



Examining the interplay dynamics of business profile, credit risk management practices, problems encountered in CRM, and financial performance of the sari-sari store in Laoag City

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ABSTRACT

This study assessed the credit risk management practices and their effect on the financial performance of sari-sari stores in Laoag City, Ilocos Norte, Philippines. Adopting a quantitative descriptive-correlational research design, the investigation focused on registered store owners in operation for at least two years, using data derived from a computed sample size of 310, based on the total population of 1,351 registered stores. Data were systematically gathered through a four-part survey questionnaire, developed and adapted from related literature and translated into Iloko, that collected information on store profile, CRM practices, and financial performance indicators, including sales, profitability, and accounts receivable turnover. Data were analyzed using frequency and percentage, weighted mean, Spearman's rho, and Pearson's r.

Results showed that CRM was practiced to a moderate extent, yet owners experienced slightly serious problems, especially in collection strategies, followed by credit policies and record-keeping practices. Financial performance was moderate, with slow accounts receivable turnover. Spearman's rho analysis indicated that store profile variables were not significantly related to the extent of CRM practices, although some profile factors were partially associated with financial performance. Pearson correlation showed that the extent of CRM practices was not significantly related to either the seriousness of problems encountered or overall financial performance. However, the severity of specific CRM problems encountered partially influenced accounts receivable turnover, while other financial indicators remained unaffected.

The study concluded that while sari-sari store owners in Laoag City generally practice credit risk management to a moderate extent, these practices do not significantly influence their financial performance. This suggests that credit decisions among micro-retailers remain largely informal and trust-based rather than guided by structured systems. It recommended adopting clearer credit policies and gradually integrating digital record-keeping tools to improve the efficiency of credit management.

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Introduction

Credit risk management (CRM) involves implementing strategies to balance extending credit to customers with

ensuring the business's financial stability. It is a critical factor for financial success across different sectors, particularly for MSMEs. According to Kalui and Kiawa (2015), poor credit risk management has been identified as a primary factor of many business failures, particularly among small businesses that often lack the resources and expertise to implement effective credit management systems. This issue is particularly prevalent among micro-retail businesses, where informal credit arrangements usually occur, especially for locally owned and operated businesses such as sari-sari stores, which constitute a significant portion of the Philippine MSME sector.

In the Philippines, micro, small, and medium-sized enterprises (MSMEs) constitute 99.63 percent of all registered businesses and employ 66.97 percent of the workforce (Philippine Statistics Authority [PSA], 2023). Sari-sari stores form a substantial part of micro-retail businesses that provide essential goods and services to communities across both rural and urban areas. According to the Asian Preparedness Partnership, they are present in almost every Filipino community, with over 1.3 million sari-sari stores operating nationwide. Additionally, these stores remain a major retail channel, with a large proportion of Filipinos purchasing from them (Kantar Worldpanel, 2018). Given their widespread presence, these stores play a crucial role in the daily lives of Filipinos and the broader economy.

In Ilocos Norte, the expansion of MSMEs has contributed significantly to the province's economic growth, employment, local innovation, and poverty reduction. Adriano (2023) reported that the provincial government established its first business incubation center in 2022 to centralize MSME support services and improve accessibility for local entrepreneurs. Meanwhile, according to the Business Permit and Licensing Office of the City of Laoag, as of April 2025, Laoag City has a total of 5,287 registered MSMEs, categorized as follows: 4,796 micro enterprises, 332 small enterprises, 159 medium enterprises, and, under micro enterprises, 1,351 are sari-sari stores, highlighting their strong presence in the local retail landscape.

Sari-sari stores are small, neighborhood-based retail outlets commonly found in Filipino communities, typically operated from a portion of the owner's home. They offer a wide range of essential goods in small, affordable quantities, providing households with convenient access to daily necessities. These stores thrive on convenience, serving customers who prefer quick purchases within walking distance.

Although sari-sari stores may have been considered small businesses, they contribute significantly to the local economy and serve as a vital source of income for many Filipino families due to their accessibility and ease of establishment (Pagara, 2022). Despite their economic significance, many sari-sari store owners face financial challenges, especially in managing credit transactions and sustaining profitability. As highlighted by Lu (2024), sari-sari stores commonly rely on informal credit practices locally known as "utang," in which regular customers are allowed to purchase goods on credit, with the promise of later payment. While this practice strengthens customer loyalty and is deeply embedded in community culture, Lu (2024) emphasized that it can also place financial strain on store owners and, in some cases, even lead to business closures. This system builds customer loyalty and is likely to come back, but it also poses financial risks for store owners, including bad debts, poor cash flow, and difficulties managing working capital, which affect the business's sustainability.

The link between financially stable sari-sari stores despite the challenges of extending store credit lies in effective credit risk management practices. CRM has various mechanisms to mitigate risk, including credit assessments, credit limits, credit policies, collection strategies, and receivables monitoring. Effective credit risk management improves business profitability and stability by guiding lending decisions (Arbasto et al., 2025). The goal of credit risk management (CRM) is to optimize an institution's returns by keeping credit risk within manageable levels (Zhang & Yu, 2023). It is important to acknowledge that not all customers will repay their debts promptly or voluntarily. Many tend to forget their dues, and most settle their obligations only when consistently reminded.

These delays can lead to increased bad debts, negatively affecting a store's finances. To improve the financial performance of sari-sari stores, it is crucial to enhance credit monitoring, establish clear credit policies, and adopt more effective collection strategies.

Despite the crucial role of credit risk management practices, there has been limited research on this subject in the context of micro-retail businesses in the Philippines. Most previous studies on credit risk management practices have focused only on microfinance and larger formal lending institutions, ignoring the distinctive credit structures and problems encountered by store owners. As such, their credit risk challenge and management strategies may differ significantly from those in formal financial institutions.

To address this knowledge gap, this study examines credit risk management practices and their effect on the financial performance of sari-sari stores in Laoag City, Ilocos Norte. By doing so, it aims to provide insights that can help sari-sari store owners implement effective CRM strategies to enhance their financial stability and long-term sustainability.

The study is divided into several parts. The first part is the introduction, which presents the study's background and purpose. The second part is the literature review, which discusses relevant theories and related studies. The third part is the research methodology, including the research design, locale, population, procedures, instruments, ethical review, and statistical treatment of data. The fourth part presents the data presentation and analysis, while the final part discusses the results and conclusions of the study.

Literature review

This section presents a thematic review of literature on credit risk management (CRM) in micro-retail businesses, with a focus on sari-sari stores. It examined CRM practices, challenges, and their impact on financial performance. Due to the limited research on informal community-based retailers, the review draws insights from studies on SMEs and microfinance institutions that are relevant to the sari-sari store context.

Credit risk management (CRM) practices in MSMEs

Credit risk management (CRM) is essential for MSMEs, as their ability to accurately assess, monitor, and recover credit directly impacts their long-term financial sustainability. Numerous studies emphasized the significance of having organized credit policies, effective collection methods, and thorough record-keeping as key components of CRM.

Clearly defined credit terms, such as setting credit limits, outlining payment periods, and imposing penalties for late payments, are essential for small and medium enterprises to effectively reduce the risk of customer defaults. Flaminiano and Francisco (2021), Mina (2024), and Bungule (2016) all emphasized that, when consistently implemented, formal credit policies enhance liquidity and reduce overdue receivables. Record-keeping is also a vital aspect of CRM. In their study of sari-sari stores in Laguna, Alusen and Javier (2018) observed that most micro-retailers continue to use handwritten logs, which often lead to inconsistencies. While this method is practical for low-volume transactions, it often leads to inadequate credit tracking and delayed follow-ups. Their study suggested that adopting organized record-keeping systems, such as simple spreadsheets or physical folders with backups, would be an important initial step toward more precise risk assessment.

Ismail and King (2021) supported this view, finding that micro-enterprises with simple and consistent ledgers for accounts receivable were 30% more likely to detect overdue accounts early and respond promptly. Their research indicated that effective credit risk management begins with accurate, reliable data collection, even in informal

business environments. Similarly, the work of Arbasto et al. (2023) illustrated the value of digital innovations, such as automated SMS reminders and mobile payment platforms, in enhancing repayment compliance in microfinance institutions' tools that could be adapted to fit the needs of micro-retailers like sari-sari stores.

