



Enterprise Risk Management and Sustainable Performance of Small and Medium-Sized Enterprises in Osun State, Nigeria

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Abstract

This study investigates the effect of Enterprise Risk Management (ERM) practices on the sustainability of Small and Medium-sized Enterprises (SMEs) in Osun State, Nigeria. It specifically examines how ERM dimensions such as risk identification, risk assessment, and risk mitigation influence three critical indicators of SME sustainability: profitability, operational efficiency, and employment creation. The study employs a quantitative research design, using structured questionnaires to gather data from 300 SME owners and managers. The responses were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) technique to test the hypothesized relationships. The findings reveal that ERM practices significantly impact SME performance in diverse ways. Risk assessment and mitigation have positive effects on profitability ($\beta=0.165$, $p=0.008$; $\beta=0.368$, $p=0.00$ respectively), while risk identification shows a negative relationship ($\beta=-0.419$, $p=0.00$). All the ERM components positively influence operational efficiency, with risk identification having the most substantial effect ($\beta=0.531$, $p=0.00$). Regarding employment creation, risk identification and assessment significantly contribute to job growth ($\beta=0.719$, $p=0.00$; $\beta=0.239$, $p=0.00$ respectively), while risk mitigation does not exhibit a statistically significant influence ($\beta=0.021$, $p=0.685$). These outcomes underscore the importance of adopting a balanced and strategic approach to ERM implementation. The study concludes that while ERM enhances SME sustainability, its effectiveness depends on how each component is integrated into business strategy. The research contributes to the growing discourse on SME development and provides practical recommendations for business owners, policymakers, and future researchers.

Keywords: Enterprise Risk Management; SMEs; Profitability; Operational Efficiency; Employment Creation.

1.0 Introduction

It is well acknowledged that Small and Medium-sized Enterprises (SMEs) are the main drivers of economic expansion, contributing significantly to the creation of jobs, innovation, entrepreneurship, and general economic growth (Ayyagari et al., 2017). Profits from these companies are the main sources of income for many economies, particularly those in developing countries where they dominate the business sector. These profits also support public policies aimed at enhancing service delivery, reducing poverty, leveling the socioeconomic development gap, and frequently, opening up opportunities for more equitable wealth creation and distribution.

In Nigeria for example, SMEs account for around 48% of the GDP and employ about 84% of the workforce in the private sector (National Bureau of Statistics NBS, 2020). SMEs are crucial economic development engines, especially in states like Osun where they support thousands of direct and indirect employments in industries ranging from manufacturing and retail to services and agriculture (OSUCCIMA, 2025). Despite being the backbone of the economy, there is increasing concern regarding their long-term viability. On the other hand, in the face of numerous internal and external obstacles, many SMEs strive just to survive. Researches have

shown that about 80percent of SMEs in Nigeria fail within the first five years of operation (Ogundele et al., 2018). Such a high rate of failures could be attributed to strategic policies within these businesses needed to make them resilient and sustainable.

According to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) the number of registered SMEs in Osun state stands at 2,272 (SMEDAN, 2022). Given the crucial role SMEs play in economic development, it is predicted that these enterprises will make a considerable contribution to the state's growth. However, Osun still ranks among the less developed states in Nigeria (World bank index, 2021) with its attendant problems bothering on poor workers welfare and weak infrastructure development. One strategic approach that has gained attention in recent years is Enterprise Risk Management (ERM). ERM is a structured, holistic approach to identifying, assessing, managing, and monitoring risks that can affect an organization's ability to achieve its objectives (Bromiley et al., 2015). Unlike traditional risk management, which often focuses on specific risks in isolation, ERM takes a comprehensive view of all risks facing a business, integrating risk management into the strategic planning process. For SMEs, this is particularly crucial, as they are more vulnerable to risks such as financial instability, operational disruptions, regulatory changes, and market volatility (Baştürk & Giray, 2021). A strong ERM framework has been shown to help businesses stay resilient, manage their operations more efficiently and adapt to changes, setting them up for long-term success. Hence this study investigated the impact of ERM strategies on the profitability, operational efficiency and employment creation of SMEs in Osun state.

