Working capital management practices and sustainability of Barangay Micro Business Enterprises (BMBEs) in Ilocos Norte, Philippines

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ABSTRACT

This study examines the relationship between the working capital management practices and sustainability of Barangay Micro Business Enterprises (BMBEs) in Ilocos Norte, Philippines. This study employed a correlational-descriptive research design. Data were gathered using a self-constructed questionnaire, which has been pre-tested to 30 other microenterprises and validated using Cronbach alpha. The participants were the owners of the 301 registered BMBEs in Ilocos Norte. This study was conducted from July to December 2020. The findings demonstrated that most of the BMBEs belong to the wholesale and retail trade sector, are registered as single proprietorships, and have no employees. The results also showed that the BMBEs have low economic, social, and environmental sustainability. Moreover, the study revealed that cash management was significantly related to economic and social sustainability, while accounts receivable and inventory management were significantly related to economic, social, and environmental sustainability.

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Introduction

Microenterprises contribute significantly to employment and exports. Of the 1,000,506 registered business enterprises in the country, micro, small, and medium enterprises (MSMEs) account for 99.5% (995,745) while large enterprises account for 0.5% (4,761). Of the MSMEs, 891,044 (89%) are micro-enterprises, 99,936 (10%) are small enterprises, and 4,765 (0.50%) are medium enterprises. As of 2019, these MSMEs generated a total of 5,510,760 jobs or 62.4% of the country’s total employment, while large enterprises generated 3,315,575 jobs or 37.6%. The microenterprises have the most substantial share (29.8%), closely followed by small enterprises (25.2%), while medium enterprises were far behind at 7.4%. In terms of value-added, the MSME sector contributed 35.7%. Small enterprises have the largest share of 20.5%, followed by medium enterprises with a share of 10.3%, and micro-enterprises registered a share of 4.9%. MSMEs account for 25% of the country’s total export revenue. It is also estimated that 60% of all exporters in the country belong to the MSME category. MSMEs contribute to exports through subcontracting arrangements with large firms or as suppliers to exporting companies (2019 List of Establishments of the Philippine Statistics Authority, as quoted by the Department of Trade and Industry).

The MSME Development Plan 2017-2022 presented the various policies and programs in four (4) outcome areas: business environment, access to finance, access to markets, and productivity and efficiency. One of the various republic acts that have been created to support MSMEs is the R.A. 9178, also known as the Barangay Micro Business Enterprises (BMBEs) Act of 2002. This Act aims to include in the mainstream of the economy those microenterprises registered as single proprietorships, which have no employees. The results also showed that the BMBEs have low economic, social, and environmental sustainability. Moreover, the study revealed that cash management was significantly related to economic and social sustainability, while accounts receivable and inventory management were significantly related to economic, social, and environmental sustainability.

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from income arising from the enterprise's operations. They are also exempted from the Minimum Wage Law; however, BMBE employees will still get the same social security and health care benefits. They are given priority to a particular credit window set up specifically for the financing of BMBEs. BMBE beneficiaries are assisted as to technology transfer, production and management training, and marketing programs. The LGUs may also reduce or exempt the amount of local taxes, fees, and charges imposed on BMBEs (R.A. 9178, BMBE Act of 2002).

All businesses need funds for their establishment and to defray their day-to-day expenditures. Such funds could either be long-term or short-term. Long-term funds are necessary to acquire long-term assets such as plant, machinery, equipment, land, and building. On the other hand, short-term funds, also known as working capital, are set aside to purchase raw materials, payment of salaries and wages, utilities, and other day-to-day expenses. Working capital is usually defined as current assets less current liabilities. The primary elements of current assets are inventories, accounts receivables, and cash, while current liabilities are accounts payable and bank overdrafts. Management of working capital refers to all aspects of the administration of both current assets and current liabilities. Its fundamental objective is to manage an enterprise's current assets and current liabilities to maintain a satisfactory working capital level.