Furthermore, Enyioko and Enock (2017) concluded that credit risk assessment methods, such as basic background checks that rely on community reputation and prior behavior, significantly improved credit performance in rural enterprises. For sari-sari stores in close-knit neighborhoods, these informal yet effective approaches can be incorporated into their credit approval processes. Kagoro Oyo (2015) supported these findings by demonstrating a clear connection between structured credit management, such as well-defined policies, customer assessment, and disciplined collections, and the financial performance of SMEs in Kampala. His study revealed that businesses implementing these practices saw higher sales, fewer bad debts, and improved liquidity.

Credit risk management (CRM) is vital for the financial sustainability of MSMEs, particularly micro-retailers such as sari-sari stores, as emphasized by various studies. Structured credit policies, such as setting credit limits, specifying payment periods, and applying penalties for late payments, help reduce customer defaults and improve cash flow (Flaminiano & Francisco, 2021; Mina, 2024; Bungule, 2016). In addition, maintaining organized records, even with basic tools such as notebooks or spreadsheets, makes it easier to track credit transactions and follow up with customers on time (Alusen & Javier, 2018; Ismail & King, 2021). Simple digital tools such as text reminders and mobile payment options also help encourage timely payments and are practical for small store owners to adopt (Arbasto et al., 2023). In communities where people are closely connected, assessing a customer's reputation and past behavior can also serve as a reliable basis for deciding whether to extend credit (Enyioko & Enock, 2017). Altogether, these practices enable small businesses to manage credit more effectively and improve financial performance (Kagoro Oyo, 2015).

Credit Risk Management (CRM) in sari-sari stores

Credit risk management (CRM) is an essential aspect of financial stability for businesses that lend or extend credit to customers, regardless of size or formality. In micro-retail settings such as sari-sari stores in the Philippines, CRM plays a subtle yet crucial role. As noted by Custodio (2017), these small, community-based retailers often extend credit to loyal customers to maintain neighborhood relationships. However, this informal credit extension, which is typically based on verbal agreements and personal trust, exposes the business to significant credit risk, especially when credit decisions are made without formal assessment or documentation.

Although CRM is typically associated with formal financial institutions, studies show that its core principles, such as assessing creditworthiness, managing payment terms, and tracking receivables, are also applicable and adaptable to informal micro-retail settings. For instance, Mina (2024) highlighted that lending companies with structured CRM systems experienced lower credit risks and higher repayment rates, emphasizing the importance of strong monitoring systems, credit evaluation, and strengthening delinquency tracking mechanisms. Similarly, Hassan and Mago (2022) identified proper credit policies, timely receivables collection, and automated billing systems as critical tools in reducing risks among UAE-based SMEs. These findings affirmed that CRM is not exclusive to formal businesses but can be simplified and applied effectively even in micro-retail settings.

Given the role of sari-sari stores as economic lifelines in many Filipino communities, increasing awareness and application of basic CRM strategies, such as consistent record-keeping, informal agreements, and setting repayment deadlines, can significantly help reduce credit risk and improve financial sustainability. This emphasized the need to explore specific CRM practices currently adopted in sari-sari stores and how these can be improved.

Financial performance of sari-sari stores

Financial performance is a key indicator of sustainability in micro-retail enterprises such as sari-sari stores, encompassing sales generation, profitability, and credit management. Sales performance is influenced by store location, product assortment, and customer demand. Quantitative studies, such as those by Garduce et al. (2024), indicate that store location, customer base, product assortment, and pricing strategies aligned with local demand can improve sales outcomes.

Profitability in sari-sari stores is generally constrained by small capital and narrow profit margins, yet owners employ adaptive strategies to sustain operations. According to Gano-An and Gempes (2020), while sari-sari stores may not generate very large profits, successful women micro-entrepreneurs highlighted **resourcefulness, reinvestment, and careful management** as key drivers of their operations' sustainability. Similarly, Gabay et al. (2023) reported that during the COVID-19 pandemic, some owners intentionally reduced profit margins to maintain customer flow and liquidity, highlighting the importance of strategic financial decision-making for operational sustainability.

Credit extension to customers is a common practice among sari-sari stores, but it poses liquidity challenges when receivables are not effectively managed. Gano-An and Gempes (2020) noted that flexible credit systems help sustain customer relationships, while Gabay et al. (2023) reported that increased receivables strained the financial performance of many stores. Alusen et al. (2019) emphasized that accounting practices and record-keeping vary across stores, which directly affects the ability to monitor credit and manage cash flow.

Collectively, these studies suggest that sari-sari stores' financial performance depends on a delicate balance of sales management, profitability strategies, and disciplined credit monitoring.

Problems in managing Credit Risk Management (CRM) among MSMEs

Despite growing recognition of credit risk management (CRM) practices, micro, small, and medium-sized enterprises (MSMEs), particularly micro-retailers such as sari-sari stores in the Philippines, continue to face systemic challenges in managing credit risk, which affect their financial stability and operational effectiveness. As Custodio (2017) pointed out in her case study of sari-sari stores in Catanduanes, bad debts arising from customers' failure to repay small informal credits consistently lead to cash inflow deficits and pose problems. The study further identified a recurring issue: numerous store proprietors, particularly women, lack financial knowledge and formal record-keeping capabilities, making it difficult to track profitability and manage credit effectively.

A primary structural barrier for MSMEs is information asymmetry, arising from the lack of reliable financial documentation. MSMEs frequently operate informally without standardized account systems, making it challenging for lenders to assess their true financial health (Ko & Tsai, 2024; Liu & Sun, 2018). Civelek (2019) explained that the absence of transparent financial records creates a trust deficiency between lenders and borrowers, thereby restricting access to formal credit. According to Nugroho (2024), around 60% of MSMEs in developing economies are excluded from the formal financial system due to inadequate documentation. This information gap is further aggravated by outdated credit assessment frameworks within financial institutions and the lack of digital tools capable of analyzing alternative or behavioral data (Aljaloudi et al., 2025; Biswas et al., 2020). Likewise, the lack of a trained labor force with expertise in credit risk analysis continues to weaken post-loan monitoring and decision-making (Kayode et al., 2020).

Compounding this is the issue of high default rates and limited access to acceptable collateral. MSMEs frequently cannot provide fixed collateral that banks will accept, leading to strict borrowing conditions or outright loan rejections (Civelek, 2019). In Indonesia, for illustration, the non-performing loan (NPL) rate for MSMEs stood at 4.29% in 2022, with only 20% of these businesses accessing formal credit (Nugroho, 2024). This lack of capital inhibits business expansion and aggravates the cycle of financial exclusion. Also, MSMEs are particularly vulnerable to macroeconomic shocks, including inflation, rising interest rates, and market disruptions. Civelek (2019) noted that SMEs in Turkey suffered significant strain due to interest rate hikes, which elevated borrowing costs and triggered credit rationing. Nugroho (2024) included that the risk of product failure, especially in fast-changing sectors, also compromises prepayment capacity.

Internally, MSMEs struggle with poor financial management practices and inconsistent cash flows. Many small business owners do not completely understand interest rates, prepayment schedules, or the long-term consequences of credit misuse (Nugroho, 2024). Seasonal demand fluctuation and delays in client payments can further destabilize operations, making debt servicing changeable (Civelek, 2019). These vulnerabilities affect banks, label MSMEs as high-risk borrowers, limit access to credit, and hinder growth opportunities (Ko & Tsai, 2024). Without targeted intervention, this creates a cycle of underinvestment and recession, preventing MSMEs from contributing completely to employment generation, innovation, and economic development.

Coordinated efforts among government institutions, financial intermediaries, and the MSME sector are essential to break this cycle. Recommendations from the literature emphasized adopting technology-driven risk assessment systems, developing alternative credit scoring models, and implementing financial literacy training tailored to MSMEs (Ko & Tsai, 2024; Liu, 2023; Civelek, 2019). In the Philippines, agencies like DTI, DOST, and LGUs can advance these initiatives by providing accessible credit, technical support, and business training. Further academic and policy exploration should focus on scalable, inclusive outcomes that bridge systemic gaps in credit risk management for MSMEs.

