



INTERNAL CONTROL PROCEDURES OF SELECTED MULTI – PURPOSE COOPERATIVES IN OCCIDENTAL MINDORO: BASIS FOR IMPROVEMENT IN THE OPERATIONAL EFFICIENCY OF COOPERATIVES

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ABSTRACT

Multi-purpose cooperatives play an important role as the most effective tool for economic development. It has enormous advantages as compared to other cooperatives like the purpose of augmenting the living standard of the members; risk-sharing among members; maximizing profit in a minimum cost; building unity among people, and providing education for the members' development. Internal control procedures in this type of cooperative are crucial. The need of sound internal control is necessary in view of the growing complexity and the huge volume of transactions. Effective internal control is vital in order to maintain the integrity and reliability of reports generated by several transactions and independent activities. The study focused on investigating the internal control procedures of selected multi-purpose cooperatives in Occidental Mindoro in order to serve as a basis to improve its operational efficiency. Specifically, internal controls such as control environment, control activities, risk assessment, information and communication and monitoring were assessed by the respondents to determine the extent of implementation of these internal controls. Furthermore, the level of operational efficiency was also evaluated using the secondary data which is the audited financial statements of selected multi – purpose cooperatives.

The research utilized both descriptive and inferential statistics as it test the significant differences among the internal controls variables and its influences on the operational efficiency of cooperatives. The findings of the study revealed that there were very significant differences among the internal control procedures. Also, there was a significant influence of internal control procedures on the operational efficiency of selected multi – purpose cooperatives. It is recommended that officers and management of cooperatives should maintain effective internal control strategies to ensure operational efficiency. Also, the cooperatives together with the Cooperative development Authority should come up with clear policies on internal control procedures.

Keywords: Internal Control Procedures, Operational Efficiency, Multi – Purpose Cooperatives

INTRODUCTION

Cooperatives can be considered as imperative tools in the creation of social capital and extending access to services for in the period of predicament, it sustains employment creation (Smith & Rothbaum, 2013). Cooperatives are organizations which are democratic in nature and service-oriented with the principle of all for one and one for all.

Multi-purpose cooperatives play an important role as the most effective tool for economic development. They have enormous advantages as compared to other cooperatives like the purpose of augmenting the living standard of the members; risk-sharing of members; the ability to maximize profit in a minimum cost; building unity among people, and providing education for the members' development. Internal control, on the other hand, is vital in multi-purpose cooperative operations in view of the growing complexity and the huge volume of transactions. The effective internal control is essential in order to maintain the integrity and reliability of reports generated by several transactions and independent activities.

