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Working Capital Management of Cooperatives in Selected Municipalities in Benguet

Joe S. Pelchona[1], David Joseph L. Bognadon[2]

[1]Faculty, Secondary Education Department, Philippine School Bahrain,
[2]Faculty, College of Agriculture, Benguet State University

Abstract
The study aimed to examine working capital management practices among cooperatives, focusing on cash management, accounts receivable management, and inventory management. Additionally, it sought to assess the financial position and performance of these cooperatives through liquidity, solvency, and profitability metrics, and to explore the relationship between working capital management and financial outcomes. Respondents included managers from multi-purpose and consumer cooperatives in Bokod, La Trinidad, and Tublay in Benguet Province. Employing a descriptive-correlational design, the study analyzed how various working capital strategies influenced financial performance using multiple linear regression. Findings revealed that while cash management strategies—like holding cash for specific purposes and implementing cash controls—were strongly applied, inventory management controls were the least utilized. Notably, there was no significant positive relationship between overall working capital management and the cooperatives' financial position. However, positive correlations were found between cash management and accounts receivable management with the debt-to-equity ratio. Conversely, inventory management displayed an inverse relationship with this ratio. Additionally, all working capital strategies exhibited an inverse relationship with return on equity. Recommendations include investing idle cash to enhance profitability and adopting consignment strategies to minimize stockouts.

Keywords: Working Capital, Multipurpose Cooperatives, Financial Position, Financial Performance

1. INTRODUCTION

Working capital, composed of cash, inventories, trade receivables, and short–term investments, is a major component of a business to be operative. Poor management of working capital may lead cooperatives to a poor financial position and significant losses.

Cooperatives are created to serve the necessary basic needs of the members of a community to improve and uplift their living conditions. As indicated in the Philippine Cooperative Code of 2008 (R.A. 9520), the purposes for which cooperatives are created are savings, credit, consumer needs, goods, and services, developing skills, housing, and loan benefits, thus giving its registered type with the Cooperative Development Authority. These cooperatives strive to achieve social, economic, and cultural aspirations by making available products and services to the community.

One important management area is financial management which is concerned with decisions related to raising, allocating, and controlling a firm's funds (Bautista et al., 2013). Without it, the business will not be able to perform its operations and achieve its intended purpose which is to generate income. At times,

financial performance may not be meeting standards, or it may fall short of the targets. If such situations go undetected and corrective actions are not made, the existence of the business may be at stake. Therefore, Cooperatives are not excused from managing their finances and must be able to properly do this to meet the purposes for which they were created.

Working Capital is an important tool for growth and profitability for businesses, the management of it is an important management aspect (Chandra, 2011). Working capital is the amount of available capital that a business must meet the daily cash requirements of its operations. It is the difference between resources in cash or readily convertible into cash and organizational commitments for which cash will soon be required (International Institute of Management and Technology Studies, 2013). According to Garg (2015), if the levels of working capital are not enough, it could lead to shortages and problems with day-to-day operations. With such importance of working capital to the business, it is only proper that it be managed with utmost responsibility. It also involves the financing and sourcing of current assets of the firm, acts as a lubricant that keeps the business operations going. Sagner (2014) opined those businesses have not paid much attention to working capital but have instead focused on raising and using debt and capital investments and that good performance has been considered because of good working capital performance – a business aspect that managers have overlooked.

Working Capital Management

Working capital refers to a firm's assets and liabilities in their status, of which the assets were the focus of this research. Current assets include cash and all the assets that can be converted to cash within one year. These assets include marketable securities, accounts receivable, and inventory (Alhabeeb, 2015).

Good working capital management is when the value of current assets is maximized while being able to minimize the current liabilities in a manner that would optimize the firm's value. A firm must maximize its networking capital and increase its liquidity to reduce the risk of being technically insolvent or unable to pay its bills.