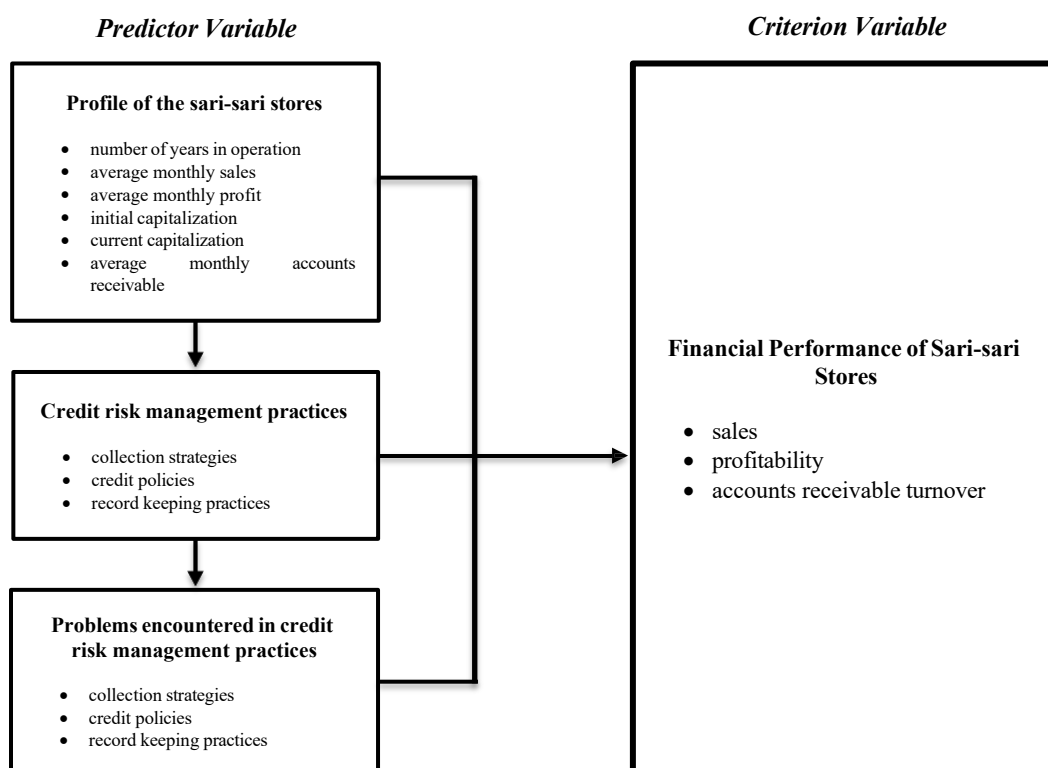
Effect of credit risk management (CRM) on financial performance

Credit risk management (CRM) is widely acknowledged as an important component of business performance, particularly for small and medium-sized organizations (SMEs). Studies have consistently shown that the use of structured CRM practices, such as credit monitoring, risk assessment, and overdue account management, reduces bad debts and improves profitability. For instance, Hassan and Mago (2022) found, in their study of SMEs in the UAE, that simply setting credit limits did not significantly affect profitability. Instead, the management of overdue credit sales played a more crucial role in ensuring operational stability, highlighting the importance of continuous credit monitoring over static policy-setting. This is further supported by Apaloo and Dzah's (2022) findings from Ghana, where the lack of knowledge in risk identification hindered the development of robust CRM systems. Nonetheless, even businesses that adopted basic CRM frameworks without advanced tools experienced improved financial performance, demonstrating that foundational capability-building can yield meaningful returns.

Sector-specific insights from Bungule (2016) further demonstrate that CRM's effectiveness is contingent on implementation quality. In Nairobi's transportation and logistics sector, the extension of credit helped increase sales, but poor follow-up and weak monitoring mechanisms sometimes led to financial losses. This reinforces the notion that CRM is not inherently beneficial unless consistently and thoroughly applied. Supporting this, Mwangi and Wanjau (2018) found that microfinance institutions in Kenya that employed comprehensive CRM techniques, including borrower assessments and regular loan monitoring, achieved better financial outcomes. Their research emphasized that portfolio management and systematic review are key contributors to CRM's success.

Taken together, these studies suggest that the financial effectiveness of CRM depends on factors such as sectoral context, enterprise scale, and implementation quality. While CRM can increase sales and strengthen customer relationships, its effectiveness depends not only on its presence but on how consistently and knowledgeably it is applied. For sari-sari stores, where credit decisions are often informal or impulsive, this suggests that ad-hoc practices may limit potential gains. Instead, adopting structured and informed CRM strategies, supported by training, documentation, and adaptive processes, is essential for improving financial performance and long-term viability in the microenterprise sector.

Conceptual framework



Source: Arañez et al. (2025); Alusen and Javier (2018); Alibuyog-Ang (2022).

Figure 1: Research Paradigm

Figure 1 illustrates the conceptual framework of this study, which adopted the Predictor-Criterion Variables Model, in which the predictor variables include the sari-sari stores' profiles, the extent of their credit risk management practices, and the seriousness of problems encountered in credit management. The store profile includes the number of years in operation, average monthly sales, average monthly profit, initial and current capitalization, and average monthly accounts receivable, while credit practices and related issues are examined in terms of collection strategies, credit policies, and record-keeping. The criterion variable is the level of financial performance of sari-sari stores, measured by sales, profitability, accounts receivable turnover, and return on investment. Likewise, this study examined the relationships between store profiles, credit risk management practices, and problems encountered, and their effect on the financial performance of sari-sari stores in Laoag City, Ilocos Norte.

Statement of the problem

This study examined credit risk management practices and their effects on the financial performance of sari-sari

Specifically, it sought answers to the following questions:

1. What is the profile of the sari-sari stores in terms of:
 - 1.1 number of years in operation;
 - 1.2 average monthly sales;
 - 1.3 average monthly profit;
 - 1.4 initial capitalization
 - 1.5 current capitalization; and
 - 1.6 average monthly accounts receivable?
2. To what extent do the sari-sari stores practice credit risk management in terms of:
 - 2.1 Collection Strategies
 - 2.2 credit policies; and
 - 2.3 Record-keeping Practices?
3. What is the degree of seriousness of the problems encountered in credit risk management practices in terms of:
 - 3.1 Collection Strategies
 - 3.2 credit policies; and
 - 3.3 Record-keeping Practices?
4. What is the level of financial performance of sari-sari stores based on:
 - 4.1 sales;
 - 4.2 profitability; and
 - 4.3 accounts receivable turnover?
5. Is there a significant relationship between the profile of sari-sari stores and their extent of practice of credit risk management by sari-sari stores?
6. Is there a significant relationship between the extent of practice of credit risk management by sari-sari stores and the degree of seriousness of the problems encountered by the sari-sari stores?
7. Is there a significant relationship between the profile of sari-sari stores and their level of financial performance of sari-sari stores?
8. Is there a significant relationship between the extent of practice of credit risk management by sari-sari stores and the level of financial performance of sari-sari stores?
9. Is there a significant relationship between the degree of seriousness of the problems encountered by the sari-sari stores and level of financial performance of sari-sari stores?

Hypothesis

H_{a1}: There is a significant relationship between profile and the extent of practice of credit risk management by sari-sari stores.

H_{a2}: There is a significant relationship between the extent of practice of credit risk management by sari-sari stores and the degree of seriousness of the problems encountered by the sari-sari stores.

H_{a3}: There is a significant relationship between profile and the level of financial performance of sari-sari stores.

H_{a4}: There is a significant relationship between the extent of practice of credit risk management by sari-sari stores and the level of financial performance of sari-sari stores.

H_{a5}: There is a significant relationship between the degree of seriousness of the problems encountered by the sari-sari stores and the level of financial performance of the sari-sari stores.

Scope and delimitation of the study

This study focused on the credit risk management practices of the sari-sari store owners and examined their relationship to financial performance, with respondents limited to registered sari-sari store owners at least two (2) years in operation in Laoag City, Ilocos Norte. The study was limited to examining collection strategies, credit policies, and record-keeping practices as dimensions of credit risk management. Financial performance was assessed based on sales, profitability, and accounts receivable turnover. This study was conducted from June to September 2025.

