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Assessing Enterprise Risk Management (ERM) Practices and Financial Sustainability Among Retail SMEs in Dagupan City

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ABSTRACT

This study examined the relationship between Enterprise Risk Management (ERM) practices and financial sustainability among retail small and medium enterprises (SMEs) in Dagupan City, with business profile considered as a moderating variable. ERM practices were assessed in terms of risk identification, risk assessment, risk response, risk monitoring, and risk communication. Financial sustainability was measured through profitability, liquidity, solvency, cash flow stability, and business continuity. Business profile covered years of operation, number of employees, capitalization, and business size. A quantitative descriptive-correlational research design was used. Data were gathered from 150 retail SME owners, managers, or authorized representatives using a structured questionnaire. Statistical tools included frequency, percentage, weighted mean, standard deviation, Pearson product-moment correlation, and moderation analysis. Findings showed that retail SMEs implemented ERM practices to a high extent and demonstrated a high level of financial sustainability. Results further revealed a significant positive relationship between ERM practices and financial sustainability. Business profile, particularly years of operation, capitalization, and business size, significantly moderated the relationship. The study concluded that effective ERM practices contribute to the financial sustainability of retail SMEs in Dagupan City.

Keyword: Enterprise Risk Management, financial sustainability, retail SMEs, risk management, business profile

Introduction

Small and medium enterprises play a vital role in local economic development by generating employment, supporting household income, promoting entrepreneurship, and providing essential goods and services. In Dagupan City, retail SMEs form an important part of the local business sector. These enterprises include grocery stores, convenience stores, pharmacies, apparel shops, hardware stores, school supply stores, food retailers, and general merchandise businesses.

Despite their contribution to the local economy, retail SMEs face various risks that may affect their financial condition and long-term survival. These risks include unstable sales, increasing operating costs, supplier delays, inventory losses, cash flow shortages, loan obligations, intense competition, regulatory requirements, and disruptions caused by emergencies or calamities. Since many SMEs operate with limited capital, manpower, and formal systems, unmanaged risks can quickly affect profitability, liquidity, solvency, and business continuity.

Enterprise Risk Management is a systematic process used to identify, assess, respond to, monitor, and communicate risks that may affect organizational objectives. For retail SMEs, ERM may be applied through practical activities such as monitoring inventory, reviewing expenses, checking sales trends, assessing supplier reliability, maintaining emergency funds, and communicating risk-related procedures to employees.

Financial sustainability refers to the ability of a business to remain financially viable over time. It includes the capacity to generate profit, meet short-term obligations, manage debt, maintain stable cash flow, and continue operations despite uncertainties. A financially sustainable retail SME can pay suppliers, replenish inventory, cover operating expenses, recover from losses, and adapt to changing market conditions.

The relationship between ERM practices and financial sustainability is important for retail SMEs because risk management can help reduce losses, improve decision-making, and strengthen preparedness. Business profile may also influence this relationship. Enterprises with longer years of operation, greater capitalization, larger business size, and more employees may have better capacity to implement risk management practices and sustain financial performance.

This study focused on Enterprise Risk Management practices and financial sustainability among retail SMEs in Dagupan City. It also examined whether business profile moderates the relationship between ERM practices and financial sustainability.

Statement of the Problem

This study assessed the relationship between ERM practices and financial sustainability among retail SMEs in Dagupan City, with business profile as a moderating variable.

Specifically, it answered the following questions:

1. What are the business attributes of retail SMEs in terms of:
 1. years of operation;
 2. number of employees;
 3. capitalization;
 4. business size?
2. What is the extent of ERM practices among retail SMEs in terms of:
 1. risk identification;
 2. risk assessment;
 3. risk response;
 4. risk monitoring;
 5. risk communication?
3. What is the extent of financial sustainability among retail SMEs in terms of:
 1. profitability;
 2. liquidity;
 3. solvency;
 4. cash flow stability;
 5. business continuity?
4. What is the extent of significant relationship between ERM practices and financial sustainability?
5. What action plan can be developed to enhance ERM practices and financial sustainability among retail SMEs based on the moderating effect of business profile?

