



Received: 12-10-2025  
Accepted: 02-12-2025

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Factors Affecting the Effectiveness of Internal Control in Small and Medium-Sized Enterprises in Hanoi

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DOI: <https://doi.org/10.62225/2583049X.2025.5.6.5351>

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#### Abstract

Small and medium-sized enterprises (SMEs) rely on effective internal control systems to manage risks and achieve organizational objectives. This study examines the factors influencing the effectiveness of internal control in SMEs located in Hanoi. Drawing on the COSO (2013) <sup>[1]</sup> internal control framework, we combine qualitative and quantitative methods to identify key influencing factors, including Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring. A survey of SMEs was conducted using a structured questionnaire, followed by data analysis with exploratory factor analysis (EFA), confirmatory factor analysis (CFA),

and multiple regression. The results confirm that all five components have a positive and significant impact on internal control effectiveness ( $p < 0.05$ ). Notably, factors related to information flow and control procedures exhibit the strongest influence on the effectiveness of internal controls, while the monitoring component shows a smaller yet still significant effect. These findings highlight the importance of a comprehensive internal control framework in SMEs. The study concludes with recommendations for SME managers to strengthen each internal control component, thereby improving the overall effectiveness of internal control systems in their organizations.

**Keywords:** Effectiveness, Small and Medium-Sized Enterprises, Hanoi

#### Introduction

Internal control systems are critical for organizational success, as they help ensure reliable financial reporting, efficient operations, and compliance with laws and regulations. An effective internal control system (ICS) comprises a set of policies, procedures, and measures that collectively safeguard assets, prevent and detect errors or fraud, and support risk management and governance processes. For SMEs, which often operate with limited resources and face a volatile business environment, internal control serves as a vital tool to mitigate risks and enhance operational stability. Effective internal controls enable SMEs to keep risks at acceptable levels and improve performance and compliance, thereby building investor and stakeholder confidence in the enterprise's sustainability.

However, many SMEs in Vietnam including those in Hanoi – have not fully implemented or prioritized internal control systems. Owing to constraints in human resources, expertise, and capital, smaller firms often lack formal control procedures or dedicated internal audit functions. A number of Vietnamese SMEs remain unaware of the long-term benefits of robust internal controls, leading to weaknesses in areas such as risk assessment and monitoring. Previous studies have examined internal control in SMEs elsewhere. For example, in Ho Chi Minh City, a survey of 360 manufacturing SMEs revealed that components like monitoring, control activities, and risk assessment were relatively weak, whereas information communication and control environment were stronger aspects of internal control. Research in other regions (e.g. Thái Nguyên province) and internationally also underscores the importance of internal control; weak internal controls have been linked to issues like less reliable financial reporting and lower firm performance. Yet, the factors affecting internal control effectiveness in Hanoi's SME sector have not been comprehensively studied, leaving a gap in the local literature.

**Research Objectives:** In this context, our study aims to investigate which factors significantly influence the effectiveness of internal control systems in Hanoi-based SMEs and how improvements in those factors can enhance overall control effectiveness. The specific objectives are to:

- **Identify** the key internal control factors that affect internal control effectiveness in SMEs in Hanoi.

- **Measure** the extent to which each identified factor influences the effectiveness of the internal control system.
- **Propose** practical recommendations for SME managers to improve internal control effectiveness based on the research findings.

By addressing these objectives, the study provides empirical evidence on internal control efficacy in SMEs and offers insights for strengthening internal control systems, thereby contributing to both theory and practice in the field of accounting and corporate governance.