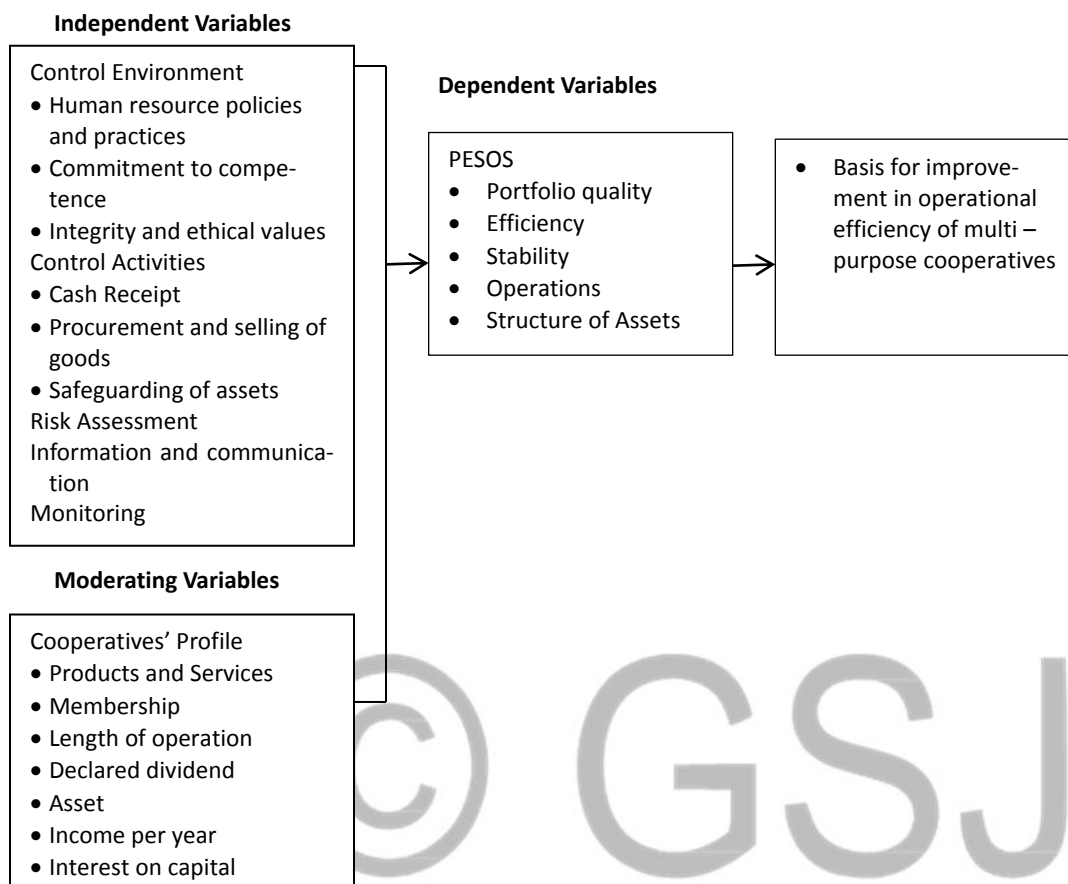
As defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which was formed in 1985 in response to instances of fraudulent financial reporting, internal control is as "a process effected by an entity's Boards of Directors, management, and other personnel designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting, and compliance with laws and regulations." Without or absence of these variables frequently lead to organizational failure. Internal control is a major part of managing an entity (Arad, 2010). The study conducted by Lakis and Giriunas (2012), present a generalizing and comprehensive internal control description. According to them, internal control system is a part of an organization's management that make sure the organization's goal, observance of accounting principles, and effective economic commercial performance, are being implemented. An effective control of work risks should also be implemented by an organization that ensures the number of intentional and unintentional faults will be minimized and frauds in the process of organization performance made by its employees and authority will be avoided. Another study was conducted that aimed to present the theoretical perspective and practices through pertinent literature review on internal control systems. The results revealed that the internal control systems, which are properly developed and effectively implemented help the organization to have a smooth operation and to prevent and protect against wastage of its resources (Abbas & Iqbal, 2012).

In a general sense, internal control is a process effected by an organization's structure, work and authority flows, people and management information system, designed to help the organization accomplish specific goals or objective. It is a means by which an organization's resources are directed, monitored, and measured. It plays an important role in preventing and detecting fraud, and protecting the organization's resources. One of the main objectives of internal control is the effectiveness and efficiency of operation. These pertain to the effective and efficient use of the entity's resources, effectiveness, and efficiency of operations including performance and profitability goals (Ng, 2012). An empirical study on the impact of internal control system in co-operative banks in India was investigated by Babel & Heda (2017). They found out that the control environment, control activities, and monitoring is significantly related to cooperative banks' performance. The study on the internal control systems and its relationship to financial performance in Medical Sciences University of Golestan revealed that there is a positive and significant relationship between internal control system and financial performance from the views of University financial employees. Also, there was a relationship between internal control dimensions such as control environment, control activities and internal audit and financial performance (Kiumars, et al, 2016).

The performance of cooperative societies in Delta State concentrating on the internal control system degree of adoption and application was evaluated by Umehali, E.E & et. al (2016). Their study revealed that physical control, arithmetic, accounting and financial authorization are internal control systems, majority being used by cooperatives and these have significant influence on performance. These related studies emphasize that the internal control procedures are very significant in a certain organization or entity. There will be no improvement and growth in a certain entity if there is no sound and effective internal control procedure. Effectiveness in internal control procedures can lead to accurate internal management reports and eventually resulting to greater operational efficiency and decision making.