Research methodology

Research design

The study adopted a quantitative research approach and employed a descriptive-correlational research design to assess the credit risk management practices among sari-sari store owners in Laoag City, Ilocos Norte, and to examine their relationship with financial performance. The descriptive correlational design was deemed appropriate for identifying relationships between variables without manipulating them, making it ideal for exploring naturally occurring practices and financial outcomes (Siedlecki, 2020).

Locale of the study

The study was conducted in Laoag City, Ilocos Norte, Philippines. As the capital of the province, Laoag serves as a commercial hub in Northern Luzon, with a vibrant local economy supported by micro- and small-enterprises. Sari-sari stores are common throughout the city's barangays, making it an appropriate setting for examining the credit risk management practices and financial performance of these micro-retail businesses.

Population and sampling

The population consisted of registered sari-sari store owners who have been operating for at least two (2) years in Laoag City, Ilocos Norte. Based on records from the Business Permits and Licensing Office (BPLO) of the City Government of Laoag City, 1,351 registered sari-sari stores are operating within the city. Using Slovin's Formula with a 5% margin of error, the computed sample size was 310 respondents. The study used random sampling to ensure that each qualified store owner had an equal chance of being chosen, resulting in a sample representative of the total population.

Data gathering procedures

Before data collection, the researchers sought approval from the Business Permits and Licensing Office (BPLO) of the City Government of Laoag City. Respondents were approached directly in their respective stores and

provided informed consent before participating. Data were gathered through on-site visits with store owners who agreed to participate in the study. Some respondents answered immediately, while others were given time to complete the questionnaire, which the researchers retrieved the following day or the next available schedule. Additionally, some store owners preferred to provide their answers or ratings verbally, in which case the researchers read each question aloud and recorded the responses accordingly. All accomplished questionnaires were checked, organized, and tabulated for analysis.

Data gathering instruments

A survey questionnaire was utilized to collect relevant data. Some parts were adapted, while other parts were developed based on related literature. The instrument consisted of four parts:

Part I collected profile information about the store, including years of operation, average monthly sales, average monthly profit, initial and current capitalization, and average monthly accounts receivable. This part was constructed by the researchers, but the structure and indicators were guided by past studies conducted by Alusen and Javier (2018), Macatumbas-Corpuz & Bool (2021), and Garduce et al. (2024).

Part II assessed credit risk management practices and was subdivided into three aspects. Collection strategies and credit policies were adapted from Arañez et al. (2025), who examined various credit risk strategies across microfinance institutions. These were contextualized for sari-sari store operations. Record-keeping practices were informed by the study by Alusen and Javier (2018), which emphasized the importance of documentation and financial tracking in small retail businesses.

Part III identified common problems encountered by sari-sari store owners in implementing credit risk management. Although this section is researcher-made, the items were adapted from the frameworks of Arañez et al. (2025) and Alusen and Javier (2018), but were intentionally framed in the negative to capture challenges such as repayment issues, customer defaults, lack of proper documentation, and the risks associated with informal credit arrangements.

Part IV evaluated the stores' financial performance using three key indicators: sales, profitability, and accounts receivable turnover. This part was also constructed by the researchers, but the structure and indicators were guided by past studies related to small enterprise performance and inventory practices by Alibuyog-Ang (2022).

To ensure the questions were easily understood by respondents, especially those more comfortable in Iloko, the entire questionnaire was translated into Iloko. This helped improve clarity, cultural appropriateness, and accuracy of responses during data collection.

Ethical review

Consent was obtained from all participants after they were clearly informed about the study's purpose and scope. Participation was entirely voluntary, and respondents were assured that all information they provided would remain confidential and be used solely for academic purposes. They were also informed that they could skip any question or withdraw from the study at any time without facing any negative consequences.

Statistical treatment of data

The study employed quantitative methods to analyze data collected from sari-sari store owners. Descriptive statistics, such as frequency and percentage, were used to present the store profiles and assess financial performance. In addition, the weighted mean was used to summarize the extent of credit risk management practices and the problems respondents encountered.

The following ranges of values with their descriptive interpretation were used:

A. For Credit Risk Management practices

<i>Scale</i>	<i>Range of mean values</i>	<i>Descriptor</i>	<i>Descriptive Interpretation</i>
5	4.21 – 5.00	Strongly Agree	Very great extent (VHE)
4	3.41 – 4.20	Agree	High extent (HE)
3	2.61 – 3.40	Somewhat Agree	Moderate extent (ME)
2	1.81 – 2.60	Disagree	Low extent (LE)
1	1.00 – 1.80	Strongly Disagree	Very low extent (VLE)

B. For problems encountered in Credit Risk Management

<i>Scale</i>	<i>Range of mean values</i>	<i>Descriptor</i>	<i>Descriptive Interpretation</i>
5	4.21 – 5.00	Strongly Agree	Very serious (VS)
4	3.41 – 4.20	Agree	Serious (S)
3	2.61 – 3.40	Somewhat Agree	Moderately serious (MS)
2	1.81 – 2.60	Disagree	Slightly serious (SS)
1	1.00 – 1.80	Strongly Disagree	Not a problem (NP)

To assess relationships among variables, the study used both Spearman's rho and Pearson's correlation coefficient. Spearman's rho examined the relationships between: (5) the profile of the sari-sari stores and the extent of credit risk management practices, and (7) the profile of the sari-sari stores and their financial performance. Pearson's r assessed: (6) the relationship between the extent of credit risk management practices and the degree of seriousness of problems encountered; (8) the extent of credit risk management practices and the level of financial performance; and (9) the degree of seriousness of problems encountered and financial performance.

Microsoft Excel was used to analyze and interpret the data. The level of significance for interpreting the results was set at 0.05 and 0.01.

Data presentation and analysis

This section presents the statistical findings obtained from the research questionnaires. The data are analyzed in relation to the stated problems.

Problem 1: What is the profile of the sari-sari stores in terms of:

- 1.1 Number of years in operation;***
- 1.2 Average monthly sales;***
- 1.3 Average monthly profit***
- 1.4 Initial capitalization***
- 1.5 Current capitalization; and***
- 1.6 Average monthly accounts receivable?***

Table 1: Profile of the sari-sari store in Laoag City, Ilocos Norte, Philippines (n=310)

Profile	Frequency	Percentage (%)
<i>A. Years in operation</i>		

2-4 years	114	36.77%
5-7 years	55	17.74%
8-10 years	33	10.65%
Above 10 years	108	34.84%
B. Average monthly sales		
Below Php15,000	183	59.03%
Php15,001 – Php30,000	93	30%
Php30,001 – Php45,000	10	3.23%
Php45,001 – Php60,000	8	2.58%
Above Php60,000	16	5.16%
C. Average monthly profit		
Below Php10,000	205	66.12%
Php10,001 – Php20,000	78	25.16%
Php20,001 – Php30,000	14	4.52%
Php30,001 – Php40,000	3	0.97%
Above Php40,000	10	3.23%
D. Total initial capitalization		
Php10,001 – Php20,000	192	61.94%
Php20,001 – Php30,000	52	16.77%
Php30,001 – Php40,000	25	8.06%
Above Php40,000	41	13.23%
E. Total current capitalization		
Php10,001 – Php20,000	159	51.29%
Php20,001 – Php30,000	65	20.97%
Php30,001 – Php40,000	29	9.35%
Above Php40,000	57	18.39%
F. Average monthly account receivables		
Below Php15,000	263	84.84%
Php15,001 – Php30,000	31	10%
Php30,001 – Php45,000	8	2.58%
Php45,001 – Php60,000	4	1.29%
Above Php60,000	4	1.29%

Source: Authors' own table (2025)

Table 1 presents the profile of sari-sari stores in Laoag City by years in operation, sales, profit, capitalization, and accounts receivable.

Years in operation. Results showed that most of the sari-sari stores in Laoag City have operated for 2–4 years (36.77%), followed closely by those operating for more than 10 years (34.84%), indicating a growing presence of both new and established stores. Similar findings were reported by Alusen and Javier (2018), who observed that micro-retail stores typically stabilize after a few years as they gain loyal customers and adapt to market demands. Likewise, Garduce et al. (2024) found that many sari-sari store owners had been operating for a decade or more, demonstrating their extensive experience and ability to sustain operations over time. These findings underscore the resilience and long-term viability of sari-sari stores as vital microenterprises in the Philippine economy.

