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Determinants of financial distress among Small and Medium Enterprises (SMEs) in Calapan City, Oriental Mindoro

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Abstract

Small and medium enterprises (SMES) worldwide have experienced financial distress marked not only by declining revenues but also by increasing difficulty in securing capital and repaying loans. Financial distress remains a critical concern for them, as it affects business sustainability, job creation, and local economic development. This study examined the relationship between financial ratios, including liquidity, leverage, and profitability, with financial distress. It aimed to identify the key financial factors influencing the likelihood of financial distress among SMEs. A descriptive-correlational quantitative research design was employed, using primary data collected through structured questionnaires administered to 74 selected SME owners in Calapan City. The reliability of the research instrument was established using appropriate statistical techniques. The findings reveal a weak positive relationship between profitability and financial distress, indicating that despite profitability efforts by small and medium enterprises, they can still experience distress due to external factors. On the contrary, the SMEs' performance in managing their liquidity is strong, especially in cash flow and financial performance management. Companies' leverage is within acceptable levels, indicating a sound credit structure with appropriate debt-to-equity ratios. The study offers practical implications for SME owners, financial institutions, and policymakers by emphasizing the importance of sound financial management, prudent use of debt, and targeted support programs to enhance SME resilience. The findings contribute to the existing literature on SME financial sustainability and offer insights for developing early warning systems and intervention strategies to prevent financial distress among SMEs in Calapan City.

Keywords: Financial Distress; Liquidity Ratio; SMES; Profitability; Liquidity; Leverage

1. Introduction

Small and medium-sized businesses (SMEs) around the world have experienced increasing financial distress since 2020, which is typified by declining revenues and ongoing challenges in obtaining capital and meeting debt commitments. Many SMEs' structural flaws, such as insufficient financial buffers, poor cash-flow management, and heavy reliance on short-term financing, were exposed by the COVID-19 pandemic. Nearly 50% of small firms were behind on loan repayments at the height of the pandemic, according to the World Bank [1], underscoring the sector's susceptibility to economic shocks. Financial distress is a persistent issue rather than a transient crisis, as many SMEs continue to face rising operating expenses, erratic demand, and limited access to formal finance, even as global economic activity has gradually restarted. Since SMEs account for over 99.5% of all registered enterprises in the Philippines and are essential to job creation and local economic development, the issue is grave. Despite their significance, many Filipino SMEs still have low profit margins and weak liquidity due to declining consumer spending, rising operating costs, and high raw material prices. Due to inadequate collateral, short credit histories, and modest asset bases, many SMEs still have limited

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access to traditional financial institutions and government lending programs (Raquiza, 2022) [2]. This problem is especially severe in rural areas, where entrepreneurs often are unaware of available financial programs or cannot meet the complex application requirements. Because of this, many SMEs rely on unofficial funding sources that are often expensive and unsustainable, making them even more vulnerable to financial instability. External operational and environmental factors exacerbate financial difficulties among SMEs. 20% of new firms fail within two years, 45% within five years, and 65% within ten years, according to data from the Bureau of Labor Statistics [3]. This trend is also seen in agricultural operations. Recurring climate events such as El Niño and La Niña significantly affect agricultural productivity in the Philippines, leading to crop losses, wasted capital, and higher production costs. SMEs are more likely to experience financial difficulties, leading to erratic cash flows and declining revenues.

Many SMEs in Calapan City, Oriental Mindoro, face comparable financial difficulties, especially those that rely on seasonal agricultural production. Several factors, including production losses, volatile market prices, insufficient managerial capacity, and limited access to funding, cause continuous financial strain. Many SME owners are still unaware of the specific financial factors that lead to financial trouble, even though some understand the importance of effective financial management and financial literacy. Furthermore, smaller environments such as Calapan City have received little attention in prior research on financial distress, which has primarily focused on larger national or international contexts. Thus, the purpose of this study is to examine the factors contributing to financial distress among small and medium-sized businesses in Calapan City, Oriental Mindoro. Through identifying these crucial elements, the study aims to provide evidence-based insights to help financial institutions, legislators, and SME owners develop focused plans, support initiatives, and early warning systems to reduce financial hardship and improve company resilience.

This study determined and investigated the determinants of financial distress among SMEs in Calapan City. Understanding these fundamental causes, owners and stakeholders were better equipped to formulate strategies that may avoid financial instability and improve business resilience. The results of this research will not only provide valuable insights for enterprises themselves but also serve as a basis for policy recommendations and support programs designed to meet the needs of SMEs in the city.