The scanty evidence of researches from the past to the most recent on the internal control procedures and its influence on operational efficiency in terms Portfolio quality, Efficiency, Stability, Operations and Structure of Assets or PESOS of multi – purpose cooperatives have motivated the researcher to conduct this current research. Usually researchers never used in their researches the PESOS as indicators of operational efficiency of cooperatives be it in the Philippines or other countries.

Conceptual Framework



This conceptual framework presents and illustrates the direction of research towards improving the operational efficiency of multi-purpose cooperatives. Several variables were presented to the respondents and were customized based on its relevance to the members of the Board, management and staff of selected multi-purpose cooperatives. They are going to assess the extent of implementation of their cooperative internal control procedures in terms of control environment, control activities, risk assessment, information and communication, and monitoring. These are the independent variables of this study. The moderating variables are the cooperative's profile in terms of products and services, membership, length of operation, declared dividend, asset, income per year, and interest on capital. The Portfolio quality, Efficiency, Stability, Operations and Structure of Assets or PESOS were also evaluated. These variables were utilized to come up with the most influential internal controls to affect operational efficiency that can be prioritized by the cooperatives.

Statement of the Problem

This study was conducted to investigate the internal control procedures of selected multi-purpose cooperatives in Occidental Mindoro in order to serve as a basis to improve its operational efficiency. Specifically, the study sought to answer the following questions:

1. What is the profile of the selected multi-purpose cooperatives in terms of:
 - 1.1 Products and Services
 - 1.2 Membership
 - 1.3 Length of Operation
 - 1.4 Declared Dividend
 - 1.5 Asset
 - 1.6 Income per year
 - 1.7 Interest on capital?
2. To what extent do these cooperatives implement the internal control procedures in terms of:
 - 2.1 Control Environment
 - 2.2 Control Activities
 - 2.3 Risk Assessment

- 2.4 Information and Communication
- 2.5 Monitoring?
3. What is the level of operational efficiency of these cooperatives in terms of :
 - 3.1 Portfolio quality
 - 3.2 Efficiency
 - 3.3 Stability
 - 3.4 Operations
 - 3.5 Structure of assets?
4. Is there a significant difference in the internal control procedures of selected multi – purpose cooperatives when grouped according to asset size classification?
5. Is there a significant influence of internal control procedures on the operational efficiency of selected multi – purpose cooperatives?
6. What internal control procedures of selected multi – purpose cooperatives most influential to affect operational efficiency that can be prioritized by cooperatives?

METHODS

The research design is descriptive in nature. It describes the “what is” of the study and the most appropriate method using questionnaires for the identified respondents to gather relevant data needed in the completion of the study. The study sought to identify the influence of the internal control procedures on a cooperative’s operational efficiency. A survey, using questionnaire, was administered to respondents to gather data about internal control procedures of selected multi-purpose cooperatives. Analysis of variance (ANOVA) was used to determine the significant difference in the internal control procedures of selected multi – purpose cooperatives. Pearson *r* correlation coefficient and linear regression were used to determine the influence of internal control procedures on the operational efficiency of selected multi-purpose cooperatives.

Purposive sampling technique was used in selecting multi – purpose cooperatives. In order to evaluate the PESOS, only cooperatives with credit services were chosen in the study. Therefore, out of 55 existing multi – purpose cooperative in the province, the study only reached 16 multi – purpose cooperative. Moreover, secondary data which is the Audited Financial Statements was utilized to evaluate the cooperatives’ operational efficiency in terms of PESOS.