Average monthly sales. More than half of the store owners reported low monthly sales, with 59.03% earning

below Php15,000 and 30% earning between Php15,001 and Php30,000. Only 5.16% reported sales above ₱60,000, highlighting that most stores operate on a small-scale basis with limited capital turnover. This low sales volume may be attributed to intense market competition, a limited customer base, and reliance on neighborhood consumption patterns. These findings are supported by Garduce et al. (2024), who emphasized that low average monthly sales among sari-sari stores are closely linked to customers' purchasing behavior and pricing strategies, noting that while affordable pricing attracts customers, it also limits the potential for higher revenue and overall sales growth.

Average monthly profit. Consistently, 66.13% of store owners earned less than ₱10,000 in monthly profit, suggesting that most store owners generate small profits with limited sales volume, which is typical of micro-retail businesses that cater mainly to neighborhood customers. Profits vary widely depending on factors such as location, capitalization, store size, operating hours, and community history (Ruiz, 2018). These findings indicate that small-scale retail enterprises operate within limited capital turnover and rely heavily on neighborhood-based consumption, which constrains profitability and growth potential.

Total initial capitalization. Most of the store owners (61.94%) started their businesses with an initial capital of Php10,001–Php20,000. Only 13.23% reported an initial investment above ₱40,000. This indicates that the majority began on a small-scale basis, which may limit early growth and operational capacity. This aligns with Galagar et al. (2024), who found that insufficient starting capital is a key factor contributing to microenterprise instability and limited growth potential.

Current capitalization. Current capitalization showed a slight increase, with stores having above ₱40,000 rising from 13.23% to 18.39%, a 39% relative increase (16 more stores). This suggests capital growth driven by improved profitability, reinvestment, or more efficient credit collection. Limited capital restricts expansion and encourages cautious credit extension to preserve liquidity. This supports Señara et al. (2025), who emphasized that financial sufficiency and entrepreneurial resilience are vital for the long-term survival and growth of sari-sari stores.

Average monthly accounts receivable. 84.84% of store owners reported monthly accounts receivable below ₱15,000, indicating that credit transactions are present but generally limited to small amounts to maintain liquidity and minimize credit risk. Only 10% record receivables between ₱15,001 and ₱30,000, while a few exceed ₱45,000. This finding aligns with previous studies affirming that maintaining low and controlled levels of accounts receivable is essential for minimizing credit risk, ensuring financial stability, and promoting the long-term sustainability of small and medium-sized enterprises (Hassan & Mago, 2022; Kagoro Oyo, 2015; Kayode et al., 2020).

Problem 2: To what extent do the sari-sari stores practice credit risk management in terms of:

2.1 Collection strategies;

2.2 credit policies; and

2.3 Record-keeping practices?

Table 2: Credit risk management practices of sari-sari stores in Laoag City, Ilocos Norte, Philippines (n=310)

	Indicators	Mean	Descriptive Interpretation
A. Collection strategies			
1	I regularly remind customers of their outstanding credit.	4.16	HE

2	I personally visit customers to collect payments.	2.07	LE
3	I send reminders through calls or text messages.	2.33	LE
4	I set a deadline for payment for customers.	3.13	ME
5	I offer flexible payment terms for customers who struggle to pay.	3.58	HE
6	I keep a record of how much each customer owes and what they have paid.	4.47	VHE
7	I explain to customers what will happen if they don't pay (e.g., no more credit).	3.55	HE
8	I give discounts to customers who pay on time.	1.62	VLE
	Composite mean	3.11	ME
B. Collection policies			
1	I assess a customer's ability to pay before granting credit.	4.03	HE
2	I have a limit on the amount of credit I allow per customer.	4.13	HE
3	I only allow trusted and regular customers to buy on credit.	4.45	VHE
4	I have clear rules about when customers should pay their debts.	3.72	HE
5	I don't extend credit to customers with unpaid balances.	3.90	HE
6	I offer discounts or incentives for customers who pay on time.	1.81	LE
7	I clearly communicated the credit terms (payment deadlines) to customers.	3.74	HE
	Composite mean	3.68	HE
C. Record-keeping practice			
1	I write down all credit transactions in a notebook or ledger.	4.56	VHE
2	I use digital methods (e.g., mobile apps and spreadsheets) to track customer debt.	2.21	LE
3	I update my credit records immediately after each transaction.	4.25	VHE
4	I review my credit records regularly to track unpaid balances.	4.24	VHE
5	I rely only on memory to track debts.	2.34	LE
6	I review and check the accuracy of credit records	4.30	VHE
7	I track the status of overdue accounts and take action when they are past due.	3.89	HE
8	I store records of all customer communications regarding payments (calls, chat, etc.).	3.82	HE
9	I regularly audit my credit records to ensure there are no discrepancies.	4.23	VHE
	Composite mean	3.76	HE
	Overall mean	3.52	HE

Source: Arañez et al. (2025) and Alusen and Javier (2018)

Legend: 4.21-5.00 Very High Extent (VHE); 3.41-4.20 High Extent (HE); 2.61-3.40 Moderate Extent (ME); 1.81-2.60 Low Extent (LE); 1.00-1.80 Very Low Extent (VLE)

Table 2 presents the extent to which sari-sari store owners practice credit risk management. The overall mean of 3.52, interpreted as High Extent (HE), indicates that store owners generally apply effective measures to manage credit risks. Among the three dimensions, the highest composite mean (3.76, HE) was recorded under record-keeping practices, while the lowest composite mean (3.11, ME) was noted under collection strategies, showing differences in how consistently these practices are applied.

Record-keeping practices. This dimension obtained the highest composite mean of 3.76, making it the strongest area of credit risk management. The highest weighted mean was recorded in the indicator "I write down all credit transactions in a notebook or ledger" (4.56, VHE), showing strong diligence among store owners. However, the

lowest weighted mean was observed for “I use digital methods (e.g., mobile apps, spreadsheets) to track customer debts” (2.21, LE), indicating limited technology adoption. Overall, sari-sari store owners rely on manual note-taking, which still helps them avoid misunderstandings and ensure accountability. These practices supported the findings of Aladejebi and Oladimeji (2019) and Khadim and Choudhury (2024), who emphasized that proper record-keeping practices are essential for accurately tracking financial transactions, strengthening financial control, improving decision-making, and enhancing accountability in small businesses.

Credit policies. Sari-sari store owners are cautious in extending credit, as reflected by a composite mean of 3.68, indicating a high degree of practice. The highest weighted mean was observed in the indicator “I only allow trusted and regular customers to buy on credit” (4.45, VHE). In contrast, the lowest weighted mean was found for “I offer discounts or incentives for customers who pay on time” (1.81, LE), consistent with collection strategies in which incentives are seldom used. These results demonstrate that sari-sari store owners prioritize preventive measures, such as careful borrower selection and setting credit limits, over incentive-based approaches. This aligns with Oluoch (2021), who emphasized that well-defined and consistent credit and collection policies help small businesses maintain cash flow, reduce payment delays, and manage credit responsibly, even in informal settings.

Collection strategies. This dimension had the lowest composite mean of 3.11, indicating Moderate Extent. Among the indicators, the highest weighted mean was observed for “I keep a record of how much each customer owes and what they have paid” (4.47, VHE), indicating that most store owners still track debts manually. Meanwhile, the lowest weighted mean was observed for “I give discounts to customers who pay on time” (1.62, LE), indicating that incentives for early payment are rarely used. These results suggest that sari-sari stores rely heavily on personal interactions, trust, and follow-up reminders rather than formal collection systems, consistent with Guansi (2022), who emphasized that small informal businesses often depend on community trust and relationships when managing credit risk. Overall, this reflects the principles of informal institutionalism, in which trust, shared norms, and mutual understanding serve as effective mechanisms for maintaining financial stability and managing risk.