2.0 Literature Review

2.1 Conceptual Review

Enterprise Risk Management (ERM) is a comprehensive approach designed to identify, assess, and manage all potential risks that could affect an organization's goals and objectives. Unlike traditional risk management, which tends to focus on addressing risks in specific areas such as financial or operational issues, ERM is an integrated and also organization-wide framework. This means that ERM considers all possible types of risks, including financial, operational, strategic, regulatory, and external risks, in a cohesive manner (Kraus & Lehner, 2016). For Small and Medium-sized Enterprises (SMEs), ERM involves a structured process for determining the likelihood of potential risks and their impact on business operations. The process typically includes several key stages which includes risk identification, assessment and mitigation. Risk identification includes all processes aimed at discovering both internal and external threats to a business, while risk assessment explores their likelihood and potential severity of their impacts. At the mitigation stage, strategies are developed to manage or minimize the identified risks (Soin & Collier, 2018).

It is a common practice for SME to first identify the risks that may affect their business. This could be internal, such as operational inefficiencies, employee-related issues, financial management problems or external, including changes in the regulatory environment, economic downturns, or shifts in market demand. Once these risks are identified, there is need to assess the likelihood of their occurrence possible impact on the business. This stage helps in prioritizing risks based on their significance and urgency. Thereafter, strategies are developed to mitigate their impact which could involve diversifying suppliers to avoid operational disruptions, setting aside financial reserves for unforeseen expenses, or investing in technology that enhances operational efficiency.

Sustainable performance for SMEs refers to their capacity to operate effectively over the long term, ensuring they meet the current needs of stakeholders without jeopardizing future opportunities for growth. This concept involves balancing business profitability with long-term resilience, growth, and social responsibility. According to Klewitz and Hansen (2016), sustainability in SMEs is more than just financial survival; it is about maintaining the ability to

withstand internal and external pressures while continuing to contribute to the broader economic ecosystem. Research has shown that SMEs implementing ERM practices tend to experience improvements in operational efficiency and are also able to contribute to job creation and workforce expansion (Soin & Collier, 2018). The conceptual framework highlighting the interactions among the core variables in the study is presented in figure 1.



Figure 1: Interactions between ERM and Sustainable Performance
Source: Author's Conceptualization (2025)

2.2 Theoretical Framework

The theoretical framework guiding this study combines several interrelated perspectives that help explain how Enterprise Risk Management (ERM) contributes to the sustainable performance of Small and Medium Enterprises (SMEs). At the heart of this framework is the understanding that sustainability for SMEs goes beyond profitability encompassing operational efficiency, and employment creation. This broad view is supported by the sustainability theory, which emphasizes the need for businesses to operate in ways that balance economic objectives with social and environmental responsibilities (Khalid et al., 2020).

Equally important is the resource-based view (RBV) theory, which argues that firms achieve competitive advantage through the development and deployment of valuable internal resources (Barney, 1991). ERM, in this regard, becomes more than just a compliance activity but a strategic capability. However, no single management strategy works universally, which is where contingency theory adds nuance to this framework. The theory posits that organizational success depends on the fit between management practices and specific contextual factors (Donaldson, 2001). Tying all of this together is the dynamic capabilities theory, which underscores an organization's ability to integrate, build, and reconfigure internal competencies in response to a rapidly changing environment (Teece et al., 1997). This is perhaps the most action-oriented perspective in this study's theoretical foundation. In real-world terms, SMEs that use ERM effectively are not just reacting to problems, they are constantly learning, adapting, and innovating to stay ahead of risk.

Together, these theories provide a comprehensive and practical framework for understanding how ERM contributes to SME sustainability. They underscore the importance of tailoring risk management strategies to the unique internal capacities and external conditions of SMEs, particularly those operating in vulnerable economic settings like Osun State. By drawing from sustainability theory, RBV, contingency theory, and dynamic capabilities, this study captures both the structural and behavioral dimensions of how SMEs can manage risk to not only survive, but thrive.

2.3 Empirical Review

Scholars have sought to elucidate how the implementation of Enterprise Risk Management (ERM) practices influences the productivity and overall operational performance of Small and Medium-sized Enterprises (SMEs). In a study conducted by Fadun et. al., (2020), the authors

examined the influence of risk management practices on the survival and operational resilience of SMEs in Lagos state, Nigeria. Using a cross-sectional survey design involving 400 SME operators, the study revealed that organizations which proactively integrate risk management into their daily operations are more likely to demonstrate agility in responding to market fluctuations. The emphasis on operational resilience reinforces the notion that effective ERM does not merely safeguard assets; it empowers SMEs to thrive amid uncertainties. This insight is particularly relevant when considering the challenges faced by businesses, especially SMEs in Osun State, where market conditions can be volatile and unpredictable.

