to specific financial decisions, assign responsibility for assumptions and responses, and establish funding triggers before disruption. Performance reviews should combine financial targets with continuity indicators suited to critical activities. After an event or exercise, managers should compare actual consequences with prior estimates and record the resulting changes to budgets or investments.

Implementation should begin with decisions where interruption has material operational and financial consequences.

ADVANCED RESEARCH

The main limitation is the purposive narrative corpus. The review cannot establish completeness, estimate average effects, or determine whether publication bias affects the argument. The conceptual interpretation also combines evidence from different sectors. Some sources were examined through abstracts or institutional summaries, which limits methodological appraisal. The framework therefore needs primary organizational evidence and broader source coverage. Future research could use longitudinal case studies that follow a budget decision before, during, and after disruption. Documents, interviews, and operational records could establish whether risk information actually changed funding or response choices. A complementary survey could test associations between accounting practices and resilience while controlling for firm size, sector, financial resources, disruption severity, and prior resilience. Respondents from finance and operations would reduce dependence on one perspective. A stronger evaluation would measure accounting practices before an event and observe continuity and recovery afterward. Researchers could then investigate the three proposed mechanisms and their conditions. Measures should undergo content validation and distinguish practice adoption from practice use. Future studies should report uncertainty, consider reverse causality, and avoid interpreting cross-sectional associations as causal effects.

REFERENCES

- Bracci, E., & Tallaki, M. (2021). Resilience capacities and management control systems in public sector organisations. *Journal of Accounting & Organizational Change*, 17(3), 332–351. <https://doi.org/10.1108/JAOC-10-2019-0111>.
- Braumann, E. C., Hiebl, M. R. W., & Posch, A. (2024). Enterprise risk management as part of the organizational control package: Review and implications for management accounting research. *Journal of Management Accounting Research*, 36(2), 7–29. <https://doi.org/10.2308/JMAR-2021-071>.
- Destine, D., Manik, R., Sianturi, A. S., Sember, R., & Sintha, L. (2025). Impact of Governance and Restructuring on Post-IPO Stock Value: Event Study of AGM and EGM at PT Totalindo Eka Persada. *Journal of Finance and Business Digital (JFBD)*, 4(2), 445–458.
- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246. <https://doi.org/10.1007/s40685-019-0085-7>.
- Hiebl, M. R. W. (2024). The integration of risk into management control systems: Towards a deeper understanding across multiple levels of analysis. *Journal of Management Control*, 35(1), 1–16. <https://doi.org/10.1007/s00187-024-00373-6>.

- Ittner, C. D., & Michels, J. (2017). Risk-based forecasting and planning and management earnings forecasts. *Review of Accounting Studies*, 22(3), 1005–1047. <https://doi.org/10.1007/s11142-017-9396-0>.
- Monazzam, A., & Crawford, J. (2024). The role of enterprise risk management in enabling organisational resilience: A case study of the Swedish mining industry. *Journal of Management Control*, 35(1), 59–108. <https://doi.org/10.1007/s00187-024-00370-9>.
- Pham, Q. H., & Vu, K. P. (2025). Management accounting control system and risk governance in public sector organizational resilience enhancement. *Cogent Social Sciences*, 11(1), Article 2444473. <https://doi.org/10.1080/23311886.2024.2444473>.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>.
- Weber, M. M., Pedell, B., & Rötzel, P. G. (2024). Resilience-oriented management control systems: A systematic review of the relationships between organizational resilience and management control systems. *Journal of Management Control*, 35(4), 563–620. <https://doi.org/10.1007/s00187-024-00385-2>.