2. Review of Related Literature

2.1. Financial Ratio

The failure of a small business extends beyond the individual enterprise, significantly impacting the broader domestic economy (Rudina and Ilirjan, 2020) [4]. In reality, a lack of financial literacy and the inability to assess risks may prevent business owners and managers from taking advantage of possibilities to generate extremely high profits. High financial literacy increases the likelihood that SME owners will take calculated risks, which could improve sustainability (Thabiso and Odunayo, 2021) [5]. Financial distress in small businesses often stems from a combination of internal and external factors that disrupt operations, so it is essential to understand these factors to anticipate difficulties and implement risk-reduction measures. It will help improve their financial stability, resilience, and risk of financial distress by addressing both financial and non-financial factors (Ikpesu et al., 2020) [6]. Incorporating both profitability and liquidity ratios into financial assessments enables a more comprehensive evaluation of a company's performance and financial well-being (Rashid, 2021) [7]. Financial metrics, including cash flow, leverage, profitability, and liquidity, are frequently used as early warning signs to help creditors, management, and investors identify and address issues before they become severe enough to lead to bankruptcy or insolvency (Rago et al., 2023) [8]. The management board can take immediate measures to reduce risks, reorganize operations, and improve financial health by identifying early warning indicators such as declining liquidity, excessive debt, or declining profitability (Ding et al., 2023) [9].

2.1.1. Liquidity

Cash is the most liquid asset because it can instantly be used for purchases or investments. Other assets, such as stocks or bonds, are also liquid but may take longer to sell; on the other hand, assets like real estate, collectibles, or rare items are considered illiquid because selling them may incur higher transaction costs or result in a significant price reduction (Stonex, 2025) [10]. Financial distress is influenced by liquidity, so companies must adopt a balanced approach that ensures liquidity supports both short-term obligations and long-term growth objectives (Sukenti,2022) [11]. Both operational continuity and the smart use of resources to promote long-term growth are ensured by effective liquidity management (Aderemi et al., 2022) [12]. This supports the idea that companies that effectively manage liquidity can reduce their debt levels, thereby ensuring greater financial stability and long-term sustainability (Cavlin et al., 2024) [13]. Companies need to re-evaluate their financial strategies, especially to improve resource efficiency and manage debt, to remain competitive in this ever-growing industry (Kurniawan, 2024) [14].

2.1.2. Leverage

Financial leverage simply leads to exploring the extent to which the firms depend on financial institutions to respond to their funding needs, like the degree of dependence of the firms in financing their investment using sources of financial interest fees, whether these resources are bank loans, debt securities, or any other debt financial instruments (Sapuan Rahman et al., 2021) [15]. Financial leverage is assessed using the long-term debt-to-equity ratio, a key indicator of a firm's reliance on debt financing relative to shareholder equity (Ibrahim, 2020) [16]. Businesses with significant debt may breach their debt agreements with creditors because their assets cannot be used as collateral, and they will also incur high interest rates. When a company's debt exceeds its total assets, its equity book value will be negative (Kuraesin et al., 2020) [17]. Late payments not only signal potential financial instability but also directly lead to tighter lending conditions. Banks' credit rationing, driven by these risk perceptions, thus plays a pivotal role in limiting SMEs' access to finance (Kaya, 2024) [18]. A company's capacity to generate sufficient income from its core activities is demonstrated by strong operating cash flow, which reassures investors about the company's financial stability and prospects for expansion (Gulo et al., 2024) [19].

2.1.3. Profitability

Businesses that make sufficient profits will experience less financial hardship (Isayas and Mcmillan, 2021). A company's profitability is the culmination of multiple policies and choices. The combined effects of liquidity, asset management, and debt management on operating performance are reflected in profitability measures such as Return on Equity and Return on Assets (Kokila and Ramprathap, 2021) [20]. These ROA and ROE ratios are commonly used to analyze a company's profitability because they show how effectively it uses its equity and assets to generate profits (Tothp et al., 2024) [21]. A profitable business frequently demonstrates effective financial management and resource allocation to optimize profits (Loya and Rahmawati, 2022) [22]. Small companies in financial difficulty usually exhibit negative profitability, reflecting inefficient use of assets to generate net revenue. The probability of bankruptcy rises as a company's profitability declines or becomes negative (Widiastuti et al., 2020) [23]. Furthermore, the criteria for financial distress are directly affected by profitability dimensions and indicators, such as ROA. The likelihood of bankruptcy occurring decreases with increasing ROA (Sukenti, 2022) [24]. Financial distress is not always caused by a decline in a firm's profits in a given year, particularly if the company has steady or even high revenues in prior years (Wangsih et al., 2021) [25].