Furthermore, Hwang et.al., (2021) conducted a survey on twenty managers in Indian construction company using structural equation modeling technique. The findings reveal that organizations must strike a balance between risk aversion and proactive engagement in new ventures. While other studies have shown that excessive caution in risk management could stifle innovation, ultimately hindering sales growth (e.g. Sadgrove, 2020), the contrasting viewpoint underscores the necessity for SMEs to tailor their ERM strategies, ensuring that they do not inhibit their ability to pursue growth opportunities.

Muda et. al., (2021) conducted a comprehensive analysis of ERM on firm performance in the Malaysian retail sector. The study involved the Balanced-Scorecards four perspectives (finance, customer, internal process & growth) and the findings revealed that organizations which adopted robust ERM strategies experienced a notable increase in sales volume due to improved customer trust and loyalty. The result suggests that when SMEs effectively manage risks, they can enhance their reputation, foster stronger customer relationships and ultimately increase revenue generation. This suggests that connection between ERM and sustainability in SMEs lies in its capacity to ensure that businesses are well-prepared to face risks and uncertainties. Other studies have also shown that SMEs that adopt comprehensive ERM practices are more likely to experience sustainable growth and stability (e.g. Florio & Leoni, 2017; Afolabi & James, 2018; Odia & Omosah, 2022). However, the direction of such influence of ERM strategies on performance remains a concern among SMEs in Osun State, where businesses face external pressures from both the local market and the broader economy and hence the need for the current investigation.

3.0 Methodology

The descriptive survey research design was adopted in this study. According to the statistics from the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2022), Osun state has approximately 5,000 registered SMEs classified into key sectors including retail, manufacturing and services. The Taro Yamane formula (1973) for finite population gives an appropriate sample size of 370. This sample was purposively drawn from the indicated sectors to include retail (50% - 185 SMEs), services (30% - 111 SMEs) and manufacturing (20% - 74 SMEs). Each sector's sample size was randomly selected from its respective SME population, ensuring fair representation in the study.

The state capital (Osogbo) and Olorunda Local Government area of Osun State were purposively chosen as the study area. Osogbo is the business hub for the state and houses the largest number of SMEs. A structured questionnaire was used to harvest firsthand information from owners/managers of the selected SMEs on the subject matter. The questionnaire consists of two parts which are the demographic information of respondents and question items on study variables, captured on a five-point likert scale. The data gathered were subjected to descriptive analysis using frequency tables and percentages. The functional models representing the linear regression for the construct variables are thus stated as:

$$\text{Profitability} = \beta_0 + \beta_1 \text{Risk Identification} + \beta_2 \text{Risk Assessment} + \beta_3 \text{Risk Mitigation}$$

$$\text{Operational Efficiency} = \beta_0 + \beta_1 \text{Risk Identification} + \beta_2 \text{Risk Assessment} + \beta_3 \text{Risk Mitigation.}$$

$$\text{Employment Creation} = \beta_0 + \beta_1 \text{Risk Identification} + \beta_2 \text{Risk Assessment} + \beta_3 \text{Risk Mitigation}$$

Where β_0 , β_1 , β_2 & β_3 are the repression parameters.

Estimations for the model parameters involved the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique via the Smart-PLS 4 software. This include the factor loadings, internal consistency test (Cronbach's Alpha and Composite Reliability), construct validity test (Average Variance Extracted) and the discriminant validity test (Fornell-Larcker and Heterotrait-Monotrait). In addition, the standardized root mean squares and R-squared statistics were used to ascertain the model fit.

4.0 Results

4.1 Demographic Analysis

The demographic distribution of the respondents is presented in Table 1, which includes the frequencies and percentages.

Table 1 – Demographic Characteristics

| Demographics | Categories | Frequency | Percent |
|--------------|-------------------|-----------|---------|
| Gender | Male | 164 | 54.7 |
| | Female | 136 | 45.3 |
| Age | 25years and below | 79 | 26.3 |
| | 26-35years | 151 | 50.3 |
| | 36-45years | 20 | 6.7 |
| | 46-55years | 50 | 16.7 |
| | 56years and above | 0 | 0 |
| Operations | Less than 1year | 53 | 17.7 |
| | 1-3years | 157 | 52.3 |
| | 4-6years | 13 | 4.3 |
| | More than 6years | 77 | 25.7 |
| Employees | 10-49 staff | 116 | 38.7 |
| | 50 - 99 staff | 69 | 23 |
| | 100 - 199 staff | 115 | 38.3 |
| Total (N) | | 300 | |

Source: Survey (2025).