Several studies (Abimola and Kolawole, 2017; Bandara and Rathnasari, 2016; Kovelskiy, 2015) found out that working capital management practices affect business performance. Likewise, several studies have been conducted to determine MSMEs' working capital management practices, but none focused on BMBEs. With the impact of BMBEs on the economy, ensuring the sustainability of their business operations is necessary. The present study determined the profile, working capital management practices, and economic, social, and environmental sustainability of BMBEs in Ilocos Norte. Also, it investigated the relationship between working capital management practices and the sustainability of BMBEs in Ilocos Norte. Hence, this study will give entrepreneurs insights regarding the working capital management practices they could adopt to attain business sustainability.

The study determined the relationship between working capital management practices and sustainability of BMBEs in Ilocos Norte; specifically, it answered the following questions:

i. What is the profile of the BMBEs in terms of industry sector, the form of ownership, capitalization, business age, and the number of employees?

ii. What are the working capital management practices executed by BMBEs in terms of cash management practices, accounts receivable management practices, and inventory management practices?

iii. How sustainable are the BMBEs in terms of economic, social, and environmental?

iv. Is there a significant relationship between the working capital management practices of BMBEs and their sustainability?

This study has five parts. It begins with an introduction that discusses the background of the research and its objective. It is followed by the discussion of the literature review which includes the theoretical background, conceptual framework, statement of the problems and hypotheses. The next part presents the research methodology, which discusses research design, the study's locale, the population of the study, data gathering instrument, data gathering procedures, and statistical treatment of data. The fourth part comprises the results and discussion. Lastly, the fifth part contains the conclusion of the study.

**Literature Review**

**Theoretical Background and Conceptual Framework**

**Working Capital Management Practices**

Zariyawati et al. (2017) found out that working capital management on firm performance between large firms and small firms is different. A small firm can increase its profit by reducing the investment in working capital, which can be done by shortening the collection period and reducing inventory turnover. On the other hand, large firms' working capital did not affect their profit but may increase their profit by lengthening the payment of accounts payable. They further stressed that considering an appropriate liquidity level is part of adequate working capital management and affects profitability.

According to Abimola and Kolawole (2017), good working capital management practices have significance to SMEs' performance. It helps SMEs operate efficiently, increase sales, attract customers' loyalty, and aids in building up long-term relationships with customers. Likewise, Bandara and Rathnasari (2016) concluded that working capital management (WCM) is vital and an integral part of financial management that affects profitability, liquidity, risk, and value creation. Moreover, according to Kovelskiy (2015), an enterprise's working capital management policies significantly affect its profitability, liquidity, and structural health. Adequate working capital should be maintained, which positively impacts the business's solvency and goodwill. Estimating the working capital requirements should be made in advance to avoid its shortage.

**Cash Management Practices**

According to Pieterson (2012), small and medium enterprises (SMEs) conformed to business institutions' conventional liquidity management mechanisms by safeguarding financial records, supplementing cash shortages with loans from the bank, saving profits
daily, and spending within their financial capability. Also, SMEs tend to prepare a cash budget and determine future cash flows (Bandara and Rathnasari, 2016; Agyei-Mensah, 2010). In contrast, Smirat (2016) found out that the SME owners have no sufficient knowledge in cash management practices and cash control procedures. As an effect, SMEs fail to keep track of their cash payments and receipts, seldom prepare the cash budget and maintain bank accounts mostly in current accounts. His study also indicated that cash management is an essential aspect that entrepreneurs have to ensure better financial performance.

Bandara and Rathnasari (2016) found out that most SMEs invest temporary cash surplus in a bank account rather than thinking about profitable investment opportunities such as marketable securities to generate more income. On the other hand, Agyei-Mensah (2010) determined that only a few SMEs deposit cash surplus into bank accounts. The majority did not know how to use the temporary cash surplus for profitable purposes.

Abimbola and Kolawole (2017) revealed that SMEs' performance has a strong positive relationship with cash management practices, which indicates that SMEs having more efficient cash management practices perform better. Likewise, Smirat (2016) and Hassan et al. (2017) found out that cash management positively affects SMEs' financial performance.

Several authors (Hassan et al., 2017; Lampetey et al., 2017; and Wangui, 2011) used the cash conversion cycle to indicate cash management. Hassan et al. (2017) found that cash management positively affects the financial performance of SMEs. On the other hand, Lampetey et al. (2017) argued that the average cash conversion period is negatively related to return on capital employed but statistically significant, which implies that a reduction in the cash conversion period leads to improved performance. The shorter the period to convert every transaction into cash, the more money is available, which can be reinvested into more profitable activities, resulting in improved performance. Wangui (2011) also revealed a negative relationship between profitability and the cash conversion cycle.