Methods

This study employed a quantitative descriptive-correlational research design to assess Enterprise Risk Management (ERM) practices and financial sustainability among retail small and medium enterprises (SMEs) in Dagupan City, Pangasinan. The descriptive component was used to determine the business profile of the participating retail SMEs, the extent to which they implemented ERM practices, and their level of financial sustainability. The correlational component was used to examine the relationship between ERM practices and financial sustainability. In addition, moderation analysis was conducted to determine whether selected business profile characteristics influenced the strength of the relationship between ERM practices and financial sustainability.

The study was conducted among retail SMEs operating in Dagupan City. The respondents consisted of 150 owners, managers, or authorized representatives who were considered knowledgeable about their respective businesses' operations, financial activities, and risk management practices. Purposive sampling was employed in selecting the respondents. To qualify for inclusion, a business had to be operating within Dagupan City, engaged in retail activities, classified as a small or medium enterprise, operating for at least one year, and represented by an owner, manager, or authorized personnel who could provide reliable information about the enterprise.

A structured questionnaire was used as the primary data-gathering instrument. The questionnaire consisted of three parts. The first part gathered information regarding the business profile of the respondents, particularly the number of years the business had been operating, number of employees, capitalization, and business size. The second part assessed ERM practices in terms of risk identification, risk assessment, risk response, risk monitoring, and risk communication. The third part measured financial sustainability based on profitability, liquidity, solvency, cash flow stability, and business continuity. The instrument was designed to capture the extent to which retail SMEs practiced risk management and maintained conditions necessary for continued financial viability.

A four-point Likert scale was used to interpret the responses. For ERM practices, mean scores from 3.26 to 4.00 were interpreted as a very high extent, 2.51 to 3.25 as a high extent, 1.76 to 2.50 as a moderate extent, and 1.00 to 1.75 as a low extent. For financial sustainability, the same numerical ranges were interpreted as a very high level, high level, moderate level, and low level, respectively. The questionnaire was subjected to validation by experts in business management, finance, and research to establish its content validity. Reliability testing using Cronbach's alpha produced coefficients of 0.91 for ERM practices, 0.90 for financial sustainability, and 0.93 for the overall instrument, indicating excellent internal consistency.

The data were analyzed using frequency and percentage distributions, weighted mean, and standard deviation. Frequency and percentage were used to describe the business profile of the respondents. Weighted mean and standard deviation were used to determine the extent of ERM practices and the level of financial sustainability. Pearson product-moment correlation was applied to determine the direction and strength of the relationship between ERM practices and financial sustainability. Moderation analysis was used to assess whether years of operation, number of employees, capitalization, and business size significantly influenced the relationship between ERM practices and financial sustainability. All inferential tests were evaluated at the 0.05 level of significance.

Discussion

The business profile results indicate that a considerable proportion of the participating retail SMEs were relatively young and small-scale enterprises. The largest group had been operating for four to six years, while most employed only one to five workers. In terms of capitalization, the greatest proportion reported capital ranging from ₱100,000 to ₱499,999, and nearly half were classified as micro enterprises. This profile reflects the typical operating conditions of many retail SMEs, which often function with limited financial resources, small workforces, and relatively simple organizational structures. These conditions may affect the way businesses identify and manage risks because owners and managers may personally perform several administrative, financial, and operational functions. Consequently, ERM practices in this setting are likely to be informal, experience-based, and closely integrated with daily business activities rather than implemented through highly formalized corporate systems.

The overall mean of 3.01 shows that retail SMEs in Dagupan City implemented ERM practices to a high extent. Risk identification obtained the highest mean of 3.18, followed by risk assessment, risk response, risk communication, and risk monitoring. The high rating for risk identification suggests that business owners and managers are generally aware of common threats affecting retail operations, including unstable sales, inventory losses, supplier problems, rising operating expenses, cash shortages, competition, and market changes. This finding is consistent with the view that risk management begins with recognizing events or conditions that may prevent a business from achieving its objectives. Awareness of potential risks provides a necessary foundation for making appropriate business decisions and protecting available resources.

Risk assessment also received a high rating, with a mean of 3.09. This indicates that retail SMEs do not merely recognize risks but also consider their possible effects on business operations. Assessing the potential impact of risks can help owners prioritize urgent concerns and allocate limited resources more effectively. Risk response obtained a mean of 3.02, showing that the businesses generally take action when risks arise. These actions may include adjusting inventory purchases, controlling expenses, changing suppliers, monitoring credit transactions, or modifying selling strategies. However, because many of the participating businesses are micro or small enterprises, their responses may be primarily reactive and dependent on the owner's judgment rather than guided by a formal written risk management plan.