The results in Table 1 shows that majority are male (54.7%), aged between 26-35years (50.3%) and have been running their business for 1-3years (52.3%). These results suggest a predominance of the young and male-gender in small business activities in the state, particularly in recent times. Further results from Table 1 reveal that most of the enterprises have a staff strength which ranges between 10 and 49 (38.7%) and which is consistent with the employee-size requirement for SMEs.

4.2 Assessment of the Measurement Items and Construct Variables

The factor loading result for the measuring items in the research instrument is presented in figure 2.

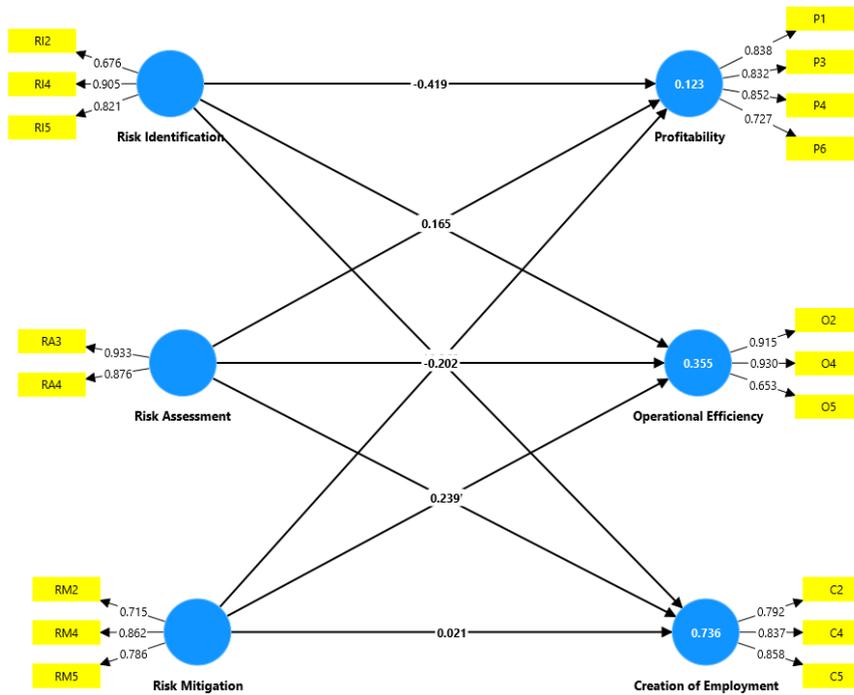


Figure 2: Factor Loadings for Retained Measuring Items
Source: Outputs from Smart-PLS 4 (2025)

The minimum acceptable factor loading requirement is 0.6 and only items who meet this condition are retained in figure 2 and are thus included in the SEM path analysis. Furthermore, the reliability results of the construct variables are presented in Table 2.

Table 2 - Reliability and Construct Validity

| Constructs | Cronbach's Alpha | Composite reliability (rho_A) | Composite reliability (rho A) | Average variance extracted (AVE) |
|----------------------------|------------------|-------------------------------|-------------------------------|----------------------------------|
| Creation of Employment (C) | 0.774 | 0.783 | 0.868 | 0.688 |
| Operational Efficiency (O) | 0.803 | 0.928 | 0.877 | 0.709 |
| Profitability (P) | 0.83 | 0.848 | 0.887 | 0.662 |
| Risk Assessment (RA) | 0.783 | 0.829 | 0.9 | 0.819 |
| Risk Identification (RI) | 0.723 | 0.75 | 0.846 | 0.65 |
| Risk Mitigation (RM) | 0.726 | 0.757 | 0.832 | 0.624 |

Source: Outputs from Smart-PLS 4 (2025).

The results in Table 2 show that all the construct variables have reliability statistics (Cronbach Alpha & Composite reliabilities) above the minimum threshold of 0.7. This confirms the internal consistency of the retained items are their reliability in jointly measuring their individual constructs. In addition, the Average Variance Extracted (AVE) results also indicate

that all the construct variables have values above the minimum acceptable requirement of 0.5. This confirms the convergent validity of the construct variables.

Furthermore, the discriminant validity is necessary to ascertain that the measuring items do not have discriminant problem. The Fornell-Larcker and Heterotrait-Monotrait (HTMT) criteria were computed to test this validity and the results are presented in Tables 3 and 4.