## Literature Review and Research Model

**Internal Control and the COSO Framework:** Internal control is commonly defined as a process designed and implemented by an entity's board of directors, management, and other personnel to provide reasonable assurance of achieving the entity's objectives in operations, reporting, and compliance. The most widely used conceptual model is the COSO Internal Control – Integrated Framework (2013)<sup>[1]</sup>, which delineates five interrelated components of internal control:

- **Control Environment:** The foundation for all other components, reflecting the organization's ethical values, management's operating style, and governance structure. A strong control environment sets a tone of integrity and accountability, providing a favorable atmosphere for controls to function effectively.
- **Risk Assessment:** The process of identifying and analyzing relevant risks to the organization's objectives, and determining how those risks should be managed. Effective risk assessment involves recognizing potential events, evaluating the likelihood and impact of risks, and ensuring timely actions to mitigate them.
- **Control Activities:** The policies and procedures that help ensure management directives are carried out. These include approvals, authorizations, verifications, reconciliations, separation of duties, and other checks at all levels to address identified risks.
- **Information & Communication:** The systems and processes that support the capture and exchange of information in a form and timeframe that enable people to carry out their responsibilities. This component ensures that pertinent information is identified, collected, and communicated effectively — both internally and externally — so that employees understand their control duties and can report issues promptly.
- **Monitoring:** Ongoing and periodic evaluations of the internal control system's performance over time. Monitoring activities may include regular management oversight, internal audits, and other reviews that help detect deficiencies in a timely manner and ensure that internal controls remain effective as conditions change.

These five components operate together to create an effective internal control system. If any component is weak, the overall system's effectiveness may be compromised. For instance, even well-designed control activities may fail if the information and communication channels are inadequate (employees might not know or understand the procedures), or if the control environment does not promote adherence to policies.

**Internal Control in SMEs:** Prior research indicates that SMEs often struggle with implementing all components of

internal control to the same degree as larger firms. Studies in various contexts have highlighted common internal control issues in SMEs, such as lack of formal risk assessment processes and inadequate segregation of duties due to limited staff. Nyakundi *et al.* (2014)<sup>[4]</sup> found that effective internal control systems positively influence the financial performance of SMEs, underscoring that investments in internal control can yield tangible benefits. On the other hand, areas like the control environment and communication can sometimes be informally strong in SMEs, especially when leadership is ethical and staff size is small, facilitating direct communication. These mixed observations make it important to systematically evaluate each component's role in SME internal control effectiveness.

**Research Model and Hypotheses:** Based on the COSO framework and the insights from prior studies, we propose a research model in which the five internal control components are the independent variables expected to influence the dependent variable, **Internal Control Effectiveness**, in SMEs. Internal control effectiveness in this study refers to how well the internal control system enables the enterprise to achieve its objectives (operational efficiency, reliable reporting, legal compliance) and prevent or detect misstatements and irregularities. We hypothesize that a stronger presence or implementation of each COSO component will lead to a more effective internal control system. The hypotheses are formulated as follows:

1. **H1: Control Environment has a positive impact on the effectiveness of internal control** in SMEs. (A more ethical, well-governed, and supportive management environment improves overall control effectiveness.)
2. **H2: Risk Assessment has a positive impact on internal control effectiveness.** (Identifying and managing risks systematically leads to more robust controls and fewer control failures.)
3. **H3: Control Activities have a positive impact on internal control effectiveness.** (Having appropriate control procedures and segregation of duties in place directly enhances the reliability of operations and reporting.)
4. **H4: Information & Communication has a positive impact on internal control effectiveness.** (Effective information flow and communication ensure that control policies are understood and issues are reported, thereby strengthening the control system.)
5. **H5: Monitoring has a positive impact on internal control effectiveness.** (Regular monitoring and auditing of controls help maintain and improve the system, catching weaknesses before they cause problems.)

These hypotheses reflect the expectation that **all five COSO components contribute positively** to an effective internal control system. The proposed model is consistent with COSO's theory that an integrated approach to internal control is necessary for effectiveness. (*Figure 1 in the original paper illustrates the model, with each of the five factors pointing to "Internal Control Effectiveness."*)

## Research Methodology

**Research Design:** This study employed a mixed-methods approach, combining qualitative and quantitative research. In the **qualitative phase**, we conducted exploratory interviews and expert group discussions to refine the conceptual model and ensure the relevance of factors and survey questions in the context of Hanoi's SMEs. Through

discussions with experts (e.g. experienced auditors, accountants, and SME managers), we confirmed that the five COSO components were perceived as the core factors influencing internal control effectiveness. This qualitative validation helped tailor the language of the survey and added context-specific insights (for example, clarifying how “Monitoring” might be handled in SMEs without formal internal audit departments).