2.2. Financial Distress

Financial distress occurs when an SME begins to experience economic problems due to factors such as unwise expansion, intense competition, poor management, and excessive debt (Lahsen, 2020) [26]. It is also characterized by sustained declines in sales, reduced profit margins, and increased operational costs, which hinder their ability to remain financially stable (Rasdiyah and Safitri, 2023) [27]. Predicting financial distress can be complex because it requires understanding a wide range of factors; however, it is essential to detect deficits as soon as possible (Piermarini et al.,2023) [28]. Bankruptcy, being a culminating event in a company's existence, very rarely happens more than once, and it takes more than one factor to trigger it. On the other hand, companies could experience multiple financial distress events without triggering bankruptcy (Malakauskas and Lakstutiene, 2021) [29]. Firms with low profitability, low liquidity, and small size are at higher risk of financial distress and are influenced by firm-specific characteristics, performance, financial leverage, and lagged financial distress (Yazdanfar and Ohman, 2020) [30].

2.3. Theoretical Framework

Myers and Majluf (1984) developed the Pecking Order Theory, which explains how businesses prioritize their sources of funding by minimizing the costs of control. According to this theory, firms prefer to use internal funds, such as retained earnings, because they do not incur any transaction costs associated with acquisitions. However, when internal funds are insufficient, businesses turn to debt financing, a riskier option but often more manageable than giving up ownership. As a last resort, firms consider issuing equity, which can dilute ownership and control. They may signal to investors that the company is overvalued or in financial trouble, leading to adverse market reactions. As applied to this study, this concept suggests that strategies to reduce external funding costs may also make a company more susceptible to financial difficulties. For Small and Medium Enterprises (SMEs), this hierarchy is particularly relevant. These types of businesses frequently have inadequate resources and struggle to raise capital. As a result, even though taking on external debt increases their financial risk, they are more likely to do so when internal finances are limited.

Jensen and Meckling (1976) introduced the Agency Theory, which explains the conflict of interest that can arise between the owners (principals) of a business and the managers (agents) hired to run it. In theory, managers are expected to act in the best interest of the owners by making decisions that maximize shareholder value. However, in practice, managers may pursue their own interests, such as higher salaries, perks, job security, or empire-building, especially when their

actions are not fully monitored or aligned with ownership goals. This misalignment can lead to inefficient decision-making, with resources misallocated, risks poorly managed, or investment strategies chosen for personal gain rather than long-term business viability. When such agency problems are left unchecked, they can erode profitability, erode investor trust, and directly contribute to financial distress, as the company may no longer operate efficiently or sustain its financial obligations.

Professor Edward I. Altman developed the popular financial analysis tool known as the Altman Z-Score Model in 1968. Its primary objective is to determine whether a business is in severe financial distress or bankruptcy. After examining the financial records of companies that filed for bankruptcy and those that remained solvent, Altman developed the model. He developed a technique to calculate a company's financial health using a single, easily comprehensible figure, the Z-score, by examining trends in key financial measures. The Z-Score model uses financial ratios to predict a company's likelihood of bankruptcy. It considers factors like liquidity, profitability, and leverage. A low Z-score signals a high probability of financial distress, whereas a higher score suggests greater financial stability. For Small and Medium Enterprises (SMEs) in Calapan City, regularly calculating and monitoring their Z-Score could serve as an essential early warning system. By identifying potential financial problems before they become severe, SMEs can take timely corrective actions, such as reducing costs, increasing revenue, or managing debt more effectively, to avoid insolvency and ensure sustainability.