Table 3 - Fornell-Larcker Discriminant Validity

| Constructs | Creation of Employment | Operational Efficiency | Profitability | Risk Assessment | Risk Identification | Risk Mitigation |
|------------------------|------------------------|------------------------|---------------|-----------------|---------------------|-----------------|
| Creation of Employment | 0.829 | | | | | |
| Operational Efficiency | 0.506 | 0.842 | | | | |
| Profitability | -0.097 | 0.188 | 0.814 | | | |
| Risk Assessment | 0.537 | 0.059 | 0.093 | 0.905 | | |
| Risk Identification | 0.729 | 0.552 | -0.124 | 0.407 | 0.806 | |
| Risk Mitigation | 0.529 | 0.442 | 0.153 | 0.266 | 0.618 | 0.790 |

Source: Outputs from Smart-PLS 4 (2025)

The Fornell-Larcker criterion requires that the square root of the AVEs (bolded & diagonal values in Table 3) must be greater than any of the inter-construct correlations (unbolded values in Table 3). The results show that this condition is satisfied.

Table 4 - Heterotrait-Monotrait Discriminant Validity

| Constructs | Creation of Employment | Operational Efficiency | Profitability | Risk Assessment | Risk Identification | Risk Mitigation |
|------------------------|------------------------|------------------------|---------------|-----------------|---------------------|-----------------|
| Creation of Employment | | | | | | |
| Operational Efficiency | 0.639 | | | | | |
| Profitability | 0.184 | 0.281 | | | | |
| Risk Assessment | 0.672 | 0.15 | 0.185 | | | |
| Risk Identification | 0.88 | 0.686 | 0.222 | 0.532 | | |
| Risk Mitigation | 0.641 | 0.465 | 0.216 | 0.391 | 0.802 | |

Source: Outputs from Smart-PLS 4 (2025)

Similarly, all the HTMT ratios in Table 4 do not exceed the maximum threshold of 0.9, which also ascertain that there is no problem of discriminant validity among the construct variables.

4.3 Path Analysis

Table 5 shows the result of the goodness of fit criteria for the structural model.

Table 5 - Model Fit

| | Estimated Model | Benchmark |
|------------|-----------------|--------------------------|
| SRMR | 0.131 | < 0.08 |
| d_ ULS | 1.644 | <HI _{.95} =1.74 |
| d_ G | 1.243 | <HI ₉₅ =1.27 |
| Chi-square | 1933.303 | |

Source: Smart-PLS 4 (2025)

While the Standardized Root Mean Residual (SRMR=0.131) is above the maximum acceptable benchmark of 0.08, the overall model fit indices (d_ ULS = 1.6440 & d_ G = 1.243) are both within the acceptable benchmarks (HI_{.95} = 1.74 & 1.27 respectively). This suggests a good model fit for the structural model.

Figure 3 shows the output of the bootstrapping for the SEM revealing the path coefficients and their corresponding p-values.