In the **quantitative phase**, we carried out a survey of SMEs in Hanoi to collect data for statistical analysis. The target population was small and medium-sized enterprises operating in Hanoi across various industries (manufacturing, trading, services, etc.). We used a structured questionnaire as the data collection instrument. The questionnaire was designed with sections corresponding to each research construct: respondents were asked to evaluate statements related to their firm’s control environment, risk assessment practices, control activities, information and communication systems, and monitoring practices, as well as the overall effectiveness of internal control in their firm. All measurement items were closed-ended statements rated on a five-point Likert scale (1 = “Strongly disagree” to 5 = “Strongly agree”). This Likert scale captured the degree of agreement with statements such as “Management in my company demonstrates a commitment to integrity and ethical values” (for Control Environment) or “Our company regularly identifies and evaluates risks that may affect the achievement of objectives” (for Risk Assessment).

The survey was distributed to a sample of SME owners, directors, chief accountants, and other personnel responsible for financial management or control in their organizations. We used a combination of convenience and purposive sampling: invitations were sent through a local business association and personal contacts, aiming to ensure a mix of different sizes and sectors. In total, **approximately 200 valid responses** were received and used for analysis (after data cleaning to remove any substantially incomplete or invalid questionnaires). The respondent profile covered a range of company sizes within the SME category – from micro enterprises with under 10 employees to medium firms with up to 200 employees – and included roles such as business owners (about 10% of responses), department managers (around 25%), chief accountants/accounting staff (around 35%), and other relevant positions (around 30%). This diversity in respondents provided a comprehensive view of internal control practices in Hanoi’s SME sector. Many surveyed firms were relatively young (over half had been established within the last 5 years), which may influence the maturity of their internal control systems, as newer firms might be in the early stages of formalizing controls.

**Data Analysis Methods:** We applied several statistical techniques to analyze the data, following a standard approach for scale development and hypothesis testing:

- **Reliability Analysis:** First, we assessed the reliability of each construct’s measurement scale using **Cronbach’s Alpha**. Items with low item-total correlations were reviewed and possibly eliminated to improve reliability. In our study, all five independent factor scales (and the dependent variable scale) achieved Cronbach’s alpha values well above the commonly accepted threshold of 0.70, indicating good internal consistency. For instance, the Control Environment scale (6 items) had  $\alpha \approx 0.89$ , and other

factors like Control Activities (5 items) and Information & Communication (5 items) also had  $\alpha > 0.85$ . These results suggest that the survey instrument was reliably capturing each construct.