RESULTS AND DISCUSSION

1. Profile of Selected Multi – Purpose Cooperatives

1.1. Cooperative Products and Services

Activities	f	%
Agri Services (trucking, harvester)	1	6.25
Canteen/Catering	3	18.75
Consumer store	6	37.50
Corn shelling	1	6.25
Credit and savings	1	6.25
Dryer operation	1	6.25
Farm inputs	2	12.5
Flatbed drying	1	6.25
Food processing	1	6.25
Gasoline station	2	12.50
Grains and facilities	1	6.25
Grains trading	2	12.50
Gravel & sand	2	12.5
Hardware	1	6.25
Hollow blocks making	1	6.25
Hotel	1	6.25
Input trading	4	25
Lending	16	100
Machinery services	1	6.25
Microfinancing	1	6.25
NFA palay procurement	1	6.25
Organic fertilizer production/Making	2	12.5
Harvester rental	3	18.75
Palay selling & space rental	1	6.25
Palay & corn trading	3	18.75

Pharmacy	1	6.25
Post-harvest operation	3	18.75
Rice importation	1	6.25
Rice milling	1	6.25
Solar dryer	1	6.25
Tarpaulin printing	1	6.25
Trucking services	1	6.25
Warehousing	1	6.25
Water refilling station	3	18.75
Wholesale & retailing of rice	1	6.25

It can be inferred that majority of multi – purpose cooperatives products and services was lending. Providing financial relief for their members in the best possible conditions is one of the cooperatives objectives so that lending is another way to help them improve their quality of life.

1.2. Cooperative Membership

(N=16)	f	%
Number of Members		
100 and below	4	25.00
101 – 300	7	43.75
301 – 500	2	12.50
501-700	1	6.25
701-900	1	6.25
901 and above	1	6.25
Total	16	100.00
Types of Members		
Farmers	13	81.25
Farmers & Vendors	1	6.25
Teachers	1	6.25
Teachers and Non - teaching	1	6.25
Total	16	100.00

This result is a good indicator that most of the cooperatives surpass the minimum number of 15 members mandated by the Cooperative Development Authority. This implies that majority of cooperatives strive to maintain and increase the number of their members. Abdulahi and Ifeoma (2011) statement on the effect of members’ participation on cooperative is very relevant to its effective performance and survival.

Moreover, Most of the cooperatives’ members are farmers. This indicates that multi – purpose cooperatives were focused on helping and uplifting the living conditions of farmers in the province because they provide our primary need which is food for our daily living. Agriculture boosts the economy of Occidental Mindoro the most prevalent is rice farming which makes the province the highest palay producer in Region IV-A and IV-B (DTI, n.d). Therefore, cooperatives play an important role in augmenting the life of farmers in order to increase their production for the province and country as a whole.

1.3. Cooperative Length of Operation, Dividend, Asset, Income per Year and Interest on Capital

	Length of Operation	Declared Dividend 2017	Asset	Income Per Year	Interest on Capital
Small					
Mean	26.83	98,972.45	6,517,962.60	639,270.38	87,391.82
S.D.	6.59	81,581.61	2208909.24	172,180.82	37,326.50
Medium					
Mean	20.38	846,825.13	53,563,712.96	11,512,362.64	1,857,766.91
S.D.	6.59	804,373.41	29,874,212.13	9,713,324.41	3,083,440.26
Large					
Mean	26.50	1,404,696.98	122,618,675.16	26,341,647.34	1,353,674.62
S.D.	2.12	289,485.25	12,680,315.96	8,567,762.57	161,846.01
Overall					
Mean	23.56	636,114.36	44,553,426.85	9,288,613.63	1,130,864.71
S.D.	6.77	726,358.72	43,166,726.34	10,966,721.51	2,272,235.09

The small and large-sized cooperatives had the longest length of operation. Additionally, the large-sized cooperatives had the highest dividend, asset and income. However, medium-sized cooperatives had the highest amount of interest on capital. The result attests that the multi – purpose cooperatives in the province of Occidental Mindoro were performing well throughout the longer period of their operations.