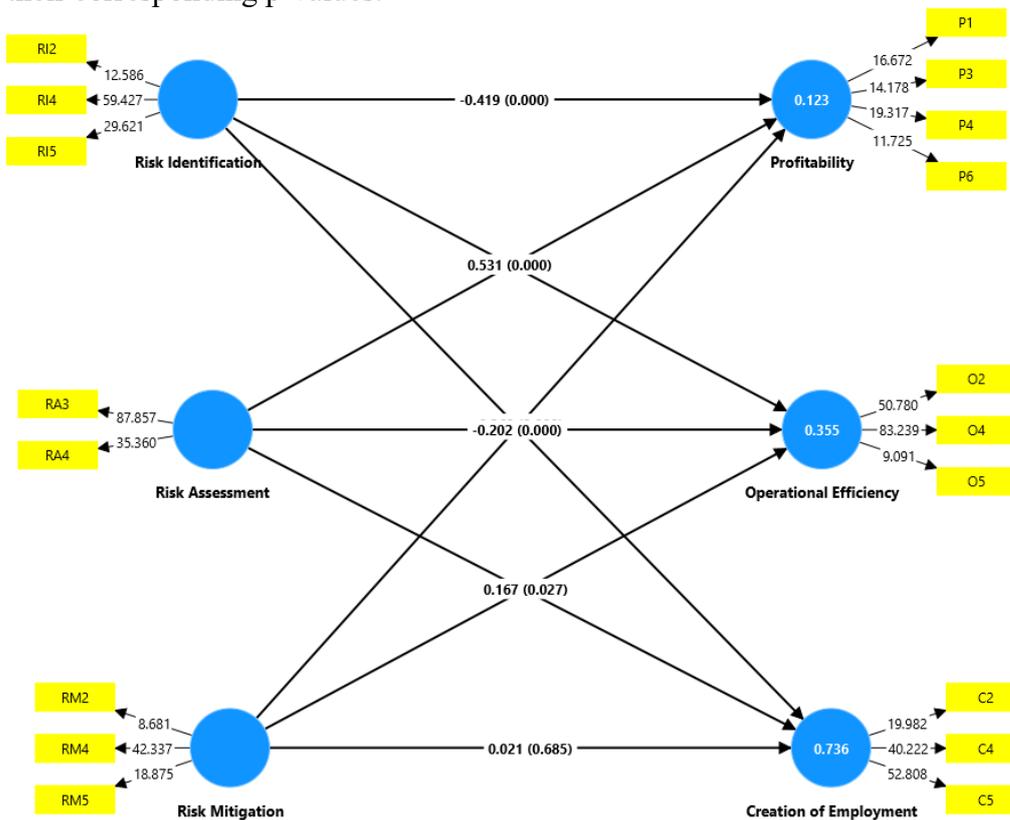


Figure 3: Path Diagram

Source: Outputs from Smart-PLS 4 (2025)

The path diagram in figure 3 reveal the path coefficients and their corresponding p-values for the linear relationship between each of the independent variables (proxies for Enterprise Risk Management) and the dependent variables (proxies for SME sustainable performance). These allow for the test of the hypothesized path.

4.4 Hypotheses Testing

Table 6 shows the regression results for the path analysis, which includes the coefficients, t-statistics and p-values.

Table 6 – Regression Results

| Hypothesized Paths | Coefficients | t-statistics | p-values | Decision |
|---|--------------|--------------|----------|----------|
| Risk Identification -> Profitability | -0.419 | 4.682 | 0.00 | Reject |
| Risk Assessment -> Profitability | 0.165 | 2.672 | 0.008 | Reject |
| Risk Mitigation -> Profitability | 0.368 | 4.049 | 0.00 | Reject |
| Risk Identification -> Operational Efficiency | 0.531 | 8.998 | 0.00 | Reject |
| Risk Assessment -> Operational Efficiency | -0.202 | 5.432 | 0.00 | Reject |
| Risk Mitigation -> Operational Efficiency | 0.167 | 2.215 | 0.027 | Reject |
| Risk Identification -> Creation of Employment | 0.719 | 14.315 | 0.00 | Reject |
| Risk Assessment -> Creation of Employment | 0.239 | 6.112 | 0.00 | Reject |
| Risk Mitigation -> Creation of Employment | 0.021 | 0.406 | 0.685 | Accept |

Source: Outputs from Smart-PLS 4 (2025)

Results from Table 6 shows that the path coefficient from Risk Identification to Profitability is negative ($\beta=-0.419$), implying an indirect effect. The t-statistic ($t=4.682$) of this path is significant at the 5% level ($p=0.00$). This implies that risk identification has a significant effect on the profitability. Similarly, the coefficient of the path from Risk Assessment to Profitability is positive ($\beta=0.165$), which indicates a direct impact. The t-statistic ($t=2.672$) of this path is also significant at the 5% level ($p=0.008$), suggesting that risk assessment significantly affect profitability. Furthermore, the path coefficient from Risk Mitigation to Profitability is positive ($\beta=0.368$), implying a direct effect. The t-statistic ($t=4.049$) of this path is also significant at the 5% level ($p=0.00$), indicating that risk mitigation has a significant effect on profitability. From these results, the null hypotheses for these paths are rejected and it is concluded that all the dimensions of enterprise risk management significantly impact the profitability of SMEs in Osun state.

Further results from Table 6 reveal that path coefficient from Risk Identification to Operational Efficiency is positive ($\beta=0.531$), indicating a direct effect. The t-statistic of this path ($t=8.998$) is significant at the 5% level ($p=0.00$). This implies that risk identification significantly influences operational efficiency. Similarly, the coefficient of the path from Risk Assessment to Operational Efficiency is negative ($\beta=-0.202$), indicating an indirect impact. The t-statistic of this path ($t=5.432$) is also significant at the 5% level ($p=0.00$), suggesting that risk assessment significantly affect operational efficiency. Furthermore, the path coefficient from Risk Mitigation to Operational Efficiency is positive ($\beta=0.167$), implying a direct effect. The t-statistic ($t=2.215$) of this path is also significant at the 5% level ($p=0.027$), suggesting that risk mitigation has a significant effect on operational efficiency. Overall, the null hypotheses

for these paths are rejected it can be concluded that all the dimensions of enterprise risk management practises significantly influence the operational efficiency of SMEs in Osun state.