Problem 3: What is the degree of seriousness of the problems encountered from the credit risk management practices in terms of:

4.1 Collection strategies;

4.2 Credit policies; and

4.3 Record-keeping practices?

Table 3. Degree of seriousness of the problems encountered from the credit risk management practices of sari-sari stores in Laoag City, Ilocos Norte, Philippines (n=310)

	Indicators	Mean	Descriptive Interpretation
A. Collection strategies			
1	I let customers delay payments even after reminders.	2.31	SS
2	Customers refuse to pay their debts	2.62	MS
3	I have difficulty following up on overdue accounts	2.63	MS
4	I don't have enough communication with customers about payment deadlines	2.22	SS
5	I don't have a proper system to track late payments.	2.22	SS
6	I have inadequate penalties for late payments.	1.76	NP
	Composite mean	2.29	SS
B. Collection policies			

1	I don't have clear guidelines on credit policies	2.34	SS
2	I have an inconsistent implementation of credit limits	2.45	SS
3	I grant credit without a proper evaluation of the customer's capability	2.26	SS
4	I let customers exceed credit limits	1.82	SS
5	I can't adapt credit policies based on customer payment behavior	2.31	SS
6	I don't have enough documentation on the customer's credit history	1.79	NP
	Composite mean	2.16	SS
C. Record-keeping practice			
1	I have incomplete or missing records of credit transactions	1.80	NP
2	I don't track overdue accounts	1.93	SS
3	I fail to update records regularly	1.97	SS
4	I don't have digital tools for tracking records	2.50	SS
5	I don't have an accurate recording of customer credit information.	1.89	SS
6	I don't have backup copies of records.	2.32	SS
7	I lost or misplaced records	1.77	NP
	Composite mean	2.03	SS
	Overall mean	2.16	SS

Source: Arañez et al. (2025) and Alusen and Javier (2018)

Legend: 4.21-5.00 Very High Extent (VHE); 3.41-4.20 High Extent (HE); 2.61-3.40 Moderate Extent (ME); 1.81-2.60 Low Extent (LE); 1.00-1.80 Very Low Extent (VLE)

Table 3 presents the degree of seriousness of the problems encountered in credit risk management practices among sari-sari store owners. The overall mean of 2.16, interpreted as Slightly Serious (SS), indicates that while challenges exist in managing credit risks, these are not considered major threats to store operations. Among the three dimensions, the highest composite mean was recorded under collection strategies, while the lowest composite mean was noted under record-keeping practices, showing that store owners experience more difficulty in following up and collecting payments than in maintaining credit records.

Collection strategies. The subcomponent on collection strategies obtained a composite mean of 2.29, interpreted as Slightly Serious (SS). This indicates that credit collection issues are the most notable among the components. The highest-weighted mean was observed for the indicator “I have difficulty in following up overdue accounts,” which received a mean score of 2.63 (MS). These findings underscore the limited enforcement mechanisms and informal nature of collection practices typical in micro-retail operations. Meanwhile, problems rated as less serious were recorded in the indicator “I have inadequate penalties for late payments” (1.76, NP). The result supported Custodio (2017), who found that unrecoverable debts and the absence of systematic collection procedures are common among sari-sari stores. This suggests that while most store owners manage collections effectively, ensuring consistent follow-ups and imposing penalties remain key areas for improvement.

Credit policies. For credit policies, the composite mean of 2.16, also interpreted as Slightly Serious (SS), reveals that sari-sari store owners encounter occasional difficulties in implementing structured credit rules. The most prominent issue was the indicator “I have inconsistent implementation of credit limits” (2.45, SS). This aligns with Arbasto et al. (2015), who argue that weak and inconsistent credit policies can lead to delayed payments and higher credit risk. Conversely, the least serious included in the indicator “I don't have enough documentation on

customer credit history” (1.79, NP). These results imply that while credit practices remain largely informal, they are manageable; however, improvements in consistency, evaluation mechanisms, and documentation could further enhance credit risk management.

Record-keeping practices. In terms of record-keeping practices, the composite mean of 2.03, interpreted as Slightly Serious (SS), reflects minor but persistent financial documentation issues. The most serious concern was the indicator “I don’t have digital tools for tracking records” with a weighted mean of 2.50 (SS), indicating that most sari-sari store owners continue to rely on manual recording methods because these are simple, familiar, and do not require technological skills. However, studies by Alusen and Javier (2018), Micabalo et al. (2022), and Yap (2019) suggested that using digital systems can help improve accuracy and efficiency. On the other hand, the lowest weighted mean was recorded in the indicator “I lost or misplaced records” (1.77, NP), suggesting that although store owners lack digital systems, they are still able to keep basic written records relatively secure. Overall, this indicates that while sari-sari store owners maintain basic record-keeping systems, they remain largely manual and are therefore prone to inefficiencies and inaccuracies in credit management.

Problem 4: What is the level of financial performance of sari-sari stores based on:

3.1 Sales;

3.2 Profitability; and

3.3 Accounts receivable turnover?

Table 4: Level of Financial Performance of Sari-Sari Stores in Laoag City, Ilocos Norte, Philippines (n=310)

Financial Performance	Frequency	Percentage (%)
A. Sales for the past 2 years		
Decreased by 5% to 10%	44	14.19%
Decreased by less than 5%	47	15.16%
Breakeven/ No change	91	29.35%
Increased by 5% to 10%	99	31.94%
Increased by more than 10%	29	9.35%
B. Profitability for the past 2 years		
Decreased by 5% to 10%	32	10.32%
Decreased by less than 5%	57	18.38%
Breakeven/ No change	88	28.39%
Increased by 5% to 10%	100	32.26%
Increased by more than 10%	33	10.65%
C. Accounts receivable turnover for the past 2 years		
Decreased by 1 to 30 days	84	27.10%
No Change	137	44.19%
Increased by 1 – 30 days	89	28.71%

Source: Authors’ own table (2025)

Table 4 shows the performance of sari-sari stores, measured by sales, profitability, and accounts receivable turnover, over the past two years.

Sales for the past 2 years. Results revealed that a considerable portion of sari-sari store owners experienced stable-to-moderately improving sales performance over the past two years, with 31.94% reported an increase of 5% to 10%, and 29.35% reported no change in their sales. Meanwhile, 15.16% experienced a decrease of less than 5%,

and 14.19% reported a decrease ranging from 5% to 10%. Only 9.35% of the respondents indicated an increase of more than 10% in sales. These findings reflect that, despite market changes, most stores maintained consistent sales within the period. This aligns with Pagara's (2022) study, which reported that sari-sari store owners commonly experienced steady sales over the years, emphasizing that customer loyalty and product familiarity serve as sustaining factors that stabilize income and sales flow.

Profitability for the past 2 years. About 32.26% of respondents reported a 5% to 10% increase, while 28.39% reported a break-even or no change in profit. Conversely, 18.38% experienced a decrease of less than 5%, and 10.32% reported a decline of 5% to 10%. A smaller proportion (10.65%) experienced an increase of more than 10%. These results imply that while certain stores encountered slight declines, a substantial portion achieved moderate profit growth. This is consistent with Alferos (2023), who noted that small and medium enterprises that practiced effective financial management generally experienced operational growth, with some achieving moderate profit increases while others showed smaller gains.

Accounts receivable turnover for the past 2 years. A total of 44.19% of respondents reported no change over the past two years, while 28.71% experienced an increase of 1 to 30 days, and 27.10% observed a decrease of 1 to 30 days. This implies that many sari-sari store owners maintained consistent collection efficiency, reflecting stable financial management practices in handling credit transactions. This is supported by Ismail and King (2021), who found that proper record-keeping enhances credit management among microenterprises, and by Alibuyog-Ang (2022), who highlighted the importance of effective financial tracking in sari-sari stores. Additionally, Arbasto et al. (2025) emphasized that systematic collection policies contribute to stable receivable turnover. However, Apaloo and Dzah (2022) noted that external factors may still cause variations in financial performance, which could explain the observed increases and decreases in turnover among some stores.

Problem 5. Is there a significant relationship between profile and the extent of practice of credit risk management by sari-sari stores?