Risk communication received a mean of 2.91, which was also interpreted as a high extent. This suggests that information about operational, financial, and business risks is generally communicated within the enterprise. Effective communication is important in retail businesses because employees often handle cash, inventory, customer transactions, and supplier coordination. Clear communication can reduce misunderstandings, improve compliance with internal procedures, and ensure that emerging problems are reported promptly. Nevertheless, the lower rating compared with risk identification and risk assessment may indicate that some businesses still need to establish more consistent procedures for reporting incidents, communicating changes in responsibilities, and documenting risk-related decisions.

Risk monitoring received the lowest mean among the ERM dimensions at 2.86, although it remained within the high-extent category. This result is important because monitoring ensures that risk responses remain appropriate and that new risks are identified as business conditions change. Retail SMEs may recognize and respond to risks when they occur, but they may not regularly review whether their controls, procedures, and corrective actions are producing the intended results. The finding supports the need for simple monitoring activities, such as regularly checking sales trends, inventory movement, expenses, cash balances, supplier performance, and outstanding obligations. As emphasized in ERM frameworks, risk management should be treated as a continuing process rather than a one-time activity.

The overall mean of 2.93 indicates that the participating retail SMEs demonstrated a high level of financial sustainability. Profitability obtained the highest mean of 3.08, followed by cash flow stability, business continuity, liquidity, and solvency. The high rating for profitability suggests that many of the businesses were generally able to generate sufficient income from their retail activities. Profitability provides the resources needed to cover operating expenses, replenish inventory, compensate employees, and maintain business operations. However, profitability alone does not guarantee long-term financial stability because a business may report income while still experiencing cash shortages or excessive debt obligations.

Cash flow stability obtained a mean of 2.96, indicating that the businesses were generally capable of managing the movement of cash into and out of their operations. Stable cash flow is particularly important for retail SMEs because they must continuously pay suppliers, maintain inventory, cover rent and utilities, and meet employee-related expenses. The results for business continuity and liquidity, with means of 2.93 and 2.89 respectively, show that the

enterprises generally had the capacity to continue daily operations and meet short-term obligations. However, these areas may remain vulnerable to sudden sales declines, unexpected expenses, supplier disruptions, or emergencies.

Solvency recorded the lowest mean among the financial sustainability dimensions at 2.81. Although this result was still interpreted as a high level, it indicates a relative weakness in the ability of the businesses to manage long-term financial obligations. The finding may reflect challenges related to borrowing, repayment schedules, interest expenses, and limited capital reserves. Unlike liquidity, which focuses primarily on short-term obligations, solvency requires longer-term financial planning and the careful management of debt and capital structure. Retail SMEs may therefore benefit from improving their borrowing decisions, monitoring debt-to-income conditions, maintaining repayment schedules, and evaluating whether loans are supported by sustainable business income.

The Pearson correlation result revealed a significant positive relationship between ERM practices and financial sustainability, with an r -value of 0.68 and a reported p -value below 0.05. This indicates that retail SMEs with stronger ERM practices also tended to report higher levels of financial sustainability. The result supports the proposition that systematic risk management can help businesses protect revenues, control expenses, manage cash flow, reduce losses, and maintain continuity. However, because the study used a descriptive-correlational design, the finding should be interpreted as an association rather than proof that ERM practices directly caused improvements in financial sustainability. Other factors, such as market conditions, managerial competence, access to financing, customer demand, and competitive position, may also contribute to the financial condition of the enterprises.

All five ERM dimensions were significantly and positively related to financial sustainability. Risk monitoring had the strongest relationship, with an r -value of 0.66, followed by risk response at 0.64, risk communication at 0.61, risk assessment at 0.59, and risk identification at 0.53. These results highlight the importance of maintaining a continuous risk management cycle. Although risk identification is an essential starting point, identifying a risk is not sufficient if the business does not monitor its development, respond promptly, and communicate appropriate actions. The strong relationship between risk monitoring and financial sustainability suggests that regular review of business conditions may help retail SMEs detect financial and operational problems before they become more serious. Similarly, timely risk responses may prevent disruptions from affecting sales, inventory, cash flow, and business continuity.