- **Exploratory Factor Analysis (EFA):** Next, we conducted EFA (using principal component analysis with varimax rotation) to explore the underlying factor structure of the measurement items. The EFA was done on the set of items for the independent variables to verify that they group into the expected five factors, and on the items for the dependent variable to confirm it represents a single factor (internal control effectiveness). The EFA results were in line with the theoretical model: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.80 and Bartlett’s test of sphericity was significant ( $\chi^2 p < 0.001$ ), confirming that the data were suitable for factor analysis. The analysis extracted **five factors** for the independent variables with eigenvalues  $> 1$ , explaining a cumulative **total variance of approximately 68.6%**. Each item loaded strongly (factor loadings  $> 0.5$ ) on its corresponding factor and had minimal cross-loading, validating that the survey items correctly clustered into the five intended constructs. We thus identified the factors as: Factor 1 – Control Environment (6 items), Factor 2 – Risk Assessment (4 items), Factor 3 – Control Activities (5 items), Factor 4 – Information & Communication (5 items), and Factor 5 – Monitoring (4 items), consistent with the COSO-based design. No unexpected factors emerged, and no serious cross-loading issues were found, so all constructs were retained as defined.
- **Confirmatory Factor Analysis (CFA):** To further validate the measurement model, we performed CFA using structural equation modeling techniques. The CFA tested whether the observed variables (survey items) load appropriately on the latent constructs (the five factors and the single outcome factor). The model fit indices indicated a good fit: for example, the comparative fit index (CFI) was above 0.90 and the root mean square error of approximation (RMSEA) was below 0.08, meeting conventional criteria for acceptable model fit. All factor loadings in the CFA were significant ( $p < 0.001$ ) and high (generally above 0.7 on their intended factors), supporting **convergent validity** of the measures. The squared correlations between factors were lower than the average variance extracted for each factor, suggesting good **discriminant validity** (each factor is distinct from the others). Overall, the CFA results confirmed that the five-factor measurement model was consistent with the data and that each construct was measured reliably by its indicators.
- **Regression Analysis (Hypothesis Testing):** Finally, we carried out a **multiple regression analysis** to test the influence of the five internal control components (independent variables) on internal control effectiveness (dependent variable). In the regression model, the composite score (or factor score) for internal control effectiveness was regressed on the five composite scores of the independent factors. Before regression, we checked for multicollinearity; the variance inflation factors (VIFs) for the five predictors were all below 2.0, indicating no multicollinearity problems. The regression model was statistically significant (F-test  $p < 0.001$ ),

and it achieved a high explanatory power. The adjusted R-squared of the model was around 0.65, meaning about **65% of the variance in internal control effectiveness** could be explained by the five factors together a substantial proportion, suggesting the model captures the major determinants of internal control effectiveness in the sampled SMEs. (Notably, this is in line with the cumulative variance explained by the factors in EFA, which was ~68.6%.) We also note that the overall internal consistency of the model aligns with the integrated nature of internal control improvements in these components collectively lead to significant enhancement in control effectiveness.

The results for each hypothesis (H1 through H5) were derived from the regression coefficients. We evaluated both the **standardized beta coefficients** (to compare the relative influence of each factor) and their **significance levels**.

## Findings and Discussion

**Profile of Respondents and Firms:** The surveyed enterprises spanned a range of sizes within the SME definition. About a quarter of the sample were **small enterprises** (10–50 employees) and the remaining were **medium enterprises** (50–200 employees), as per Vietnam's official SME categories. The sectors included trade, manufacturing, services, and others, with a slight majority in **commerce and services** (~56%) followed by **industry and construction** (~27%), and the rest in agriculture or other sectors. Regarding organizational type, roughly half of the firms were structured as limited liability companies, about 44% were sole proprietorships, and only a small fraction (~3%) were joint-stock companies, reflecting the typical distribution of SME forms in Vietnam. The respondents' roles were predominantly in management or finance: approximately 36% were chief accountants or accounting managers, 26% were department heads or deputy managers, 10% were general directors/owners, and the rest were other staff involved in administration or control. This distribution indicates that the information collected is largely from individuals knowledgeable about their firms' internal control processes. Many of the surveyed firms were relatively **young** (over half had been in operation for five years or less), which could mean their internal control systems were still maturing or being formalized.

These context details provide assurance that the data reflect a broad perspective on internal control practices in Hanoi's SME community. The variety in firm size, industry, and respondent positions helps ensure that the findings are not limited to one niche of SMEs but are more generally applicable to small and medium businesses in the city.

**Reliability and Validity of Measures:** As noted in the methodology, all constructs demonstrated satisfactory reliability. Table 1 (from the study) showed Cronbach's Alpha values ranging from 0.818 (for Risk Assessment) to 0.895 (for Control Environment), indicating that respondents' answers to items within each factor were consistent. The item-total correlation for each construct was well above 0.3, meeting the usual criteria for internal consistency. These high reliability scores reflect that the survey instrument's translation and adaptation (from theory to the Vietnamese context) were successful.

The EFA and CFA results provided evidence of construct validity. The five distinct factors were clearly recovered in EFA, and the CFA confirmed that the measurement model

fit the data adequately (as summarized earlier). Thus, we proceed to interpret the influences of these factors with confidence that each represents a distinct aspect of internal control.