Additionally, the path coefficient from Risk Identification to Creation of Employment ($\beta=0.719$), is positive implying a direct impact. The t-statistic ($t=14.315$) of this path is significant at the 5% level ($p=0.00$). Hence, it can be said that risk identification has a significant impact on the creation of employment. Also, the coefficient of the path from Risk Assessment to Creation of Employment is positive ($\beta=0.239$), which also indicates a direct effect. The t-statistic ($t=6.112$) of this path is significant at the 5% level ($p=0.00$), indicating that risk assessment significantly affects creation of employment. However, the path coefficient from Risk Mitigation to Creation of Employment is positive ($\beta=0.021$), implying a direct effect. The t-statistic ($t=0.406$) of the path is not significant at the 5% level ($p=0.685$), suggesting that risk mitigation has no significant effect on creation of employment. Therefore, it is concluded here that only risk identification and assessment (as dimensions of enterprise risk management practices) significantly affect creation of employment among SMEs in Osun state.

4.5 Discussion of Findings

The study has provided substantial empirical evidences supporting the role of Enterprise Risk Management (ERM) in enhancing the sustainability of Small and Medium-sized Enterprises (SMEs) in Osun State, particularly through the lenses of profitability, operational efficiency, and employment creation. The empirical findings have shown that ERM practices; specifically risk assessment and mitigation; positively and significantly impacted profitability. This suggests that when SMEs identify and manage financial and operational risks effectively, they are more likely to experience stable revenues and improved financial outcomes. The result is in tandem with Muda et al. (2021), who opined that a robust ERM framework enhances organizations productivity and improves sales growth. However, the negative relationship between risk identification and profitability highlights the potential burden or cost implications of extensive risk cataloguing without strategic alignment, echoing Hwang et al. (2021)'s caution about over-cautious risk approaches hindering financial performance.

In terms of operational efficiency, all three ERM components (risk identification, assessment & mitigation) exhibit significant influence. Notably, risk identification had the strongest effect, reinforcing the view that understanding potential internal and external threats is foundational to building resilient operations. However, the negative coefficient of risk assessment suggests that excessive or misaligned evaluation of risks may create bureaucratic inefficiencies, which can hinder smooth operations if not properly managed. The results are supported by the finding of Fadun et al. (2020), who posited that well-integrated ERM frameworks streamline processes, improve decision-making, and reduce inefficiencies. Lastly, the impact of ERM on employment creation revealed a mixed result. While risk identification and assessment significantly influenced job creation; likely due to improved stability and growth, risk mitigation did not show a significant effect. This contradicts expectations but aligns with Sadgrove (2020), who emphasized that risk mitigation strategies must be carefully tailored to avoid stagnation. In essence, while ERM fosters an enabling environment for expansion, overemphasis on mitigating every potential threat could discourage innovative growth necessary for workforce expansion.

5.0 Conclusion and Recommendations

This study set out to examine the effect of Enterprise Risk Management (ERM) on the sustainability of Small and Medium-sized Enterprises (SMEs) in Osun State. The Structural Equation Modeling revealed significant interactions among the study variables. Specifically, risk assessment and risk mitigation were found to significantly and positively affect profitability, while risk identification surprisingly had a negative effect. For operational

efficiency, all three ERM components had statistically significant effects. However, in terms of employment creation, risk identification and risk assessment positively impacted outcomes, while risk mitigation had no significant effect. Overall, the findings affirm that ERM is crucial to SME sustainability, but its components must be thoughtfully applied to yield the desired benefits. The study concludes that ERM is a fundamental tool for enhancing the long-term sustainability of SMEs, especially in dynamic and risk-prone environments like Osun State. Based on the findings, it is recommended that SMEs in Osun State should adopt a more strategic and balanced approach to their ERM. Business owners and managers should not view risk identification as an end in itself but rather as a means to facilitate proactive planning and decision-making. They should prioritize actionable insights from risk assessments and ensure that mitigation strategies are aligned with their long-term growth objectives. Additionally, training programs and capacity-building initiatives should be developed to enhance SME managers' understanding of risk management tools and techniques.