The commonly used expression, "Cash is king," denotes that cash management is vital as it is the main factor to any successful business. Companies that practice efficient cash management achieve success. The shortage or lousy cash management could result in loss of cash discount and glitch on reputation because of failure to pay obligation on due dates and insolvency, which may cause the company's operational shutdown (Tuller, 2008 as cited by Smirat, 2016). Implementing a sound cash management system will guarantee that financial risk is better controlled, a higher chance of gaining profit, improve the business' balance sheet, increased confidence in the industry, and improved operational efficiency (Gallagher, 2000 as cited by Smirat, 2016).

**Accounts Receivable Management Practices**

Pietersen (2012) found out that SMEs managed account receivables by selling on credit to customers. Before such an arrangement, formal credit investigations were made to ascertain the creditworthiness of customers. After that, documents were prepared and compiled as proof for customers' indebtedness. When a default in payment arose, legal action will be taken against most debtors. Bandara and Rathnasari (2016) revealed that most SMEs sell their products on credit basis and disclose the credit policy to customers while a few never use credit sales. Moreover, they showed that the extent of accounts receivable management among SMEs is low. Although SMEs maintain a set credit policy to control the sales to be made on credit, sales are just made to customers without vetting who should be granted credit and how much credit should be granted. This is further supported by the high levels of bad debts and difficulty that SMEs face in recovering the money from credit sales.

Agyei-Mensah (2010) showed that selling products or services on credit is a common trend among SMEs in Ashanti Region of Ghana. They sell their products or services on credit and set up their credit policies to the customers. Most SMEs review their levels of receivables and bad debts quarterly. SMEs always experience bad debts, which more than 20% of sales. A few employ credit officers. The owners/managers tended to neglect accounts receivables management because of its difficulty and found it distasteful. The SMEs lack proper debt collection procedures such as prompt invoicing and sending out regular statements, which might cause an increased risk of late payment and defaulting debtors. Bad debts can be a significant problem to SMEs, especially in the current economic climate where margins may already be squeezed. Firms that provide most or all products or services on credit to more or all of their customers are likely to experience bad debts situation on a large scale.

Abimbola and Kolawole (2017) revealed that all three predictors of trade management practices: credit policy, credit-granting decision, and credit debt collection have a significant positive relationship on SMEs' performance. Their study revealed that a unit increase in credit granting decision would enhance the performance of SMEs. This showed that the SMEs would have a better performance if they have more effective credit-granting decisions because good credit-granting decisions will boost sales and build customers' loyalty. Moreover, the significant positive effect of credit debt collection policies on SMEs profitability implies that credit debt collection policies must be in place in order for an enterprise to be successful. Otherwise, it will affect their performance negatively. The lack of proper debt collection procedures will likely increase the risks of late payment and default by debtors. Furthermore, credit policy also has a positive and significant effect on SMEs' performance, which indicates that enhancing credit policies in an enterprise will stimulate profitability.

The study of Hassan et al. (2017), which used the receivable turnover ratio as an indicator, found out that receivable management has a negative effect on financial performance. Similarly, Lampetey et al. (2017) showed that the average account collection period is negatively related and statistically significant to ROCE, which indicates that a decrease in the account collection period would
increase performance. Likewise, Wangui (2011) revealed a negative relationship between profitability days sales outstanding, which means that enterprises should ensure optimal inventory levels are maintained.

**Inventory Management Practices**

SMEs buy stocks from local companies in moderate quantities, and regular stock-taking is the operators' strategies to manage their inventory. However, they often bought expensive and low-quality stocks. They did not have a re-order level policy in requesting stocks from the appropriate buyers or manufacturers during peculiar seasons (Pieterson, 2012).

According to Anoos et al. (2020), micro, small, and medium enterprises (MSMEs) moderately practiced the inventory management systems because physical counting and regular tracking of the stocks is a tedious and time-consuming activity for business owners. Likewise, they moderately practiced recording all new stock purchases in the books, the conduct of inventory or physical counting of stocks regularly, the practice of first-in and last-out, and projecting the required inventory level regularly for a specified time. Moreover, MSMEs less practiced the usage or application of technology in recording the ins and outs of stocks or inventories like Point of Sales System (POS) because the software and hardware requirements for automated inventory systems like POS are relatively expensive. Hence, only a few can afford it.