**Regression Results (Hypothesis Testing):** The multiple regression analysis results are summarized in Table 2 (not shown here for brevity). All five hypothesized factors were found to have **positive and statistically significant effects** on internal control effectiveness, supporting H1 through H5. Specifically:

- **Control Environment (H1):** This factor had a positive coefficient and was significant ( $p < 0.01$ ). A stronger control environment – characterized by management integrity, clear organizational structure, and a culture of discipline – tends to enhance the effectiveness of internal controls. When SME leaders demonstrate commitment to ethical values and good governance, it sets a strong foundation that influences employees to adhere to control procedures. Our findings align with this idea: companies with higher scores for Control Environment also reported higher internal control effectiveness. The standardized beta ( $\beta$ ) for Control Environment was around 0.24, indicating a moderately strong contribution relative to other factors.
- **Risk Assessment (H2):** Risk Assessment also showed a significant positive impact ( $p < 0.05$ ) on internal control effectiveness. SMEs that actively identify and evaluate their risks are better equipped to design relevant control activities and allocate resources to high-risk areas, resulting in more effective overall control. The regression coefficient for Risk Assessment, though positive, was somewhat lower in magnitude (standardized  $\beta \approx 0.21$ ) compared to some other factors. This suggests that while risk assessment is important, many SMEs in the sample might not have sophisticated risk management processes, limiting its relative impact. Nonetheless, the positive significance confirms that systematic risk assessment contributes to stronger internal controls for example, by foreseeing potential fraud risks or compliance issues and prompting preemptive controls.
- **Control Activities (H3):** Control Activities had one of the higher standardized effects on internal control effectiveness, with  $\beta \approx 0.32$  ( $p < 0.001$ ). This highlights that the presence of well-established control procedures (such as approvals, verifications, reconciliations, and segregated duties) directly improves the functioning of an internal control system. In SMEs, common control activities include requiring dual signatures for payments, regular inventory counts, or separation of accounting duties – when these are implemented, they help prevent errors and fraud, thereby boosting control effectiveness. The strong impact of Control Activities in our results echoes other studies that emphasize the need for procedural checks in smaller firms to compensate for their scale. The implication is clear: SMEs must focus on developing appropriate control activities proportional to their size and complexity, as these actions form the frontline defenses in the internal control system.
- **Information & Communication (H4):** This factor emerged as the **most influential** of the five, with the highest standardized coefficient ( $\beta \approx 0.35$ ,  $p < 0.001$ ). Effective information and communication within the



organization ensure that everyone is aware of the control policies and findings. In our survey, SMEs that scored high on this factor have practices like regular internal meetings to discuss policy updates, clear documentation of procedures, and accessible channels for staff to report issues or ask questions. These practices lead to better-informed employees who can execute controls properly and alert management to irregularities in a timely manner. The finding that Information & Communication is a top driver of control effectiveness is consistent with the nature of SMEs: with often informal structures, transparent and frequent communication can substitute for formal systems. If an SME maintains open lines of communication and information flow, it can quickly correct control deviations and ensure that controls are understood and followed. Conversely, if communication is poor, even well-designed controls may fail because staff are unaware or misunderstand their roles. Our results reinforce the idea that SMEs should invest in good information systems (even simple accounting software or regular reporting routines) and foster a culture of open communication to support their internal controls.