Working capital management is a very important component of business because it directly affects the liquidity, profitability, and growth of a business. Its importance to the financial health of businesses of all sizes matters to managers as the amounts invested in working capital is often high in proportion to the total assets employed (Atrill, 2010).

The elements in working capital can be changed to impact the level of profit and performance in general. Knowing the permanent and temporary needs would highlight how the firm uses its current liabilities to finance its current assets. When the working capital requirements are not properly managed and are allocated more than what is required, it renders the management inefficient while reducing the benefits of short-term investments. Additionally, if the working capital is too low, the company may miss a lot of profitable investment opportunities, suffer short-term liquidity crises or lead to the derail of company credit, as it cannot respond effectively to temporary capital requirements.

According to the IIMTS (2013), the conventional approach is one major method in analyzing working capital. The conventional approach implies managing the individual components of working capital, that is, the current asset accounts and current liabilities. Accounts receivable from customers may be emphasized for the reason that it is the largest component of the working capital, thus credit policies are made to be stricter. It may also happen that there are large amounts of inventories not being sold, so controls must be made on purchase. Sagner (2014) added that the conventional/traditional approach points out the importance of working capital as a positive component of the Financial Statements. Lenders will view the working capital as an easy way of looking into the repaying capacity of a firm,

thus Accounts Payables are to be managed to meet the goal of increasing one's credit ratings. In addition, this approach to working capital management pinpoints specific accounts rather than taking into consideration the effects of other accounts on one another. This research tested the Cooperative's Cash and Short-term Investment Management, Accounts Receivable Management, and Inventory Management, by individually assessing the application of strategies that are applied by cooperatives in their operations and management.

Cash Management

Cash management is the process of planning and controlling cash flows into and out of the business, cash flow movements within the business, and cash balances at a point in time. The ability to manage cash and cash equivalents is an important element that differentiates a successful business from an unsuccessful business. Cash is the basic input required to keep the business running on a continuous basis and it is also the ultimate output expected to be realized by providing services or by selling products manufactured by a firm.

Accounts Receivable Management

Management of accounts receivable reflects the firm's ability and willingness to extend credit to its customers. This represents the debt owed to the firm due to selling its goods and services on a credit basis, and how long it would take the firm to collect the revenue of the sold product. While selling on credit makes it much easier for the firm to increase its sales and build a wider customer base, it would also mean putting a burden on a firm to make sure it can collect the due amounts out of that sale. The IIMTS (2013) added that proper management of receivables would reduce days receivables are outstanding and also reduce the possibilities of bad debts, and also improves liquidity and cash flow. Bad debts are an expense for the firm, which would reduce profitability.

Inventory Management

The objective of inventory management is to maximize profit while meeting customer needs and keeping inventory costs at a reasonable level (Mercado, 2007). Inventory is a significant and expensive part of the total current assets especially among manufacturing and merchandising industries where its value can reach more than half of total current assets. Alhabeeb (2015) noted that to avoid any stockouts and backorders, inventory level needs to be enough to smoothly satisfy market demand. This, in turn, will avoid any potential dissatisfaction by consumers who will switch to different suppliers. While keeping enough inventory levels, managers should also consider the minimal cost of inventories stocked up to free up available resources which can be used for other investments to earn more income. Burja and Burja (2011) in their study on inventory management opined that mobilization of available resources and effort to reduce inventory show improvement in financial stability and increased financial performance. Lai and Cheng (2016) added that aside from increased profits as a result of a reduction in inventory costs, operational efficiency is also benefit firms can have in applying proper inventory management. This is due to the decrease in the statement of financial position balance, while, at the same time, increasing the amounts in the statement of financial performance.

Financial Position

Financial position is a company's ability to continue its operations with the availability of resources to paying its obligations. Financial position is embodied in a firm's Balance Sheet. Comparisons between the assets, liabilities, and equity components are procedures in determining financial position.