2.4. Conceptual Framework

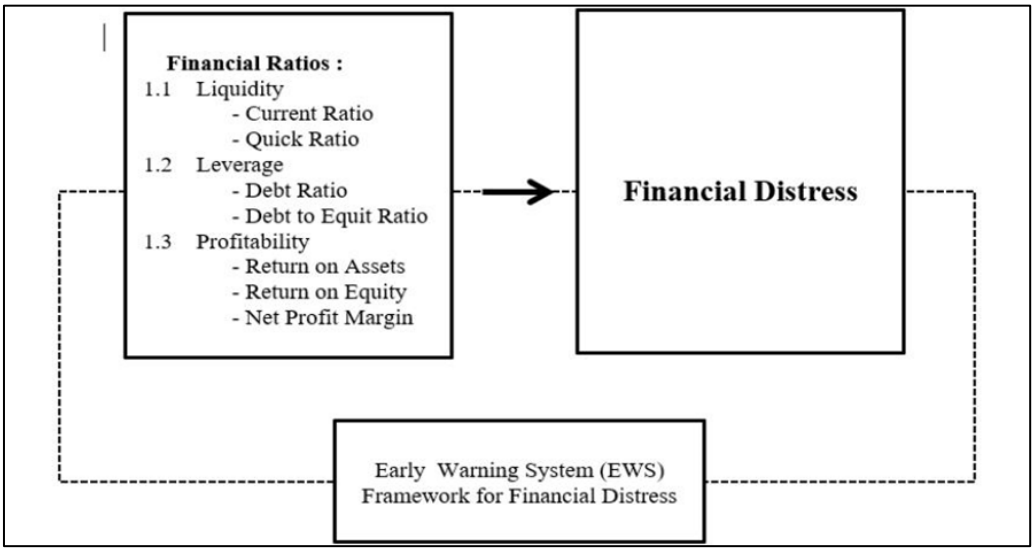

Figure 1. Conceptual Framework

The conceptual framework used an IV-DV (Independent Variable–Dependent Variable) Model to illustrate the relationship between financial ratios (independent variable) and financial distress (dependent variable). Financial ratios are represented by three key components: liquidity, leverage, and profitability. These components are considered crucial indicators of a firm's internal financial health. They are hypothesized to influence the likelihood or severity of financial distress, according to Susilowati et al. (2021), who conducted a study titled "Financial Analysis to predict Financial Distress of Small and Medium-Sized Entities in Malang City." This framework illustrates how changes in internal financial conditions, such as a firm's ability to meet short- and long-term obligations and generate earnings, can significantly affect the level of financial distress an organization experiences. This study seeks to determine whether specific financial factors have a measurable impact on financial distress, emphasizing the importance of financial practices in maintaining business stability and avoiding insolvency

2.5. Statement of the Problem

The main goal of this study is to investigate the relationship between selected financial factors and the financial distress experienced by Small and Medium Enterprises (SMEs) in Calapan City, Oriental Mindoro. Specifically, this study aims to answer the following questions:

1. To what extent are the financial factors evident among Small and Medium Enterprises (SMEs) in Calapan City in terms of:

- Liquidity;
- Leverage; and
- Profitability

2. What is the level of financial distress of Small and Medium Enterprises in Calapan City?

3. Is there a significant relationship between the financial factors (liquidity, leverage, and profitability) and the financial distress of Small and Medium Enterprises in Calapan City?

4. What is the financial factor that primarily affects the Financial Distress of Small and Medium Enterprises in Calapan City?

5. Based on the analysis of the study, what action plan for financial ratios and financial distress will be proposed?

2.6. Hypothesis

Ho: There is no significant relationship between the financial ratio and the financial distress of Small and Medium Enterprises in Calapan City.

3. Material and Methods

3.1. Research Design

To investigate the factors contributing to financial distress among Small and Medium Enterprises (SMEs) in the agriculture sector in Calapan City, Oriental Mindoro, this study employed a descriptive-correlational quantitative research design, which describes and measures relationships among variables. It uses numbers and statistics, focusing on collecting numerical data for statistical analysis of a sample within a population (Siedlecki, 2020) [31]. Data from a representative sample of SME owners and managers in the local food industry were collected through structured surveys. To examine the data and identify correlations among variables, statistical methods such as regression analysis and descriptive statistics will be used.

3.2. Subject and Sampling

The subject of the study encompasses the owners of Small and Medium Enterprises (SMEs) specifically in the agricultural sector: Rice Mills, Rice and Palay Trading, and Livestock in Calapan City, Oriental Mindoro. To determine the sample size, the researchers used data from the City Hall of Calapan Licensing Office. Purposive sampling was employed to ensure fair and proportionate representation of the three major SME sectors in Calapan City. Out of the total population of 91 SMEs which were classified as 17 livestock, 51 rice mill, and 23 rice/palay trading, only 74 were considered as a sample that passed the following requirements: (1) being classified as a Small and Medium Enterprises according to government norms, (2) operating actively as an agricultural business, and (3) having a physical store in Calapan City.

3.3. Data Gathering Procedures and Instrumentation

The researchers followed a procedure to collect reliable data for the study. First, a pilot test was conducted with a small sample of respondents, particularly Small and Medium Enterprises (SMEs) in the agriculture sector in Calapan City, Oriental Mindoro, before the full distribution. It was conducted by the researcher through an interview using open-ended questions to help measure response trends, identify unclear questions, and recognize problems. Second, the study's primary instrument is a researcher-developed questionnaire to collect pertinent information on the financial circumstances, management styles, and financial distress experiences of Small and Medium Enterprises (SMEs). Academic professionals analyzed and validated the instrument to guarantee its content validity. Their assessment helped improve each item's structure, clarity, and applicability to the local environment and study goals. The final version will be used for actual data collection after modifications in response to input. With both closed-ended and scaled items to facilitate quantitative analysis, the questionnaire is divided into sections covering liquidity, leverage, and profitability. This enabled the researchers to systematically collect and evaluate factors related to each company's financial health.