Bandara and Rathnasari (2016) found out that inventory management practices among SMEs are relatively low. Also, Agyei-Mensah (2010) found out that SMEs still have little knowledge of inventory management theories. SMEs are used to practice inventory budget preparation (Bandara and Rathnasari, 2016), review inventory levels, and prepare inventory budgets (Agyei-Mensah, 2010), but applying inventory management theories in the inventory budget is minimal (Bandara and Rathnasari, 2016; Agyei-Mensah, 2010). The majority determined the inventory level based on the owner/manager's experience, while only a few based it on inventory management theories (Bandara and Rathnasari, 2016; Agyei-Mensah, 2010). According to Bandara and Rathnasari (2016), most SMEs revealed that they were aware of the economic order quantity (EOQ) model in inventory management; however, the practical application was minimal. Meanwhile, Agyei-Mensah (2010) found out the majority did not know anything about the economic order quantity (EOQ) model.

Abimbola and Kolawole (2017) used three predictors for inventory management practices: inventory shrinkage, inventory investment, and inventory turnover. Their study revealed that both the inventory investment and the inventory turnover had positive relationships with SMEs' performance. This indicates that a unit increase in inventory turnover leads to increased performance and a unit increase in inventory investment also leads to an increase in SMEs' performance. On the other hand, inventory shrinkage had a negative relationship with the performance of SMEs. This means that a unit increase in inventory shrinkage will cause a decrease the performance of the SMEs. The inventory shrinkage has a significant role in determining SMEs performance since stock shortages such as employees' theft, expired goods or stock and stock out usually cause severe hardships for most businesses and tend to affect the SMEs' overall performance.

Meanwhile, Hassan et al. (2017) and Lamptey et al. (2017) only used inventory turnover as an indicator. Hassan et al. (2017) found out that inventory management has a significant relationship with SMEs' performance. Lamptey et al. (2017) found out that the average inventory turnover period is negatively related to Return on Capital Employed (ROCE) but statistically significant. This indicates that less inventory holding period, limited spoilage, and reduced number of expired products lead to lower storage cost, handling cost, and pilferages will increase profitability. Moreover, since the inventory turnover period was statistically significant with performance, a decreased inventory turnover period would improve performance. Likewise, Wangui (2011) revealed a negative relationship between profitability and days inventory outstanding.

**Sustainability Theory**

Corporate sustainability is defined by Dyllick and Hockerts (2002) as:

"meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc), without compromising its ability to meet the needs of future stakeholders as well. Towards this goal, firms have to maintain and grow their economic, social and environmental capital base while actively contributing to sustainability in the political domain.

To measure sustainability, John Elkington, the founder of a British consultancy called SustainAbility, came up with a new framework called the triple bottom line (TBL) during the mid-1990s to measure performance in corporate America. The TBL is an accounting framework that integrates three dimensions of performance: social, environmental, and financial, commonly called the three Ps: people, planet, and profits (Slapper and Hall, 2011).

The financial bottom line, which encompasses the traditional financial measures, focuses on ensuring that the business has a healthy operating capital. The people account bottom line looks into how socially responsible the company is throughout all its operations. The planet account bottom line measures the business's eco-efficiency (Elkington, 1997 as cited by Marquez, 2012).

The TBL has become captivating in the business world because of the accumulating anecdotal evidence of greater long-term profitability. In this study, the sustainability theory measured the economic, social, and environmental sustainability of BMBEs in Ilocos Norte.
Conceptual Framework

Independent Variables

Profile of the BMBEs in Ilocos Norte
- Industry Sector
- Form of Ownership
- Capitalization
- Business Age
- Number of Employees

Working Capital Management Practices
- Cash Management
- Accounts Receivable Management
- Inventory Management