Financial Performance

Measured through profitability, finance performance is the profit earning capacity of a firm (Banerjee,

2015). A study conducted among Philippine Firms indicated that the firm's working capital management policy had a positive impact on the profit ratio and Return on Equity (ROE) (Magpayo, 2011). Return on Equity (ROE) is computed as the ratio of net income to average equity (ROE=NI/E). While there is no real benchmark as to how much PR and ROE is acceptable, it must retain a positive figure to consider concluding profitability.

2. Methodology

Research Design. This study used a descriptive correlational approach to research. The descriptive correlational study describes relationships among variables, without seeking to establish a causal connection. A descriptive quantitative approach was used to measure the working capital management strategies. Descriptive quantitative research is a method that attempts to collect quantifiable information to be used for statistical analysis of the population sample. The quantitative data covered the statistical measurements used in analyzing the relationship between the identified factors.

Sampling and Participants of the Study. This study was conducted among listed cooperatives in selected municipalities in Benguet. The municipalities subjected to the study were La Trinidad, Tublay, and Bokod. The study was delimited to cooperatives which are pure consumer cooperatives and multipurpose cooperatives operating a retail store and submits Audited Financial Statements to the Cooperative Development Authority. Purposive and non-probability sampling through convenience sampling was used. Therefore, 11 cooperatives located in various areas of Bokod, La Trinidad, and Tublay, Benguet were considered as respondents of this study.

Data collection techniques and procedures. A survey questionnaire was constructed as a data-gathering instrument to draw answers to the problems. The questionnaire consists of items relating to management policies and strategies on cash and short-term investments, accounts receivable, and inventory management. The manager or a cooperative official with related managerial functions was interviewed and asked to answer the survey questionnaire.

Secondary data in the form of Financial Statements submitted by the cooperatives to the Cooperative Development Authority were used to support and interpret the survey results gathered from the questionnaire. Financial statements consisted of Statement of Financial Position, Income Statement, and Cash Flow Statement. This data will provide evidence on the financial position and financial performance of the cooperatives.

Analysis of the Data. The relationship between Working Capital Management strategies and Financial Position and Performance of the cooperatives was investigated in terms of the mean financial position and performance of the cooperative for the latest comparative financial statements, namely, the 2017 and 2018 financial statements. The relationship between the application of working capital management and the financial status of a cooperative were subjected to statistical measures.

Multiple linear regression analysis was used to determine the correlation between specific working capital management and financial status. The enter method was used to analyze the combination of all independent variables to test the predictive significance of combined managerial policies to the cooperative's financial status. Pearson product-moment correlation (Pearson's r) was also used to determine the significance of the correlation between the variables.

The financial position and status of the cooperative were assessed through its liquidity, leverage, and profitability ratios. This study was delimited to the assessment of liquidity using the current ratio. Leverage was determined using the debt-to-equity ratio while profitability was computed using profit

ratio and return on equity.

3. Results and Discussion

Table 1 shows the application of cooperatives of working capital management in the aspect of cash and short-term investments management. Strategies A and F are strongly applied strategies, which means that cooperatives cash for transaction, compensatory and precautionary purposes. Cooperatives keep cash for the continuity of their day-to-day operations in the normal buy-and-sell transactions of the business. Also, cash is held by the respondents in the banks to safely keep their monetary resources; and to have a standby resource for bargain purchases that need immediate cash. This is about the works of Alhabeeb (2015) and Bautista et al. (2013) citing that cash is held by cooperatives for transaction, compensatory, implying that speculation is not the concern of cooperatives in Benguet.