2. The extent of implementation of Internal Control Procedures of selected Multi – purpose Cooperatives.

2.1. Control Environment

Assessment of Internal Control Procedures in terms of Human Resource Policies and Practices

	Mean	S.D	V.I
1. Educational qualifications and industry experience are rigidly determined and considered in hiring employees.	3.41	.69	To a Great Extent
2. Members of the Board, management and staff are given regular trainings on cooperative operations and on trends and innovations of the cooperative organizations.	3.40	.74	To a Great Extent
3. Orientation program is given to new employees on their responsibilities.	3.47	.71	To a Great Extent
4. Human resource handbook/manual is given to all employees upon entry to cooperative.	3.02	.98	To a Great Extent
5. Reward and recognition are given to the members of the Board, management and staff for their exemplary actions.	3.16	.83	To a Great Extent
6. Disciplinary actions are given to erring officers, management and staff.	3.26	.84	To a Great Extent
7. The cooperative has enough manpower to attend to the needs of the members.	3.39	.74	To a Great Extent
8. The cooperative has an organized committee to screen and to select applicants to fill up vacant position.	3.35	.78	To a Great Extent
9. Employees are well compensated.	3.49	.71	To a Great Extent
10. The duties are assigned to others when members of the Board and management are on vacation.	3.30	.81	To a Great Extent
Overall	3.32	.53	To a Great Extent

The human resource policies and practices were implemented to a great extent. This result meant that the cooperatives value the significance of human resource policies and practices. Human resource policies are needed because there has to be standards to evaluate and assess employees under the management of the cooperative. Not all in the cooperative need to accept others' view. With human resource policies, everyone will follow and respect the same rules. It will reduce the employees getting into conflict with each other and will aid the BOD to take corrective actions based on the cooperative's rules and regulations.

Assessment of Internal Control Procedures in terms of Commitment to Competence

	Me an	S.D	V.I
1. The members of the Board and management have the education, experience and expertise necessary to accomplish their duties.	3.20	.80	To a Great Extent
2. The members of the Board and management attended trainings and seminars mandated by CDA.	3.60	.64	To a Very Great Extent
3. The members of Board and management understand their duties and responsibilities.	3.42	.69	To a Great Extent
4. The audit committee and accountant have sufficient expertise in accounting principles.	3.33	.73	To a Great Extent
5. The audit committee complies with standard accounting.	3.35	.76	To a Great Extent
6. The members of the Board and management strictly comply with the CDA rules and regulations.	3.62	.61	To a Very Great Extent
7. The management is capable of meeting the budget and/or other financial and operating goals.	3.46	.63	To a Great Extent
Overall	3.43	.51	To a Great Extent

The cooperatives implement to a great extent the internal control procedures on commitment to competence. It denotes that the officers are predominantly implementing internal controls on commitment to competence in the cooperatives. Commitment is demonstrat-

ed by an organization to develop, attract and retain competent individuals in association with its objectives (COSO, 2013).

As espoused by Murphy (2015), competence denotes appropriateness not only intelligence. Appropriate in the sense of having qualifications and experience, knowledge to accomplish the objectives. If the officers and management are competent, they will be able to do something well and capable of performing their tasks effectively. Their full understanding of their competence through proper role orientation and supervision resulted to employees' high level of commitment and with which, they greatly deliver the desired cooperative prosperity and development.

Assessment of Internal Control Procedures in terms of Integrity and Ethical Values

	Mean	S.D	V.I
1. The cooperative has a code of conduct manual that is distributed to all the members.	2.99	.98	To a Great Extent
2. The cooperative has continuing training on the commitment to ethics.	3.18	.87	To a Great Extent
3. Violators of the code of conduct are identified and dealt with in a manner that reinforces the cooperative's integrity.	3.27	.85	To a Great Extent
4. Employees understand and adhere to the code of conduct.	3.34	.76	To a Great Extent
5. The members of the Board and management of the cooperative serve as role model to the members and employees.	3.44	.70	To a Great Extent
6. Management emphasizes to all employees the importance of integrity in financial reporting.	3.60	.60	To a Very Great Extent
7. The management ensures that financial statements are true and correct.	3.74	.48	To a Very Great Extent
Overall	3.36	.57	To a Great Extent

The cooperatives are predominantly implementing control over integrity and ethical values. The effectiveness of internal control policies and procedures are tied to the integrity and ethical values of the people who create, administer, and monitor them. Integrity and ethical behavior are products of the entity's ethical and behavior standards, including how they are communicated and how they are reinforced in practice (Rittenberg, et al., 2012). Integrity is the foundation of character that officers and management in the cooperatives should value because a person with high integrity will always do the highest quality of work in everything they do. However, they should also value the importance of right and wrong and value good judgement in every decision that they make.