Qualified respondents, who were owners or financial decision-makers of particular SMEs, received digital surveys in person. To guarantee sincere and careful involvement, the respondents were given enough time to understand and react to each question. By providing information about the study's goal, obtaining informed consent, and ensuring the confidentiality of all responses, the researchers adhered to ethical norms throughout the data collection process. To facilitate processing and comprehension, the collected data were encoded into tabular form. To assess the extent and significance of correlations between various characteristics and financial distress, quantitative data were analyzed using statistical techniques such as frequency distributions, mean calculations, and regression analysis. This methodical approach made it possible to gain a meaningful understanding of the financial difficulties experienced by Small and Medium-Sized Enterprises in Calapan City and to identify prospective areas for intervention and policy support. It ensured that the data evaluation was accurate, objective, and trustworthy.

Table 1 Scaling and Quantification of Data in a Self-Made Questionnaire

Likert Scale	Range	Description	Interpretation
Strongly Disagree	1.00-1.49	Strongly Disagree	Low Evident
Disagree	1.50-2.49	Disagree	Slightly Evident
Agree	2.50-3.49	Agree	Evident
Strongly agree	3.50-4.0	Strongly agree	Very Evident

3.4. Reliability

In this study, Cronbach's alpha was used to assess the internal consistency of the survey items and to examine the liquidity, leverage, profitability, and financial distress of SMEs in Calapan City, Oriental Mindoro. The reliability test results, based on 15 samples and 15 respondents, assure that this instrument is reliable and adequate for analyzing the consistency of indicators across independent and dependent variables.

Table 2 Range of Reliability and its Cronbach's Alpha Coefficient

No.	Cronbach's Alpha Coefficient	Reliability Level
1	More than 0.90	Excellent
2	0.80-0.89	Good
3	0.70-0.79	Acceptable
4	0.60-0.69	Questionable
5	0.5-0.59	Poor
6	Less than 0.59	Unacceptable

Table 3 Interpretation of Cronbach's Alpha Coefficient

Indicator	Cronbach's alpha	Interpretation
Liquidity	0.725	Acceptable reliability
Leverage	0.746	Acceptable Reliability
Profitability	0.861	Good Reliability
Financial Distress	0.794	Acceptable Reliability

The liquidity ($\alpha = 0.725$), leverage ($\alpha = 0.746$), and financial distress ($\alpha = 0.794$) indicators all demonstrated acceptable internal consistency, indicating that their items reliably measure SMEs' liquidity practices, financial structure, and financial difficulties. The profitability indicator showed high reliability ($\alpha = 0.861$), reflecting strong internal consistency and a stable measurement of SMEs' profitability. Overall, all indicators were found to be sufficiently reliable.

3.5. Data Analysis

To gather the necessary data, a survey was distributed to 74 small and Medium Enterprises. The data collected from the questionnaire items were systematically organized, aggregated, and analyzed using Microsoft Excel. Correlation coefficients were first computed from the raw data to determine initial relationships among the identified variables. This preliminary analysis helped ensure that the data collected would yield reliable and consistent findings. Each response was carefully tallied and categorized to support accurate interpretation and better comprehension of the results. To assess the extent or level of the financial factors, namely liquidity, leverage, and profitability, and the degree of financial distress experienced by the respondents, the weighted mean was employed. This measure enabled the evaluation of trends and patterns in the responses. Furthermore, to assess the consistency of each indicator with the independent variable, Cronbach's Alpha was used as the initial analysis method. This provided an understanding of the strength and direction of the relationship among variables. Following this, a multiple linear regression analysis was conducted to examine the extent to which financial factors predict financial distress. This method provided deeper insight into the influence of each variable and its combined impact on the dependent variable.

3.6. Ethical Consideration

The research aimed to develop a deeper insight into the financial distress of Small and Medium Enterprises (SMEs) in Calapan City, Oriental Mindoro. During the study, the researchers adhered to strict ethical standards to protect the dignity and well-being of all respondents. Ensured also that all the data gathered was handled with strict confidentiality following RA. 10137 Data Privacy Act of 2012. Finally, the participants were respected and treated with dignity; no physical, psychological, or financial harm was caused to any individual or enterprise. Throughout the research process, steps were taken to protect the safety, confidentiality, and security of all participants.

4. Results and discussion

4.1. To what extent are the financial factors evident among Small and Medium Enterprises (SMEs) in Calapan City in terms of

4.1.1. Liquidity

Table 4 Mean Interpretation of Financial Factor among Small and Medium Enterprises in Terms of Liquidity

Items	Mean	Rank	Description	Verbal interpretation
1. My business practices proper monitoring of cash flow control to prevent bankruptcy.	3.851	2	Strongly Agree	Very Evident
2. My business regularly monitors its financial performance to identify areas where costs can be optimized.	3.878	1	Strongly Agree	Very Evident
3. My business has sufficient liquidity, which contributes to its overall financial stability.	3.230	4	Agree	Evident
4. My business has access to short-term financing to provide financial support.	3.676	3	Strongly Agree	Very Evident
5. My business uses internal funds rather than external borrowing to reduce financial risks.	3.027	5	Agree	Evident