Table 1. Cash Management Strategies

STRATEGIES	MEAN	INTERPRETATION
a. Holding Cash for a Purpose	4.40	Strongly Applied
b. Preparing Cash Budget	3.90	Applied
c. Depositing Cash Immediately	4.13	Applied
d. Delaying Payments	4.08	Applied
e. Investing Idle Cash	3.43	Applied
f. Other Cash Control Procedures	4.22	Strongly Applied
Mean	4.03	Applied

Holding cash for transactions is mainly from the perspective of meeting the daily trading needs of the cooperative especially that they are multi-purpose operating a retail store. In the daily production and operation process, cooperatives will involve the purchase of raw materials, equipment, or pay wages, all of which require monetary funds (Ye, 2018), and to some extent, an immediate source of cash is needed. In relation to the study of Arango et al. (2016), cash is still the main payment instrument used to pay for low-value transactions which are most evident in multi-purpose cooperatives. In addition to this, the cooperatives indicated that cash left in the vaults/registers will be used as “panukli” for the next operating day. For this reason, cash left in the registers of selected cooperatives ranges from Php 1,000.00 to Php 4,000.00 in the form of loose bills and coins. Accordingly, the respondents already consider their cash held for transaction purposes as their petty cash fund. Petty cash funds are small amounts of funds that stay in the stores for daily purposes.

Asio (2019) concluded in his research amongst multi-purpose cooperatives in Occidental Mindoro that cash, together with inventories, must be kept in proper custody. Keeping cash in banks with compensatory balances answers for the assurance of sources for funds when badly needed. Keeping compensating balance acts as a buffer needed for precautionary measures for cash management. In addition, Salas-Molina et al. (2015) balances should be maintained if the company holds cash in the forms of short-term investments such as bank deposit accounts or treasury bills, the former being common for multipurpose cooperatives in the selected municipalities of Benguet.

Holding cash is required as a financial reserve in case it is needed for unexpected expenditures. As though cash management was concerned with cash supply optimization within a given cash allocation scheme (Ágoston et al., 2016), variances are still common, a reason to hold cash for emergency

expenses.

Preparing bank reconciliation statements is a control measure to ensure that cash transactions are properly recorded and accounted for (Cornett et al., 2019). Bank reconciliation shows the flow of cash from and to the bank and the books of the cooperatives. Segregation of duties, together with bank reconciliation, is another cash management strategy with an emphasis on control measures. To avoid fraud and mishandling of cash, the functions of collecting and disbursing funds should be separate persons. Cash, being the most exploited resource for fraudulent acts, must be handled with utmost control. Verification of transactions made by separate people is easier while also increasing the responsibilities for the resource and would be easier to verify from the collecting officer and the disbursing officers.

Table 2 shows the working capital management strategies applied by cooperatives in the aspect of accounts receivable management. Based on Table 2, out of three strategies, only one strategy is being strongly applied which strategy (c) evaluating credit (4.21). This implies that of the 5 Cs of credit (character, capacity, capital, collateral, and conditions), the cooperative's strategy focuses more on evaluating the customer's capacity. A customer's capacity is determined by taking into account the financial status of the cooperative member, the living conditions, the job, and the income. Usually, the members of cooperatives are closely situated to the cooperatives' address where it is easy for the managers to determine if the prospect debtor can indeed pay or not.

Table 2. Accounts Receivable Management

STRATEGIES	MEAN	INTERPRETATION
a. Controlling Credit	4.04	Strongly Applied
b. Applying Credit Policies	3.81	Applied
c. Evaluating Credit	4.21	Applied
Mean	4.02	Applied

Based on the survey of rural microfinance companies conducted by Xia et al. (2011) and Song et al. (2017), it was found that managing credit is best achieved when there is a thorough credit investigation. This credit investigation is best conducted by examining the capacity to pay off the prospective borrower of the firms. The findings are also supported by Kamble and Rawal (2019) where they concluded that credit management is important in both rural and urban cooperative banks.