The moderation analysis showed that years of operation, capitalization, and business size significantly moderated the relationship between ERM practices and financial sustainability. The p -values for years of operation, capitalization, and business size were 0.031, 0.018, and 0.026, respectively, all of which were below the 0.05 level of significance. These findings suggest that the relationship between ERM practices and financial sustainability may differ depending on the enterprise's level of experience, financial capacity, and scale of operation. Businesses that have operated for a longer period may have accumulated greater knowledge of market conditions, supplier behavior, customer preferences, and recurring operational risks. They may also have developed more established procedures for responding to business disruptions.

Capitalization also significantly moderated the relationship between ERM practices and financial sustainability. Retail SMEs with greater capital may have more resources to invest in inventory controls, digital recordkeeping, emergency funds, insurance, employee training, and other risk management measures. They may also have greater flexibility in responding to sales fluctuations or unexpected expenses. Similarly, business size significantly moderated the relationship, which may indicate that larger enterprises have more formal structures, clearer role assignments, and greater capacity to implement ERM activities. These results are consistent with the view that organizational resources and experience influence the effectiveness of risk management practices.

In contrast, the number of employees did not significantly moderate the relationship between ERM practices and financial sustainability, as shown by the p -value of 0.078. This suggests that having more employees alone does not necessarily strengthen the contribution of ERM practices to financial sustainability. The effectiveness of risk management may depend more on the quality of procedures, management commitment, employee training, internal controls, and available financial resources than on the number of personnel. A small business with well-defined responsibilities and reliable monitoring practices may therefore manage risks more effectively than a larger business with weak controls and unclear communication.

Overall, the findings support the importance of ERM as a practical management approach for retail SMEs. The results are consistent with ERM principles that emphasize the integration of risk identification, assessment, response, monitoring, and communication into organizational decision-making. They also reinforce the importance of financial management practices that protect profitability, liquidity, solvency, cash flow, and continuity. For retail SMEs in Dagupan City, ERM does not necessarily require complex or expensive systems. Instead, it may be strengthened through consistent and practical activities that are appropriate to the size, resources, and operating conditions of each enterprise.

Conclusion and Recommendations

Based on the findings, the retail SMEs in Dagupan City implemented Enterprise Risk Management practices to a high extent. Among the five ERM dimensions, risk identification obtained the highest rating, indicating that the enterprises were generally aware of the operational, financial, and market-related risks affecting their businesses. Risk monitoring received the lowest rating, although it was still interpreted as a high extent, suggesting that continuous review and documentation of risks remain areas for improvement.

The participating retail SMEs also demonstrated a high level of financial sustainability. Profitability received the highest rating, indicating that the businesses were generally able to generate income from their operations. However, solvency obtained the lowest rating among the financial sustainability dimensions. This result suggests that long-term financial planning, debt management, and the maintenance of adequate capital reserves require greater attention to ensure that the enterprises remain financially viable over time.

The study further established a significant positive relationship between ERM practices and financial sustainability. Retail SMEs that reported stronger practices in risk identification, risk assessment, risk response, risk monitoring, and risk communication also tended to report higher levels of profitability, liquidity, solvency, cash flow stability, and business continuity. The result demonstrates that ERM is associated with the financial condition and sustainability of retail SMEs, although the correlational design does not establish a direct cause-and-effect relationship.

Among the ERM dimensions, risk monitoring showed the strongest relationship with financial sustainability, followed by risk response, risk communication, risk assessment, and risk identification. This indicates that the continued monitoring of business risks, together with timely responses and effective communication, is particularly important in supporting the financial stability of retail SMEs.

The study also found that years of operation, capitalization, and business size significantly moderated the relationship between ERM practices and financial sustainability. This means that the contribution of ERM practices to financial sustainability may vary according to the experience, financial capacity, and scale of the enterprise. In contrast, the number of employees did not significantly moderate the relationship. Therefore, the effectiveness of ERM appears to depend more on the quality and consistency of risk management practices and the resources available to support them than on workforce size alone.

In general, the study concludes that ERM is an important management practice for retail SMEs in Dagupan City. When implemented consistently, ERM can help enterprises recognize threats, prioritize risks, improve decision-making, control losses, protect cash flow, and strengthen business continuity. Simple and appropriately scaled risk management practices may therefore contribute to the long-term financial sustainability of retail SMEs.