2.2. Control Activities

Assessment of Internal Control Procedures in terms of Cash Receipts

	Mean	S.D	V.I
1. The treasurer/cashier and other employees are allowed to handle cash and should not handle the book of accounts.	3.29	.97	To a Great Extent
2. The treasurer/cashier prepares a daily cash receipt report.	3.58	.72	To a Very Great Extent
3. Cash receipts during the day are deposited the next banking day.	3.43	.81	To a Great Extent
4. Each prepared check is covered by a pre-numbered cash voucher and supported by documents.	3.77	.50	To a Very Great Extent
5. All checks are made payable to specific persons or identity and are issued in numerical sequence.	3.78	.50	To a Very Great Extent
6. Signing of blank check is strictly prohibited.	3.68	.59	To a Very Great Extent
7. Disbursement from the petty cash are covered by a pre-numbered petty cash voucher and supported by documents.	3.59	.69	To a Very Great Extent
8. A surprise audit by the audit committee is done from time to time.	3.43	.74	To a Great Extent
9. All loan transactions are made in accordance with the duly approved loan policies.	3.64	.61	To a Very Great Extent
10. All loans are covered by a promissory note signed by the borrower and the co-makers.	3.73	.54	To a Very Great Extent
Overall	3.59	.40	To a Very Great Extent

The cooperatives implement to a very great extent the internal control procedures on the management of cooperative's cash receipt. It is a good indicator that cooperatives have full control over their assets especially cash. Cash is a particularly vulnerable asset because, without proper control, it is easily concealed and readily stolen (Bragg, 2009). Internal control procedures for cash receipts help an organization prevent losses due to accounting errors and employee fraud. These controls limit access to cash by employees and affirm that all refunds or transfers, receipts are properly documented and in a timely manner (Sullivan, 2018).

Assessment of Internal Control Procedures in terms of Procurement and Selling of Goods

	Mean	S.D	V.I
1. There is a system for procuring goods and quantities ordered correspond with the quantities invoiced and received.	3.41	.79	To a Great Extent
2. Payments to suppliers are properly approved, made by check, whenever practicable and given directly to supplier.	3.62	.67	To a Very Great Extent
3. Goods are issued based only upon presentation of duly accomplished requisition.	3.52	.69	To a Very Great Extent
4. Goods are issued only on duly approved voucher.	3.59	.69	To a Very Great Extent
5. Reports of goods received and issued are made promptly.	3.52	.70	To a Very Great Extent
6. All goods are received, counted and inspected prior to entry in storeroom/inventory records.	3.63	.61	To a Very Great Extent
Overall	3.55	.59	To a Very Great Extent

The cooperatives implement to a very great extent the internal control procedures on procurement and selling of goods. Procurement is the process of negotiation and strategic selection of goods or services, which is important to an organization (Lim, 2014). It is the process used to ensure that the buyers receive goods, services or works at a reasonable or best possible price in consideration to quality, quantity, location and time of goods or delivery of services (Weele, 2010). The cooperative's procurement of goods and services is a high value activity that has a critical influence on its success and performance.

Assessment of Internal Control Procedures in terms of Safeguarding of Assets

	Mean	S.D	V.I
1. The cooperative employs security measures to check persons and vehicles coming in and out of its compound and premises.	3.51	.68	To a Very Great Extent
2. There is adequate security equipment surrounding cashiering areas.	3.37	.74	To a Great Extent
3. The equipment breakdown is promptly reported and acted on.	3.25	.76	To a Great Extent
4. All equipment in the cooperative undergoes regular maintenance.	3.41	.71	To a Great Extent
5. The physical access to inventories is limited to authorized personnel.	3.46	.67	To a Great Extent
6. The cooperative keeps cash and inventories in proper custody.	3.80	.43	To a Very Great Extent
7. The inventory records are maintained based on periodic physical counts.	3.61	.56	To a Very Great Extent
8. The inventory record is adjusted immediately based on the results of physical inventory.	3.65	.54	To a Very Great Extent
Overall	3.51	.48	To a Very Great Extent

The cooperatives implement to a very great extent the internal control procedures on safeguarding of assets. As described by Ng (2012), assets should be protected by appropriate physical safeguards to protect them from physical loss. Ineffective internal control in the form of inadequate physical security and inadequate documentation further allows the misappropriation of resources by employees.