Table 4 presents the mean interpretation of financial factors with respect to liquidity. Based on the results, Item number 2 has the highest ranking, which shows that monitoring is a regular practice, business owners or managers pay close attention to key financial indicators such as income, expenses, cash flow, and profitability making sure that there is an active monitoring in financial performance on the part of the SMEs as they are committed in reviewing financial reports for them to be able to identify areas where costs are too high or spending is inefficient, and take corrective action. Aligned with the study by Junior and Gameiro (2020) [32], which found that monitoring cash flow as a management tool is essential for ensuring business stability, as it aids financial reorganization, supports business continuity, helps prevent financial difficulties, improves operational efficiency, and reduces the risk of bankruptcy. Item number 5 received the lowest ranking, which suggests that while SMEs recognize the importance of liquidity and take steps to manage it, their actual liquidity levels or reliance on internal funds are not as strong or consistent as other financial

practices. They might be good at planning or monitoring cash, but their available cash or reserves are only moderately sufficient to cover obligations.

4.1.2. Leverage

Table 5 Mean Interpretation of Financial Factor among Small and Medium Enterprises in Terms of Leverage

Items	Mean	Rank	Description	Verbal interpretation
1. My business has access to long-term debt financing for its growth.	2.676	2	Agree	Evident
2. My business rarely experiences late payments, allowing for more favorable lending conditions.	2.027	5	Disagree	Slightly Evident
3. My business maintains a healthy balance between debt and equity in its financing.	3.270	1	Strongly Agree	Very Evident
4. My business maintains an appropriate level of debt to avoid potential financial difficulties.	2.581	3	Agree	Evident
5. My business has an established relationship with lenders, which helps in obtaining larger loans.	2.5	4	Disagree	Slightly Evident

Table 5 shows the extent of leverage among SMEs. Item number 3 has the highest rank, which shows that SMEs are generally cautious in taking on debt; they prefer not to rely heavily on loans or external financing to avoid the risk of financial distress if they cannot meet repayment obligations. The lower scores for other leverage indicators suggest that while some SMEs may take on debt occasionally, excessive borrowing is not common, and most prefer a balanced approach to capital structure. Most respondents strongly agreed that they carefully manage their debt levels and avoid overleveraging. This is supported by analyzing the other leverage indicators, showing generally lower reliance on debt. Item 5 scores the lowest, which indicates late payment problems, showing that some SMEs struggle to pay obligations on time, which can further limit their ability to secure financing. These results highlight that while SMEs are generally cautious with debt, gaps in financial relationships and payment discipline still exist. In accordance with the study by Karasin et al. (2021) [33], companies with high levels of debt face an increased risk of breaching the terms of their debt agreements with creditors, especially when their available assets are insufficient to meet outstanding obligations.

4.1.3. Profitability

Table 6 Mean Interpretation of Financial Factor among Small and Medium Enterprises in Terms of Profitability

Items	Mean	Rank	Description	Verbal interpretation
1. My business efficiently uses its assets to generate income.	3.905	1	Strongly Agree	Very Evident
2. My business's financial condition improves with profit growth.	2.905	5	Agree	Evident
3. My business aims to achieve a high return on equity to provide strong returns to its investors.	3.891	2	Strongly Agree	Very Evident
4. My business consistently achieves the value of sales growth I have set.	3.243	4	Agree	Evident
5. My business channel internally generated funds to attain the minimum efficiency scale.	3.834	3	Strongly Agree	Very Evident

Table 6 presents the profitability indicators of SMEs. The highest-ranked item is number 1, highlighting strong asset utilization efficiency, as SMEs are effectively using their assets to generate revenue or support operations. High asset utilization efficiency means that the resources, such as equipment, inventory, and cash, are being employed productively rather than sitting idle. This is important for SMEs, which often have limited resources, because it maximizes return on

investment, improves profitability, and supports financial stability. Lower-ranked items include number 4 and number 2 which indicates that while SMEs are generating profits, the level of profitability may not consistently translate into strong growth outcomes which supports Wangsa et al. (2021)[34] in their statement that a decline in company profits in a particular year does not necessarily lead to financial distress, especially when the company has benefited from relatively stable or strong sales performance in previous years.