Additionally, local research conducted among cooperatives in the Province of Bohol by Aradanas et al. (2018) revealed that cooperatives consider the past due accounts of the borrowers to be able to pinpoint the degree of how much can be the extent of the amount that should be lent, this means that more past due accounts mean the lesser capacity to pay due to accumulation of debts in the cooperatives. Bad debts with higher age are indicative of a debtor not able to pay in due time because of financial problems. Supporting research from Xi (2018) has concluded that an aging analysis for accounts receivable reduces financial risks as a result of putting extra care on overdue debts to avoid excessive bad debts. Additionally, excessive provision of bad debts by enterprises will weaken the profitability of enterprises and is not conducive to the economic development of enterprises. Moreover, Liheng (2018) recommends improving the credit evaluation system for rural credit cooperatives due to its weak credit/accounts receivable management strategies.

It should be noted that the majority of multi-purpose cooperatives in Benguet cater to small household

farmers. These categories of customers are usually highly inclined to short-term credit borrowings for their short-term farming works. Farmers in Benguet usually plant crops and vegetables that are harvested within a year. With this, farmers need "human" for short-term purposes prompting them to borrow from cooperatives. Due to fluctuations in prices of vegetables, farmers can have extremely high profits which they call "chamba", but in worst cases, farmers may incur significant losses. These highs-and-lows of Benguet farmers necessitate creditors to emphasize the borrower's capacity to pay (Onyango, 2016). In conjunction with the results, Ahabyoona and Lubega (2018) also identified decisions that should be made in lending, which include decisions to accept or reject a received application, financial position made, compliance to duration and due payments, the status of the collateral security made and communicating with debtors. Gichuhi and Omagwa (2020) support this in their findings among credit cooperatives suggesting that cooperative managers should consider enforcing the strict application of credit evaluation with emphasis on clients who have the capacity and willingness to repay the borrowed funds.

Table 3 shows the working capital management strategies of cooperatives as applied in their inventory management. Based on Table 3, two inventory management strategies are applied, namely: reducing inventory, and implementing purchase controls. These strategies imply that since the respondents are consumer cooperatives, high inventory levels are minimized, thereby maintaining sufficient inventories only.

Table 3. Inventory Management

STRATEGIES	MEAN	INTERPRETATION
a. Reducing Inventory	3.68	Applied
b. Implementing Purchase Controls	3.90	Applied
c. Other Inventory Controls	3.37	Moderately Applied
Mean	3.65	Applied

The findings of Chen et al. (2014) on inventory controls reveal that the first-in-first-out (FIFO) rule in issuing inventories is the most cost-efficient way of selling inventories. However, the FIFO method may not always be optimal if inventory cannot be disposed of immediately as in the case of luxurious items. He added that the FIFO method is most applicable to organizations that have full control of inventory units used to meet the demand, such as cooperatives. Additionally, this inventory system is treated differently for perishables and non-perishables, the former being the main products of cooperatives (Ching & Wu, 2019). The latter's findings are in contrast to the abovementioned work of Chen et al. which emphasizes last-in-first-out being more superior for perishable items. Furthermore, FIFO is not recommended because of fluctuations in rates that may increase holding costs, and in turn, reduce profitability.

However, in contrast to Ching and Wu (2019), Manohar and Aappaiah (2017) advocate the FIFO inventory system which can reduce labor expense as a result of lesser packers for the inventory. This, however, does not necessarily apply to larger-sized businesses, which is a limitation of this study. Asio (2019) added that procurement of goods is critical in determining the inventory system showing a critical influence on the firm's success and performance.

The least applied strategy of cooperatives are other inventory controls such as spending on insurance for inventories, owning other stock rooms, and holding items on consignment Insurance of inventories are

taken usually for high-end products, which are not the focus of Benguet cooperatives. Essential foods, which are the focus of cooperatives in rural areas, are not high-end goods. This is also an implication that cooperatives sell goods that they purchase from retailers and not goods that are held on consignment. This is indicative of one problem faced by cooperatives which are having stockouts, whereas modern financial management aims at reducing the level of current assets without ignoring the risk of stockouts (Kennedy, 2014).