2.3. Risk Assessment

Assessment of Internal Control Procedures in terms of Risk Assessment

	Mean	S.D	V.I
1. Management identifies risks related to each of the cooperative established objectives.	3.54	.61	To a Very Great Extent
2. Management has mechanisms in place to identify cooperative risks resulting from entering new markets or from offering new product and services.	3.33	.72	To a Great Extent
3. There are effective processes for sourcing, measuring and monitoring internal cooperative risks.	3.34	.65	To a Great Extent
4. The cooperative planning process includes a broad spectrum of personnel with collective knowledge of all areas of cooperative.	3.39	.68	To a Great Extent
5. Risks are evaluated and addressed in the cooperative planning process.	3.49	.63	To a Great Extent
6. Members of the Board develop plans to mitigate significant identified risks.	3.44	.66	To a Great Extent
Overall	3.42	.53	To a Great Extent

The cooperatives to a great extent implement control over risk assessment. The purpose of the risk assessment is to gauge individually and collectively how big the risks are so as to ensure that the management will focus their attention on the most essential threats and opportunities and to lay the groundwork for risks response. Risk assessment follows event identification and precedes risk response. It is all about assessing and prioritizing risks so that risk levels are managed within defined tolerance thresholds without being over controlled or foregoing desirable opportunities (COSO, 2012).

2.4. Information and Communication

Assessment of Internal Control Procedures in terms of Information and Communication

	Mean	S.D	V.I
1. There are procedures implemented in the cooperative to verify the accuracy of data in management and monitoring reports.	3.51	.66	To a Very Great Extent
2. The management provides information to the staff in sufficient detail and on time to enable them to carry out their responsibilities efficiently and effectively.	3.48	.67	To a Great Extent
3. The management communicates employees duties and control responsibilities in an effective manner.	3.55	.59	To a Very Great Extent
4. The operations manager of the cooperative responds to his/her staff concerns and suggestions.	3.50	.59	To a Very Great Extent
5. The management takes timely and appropriate follow – up action on communication received from the members of the Board, staff and members.	3.52	.60	To a Very Great Extent
Overall	3.51	.52	To a Very Great Extent

The information and communication control procedures of cooperatives implement to a very great extent. Information is essential for the cooperative to carry out internal control responsibilities to support the achievement of its objectives. Communication plays a vital role in all facets of cooperatives.

It is very important that both internal communications within cooperative, as well as employees' communication skills is effective. An effective communication builds and maintains relationships, ensures transparency and contributes to growth and the development of cooperative.

2.5. Monitoring

Assessment of Internal Control Procedures in terms of Monitoring

	Mean	S.D	V.I
1. The management reviews key performance indicators when monitoring financial reporting activities.	3.62	.55	To a Very Great Extent
2. The management monitors procedures to ensure that transactions are recorded immediately.	3.62	.54	To a Very Great Extent
3. The management periodically reviews financial reports.	3.60	.58	To a Very Great Extent
4. The management reviews external audit reports and take corrective actions on recommendations/deficiencies.	3.61	.57	To a Very Great Extent
5. The management monitors procedures to ensure that all economic activity of the cooperative for the period is reflected in the financial statements.	3.66	.50	To a Very Great Extent
Overall	3.62	.46	To a Very Great Extent

The result implies that the management is extremely dominant in monitoring the daily transactions of their cooperatives. The regular observation and recording of cooperative activities is an avenue to ensure that activities are on the right track to achieve its objective. The monitoring of internal controls requires the organization to evaluate whether internal controls are operating as intended and time-ly communicate any deficiencies to those with authority to take corrective action (FEI Daily, 2014).