4.2. What is the extent of financial distress of Small and Medium Enterprises in Calapan City?

Table 7 Mean Interpretation Financial Distress of Small and Medium Enterprises in Calapan City

Items	Mean	Rank	Description	Verbal interpretation
1. My business efficiently uses its assets to generate income.	3.905	1	Strongly Agree	Very Evident
2. My business's financial condition improves with profit growth.	2.905	5	Agree	Evident
3. My business aims to achieve a high return on equity to provide strong returns to its investors.	3.891	2	Strongly Agree	Very Evident
4. My business consistently achieves the value of sales growth I have set.	3.243	4	Agree	Evident
5. My business channel internally generated funds to attain the minimum efficiency scale.	3.834	3	Strongly Agree	Very Evident

Table 7 presents the extent of financial distress among small and medium enterprises. All items are interpreted as Evident, suggesting that financial distress is present but not severe. The most prominent distress item is number 1; SMEs may occasionally encounter challenges, but these are generally manageable. This result suggests that this particular aspect of financial distress, likely related to cash flow constraints, late payments, or short-term obligations, is the most prominent concern among SMEs. This aligns with the study conducted by MPORA et al. (2025) [35]. Financial distress arises from the combined effect of several interrelated factors, including unwise or poorly planned business expansion, intense market competition, ineffective management practices, and excessive reliance on debt financing. Lower-ranked indicators include item 3, which suggests that while challenges exist, most enterprises remain operationally stable.

4.3. Is there a significant relationship between the financial factors (liquidity, leverage, and profitability) and the financial distress of Small and Medium Enterprises in Calapan City?

Table 8 Correlation between liquidity, leverage, profitability, and financial distress of Small and Medium Enterprises in

Indicator	P-value	Pearson's r value	Interpretation		
			Direction	Degree	Significance
Liquidity and Financial Distress	0.000	0.168	positive	low	Significant
Leverage and Financial Distress	0.000	0.025	positive	negligible	Significant
Profitability and Financial Distress	0.000	0.151	positive	low	Significant
$\alpha = 0.05$					

As presented in Table 8, there is a significant relationship between liquidity and financial distress. The p-value is 0.000, which is significant at the 0.05 level. Additionally, the Pearson correlation coefficient of 0.168 indicates a low positive relationship between the two variables. This result implies that even if enterprises are actively managing liquidity, including activities such as tracking cash flows and short-term borrowings, financial distress can still occur, mainly due to the reasons mentioned, which often occur in SMEs. There is a statistically significant relationship between leverage and financial distress (p = 0.000). However, the Pearson correlation coefficient (r = 0.025) indicates a negligible positive relationship. The very weak correlation suggests that leverage explains little variation in financial distress among micro and small enterprises. Although the relationship is positive, it's extremely low magnitude indicates that leverage is not

a key determinant of financial distress. This may be attributed to SMEs' reliance on internal funds or short-term borrowing rather than high levels of long-term debt. There is a statistically significant relationship between profitability and financial distress (p = 0.000), with a low positive correlation (r = 0.151). This indicates that higher profitability is slightly associated with higher financial distress. This suggests that profitability alone does not prevent financial difficulties, as profitable firms may still face cash flow constraints, reinvestment pressures, delayed payments, or limited access to financing.

4.4. What is the financial factor that mostly affects the Financial Distress of Small and Medium Enterprises in Calapan City?

Table 9 Rank of Financial factors affecting Financial Distress of Small and Medium Enterprises in Calapan City

Financial Factor	Overall Mean	Rank
Liquidity	2.61	3
Leverage	3.76	1
Profitability	2.96	2

Out of liquidity, leverage, and profitability, leverage has the strongest link to financial distress at an overall mean of 3.76. This result implies that leverage hinders businesses' ability to access further financing. SMEs with excessive leverage may face stricter borrowing terms or be denied financing altogether, limiting their ability to invest in growth or cover long-term obligations. This restricted access to capital can worsen financial distress, creating a cycle where debt obligations lead to liquidity problems, and liquidity problems make it harder to manage debt. Profitability showed an overall mean of 2.96, making it a second factor that affects the financial distress of small and medium enterprises (SMEs) in Calapan City, implying that they are generally profitable and efficient in using their assets, but profitability alone does not guarantee protection from financial crises. A business may report profits on paper yet still struggle to meet day-to-day financial obligations. Liquidity had an overall mean of 2.61, indicating a moderate effect on the financial distress of small and medium enterprises (SMEs) in Calapan City, as it directly affects their ability to meet short-term financial obligations. When SMEs have sufficient cash or assets that can be converted into cash, they are better able to pay operating expenses, suppliers, and loan obligations on time, reducing immediate financial pressure. However, liquidity alone cannot entirely shield SMEs from financial distress, especially if their revenues are unstable or expenses are poorly controlled.