Dependent Variables

Sustainability of BMBEs in Ilocos Norte
- Economic
- Social
- Environmental

Hypotheses

Ho1: Cash management practices have no significant relationship with economic sustainability.
Ho2: Cash management practices have no significant relationship with social sustainability.
Ho3: Cash management practices have no significant relationship with environmental sustainability.
Ho4: Accounts receivable management practices have no significant relationship with economic sustainability.
Ho5: Accounts receivable management practices have no significant relationship with social sustainability.
Ho6: Accounts receivable management practices have no significant relationship with environmental sustainability.
Ho7: Inventory management practices have no significant relationship with economic sustainability.
Ho8: Inventory management practices have no significant relationship with social sustainability.
Ho9: Inventory management practices have no significant relationship with environmental sustainability.
Research and Methodology

The study was carried out through appropriate research methodologies such as research design, data gathering instrument, population, the locale of the study, data gathering procedures, and statistical treatment.

Research Design

This study used a descriptive-correlational research design. It described the profile, working capital management practices, and sustainability of BMBEs in Ilocos Norte. Moreover, it measured the correlation between working capital management practices and the sustainability of BMBEs.

Locale of the Study

This study was conducted in the province of Ilocos Norte, located in the northernmost part of Luzon. Its strategic location is an exceptional gateway for inbound-outbound logistics. It links North Luzon to major Asian economies north of the Philippines, such as Taiwan, China, Hongkong, Japan, and South Korea. The presence of an international airport, seaport, and road networks make the province accessible. In pursuing sustainable development, the province has embraced green practices to limit the reliance on fossil fuels. It has a low crime rate. Foreign remittance inflow makes the province a prime source of capital, making the Ilocanos have greater spending power, hence paving the way for MSMEs to grow.

Population

The population of the study was the registered Barangay Micro Business Enterprises (BMBEs) in Ilocos Norte. Total enumeration was employed in this study. However, out of the 446 BMBEs on the list of registered BMBEs provided by the Department of Trade and Industry – Ilocos Norte Provincial Office, only 301 responded. The remaining 145 were already closed or could no longer be located.

Data gathering instrument and Procedures

This study used a survey questionnaire. The researcher constructed the survey questionnaire. To validate the instrument, it was subjected to pilot testing. It was pre-tested to 30 other micro-enterprises in Ilocos Norte. The result of the pre-test is acceptable based on Cronbach's alpha of 0.70. The questionnaire was also translated in Iloco.

In the process of data gathering, permission was asked from the respondents. The researcher, together with an enumerator, administered the distribution and retrieval of the instrument. Answering the questionnaire took 15-30 minutes. This study was conducted from July to December 2020.

Statistical Treatment of Data

Frequency and percentage were used to describe the profile of the BMBEs. The weighted mean was used to determine the working capital management practices and sustainability of BMBEs. The following range of values with their descriptive interpretation is shown below.

| Statistical Range | Descriptive Interpretation | Overall Descriptive Rating |
|-------------------|---------------------------|---------------------------|
| 4.21 – 5.00       | Always                    | Very high                 |
| 3.41 – 4.20       | Often                     | High                      |
| 2.61 – 3.40       | Sometimes                 | Moderate                  |
| 1.81 – 2.60       | Seldom                    | Low                       |
| 1.0 – 1.80        | Never                     | Very Low                  |

Pearson R was used to determine the significant relationship between the working capital management practices and sustainability of BMBEs in Ilocos Norte.

Result and Discussion

Empirical Data and Analysis

The study's findings are presented below and arranged according to the structure of the statement of the problem of the study.

1. What is the profile of the BMBEs in terms of industry sector, the form of ownership, capitalization, business age, and the number of employees?
Table 2: Industry Sector of BMBEs in Ilocos Norte

| Industry Sector                                                      | Frequency | Percent |
|---------------------------------------------------------------------|-----------|---------|
| Agriculture, Forestry, and Fishing                                  | 21        | 6.98    |
| Manufacturing                                                       | 11        | 3.65    |
| Water Supply; Sewerage, Waste Management, and Remediation Activities| 3         | 1.00    |
| Construction                                                        | 1         | 0.33    |
| Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles| 242       | 80.40   |
| Accommodation and Food Service Activities                           | 11        | 3.65    |
| Human Health and Social Work Activities                             | 1         | 0.33    |
| Other Service Activities                                             | 11        | 3.65    |
| **Total**                                                           | 301       | 100     |

Table 2 presents that 242 (80.40%) of the BMBEs belong to the Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles sector; 11 (3.65%) each for manufacturing, accommodation, and food service activities, and other service activities sectors; 3 (1%) for water supply; sewerage, waste management, remediation activities; and one (0.33%) each for construction, and human health and social work activities sectors.