Furthermore, government agencies and SME support organizations should consider integrating ERM education into their entrepreneurship development programs. Regulatory bodies could also create incentives for SMEs that demonstrate effective risk management frameworks, such as tax breaks or access to funding. This would encourage more SMEs to institutionalize ERM practices. Policymakers should recognize that while ERM may seem resource-intensive, its long-term benefits such as improved profitability, process efficiency, and job creation; far outweigh the initial costs, particularly in volatile economic environments like Osun State.

6.0 References

- Afolabi, T. S. & James, J. T. (2018). Risk Management and Performance of Small and Medium Enterprises in Osun state, Nigeria. *Archives of Business Research*, 6(12), 157-163.
- Ayyagari, M., Beck, T., & Demirgüç-Kunt, A. (2017). Small and medium enterprises across the globe: A new database. World Bank Policy Research Working Paper No. 3127.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baştürk, F., & Giray, G. (2021). Enterprise risk management practices and SME sustainability: A case study in Turkey. *Journal of Business Research*, 92, 123-134.
- Beasley, M. S., Branson, B. C., & Voss, L. (2019). Developing an enterprise risk management framework: A new approach for small and medium enterprises. *The Journal of Risk Management in Financial Institutions*, 12(3), 286-299.
- Bromiley, P., McShane, M., Nair, A., & Rustambekov, E. (2015). Enterprise risk management: Review, critique, and research directions. *Long Range Planning*, 48(4), 265-276.
- Brown, R., Smith, A., & Wilson, P. (2018). Risk management strategies in small enterprises: Implications for sustainability. *Journal of Risk Management*, 8(4), 34-50.
- Drennan, L., & McGowan, P. (2019). Risk management in the project-based organization: A study of SMEs. *International Journal of Project Management*, 37(6), 763-771.
- Fadun, S. O., Adetayo, J. O., & Abidoeye, R. A. (2020). Risk Management Practices and Operational Resilience of Small and Medium Enterprises. *International Journal of Business and Economics*, 12(5), 234-248.
- Florio, C., & Leoni, G. (2017). Enterprise risk management and firm performance: The Italian case. *British Accounting Review*, 49(1), 56-74.
- Hwang, B. G., Ng, W. J., & Ofori, G. (2021). Stakeholder management in the construction industry: The role of enterprise risk management. *International Journal of Project Management*, 39(3), 289-300.
- Khalid, A., Peterson, G., & Khan, M. (2020). Aligning corporate strategy with sustainability: The role of risk management. *Sustainability and Business Practices Review*, 14(3), 98-110.

- Klewitz, J., & Hansen, E. G. (2016). Sustainability-oriented innovation in SMEs: A systematic review. *Journal of Cleaner Production*, 65(1), 57-75.
- Kraus, S., & Lehner, J. M. (2016). The nexus of corporate responsibility and firm performance: From a risk management perspective. *Journal of Business Research*, 69(8), 2576-2583.
- Lam, J. (2020). *Enterprise risk management: From incentives to controls* (2nd ed.). Financial Times Prentice Hall.
- Muda, I., Rahman, A., & Hameed, I. (2021). The impact of enterprise risk management on sales performance: Evidence from the retail sector. *International Journal of Retail & Distribution Management*, 49(4), 487-503.
- National Bureau of Statistics (NBS). (2020). *Small and Medium Enterprises Development in Nigeria: A Report of the National Survey of Micro, Small, and Medium Enterprises*. Abuja: NBS Press.
- Odia, J., & Omosah, D. (2022). Risk management strategies and sustainability of SMEs in challenging environments. *Management Decision*, 60(2), 375-391.
- Ogundele, O. J. K., Hassan, O. A., & Idris, A. A. (2018). Predicting the sustainability of SMEs in Nigeria using the survival model. *International Journal of Business Research*, 19(1), 56-67.
- Osun State Chamber of Commerce Mine and Agriculture, OSUCCIMA (2025).
- Sadgrove, K. (2020). *The Complete Guide to Business Risk Management*, (3rd edition). Routledge eBook. <https://doi.org/10.4324/9781003075073>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students*. Pearson Education.
- Small and Medium Enterprises Development Agency of Nigeria, SMEDAN (2022).
- Soin, K., & Collier, P. M. (2018). Risk and risk management in management accounting and control. *Management Accounting Research*, 38, 1-9.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- World Bank (2021). *Small and Medium Enterprises in Transition Economies: Challenges and Opportunities*. World Bank Policy Research Working Paper No. 2345.
- Yamane, T. (1967). *Statistics: An Introductory Analysis*. Harper & Row.