The results of this study are in contrast with this managerial aim because cooperatives in Benguet experience stockouts. It should be noted that while inventory holding is desirable because it meets several objectives on sales, and excessive inventories are undesirable because it entails expenses in terms of storage costs, opportunity costs, theft, and perishability, incurring stockouts is also undesirable due to lost opportunity to have more sales. Studies have also concluded that holding the right amounts of inventories to not experience stockouts may increase the performance of an organization (Kimaiyo, 2014). Also, many activities depend on having the correct amounts of inventories held for sale, but the definition of the term "reasonable level" varies depending on who defines it (Wild, 2017).

In agreement with the results of this study, Ciemcioch (2019) stated that minimizing consignment inventories reduces the costs due to "additional inventory control and accounting, supply chain complexity, and potential loss or damage". Consignment inventories are goods sold by the cooperatives on behalf of another firm or individual for a fee (Vrbová, 2019).

In support of Wild (2017), Zahran and Jaber (2017) advocated accepting consignment stocks to reduce inventory costs, and in turn, improve profitability. Additionally, the primary benefit of the consignment is that the consignee (i.e., the cooperative) saves money on inventory costs and invests no money for purchasing the goods to be sold. Also, suppliers generally prefer a wholesale contract while the retailer will prefer consignment (Sarker, 2014).

Table 4 shows the measures for financial position and performance of the cooperatives in terms of their liquidity, solvency, and profitability. Liquidity is measured through current, solvency through debt-to-equity ratio and profitability ratios through return on equity.

Table 4. Financial Position and Performance of Cooperatives

Respondent	Current Ratio	Debt-To-Equity	Return On Equity
1	5.46:1	0.08:1	25.63
2	1.65:1	0.49:1	34.74
3	6.24:1	0.04:1	12.31
4	1.21:1	1.08:1	13.17
5	1.10:1	0.98:1	20.69
6	3.71:1	0.06:1	21.73
7	1.37:1	0.35:1	8.57
8	3.03:1	0.01:1	2.94
9	8.21:1	0.11:1	6.84
10	8.70:1	0.04:1	13.62
11	10.40:1	0.06:1	11.74
Mean	4.64:1	0.28:1	15.63:1

Liquidity. The average current ratio of the cooperatives in Benguet is 4.64:1 This means that cooperativ

-es in Benguet have 4.64 pesos of current assets for every one peso of liability. This ratio is within the rule of thumb for liquidity ratios, implying that the cooperatives are very liquid. The rule of thumb for current ratios is 2:1 or higher (Banerjee, 2015 and Bautista et al., 2013).

Solvency. The financial leverage or financial solvency conveys a cooperative's ability to meet its long-term obligations. Financial leverage is best measured using the debt-to-equity (DTE) ratio. Similarly, this ratio is the best measure to test the soundness of the long-term financial position of the cooperatives. A DTE ratio of 0.50:1 or lower is deemed most acceptable (Banerjee, 2015 and Bautista et al., 2013). This means that to consider a cooperative solvent, for every peso of owner's investments, 0.50 pesos should only be borrowed from outside creditors. The DTE ratio of cooperatives in Benguet is 0.28:1 which implies that the cooperatives are solvent. This indicates that for every capital investment of cooperative members, only 0.28 is financed from outside creditors.

Profitability. Profitability ratios are used to test the ability of the cooperative to earn income for the benefit of the members. The standard for profitability depends on the goals of the firm but the most acceptable is having positive ratios for ROE (Cornett et al., 2019, Banerjee, 2015 and Bautista et al., 2013). Cooperatives in Benguet have positive figures for financial performance with ROE at 15.63%. With this result, cooperatives in Benguet are deemed to be profitable. Profitability also indicates that the management of the cooperative's resources is effective and that all resources are efficiently used. In comparison to cooperatives in Cavite having 13% ROE (Rapisura, 2017).