Table 3: Form of Ownership of BMBEs in Ilocos Norte

| Form of Ownership | Frequency | Percent |
|-------------------|-----------|---------|
| Single Proprietorship | 291       | 96.70   |
| Partnership       | 9         | 3.00    |
| Corporation       | 1         | 0.30    |
| **Total**         | 301       | 100.00  |

It can be gleaned in Table 3 that almost all (96.70%) of the BMBEs' are single proprietorships, 3% are partnerships, and 0.30% are corporations.

Table 4: Capitalization of BMBEs in Ilocos Norte

| Capitalization | Frequency | Percent |
|----------------|-----------|---------|
| P10,000 and below | 106       | 35.20   |
| P10,001 – P20,000 | 53        | 17.60   |
| P20,001 – P30,000 | 48        | 15.90   |
| P30,001 – P40,000 | 22        | 7.30    |
| P40,001 – P50,000 | 15        | 5.00    |
| P50,001 and above | 57        | 18.90   |
| **Total**        | 301       | 100.00  |

As shown in Table 4, there are 106 (35.2%) BMBEs which have a capitalization of P10,000 and below; 57 (18.9%) have P50,001 and above; 53 (17.6%) have P10,001 – P20,000; 48 (15.9%) have P20,001 – P30,000; 22 (7.3%) have P30,001 – P40,000; and 15 (5.0%) have P40,001 – P50,000.
Table 5: Business Age of BMBEs in Ilocos Norte

| Business Age     | Frequency | Percent |
|------------------|-----------|---------|
| 1 – 3 years      | 133       | 44.19%  |
| 4 – 6 years      | 84        | 27.91%  |
| 7 – 9 years      | 16        | 5.32%   |
| 10 – 12 years    | 21        | 6.98%   |
| 13 – 15 years    | 12        | 3.99%   |
| 16 years and above | 35       | 11.63%  |
| Total            | 301       | 100.00% |

Table 5 presents the business age of BMBEs in Ilocos Norte. There are 133 (44.19%) BMBEs that have been operating for 1-3 years; 84 (27.91%) for 4-6 years; 16 (5.32%) for 7-9 years; 1 (6.98%) for 10-12 years; 12 (3.99) for 13-15 years and 35 (11.63%) for 16 years and above.

Table 6: Number of Employees of BMBEs in Ilocos Norte

| Number of Employees | Frequency | Percent |
|---------------------|-----------|---------|
| 0                   | 198       | 65.80%  |
| 1                   | 36        | 12.00%  |
| 2                   | 24        | 8.00%   |
| 3                   | 21        | 7.00%   |
| 4                   | 3         | 1.00%   |
| 5                   | 10        | 3.30%   |
| 6                   | 6         | 2.00%   |
| 10                  | 3         | 1.00%   |
| Total               | 301       | 100.0%  |

Table 6 shows the number of employees of BMBEs. There 198 (65.85) BMBEs who do not have any employee; 36 (12.00%) have one employee, 24 (8%) have two employees; 21 (7.00%) have three employees, 3 (1%) have four employees; 10 (3.3%) have five employees; 6 (2%) have six employees and 3 (1%) have ten employees.

Problem 2. What are the working capital management practices executed by the BMBEs in terms of cash management, accounts receivable management, and inventory management?

Table 7: Cash Management Practices of BMBEs in Ilocos Norte

| Cash Management Practices                        | Mean | Descriptive Interpretation |
|--------------------------------------------------|------|---------------------------|
| Maintains an optimal level of cash                | 2.98 | Sometimes                 |
| Sales are on a cash basis                         | 2.80 | Sometimes                 |
| Performs bank reconciliation                      | 2.40 | Seldom                    |
| Separates business money from personal money     | 3.12 | Sometimes                 |
| **Composite Mean**                                | **2.82** | **Sometimes**             |