Retail SMEs in Dagupan City should strengthen their risk monitoring practices by conducting regular reviews of sales performance, operating expenses, inventory levels, cash balances, supplier reliability, customer credit, and internal controls. These reviews may be conducted weekly or monthly, depending on the nature and size of the business. The results should be recorded and discussed by the owner, manager, or assigned personnel so that emerging problems can be addressed before they significantly affect profitability, liquidity, or business continuity.

Each retail SME should prepare and maintain a simple risk register. The register may contain the identified risk, its possible impact on the business, the likelihood of occurrence, the planned response, the person responsible for addressing it, and the schedule for monitoring. The risk register does not need to be complicated or costly. A spreadsheet, notebook, or basic digital file may be used, provided that it is updated regularly and referred to during business planning and decision-making.

Retail SMEs should improve their cash flow planning by preparing weekly or monthly cash flow estimates. These estimates should include expected sales collections, supplier payments, operating expenses, loan repayments, taxes, payroll, and other financial obligations. Regular cash flow forecasting can help business owners anticipate shortages, schedule payments more effectively, avoid unnecessary borrowing, and ensure that sufficient funds are available for inventory replenishment and daily operations.

Greater attention should be given to solvency and long-term debt management. Before obtaining a loan or entering into a financial commitment, business owners should evaluate their repayment capacity, interest obligations, projected income, and other existing liabilities. Borrowing decisions should be based on realistic cash flow projections rather than immediate financial needs alone. Retail SMEs should also maintain clear records of loan balances, due dates, interest payments, and repayment schedules to reduce the risk of default and excessive indebtedness.

Retail SMEs should establish emergency funds to support business operations during periods of declining sales, supplier disruption, unexpected repairs, calamities, health emergencies, or other unforeseen events. Even small and regular contributions to an emergency reserve can improve the business's ability to continue operating without relying immediately on high-cost borrowing. The amount and target of the reserve may be adjusted according to the enterprise's operating expenses, capitalization, and financial capacity.

Risk communication should be improved by establishing clear procedures for cash handling, inventory control, purchasing, receiving deliveries, reporting damaged goods, addressing supplier concerns, and documenting business incidents. Employees should understand their responsibilities and know whom to inform when a risk or operational problem occurs. Clear communication can help reduce errors, prevent losses, and ensure that management receives timely information for decision-making.

Retail SMEs should adopt basic digital recordkeeping practices to improve the accuracy and timeliness of financial and operational information. Spreadsheets, point-of-sale reports, digital inventory trackers, and expense monitoring applications may be used to record sales, purchases, inventory movement, cash transactions, and outstanding obligations. The use of simple digital tools can support risk monitoring, improve financial reporting, and help owners identify unfavorable trends more quickly.

Local government units, business development offices, chambers of commerce, and other support organizations should provide practical training programs for retail SME owners and managers. These programs may focus on risk identification, risk assessment, inventory control, cash flow forecasting, debt management, internal controls, digital recordkeeping, and business continuity planning. Training should be designed for micro and small enterprises and should emphasize affordable, practical, and easy-to-implement procedures.

Financial institutions and business support organizations should strengthen advisory services for retail SMEs. In addition to providing financing, these institutions may assist business owners in evaluating working-capital requirements, assessing repayment capacity, choosing appropriate loan products, managing debt, and preparing financial projections. Advisory assistance may help SMEs make more informed financial decisions and reduce the risk of using borrowed funds without adequate repayment planning.

Retail SMEs should develop basic business continuity plans that identify essential operations, critical suppliers, emergency contacts, alternative sources of inventory, backup records, and procedures for responding to disruptions. Such plans should be reviewed periodically and updated when business conditions change. Business continuity planning is particularly important for enterprises operating in areas that may be affected by flooding, severe weather, supply interruptions, public health emergencies, or other local disruptions.

Finally, future researchers may expand the study by including retail SMEs from other cities or regions, comparing retail businesses with other SME sectors, increasing the sample size, or using a mixed-methods research design. Qualitative interviews may provide deeper information about how owners make risk-related decisions and how ERM practices are implemented in daily operations. Future studies may also examine additional factors, such as access to financing, digital technology adoption, managerial capability, market competition, financial literacy, and resilience, to obtain a more comprehensive understanding of the factors affecting the sustainability of SMEs.

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