Table 5: Relationship between profile and the extent of practice of credit risk management by sari-sari stores

Profile of the Sari-Sari Store		Credit Risk Management Practices		
		Collection Strategy	Credit Policy	Record Keeping Practice
Years in operation.	(r)	-0.06	-0.07	-0.06
	Sig (2-tailed)	0.302	0.226	0.332
Average monthly sales	(r)	-0.20	0.02	0.04
	Sig (2-tailed)	0.730	0.739	0.497
Average monthly profit	(r)	-0.01	0.07	-0.03
	Sig (2-tailed)	0.862	0.214	0.619
Initial capitalization	(r)	0.06	0.08	0.07
	Sig (2-tailed)	0.259	0.180	0.198
Current capitalization	(r)	-0.003	0.02	0.06
	Sig (2-tailed)	0.955	0.714	0.271
Average monthly accounts receivable	(r)	0.07	0.09	0.08
	Sig (2-tailed)	0.205	0.107	0.152

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors' own table (2025)

Table 5 presents the results of the Spearman's rho analysis conducted to determine whether the profile of sari-sari stores significantly influences the extent of their credit risk management practices. The computed correlation coefficients (ρ) range from -0.20 to 0.09, all of which are statistically insignificant ($p > 0.05$) across variables, indicating that there was no statistically significant relationship between the profile of the sari-sari stores and the extent of their credit risk management practices. The results imply that the levels of CRM practices are not dependent on the store profile.

Among the computed correlation coefficients, the highest correlation ($r=0.09$, $p=0.107$) was observed between average monthly accounts receivable and credit policy, although it remained insignificant. This implies that as receivables increase, some store owners may feel the need to establish clearer rules or guidelines to protect against non-payment, even if such adjustments remain limited in scope. Conversely, the lowest correlation ($r= -0.003$, $p= 0.955$) was found between current capitalization and collection strategy, indicating that the availability of capital has no relationship with how collection strategies are carried out. This implies that the amount of available capital does not influence how collection strategies are implemented.

These results are consistent with previous studies. For instance, Flaminiano and Francisco (2021) found that firm characteristics influence credit access or risk exposure but not the adoption of internal credit management systems. Likewise, Moore (2022) emphasized that record-keeping quality and credit practices depend more on managerial skills, training, and awareness than on firm size or age. Similarly, Yap (2019) noted that while years of operation may improve bookkeeping efficiency, it does not necessarily enhance credit risk practices. Thus, credit management among sari-sari stores depends more on owners' knowledge and discipline than on demographic or financial attributes.

Therefore, H_{a1} is rejected. The results indicate that there is no significant relationship between the profile and the extent of credit risk management practice among sari-sari stores.

Problem 6. Is there a significant relationship between the extent of practice of credit risk management by sari-sari stores and the degree of seriousness of the problems encountered by the sari-sari stores?

Table 6. Relationship between the extent of practice of credit risk management by sari-sari stores and the degree of seriousness of the problems encountered by the sari-sari stores

Credit Risk Management Practices		Problems Encountered		
		Collection strategies	Credit policies	Record-keeping practices
Collection strategies	(r)	0.02	0.03	0.01
	Sig (2-tailed)	0.711	0.545	0.840
Credit policies	⁽¹⁾	0.01	-0.07	-0.07
	Sig (2-tailed)	0.923	0.212	0.208
Record-keeping practices	⁽¹⁾	0.01	-0.04	-0.15**
	Sig (2-tailed)	0.918	0.460	0.009

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors' own table (2025)

Table 6 shows that the correlation coefficients (r) between credit risk management practices and the problems

encountered by sari-sari store owners are generally very low, with p-values ranging from 0.009 to 0.923, most of which exceed the 0.05 significance level. This indicates that there is no statistically significant relationship between the extent of credit risk management practice and the severity of the problems encountered. The only exception is the relationship between record-keeping practices and problems encountered in record keeping ($r = -0.15$, $p = 0.009$), which shows a weak but significant negative correlation at the 0.01 level. This means that better record-keeping practices slightly reduce related problems with the documentation and monitoring of credit transactions.

These findings imply that while sari-sari store owners employ various credit risk management measures, such as informal collection strategies or basic credit policies, these practices do not substantially determine the severity of credit-related problems they face. Most sari-sari stores in Laoag City operate on trust-based or informal credit systems, where lending decisions rely more on personal relationships and familiarity with customers rather than on structured credit procedures. As a result, formal risk management practices have limited impact on mitigating collection and repayment challenges. The results align with Arañez et al (2025), who found no significant correlation between formal credit management systems and performance outcomes. The data suggest that while credit risk management practices are implemented to some extent among sari-sari store owners, their informal and small-scale nature limits their influence on reducing credit-related problems.

Therefore, Ha2 is rejected, indicating no significant relationship between credit risk management practices and the problems encountered, except for a weak negative association in record-keeping practices.

Problem 7. Is there a significant relationship between profile and the level of financial performance of sari-sari stores?

Table 7: Relationship between profile and level of financial performance of sari-sari stores

Profile of the Sari-Sari Store		Financial Performance		
		Sales	Profitability	Accounts receivable turnover
Years in operation.	(r)	-0.10	-0.12*	0.02
	Sig (2-tailed)	0.087	0.042	0.697
Average monthly sales	(r)	0.14*	0.15**	-0.05
	Sig (2-tailed)	0.01	0.006	0.413
Average monthly profit	(r)	0.13*	0.18**	-0.04
	Sig (2-tailed)	0.025	0.001	0.451
Initial capitalization	(r)	0.08	0.18*	-0.13*
	Sig (2-tailed)	0.161	0.002	0.019
Current capitalization	(r)	0.16**	0.26**	-0.15**
	Sig (2-tailed)	0.006	0.000004	0.0010
Average monthly accounts receivable	(r)	0.13*	0.23**	-0.12*
	Sig (2-tailed)	0.028	0.00005	0.035

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors' own table (2025)

Table 7 presents the results of the Spearman's rho analysis conducted to determine whether the profile of sari-sari stores significantly influences their financial performance. The correlation coefficients (ρ) range from -0.15 to

0.26, indicating both positive and negative relationships of varying strengths. Results show that several relationships were statistically significant.

Among the computed correlation coefficients, the highest positive correlation was observed between current capitalization and profitability ($r = 0.26$, $p < 0.01$), suggesting that stores with greater available capital tend to achieve stronger financial outcomes. Conversely, the strongest negative correlation was observed between current capitalization and accounts receivable turnover ($r = -0.15$, $p < 0.01$), indicating that stores with higher capital tend to experience slower credit collection. These findings imply that capitalization plays a notable role in shaping store performance, both in enhancing profitability and affecting receivable management.

The results of this study align with those of Apaloo and Dzah (2022), who found that effective risk management practices positively influence the performance of small and medium-sized enterprises, supporting the present finding that prudent management of financial resources contributes to improved profitability. Similarly, Flaminiano and Francisco (2021) found that firm characteristics, such as size and access to credit, affect SMEs' financial capacity, indicating that stronger financial resources can enhance business outcomes. In contrast, Custodio (2017) observed that some micro-retail stores continue to face challenges despite long years of operation, which supports the weak negative correlation between years in operation and profitability found in this study.

Ha3 is partially accepted, as only certain profile variables, particularly years in operation, average monthly profit, capitalization, and accounts receivable, showed statistically significant relationships with the financial performance of sari-sari stores, while others did not exhibit significant correlations.

Problem 8. Is there a significant relationship between the extent of practice of credit risk management by sari-sari stores and the level of financial performance of sari-sari stores?

Table 8. Relationship between the extent of practice of credit risk management by sari-sari stores and the level of financial performance of sari-sari stores

Credit Risk Management Practices		Financial Performance		
		Sales	Profitability	Accounts receivable turnover
Collection strategies	(r)	0.02	0.04	0.04
	Sig (2-tailed)	0.737	0.498	0.513
Credit policies	(r)	0.01	0.04	0.005
	Sig (2-tailed)	0.922	0.483	0.936
Record-keeping practices	(r)	-0.003	0.04	0.03
	Sig (2-tailed)	0.954	0.522	0.573

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors' own table (2025)

Analysis of the data presented in Table 8 indicates that the examined credit risk management practices, including collection strategies, credit policies, and record-keeping practices, do not exhibit any statistically significant relationship with the financial performance indicators of sari-sari stores, such as sales, profitability, and accounts receivable turnover. Among the tested variables, collection strategies and profitability ($r = 0.04$, $p = 0.498$) showed the highest correlation, though it remained statistically insignificant. All correlation coefficients (r) ranged from -0.003 to 0.04 , and the corresponding significance values (p) were greater than 0.05 , indicating that variations in

the extent of practice of credit risk management do not meaningfully influence the financial outcomes of the stores. This implies that while credit management practices are implemented to some extent, they do not substantially determine financial success among sari-sari store owners in Laoag City.