- **Monitoring (H5):** Monitoring activities showed the smallest coefficient among the five factors, with a standardized  $\beta$  of about 0.11 (though still significant at  $p < 0.05$ ). This indicates that while ongoing monitoring and periodic evaluations do contribute to better internal control, their relative impact in the surveyed SMEs is comparatively low. One reason could be that many SMEs lack a formal internal audit department or dedicated compliance officer, so monitoring is often done irregularly or by top management in an ad-hoc manner. SMEs might not conduct systematic reviews of their control systems unless prompted by external requirements (such as an audit by tax authorities or banks). Thus, the monitoring component is underdeveloped in many small firms, as reflected in both the lower average scores and its smaller effect on the overall control effectiveness. Nevertheless, the positive significance suggests that those SMEs which do implement some monitoring – for example, the owner periodically reviewing financial reports or an external accountant checking the books – see a benefit in terms of more effective controls. Monitoring acts as a corrective layer, catching control failures or emerging risks that the other components might miss. The relatively modest influence of Monitoring in our study underscores a potential area for improvement: strengthening monitoring mechanisms could further boost internal control effectiveness in SMEs, an issue we discuss in the implications.

In summary, the regression analysis confirms **all five hypotheses**: each component of internal control as per COSO has a meaningful positive influence on the effectiveness of the internal control system in SMEs (with standardized impact rankings in our context: Information & Communication highest, followed by Control Activities, Control Environment, Risk Assessment, and Monitoring). Our model's explanatory power ( $R^2 \approx 0.65$ ) suggests that these internal factors collectively account for a major portion of what makes an SME's internal control system effective. This finding is consistent with the integrated nature of internal control – strong performance across all

components leads to the best outcomes. It also aligns with related research in different contexts; for example, a study at a private hospital in Vietnam similarly found that factors like information & communication and control activities had the strongest contributions to internal control effectiveness, while monitoring needed to be bolstered due to its weaker influence.

**Discussion of Key Insights:** The above results highlight several important insights for both theory and practice:

1. **Critical Role of Communication:** The prominence of Information & Communication confirms that beyond having formal rules, the dissemination and understanding of those rules are crucial. In SMEs, ensuring that every employee knows the policies, understands their responsibilities, and feels free to communicate issues can dramatically improve control adherence and timely error detection. This aligns with the COSO framework's emphasis that information and communication underpin all other control components. For researchers, this suggests that studies of internal control in small firms should pay particular attention to informal communication channels and knowledge sharing as part of internal control effectiveness.
2. **Control Activities as the Backbone:** The strong impact of control activities reinforces that tangible control procedures (checks, reconciliations, approvals) are the backbone of an ICS. Even in small firms with tight-knit staff, having explicit control activities prevents complacency and oversight. This finding encourages SME managers to formalize key procedures (for example, always requiring two people to handle cash or separating duties between recording and custody of assets) as their business grows, rather than relying purely on trust.
3. **Importance of Management Tone:** The control environment's positive effect, while not the largest, is fundamentally important. A good control environment (management's tone at the top, clarity in organizational structure, etc.) not only directly improves control effectiveness but also indirectly influences the other components. If leaders are committed to control, they are more likely to invest in risk assessment, enforce control activities, encourage communication, and support monitoring. Our results and observations support the idea that many SMEs would benefit from enhancing their control environment – for instance, by establishing a stronger code of ethics, setting a more structured organization chart, or improving the competence of accounting personnel – to serve as a foundation for other control improvements.
4. **Underdeveloped Monitoring in SMEs:** The relatively lower influence of monitoring suggests that SMEs might be over-reliant on day-to-day oversight by management and lacking independent evaluations. This is understandable given resource constraints; however, it poses a risk that control deficiencies could accumulate unnoticed. The discussions with experts revealed that many SME owners equate “monitoring” with simply supervising employees, and they often do not conduct formal audits or reviews unless required. This perception needs to change if SMEs are to reach higher internal control maturity. Even if hiring full-time internal auditors is not feasible, SMEs can implement alternative monitoring measures (such as periodic

engagements with external consultants, peer reviews among businesses, or setting up basic performance indicators to monitor processes). Strengthening monitoring will likely elevate its impact on control effectiveness over time.

5. **Interdependence of Factors:** Finally, our study underscores that these components do not operate in isolation. SMEs that performed well in one factor often tended to perform well in others, reflecting a holistic approach to internal control. For example, a company that values a good control environment likely also communicates better and sets up more thorough control activities. This interdependence was observed in our correlation analysis (all five factors were positively correlated with each other,  $p < 0.01$ ). It reinforces a key message: improving internal control effectiveness is not about focusing on only one or two areas, but about uplifting the entire system in a balanced manner.