Table 5 shows that there is no significant relationship existing between working capital management and the financial position and performance of the cooperatives as all p-values are greater than 0.05. However, it is remarkably noted that there exists a positive relationship in cash and short-term investments management (r = 0.22) and accounts receivable management (r = 0.31) to the debt-to-equity ratio which is in contrast with the inverse relationship existing between inventory management and debt-to-equity ratio (r = -0.53). In the discussion in Table 2, the debt-to-equity ratio is most favorable when lower. This means that when cash and short-term investment management and accounts receivable management are applied, insolvency will be encountered by cooperatives. The debt-to-equity ratio increases thereby indicating unfavorable effects of applying cash and short-term investments and accounts receivable management to solvency. However, the debt-to-equity ratio decreases when inventory management is applied, implying a favorable effect on solvency. Also, the debt-to-equity ratio decreases when inventory management is applied, implying a favorable effect on solvency.

Table 5. Relationship between working capital management and financial position and performance

Management Strategies	Financial Position				Financial Performance	
	Current Ratio		Debt-to Equity		Return on Equity	
	r	p	r	p	r	P
Cash	0.14	0.65	0.22	0.47	-0.11	0.73
Accents Receivable	0.27	0.37	0.31	0.3	-0.25	0.41
Inventory	0.12	0.7	-0.53	0.06	-0.4	0.17
Overall	0.25	0.42	0.06	0.85	-0.25	0.41

Also, all working capital management strategies exhibit a positive correlation to both liquidity measures of current ratio (r = 0.25. This is indicative of the nature of working capital components being part of

current portions of financial position, thereby addressing a cooperative's liquidity. The proper management of current assets (cash, short-term investments, and inventories) increases the liquidity of any business firm.

The current ratio is the best and most common measure for liquidity. It shows the capacity of a business to pay its currently maturing obligations and its capacity to continue delivering services to the customers. According to Pakdel and Ashrafi (2019), working capital management is best measured by looking at the different business cycles, particularly the overall cash conversion cycle. This is also in agreement with the works of Sabki et al. (2019) on SMEs in Malaysia wherein the application of working capital management decreased the firm's cash conversion cycle; hence, a favorable output.

The DTE ratio is a measure of financial leverage and financial sustainability of cooperatives in the long run. In the discussion on cash management strategies, cash holding strategies were the strongest applied strategy of the cooperatives. A study conducted by Huang-Meier et al. (2016) revealed that if firms have great hedge needs for future investment, they will prefer holding more cash than lowering leverage, leading to a positive relation between leverage and cash holdings, which is in agreement with the positive correlation between cash management strategies and debt-to-equity ratio. It should be noted that increasing the DTE ratio is unfavorable to a cooperative, thus the strategies of the cooperatives in holding too much cash have bloated their current assets, which is indicative of lower solvency. In contrast to the strategies of Benguet cooperatives, Bambang (2018) concluded that dividend-paying firms like cooperatives should reduce cash holdings to reduce leverage, implying that increasing cash holdings will also increase the unfavorable debt-to-equity ratio. In addition, and relation to inventory management having a negative relationship to debt-to-equity ratio, other companies tend to have excessive and inefficient investments which, in turn, would negatively affect the financial position; however, it has positive effects on company performance (Xinyuan et al., 2017 and Chunhua & Xingquan, 2012) (see next discussion on return on equity).

On the inverse relationship of inventory management to DTE ratio, studies on cooperatives in Thailand revealed that 25% of respondents were not financially stable or have poor financial status due to implementation of inventory management such as increasing the pace of selling inventories (Kromkratoke & Suwanmaneepong, 2018). The results of this study reveal a favorable relationship between inventory management and DTER. When managing inventories properly, which is the ultimate source of profits for a cooperative, the cooperative will have better operations, thus increasing solvency as well. Additionally, and in agreement with the results of this research, the high cost of goods sold, which implies low holdings of inventory, has decreased leverage in a case study on debts of cooperatives (Srinivasan, 2011). In contrast, the study of Lopez (2019) on travel agencies revealed that there is no significant relationship between management strategies and leverage. He also suggested that these agencies adopt financial planning, tracking of all expenses, formulate adequate and effective financial objectives, policies, procedures, and budgets. Cooperatives have managers, and these managers design the objectives and plan to take on for a fiscal year. It is crucial, however, that they should adopt a good financial management system to aid profitability and efficiency.