As presented in Table 7, the BMBEs sometimes practice cash management, as indicated by the composite mean of 2.82. The BMBEs sometimes practice maintaining an optimal level of cash (2.98), sales on a cash basis (2.80), and separating business money from personal money (3.12). On the other hand, they seldom perform bank reconciliation (2.40).
Table 8: Accounts Receivable Management Practices of BMBEs in Ilocos Norte

| Accounts Receivable Management Practices                                      | Mean | Descriptive Interpretation |
|--------------------------------------------------------------------------------|------|---------------------------|
| Grants credit to customers                                                   | 2.24 | Seldom                    |
| Implements credit policy such credit terms                                    | 2.18 | Seldom                    |
| Implements account receivable collection policy                               | 2.20 | Seldom                    |
| Monitors receivables by maintaining individual records of customers           | 2.34 | Seldom                    |
| **Composite Mean**                                                            | 2.24 | Seldom                    |

Table 8 presents that the BMBEs seldom practice accounts receivable management, as indicated by the composite mean of 2.24. They seldom practice granting credit to customers (2.24), implementing credit policy such as credit terms (2.18), implementing accounts receivable collection policy (2.20), and monitoring of receivables by maintaining individual records of customers (2.34).

Table 9: Inventory Management Practices of BMBEs in Ilocos Norte

| Inventory Management Practices                                      | Mean | Descriptive Interpretation |
|---------------------------------------------------------------------|------|---------------------------|
| Returning spoiled goods to suppliers to minimize inventory shrinkage | 2.87 | Sometimes                 |
| CCTVs are in place to prevent theft                                 | 1.78 | Never                     |
| Prepares ending inventory reports and compares them with the physical count | 2.38 | Seldom                    |
| Applies different inventory management techniques to determine the desired level of inventory | 2.30 | Seldom                    |
| Observes the First-In, First-Out (FIFO) method                      | 3.01 | Sometimes                 |
| **Composite Mean**                                                  | 2.47 | Seldom                    |

As shown in Table 9, the BMBEs seldom practice inventory management, as indicated by the composite mean of 2.47. They sometimes practice returning spoiled goods to suppliers to minimize inventory shrinkage (2.87) and observing First In, First Out (FIFO) method (3.01). They seldom practice preparing inventory reports, comparing them with physical count (2.38), and applying different inventory management techniques to determine the desired inventory level (2.30). Also, they never practice placing CCTVs to prevent theft (1.78).

Problem 3. How sustainable are the BMBEs in terms of economic, social, and environmental?

Table 10: Economic Sustainability of BMBEs in Ilocos Norte

| Economic Sustainability                                      | Mean | Descriptive Interpretation |
|-------------------------------------------------------------|------|---------------------------|
| Increase in sales                                           | 2.69 | Moderate                  |
| Increase in profit                                          | 2.64 | Moderate                  |
| Increase in market share                                    | 2.36 | Low                       |
| Increase in return on investment (ROI)                       | 2.21 | Low                       |
| Increase in return on Assets (ROA)                          | 2.12 | Low                       |
| Increase in the number of employees                         | 1.46 | Very Low                  |
| A decrease in cost and expenses                             | 1.84 | Low                       |
| **Composite Mean**                                          | 2.19 | Low                       |

As can be gleaned in Table 10, BMBEs have low economic sustainability, as indicated by the composite mean of 2.19. They have moderate economic sustainability as to increase in sales (2.69) and increase in profit (2.64). However, they have low economic sustainability as to increase in market share (2.36), increase in return on investment (2.21), increase in return on assets (2.12), and decrease in cost and expenses (1.84). Also, they have very low economic sustainability as to the increase in the number of employees (1.46).
### Table 1: Social Sustainability of BMBEs in Ilocos Norte

| Social Sustainability                        | Mean | Descriptive Interpretation |
|---------------------------------------------|------|-----------------------------|
| Safety and health of employees              | 2.42 | Low                         |
| Labor relationship                          | 2.36 | Low                         |
| Training and education of the workforce     | 2.05 | Low                         |
| A decrease in rate of customer complaints    | 2.15 | Low                         |
| **Composite Mean**                          | **2.24** | Low                       |

As can be seen in Table 1, BMBEs have low social sustainability, as indicated by the composite mean of 2.24. They have low social sustainability as to safety and health of employees (2.42), labor relationship (2.36), training and education workforce (2.05), and a decrease in the rate of customer complaints (2.15).