Overall, the findings provide empirical support for using the COSO internal control framework as a diagnostic and improvement tool in the SME context. They validate that the conceptual pillars of internal control are applicable and impactful even for smaller organizations, not just large corporations or banks that typically have been the focus of internal control regulations.

### Conclusion and Managerial Implications

**Conclusion:** This study examined the factors affecting the effectiveness of internal control systems in small and medium-sized enterprises in Hanoi, using the COSO framework as a basis. Through a combination of expert insights and a survey analysis, we identified five key components – Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring – that collectively determine how effective an SME's internal control system will be. Our quantitative results confirmed that improvements in each of these areas are associated with a statistically significant increase in internal control effectiveness. Among the factors, Information & Communication and Control Activities emerged as especially influential, suggesting that SMEs which ensure clear communication of information and implement robust control procedures tend to have more effective control systems. Conversely, the Monitoring component was relatively weaker in many firms, indicating a need for greater attention to ongoing reviews and audits in the SME sector.

These findings contribute to the academic literature by providing evidence that the integrated internal control model (COSO) holds true in the context of Vietnamese SMEs. We demonstrated that even though SMEs differ in scale and structure from large enterprises, the fundamental elements that make internal controls effective are similar. This supports the generalizability of internal control theories while also highlighting areas (like communication and monitoring) that may require special focus in smaller organizations.

**Managerial Implications:** For practitioners SME owners, managers, and accountants the research offers several important implications. Strengthening internal control is not merely a compliance exercise but a value-adding endeavor that can protect the business and improve performance. Based on our findings, we recommend the following actions:

- **Enhance the Control Environment:** SME leaders should actively cultivate a strong control environment. This involves demonstrating ethical leadership and commitment to integrity in all business dealings, setting clear organizational structures (even if small, define roles and responsibilities clearly), and fostering a culture that values accountability. Management should lead by example in following procedures and emphasize the importance of internal controls to all employees. Training sessions or workshops on ethics and internal control awareness can be conducted to reinforce the desired culture. A supportive control environment will lay the groundwork for every other control measure to function effectively.
- **Implement Systematic Risk Assessment:** SMEs should adopt a more structured approach to risk assessment. This could start with simple steps like periodic brainstorming of what could go wrong in key processes (sales, procurement, cash handling, etc.) and maintaining a basic risk register. For each identified risk, management can evaluate its likelihood and potential impact, and then devise appropriate responses or controls. Even if an SME cannot afford a dedicated risk manager, the act of regularly assessing risks (for example, in management meetings) ensures that emerging issues – such as new market challenges or regulatory changes – are considered and addressed proactively. Over time, formalizing risk assessment will guide where to strengthen or add control activities.
- **Strengthen Control Activities and Procedures:** Managers should review their current control activities and identify gaps or weaknesses. Key questions to consider include: Are there areas where a single individual has too much unchecked control (e.g. one person both approves and records transactions)? Are important reconciliations (bank reconciliations, inventory counts) performed regularly? Are there clear policies for approvals of expenditures, credit sales, or asset disposals? SMEs would benefit from documenting basic control procedures even a brief internal control manual to standardize operations. Introducing practical control activities, such as dual approval for payments above a certain amount, segregation of duties in bookkeeping, or requiring supervisor sign-off on time sheets, can greatly reduce the risk of errors or fraud. Even with a small staff, creative measures (like rotating tasks among employees or involving the owner in random checks) can implement the spirit of segregation of duties. Our findings confirm that such control activities are directly linked to better internal control effectiveness, so the effort put into establishing them is well justified.
- **Improve Information Systems and Internal Communication:** Investing in better information and communication is perhaps the most impactful step SMEs can take. This has both technological and behavioral aspects. On the technology side, SMEs should utilize appropriate accounting software or management information systems that suit their scale – tools that can generate reliable reports and facilitate the sharing of data among authorized personnel. A good information system ensures accuracy and availability of financial data for control purposes. On the communication side, management should ensure that all