While the present study found no significant relationship between the extent of credit risk management practices and financial performance, other Philippine research by Marcos (2021) identified a positive connection between financial management practices and profitability among MSMEs. This contrast may be due to differences in scope, such as MSMEs versus micro-retail, operational scale, or the specific nature of the practices examined, such as broader financial management versus narrow credit risk management.

The findings suggest that the limited or informal nature of credit systems used by micro-retailers may explain the absence of a significant relationship. Since sari-sari stores often extend credit based on personal trust rather than structured policies, the impact of formal credit risk management practices becomes negligible. This observation is consistent with studies by Alusen (2019) and Pagara (2022), who found that many sari-sari store owners rely more on informal bookkeeping, customer trust, and operational efficiency than on formal credit systems to sustain financial performance.

Therefore, Ha4 is rejected. There is no significant relationship between the extent of credit risk management practice and the level of financial performance of sari-sari stores in Laoag City.

Problem 9. Is there a significant relationship between the degree of seriousness of the problems encountered by the sari-sari stores and the level of financial performance of the sari-sari stores?

Table 9. Relationship between the degree of seriousness of the problems encountered in the sari-sari stores and the level of financial performance of the sari-sari stores

Problems Encountered		Financial Performance		
		Sales	Profitability	Accounts receivable turnover
Collection strategies	(r)	-0.08	-0.10	0.13*
	p-value	0.177	0.068	0.021
Credit policies	(r)	-0.003	-0.07	0.14*
	p-value	0.953	0.201	0.013
Record-keeping practices	(r)	-0.01	-0.90	0.07

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors' own table (2025)

Table 9 shows the correlation analysis between the seriousness of the problems encountered in credit risk management and the financial performance of sari-sari stores. The computed correlation coefficients (r) ranged from -0.10 to 0.14, indicating that the relationships among the variables were generally weak. However, two correlations were found to be statistically significant ($p < 0.05$), suggesting that some credit management challenges are linked to differences in financial performance, especially in relation to record-keeping practices.

The highest correlation ($r = 0.14$, $p = 0.013$) was observed between credit policy problems and record-keeping practices, indicating that store owners who experience greater difficulties in enforcing credit policies tend to maintain more systematic and detailed records. While the lowest correlation ($r = -0.003$, $p = 0.953$) was found

between credit policy problems and sales, showing that credit management issues have little to no direct effect on sales performance. The findings suggest that while credit management problems do not strongly influence sales and profitability, they encourage better financial organization through improved record-keeping. This finding stands in contrast to a previous study by Nyawa et al. (2025), who indicated that there is a significant influence of credit risk management practices on the financial performance of small and medium-sized enterprises in Kenya. They recommend considering a holistic reassessment and implementation of the credit risk management practices to foster the financial performance of small and medium-sized enterprises.

Therefore, Ha5 is partially accepted, indicating that while most correlations are weak and insignificant, specific relationships, particularly between credit management problems and accounts receivable turnover, show significant associations with financial performance.

Results and discussion

The findings of this study provide a comprehensive understanding of the credit risk management practices and their effects on the financial performance of sari-sari stores in Laoag City, Ilocos Norte. The profile analysis revealed that most sari-sari stores operate as micro-enterprises with low profits, sales, and limited capitalization, making them financially conservative in extending credit to customers. This finding is consistent with Custodio (2017), who found that most sari-sari stores in rural communities operate informally with limited capitalization and maintain only the necessary stock levels based on their sales capacity, making it impractical to extend credit, as this could deplete their limited funds needed to restock inventory and sustain business operations.

Sari-sari store owners practiced credit risk management (CRM) to a moderate to high level, with strong emphasis on record-keeping and establishing credit policies, though collection strategies were only moderately applied. This aligns with Alusen and Javier (2018), Micabalo et al. (2022), and Yap (2019), who highlighted the continued reliance on manual record-keeping among small retailers due to its simplicity and accessibility. Despite awareness of CRM, the limited use of digital tools shows room for improvement through financial and digital literacy initiatives.

Problems encountered were generally slightly serious, particularly in collection strategies, credit policies, and record-keeping practices, respectively. This indicates that while challenges exist, they are generally manageable. The most common problems were difficulty in following up overdue accounts and customers refusing to pay debts. This result supports Custodio (2017), who found that unrecoverable debts and the absence of systematic collection procedures are common among sari-sari stores. In terms of credit policies, issues such as unclear guidelines and inconsistent credit limits reflect the informal nature of credit decisions, aligning with Arbusto et al. (2025), who noted that small enterprises often lack structured credit evaluation and policy enforcement. For record-keeping, the absence of digital tools and backup systems indicates continued reliance on manual methods. This finding is consistent with Alusen and Javier (2018) and Micabalo et al. (2022), who emphasized that manual recording remains prevalent due to its simplicity but limits accuracy and efficiency. These challenges show that traditional, informal systems still dominate, and improvements in financial literacy, clearer policies, and digital tools could enhance risk management.

Regarding financial performance, most sari-sari stores have maintained stable to moderately improving sales, profitability, and accounts receivable turnover over the past two years, indicating that store owners in Laoag City demonstrate financial adaptability and resilience, managing to sustain consistent business outcomes despite varying market conditions.

The correlation analysis showed no significant relationship between store profile and CRM practices, indicating

that credit behavior is influenced more by personal experience and cultural norms than by business size or years of operation. Similarly, CRM showed no significant relationship with sales, profitability, or accounts receivable turnover, which contrasts with Hassan and Mago (2022), who reported that systematic CRM improves liquidity and profitability among SMEs. However, the study found significant relationships between store profile and both profitability and accounts receivable turnover, suggesting that stores with greater capitalization and longer operating experience tend to achieve higher profitability but may experience slower collection turnover due to larger credit volumes.

Overall, the findings indicate that while sari-sari store owners are aware of credit risks and apply credit management practices, their impact on financial performance remains limited without formal systems, digitalization, or institutional support. The study also underscores the resilience of these micro-retailers and the strong community-based trust that helps sustain their operations despite structural challenges.

Conclusion

The study sought to determine the effect of credit risk management (CRM) practices on the financial performance of sari-sari stores in Laoag City, Ilocos Norte, Philippines. The results showed that sari-sari store owners practice CRM to a moderate to great extent. With regard to financial performance, most stores maintained stable to moderately improving sales, profitability, and accounts receivable turnover over the past two years. Problems encountered were generally rated as slightly serious across all CRM practices.

Statistical analysis revealed that store profile variables were not significantly related to the extent of credit risk management (CRM) practices, leading to the rejection of Ha1. Similarly, the extent of CRM practices was also not significantly related to the degree of seriousness of problems encountered or overall financial performance, resulting in the rejection of Ha2 and Ha4. Certain profile variables were partially associated with indicators of financial performance, partially supporting Ha3, while the degree of seriousness of specific CRM problems had a partial influence on accounts receivable turnover, partially supporting Ha5.

These findings suggest that sari-sari stores effectively apply informal, yet functional credit management systems rooted in personal trust, customer familiarity, and adaptive decision-making. This highlights that formal CRM frameworks, typically designed for structured small and medium enterprises (SMEs), may not fully apply to community-based microenterprises like sari-sari stores. In such informal settings, credit behavior is guided more by relational trust and cultural norms than by standardized financial systems.

Based on these results, it is recommended that sari-sari store owners should adopt clearer and consistent credit policies that include defined credit limits and repayment deadlines to reduce defaults and promote disciplined credit behavior among borrowers. Additionally, they should enhance their record-keeping practices by integrating simple digital tools such as spreadsheets, mobile applications, or accounting software to accurately track credit transactions, monitor accounts receivable promptly, and enable the early identification of overdue payments. Maintaining both digital and manual backups is also recommended to prevent data loss and ensure the continuity of financial records.

Future researchers are encouraged to employ mixed-method approaches to explore behavioral and cultural factors influencing credit decision-making and to assess the role of financial technology in improving credit management. Comparative studies between urban and rural micro-retailers or across different regions could also deepen understanding of how contextual factors affect CRM effectiveness and financial performance.

Overall, this study broadens the discourse on microenterprise finance by presenting a Philippine-based model of informal credit risk management, emphasizing that for sari-sari stores, CRM serves less as a mechanism for profit maximization and more as a foundation for financial resilience and long-term sustainability.

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