Also, all working capital management strategies, namely, cash and short investments ($r = -0.11$), accounts receivable management ($r = -0.25$) and inventory management ($r = -0.40$) exhibit an inverse relationship on return on equity ratio. These imply that an increase in the application of these strategies tends to decrease the value of the return on equity ratio. Application of the cash management on holdings tends to lessen additional profits to be derived from investments. Lenient approval of credits

can also decrease the revenues of business because of lesser openness to credit.

In addition to cash management strategies having a negative relationship to return on equity, holding cash implies lowering the cost of liabilities thereby increasing the equity. Ultimately, cash being held for various reasons makes it stagnant, which means it is not efficiently used in the business. Assets should be used efficiently by putting them to work in all aspects of the business including investment. Accordingly, having constant profits while increasing equity ultimately results in a lower return on equity (Limanta & Malelak, 2015).

Consistent with the findings of negative relationships of working capital management strategies to return on equity is the study of Rebelo et al. (2017) on olive oil cooperatives. Their study concluded that high net working capital results in reduced profitability, thereby reducing the return on equity as well. Cooperatives in Benguet have high liquidity ratios; this is an implication of high working capital as seen in Table 2 and its discussions on financial position.

Contributory factors that increased working capital were evident in the application of cash management strategies of holding cash and not opening the chances for investing idle cash increases risk while losing the chance to earn additional income, thereby causing a decrease in return on equity.

In contrast to the findings of this research, a study on the impact of financial performance of savings and credit cooperatives (Kaberia, 2015) showed that higher capital requirements, together with an increase in management efficiency, have a positive relationship to the firms' financial performance. Also, according to Paul (2015), cash management strategies are strongly interlinked to profit-making. Studies on manufacturing firms have also concluded positive relationships between working capital management and financial performance (Kennedy, 2014). Working capital management does not affect the return on equity but accounts receivable management does (Yamin & Pratiwi, 2020). While working capital management focuses on the right balance of current assets and current liabilities, it also impacts profitability by showing business efficiency in utilizing its resources.

4. Conclusions and Recommendations

1. All working capital management strategies in the aspect of cash management, accounts receivable management, and inventory management is applied by cooperatives. Cooperatives hold cash for various purposes, are strict in approving and collecting receivables, and do not accept consignment inventories.
2. The financial position and performance of the cooperatives reflected in terms of their liquidity, solvency, and profitability are favorable. For financial position, cooperatives are liquid with a current ratio of 4.64:1 which is above the benchmark of 2:1. Also, cooperatives are solvent with a debt-to-equity ratio of 0.28:1 which is above the standard of 0.50:1. Lastly, on financial performance, the cooperatives are profitable with an ROE of 15.63%, which meets the standard of positive financial performance ratios.
3. There is no significant direct or positive relationship between working capital management and financial position and the performance of cooperatives. However, precaution should be made on holding too much cash, having liberal credit policies, and holding too many inventories since doing so would reduce profitability.

Based on the conclusions, the following are recommended:

1. Allow consignment of inventories to lessen the need for holding inventories and to reduce the

experience of stockouts and have additional profits from additional sales.

2. It is strongly recommended that future similar studies consider increasing the number of respondents and the study area, type, and size of cooperatives and compare the application of working capital management strategies and their effect on financial performance and position. The recommended types to include in further studies are credit and savings, transport, and agriculture cooperatives. Cooperative classification as to size whether large, small, medium, or micro should be considered as well.

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