employees understand the internal controls relevant to their jobs. This might involve regular team meetings to discuss any control issues or updates in procedures, an open-door policy for employees to report irregularities or suggestions, and clear documentation (in Vietnamese) of key policies distributed to staff. Given that Information & Communication was the strongest factor in our study, improving this area can yield quick wins: when employees are well-informed and there is transparency, compliance with controls naturally increases, and problems are flagged sooner. Managers should not assume that “everyone knows what to do”; instead, they should actively disseminate information about controls and encourage feedback.

- **Establish Monitoring Mechanisms:** SMEs should seek ways to monitor their controls regularly. While hiring an internal auditor might be beyond the means of many, alternatives exist. Company owners or top managers should periodically review control reports (for instance, examine monthly financial statements for any anomalies, or spot-check a sample of transactions). Peer review can be useful: have one knowledgeable employee occasionally check another’s work (for example, a second person rechecking the inventory count done by the first). Additionally, engaging external professionals to conduct an **independent review** of internal controls annually or semiannually can be valuable – local audit or consulting firms offer such services tailored for SMEs. Another approach is to use the company’s external financial auditor (if the firm undergoes a yearly audit) as a resource: management can discuss internal control improvement points with them. By instituting some form of monitoring, SMEs ensure that the internal control system remains dynamic and improvements are made when weaknesses are detected. Over time, as the business grows, management should consider more formal monitoring such as establishing an internal audit function or assigning a dedicated compliance officer, especially if the complexity of operations increases.

In implementing the above recommendations, it is important for SME managers to tailor actions to their firm’s size and complexity. Not all controls suitable for large corporations make sense in a 20-person company. The key is to achieve a balance where controls are effective yet not overly burdensome. The COSO framework can serve as a checklist: even a small firm can ask, “What are we doing about each of these five components?” and ensure none are completely neglected.

**Limitations and Future Research:** While this study provides valuable insights, it is not without limitations. First, the research is cross-sectional and focused on SMEs in the Hanoi area; thus, the findings capture a snapshot in time and may not account for changes or trends in internal control practices. Future studies could employ a longitudinal design to see how internal control effectiveness evolves as SMEs grow or face different economic conditions. Second, our study concentrated on internal factors within the enterprise. There may be **external factors** (such as regulatory environment, market conditions, or industry-specific challenges) that also impact internal control effectiveness but were outside the scope of this research. Investigating those could provide a more holistic understanding. Third, the measurement of “internal control effectiveness” was

based on management’s perceptions (survey responses), which is subjective; subsequent research might incorporate objective indicators of control effectiveness (such as frequency of control breaches, error rates in financial reporting, or audit findings) to complement the perceptual data. Lastly, expanding the research to other regions of Vietnam or conducting comparative studies between different provinces (or countries) could highlight contextual differences and best practices in internal control implementation.

In conclusion, our study confirms that effective internal control in SMEs is driven by multiple interrelated factors, all of which need attention from management. By adopting a comprehensive approach – improving the control environment, performing risk assessments, enforcing control activities, facilitating information flow, and monitoring the system – SME owners and managers in Hanoi can significantly enhance the robustness of their internal control systems. Strengthening internal control is an investment in the enterprise’s transparency, efficiency, and sustainability. As Vietnam’s economy and regulatory landscape continue to evolve, SMEs with strong internal controls will be better prepared to face challenges and capitalize on opportunities, thereby contributing to more stable and reliable business growth. The insights from this research can serve as a guide for SMEs and policymakers to focus training, resources, and support on the critical areas that make internal controls truly effective.

### Acknowledgments

The article was conducted under the research support of the topic “Factors Affecting the Effectiveness of Internal Control in Small and Medium-Sized Enterprises in Hanoi”. Subject code: HUNRE.2025.06.09 Hosted by Hanoi University of Natural Resources and Environment.

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