4.5. Based on the analysis of the study, what action plan for financial ratios and financial distress will be proposed?

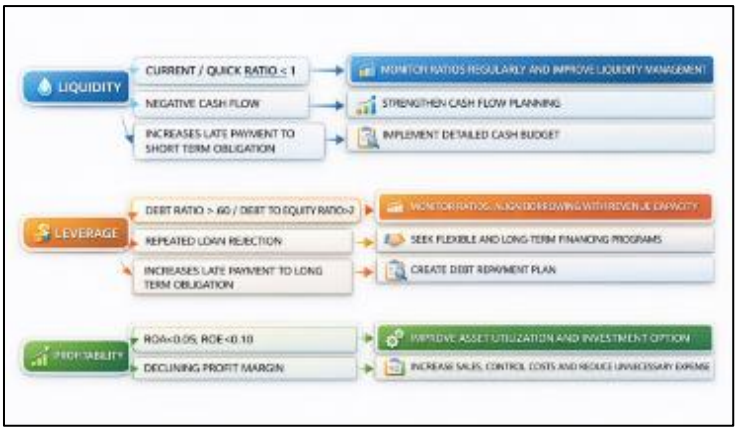

Figure 2. Early Warning System Framework

An Early Warning System (EWS) framework is a proactive, preventive tool that helps small and medium-sized businesses (SMEs) spot early indicators of financial trouble before they escalate into serious or irreversible issues. The EWS framework helps business owners, managers, and even policymakers anticipate potential financial risks early, rather than relying on reactive measures after a business failure. The systematic tracking of key financial indicators, particularly profitability, liquidity, and leverage, is a primary purpose of an EWS framework. From a broader economic

perspective, implementing an Early Warning System contributes to economic stability and employment protection. SMEs are widely recognized as key drivers of job creation, income generation, and local economic development. Preventing business failure through early detection and intervention helps sustain employment opportunities, maintain household incomes, and reduce economic disruptions within communities. The EWS framework aligns closely with the objectives of Sustainable Development Goal 8, Decent Work and Economic Growth, by fostering financially stable, resilient, and sustainable enterprises that can support inclusive economic growth and decent employment.

5. Conclusion and recommendation

The study finds that financial factors are generally evident within SMEs in Calapan City. Regarding liquidity, SMEs demonstrate effective liquidity management, conservative and robust debt structures, and strong performance, particularly in asset utilization and return on equity.

The study finds that the extent of financial distress in Calapan City's SMEs is moderate and evident, though not intense. Typical signs of financial distress include late payments to suppliers and difficulty obtaining flexible or long-term funding. Nonetheless, significant operational instability is less evident, suggesting that most SMEs continue to operate despite financial strains.

The results validate that a statistically significant connection exists between liquidity, leverage, profitability, and the financial distress of SMEs in Calapan City. Nevertheless, the intensity of these connections is generally low. This suggests that although financial factors correlate with financial distress, they account for only a small share of the financial challenges SMEs face, indicating the presence of various internal and external influences.

Among the financial factors analyzed, leverage is concluded to be the primary factor influencing the financial distress of SMEs in Calapan City. Although the correlation is weak, liquidity shows the strongest association with financial distress, compared with profitability and leverage. This suggests that timing issues related to long-term financial constraints have a greater impact on financial distress than profitability.

The analysis indicates that an early warning system based on financial ratio monitoring is a suitable strategy for tackling financial distress in SMEs. By regularly assessing liquidity, leverage, and profitability ratios, SMEs can evaluate their financial health and detect early indicators of financial distress or risk. This action plan facilitates proactive financial oversight and prompt decision-making to prevent moderate financial issues from turning into severe financial distress.

Recommendation

Given that liquidity has the most significant connection to financial distress, SMEs ought to enhance their cash flow management, collection of receivables, and payment timing. It is recommended to maintain cash reserves and secure flexible short-term financing to manage cash-flow timing challenges.

SMEs ought to maintain careful debt management, since leverage has little effect on financial distress. Improving ties with official lenders could enable companies to obtain long-term funding for expansion while minimizing financial risk.

Despite the general profitability of SMEs, being profitable in itself does not prevent financial difficulties. Business owners must confirm that genuine cash inflows back profits and meticulously plan reinvestments to prevent liquidity issues.

To reduce financial distress, SMEs need to concentrate on enhancing working capital management, especially in managing payment delays and securing flexible financing options.

SMEs are recommended to implement an early warning system by consistently tracking essential financial ratios concerning liquidity, leverage, and profitability to identify initial indications of financial distress.

Future researchers are urged to broaden the study's scope by including other factors like macroeconomic conditions, market competition, government backing, management skills, and environmental risks. A deeper understanding of the long-term financial behavior and distress patterns of SMEs may be gained by using continuous data or by conducting comparable studies in other areas.

Compliance with ethical standards

Disclosure of conflict of interest

There is no conflict of interest

Statement of informed consent

The identities of all survey participants are maintained in strict confidence to protect their privacy. Every piece of data collected and analyzed is handled in line with established ethical research standards. The information gathered remains entirely confidential to ensure the privacy of Small and Medium Enterprises (SMEs) owners. The researchers carried out the survey with professionalism and integrity, taking appropriate precautions to prevent misconduct and uphold the credibility of the research process.

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