### Table 12: Environmental Sustainability of BMBEs in Ilocos Norte

| Environmental Sustainability                | Mean | Descriptive Interpretation |
|--------------------------------------------|------|-----------------------------|
| Reduction in environmental wastage         | 2.42 | Low                         |
| Reduction in emission                      | 2.00 | Low                         |
| Reduction in material usage                | 1.97 | Low                         |
| Reduction in energy usage                  | 2.00 | Low                         |
| **Composite Mean**                         | **2.10** | Low                       |

The BMBEs have low environmental sustainability as indicated by the composite mean of 2.10. They have low environmental sustainability as to the reduction in environmental wastage (2.42), emission reduction (2.00), reduction in material usage (1.97), and reduction in energy usage (2.00).

Problem 4. Is there a relationship between the working capital management practices of BMBEs and their sustainability?

### Table 13: Correlations between Working Capital Management Practices and Sustainability

| Working Capital Management Practices      | Economic Sustainability | Social Sustainability | Environmental Sustainability |
|-------------------------------------------|-------------------------|-----------------------|------------------------------|
| Cash Management Practices                 | Pearson Correlation     | .171**                | .216**                       | .067                         |
|                                          | Sig. (2-tailed)         | .003                  | .000                         | .244                         |
|                                          | N                       | 301                   | 301                          | 301                          |
| Accounts Receivable Management Practices  | Pearson Correlation     | .346**                | .309**                       | .294**                       |
|                                          | Sig. (2-tailed)         | .000                  | .000                         | .000                         |
|                                          | N                       | 301                   | 301                          | 301                          |
| Inventory Management Practices            | Pearson Correlation     | .351**                | .295**                       | .171**                       |
|                                          | Sig. (2-tailed)         | .000                  | .000                         | .003                         |
|                                          | N                       | 301                   | 301                          | 301                          |

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

As indicated in the Pearson R correlation, there is a significant relationship between cash management practices and economic and social sustainability. Moreover, there is a significant relationship between accounts receivable management practices and economic, social, and environmental sustainability. Likewise, there is a significant relationship between inventory management practices and economic, social, and environmental sustainability. However, there is no significant relationship between cash management practices and environmental sustainability. Thus, Ho1, Ho2, Ho4, Ho5, Ho6, Ho7, Ho8 and Ho9 are rejected while Ho3 is accepted.
Conclusions

This study determined the profile, working capital management practices, and sustainability of BMBEs in Ilocos Norte. It also investigated the relationship between working capital management practices and the sustainability of BMBEs in Ilocos Norte. The findings show that most of the BMBEs belong to the wholesale and retail trade sector, are registered as single proprietorships, and have no employees. The BMBEs sometimes practice cash management and seldom practice accounts receivable and inventory management. Also, the results showed that the BMBEs have low economic, social, and environmental sustainability. Moreover, the study revealed that cash management practices have a significant relationship with economic and social sustainability. Accounts receivable and inventory management practices have a significant relationship with economic, social, and environmental sustainability. The results implied that working capital management practices are crucial in attaining economic, social, and environmental sustainability. Failing to give importance to these practices can result in low sustainability, eventually leading to bankruptcy.

The BMBEs' working capital management practices in terms of cash, accounts receivable, and inventory management are significantly related to economic, social, and environmental sustainability. This study conforms with Abimola and Kolawole (2017), which revealed that good working capital management practices have significance to SMEs' performance. Likewise, it supports the studies of Bandara and Rathnasari (2016), and Kovelskiy (2015) that working capital management (WCM) is vital and an integral part of financial management that affects profitability, liquidity, structural health, risk, and value creation. Thus, the BMBEs should give significance to the execution of these working capital management practices to attain a high level of economic, social, and environmental sustainability. This study could be a basis for government agencies to formulate programs that help microenterprises, especially those in the barangays, learn skills necessary for their business operations, particularly those related to working capital management.

This study has been subject to some limitations. First, this study focuses only on the working capital management of BMBEs in Ilocos Norte. Future research studies can consider other business practices, such as marketing practices. The study's findings may also apply only to other provinces with the same situation as Ilocos Norte.

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