3. Level of Operational Efficiency of Selected Multi – Purpose Cooperatives as to portfolio quality, efficiency, stability, operations and structure of assets.

	Mean	S.D	V.I
Portfolio Quality	3.38	.50	Good
Efficiency	3.31	.79	Good
Stability	3.56	.81	Very Good
Operations	3.00	.63	Good
Structure of Assets	2.88	1.09	Good
Overall	1.56	.63	Moderately Good

The level of portfolio quality, efficiency, stability, operation and structure of assets (PESOS) of selected multi – purpose cooperatives were measured as moderately good. It denotes that the selected multi – purpose cooperatives were financially manageable. It further implies that cooperatives had a remarkable degree of protection for member savings and shares in the event of liquidation of the cooperative assets and liabilities; had the ability to service its member’s withdrawal and deposit on time; and risk of default was adequately protected, enabled to generate sufficient income to cover expenses on operations, minimized dependence on external borrowing and greater emphasis on mobilizing voluntary savings from its members and effectively used its assets to generate revenues.

4. The significant difference in the internal control procedures of selected multi – purpose cooperatives when grouped according to asset size classification.

Internal Control	Asset Size	Mean	S.D.	F - Value	P - Value	Sig	Remarks	Decision on Ho
Human Resource Policies and Practices	Small	2.99	.51	34.53	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.54	.42					
	Large	3.14	.54					
	Total	3.33	.53					
Commitment to Competence	Small	3.12	.41	29.79	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.62	.42					
	Large	3.25	.67					
	Total	3.43	.51					
Integrity and Ethical Values	Small	3.00	.46	34.16	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.59	.48					
	Large	3.17	.68					
	Total	3.37	.57					
Cash Receipts	Small	3.38	.41	20.71	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.72	.32					
	Large	3.51	.46					
	Total	3.59	.40					
Procurement and Selling of Goods	Small	3.24	.74	17.31	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.72	.43					
	Large	3.51	.56					
	Total	3.55	.59					
Safeguarding of Assets	Small	3.15	.48	41.06	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.70	.37					
	Large	3.44	.45					
	Total	3.51	.48					
Risk Assessment	Small	3.08	.55	31.54	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.62	.43					
	Large	3.28	.49					
	Total	3.42	.53					
Information and Communication	Small	3.22	.47	26.40	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.70	.43					
	Large	3.34	.64					
	Total	3.51	.52					
Monitoring	Small	3.35	.44	25.97	P = 0.00 < 0.01	VS	Small vs. Medium vs. Large	Reject
	Medium	3.78	.39					
	Large	3.51	.51					
	Total	3.62	.46					

There were very significant differences among asset size on internal control procedures from human resource policies and practices, commitment to competence, integrity and ethical values, cash receipts, procurement and selling of goods, safeguarding of assets, risk

assessment, information and communication and monitoring. The differences were noted on the following combinations: for human resource policies and practices, commitment and competence, integrity and ethical values, cash receipts, risk assessment, information and communication, and monitoring, small and medium; medium and large combinations. Meanwhile, for procurement and selling of goods combinations are small and medium; small and large. Further, for safeguarding of assets combinations are small and medium; small and large; medium and large.

Among these, medium-sized cooperatives had the most number of combinations with a noted difference on others. All of these combinations were very significant differences on internal control procedures as shown by the p – value of 0.00 which is less than 0.01 levels of significance. It further implies that the internal control procedures of cooperatives were different from each other because small-sized cooperatives had a simpler internal control while medium and large-sized cooperatives had a complex internal control.

5. Influence of Internal Control Procedures in the Operational Efficiency of selected Multi-purpose Cooperatives.

Correlation of Internal Control Procedures in the Operational Efficiency of Multi-purpose Cooperatives

		P	E	S	O	S	Overall
Human Resource Policies and Practice	r	.216**	.234**	.169**	.196**	.186**	.278**
	P – value	.000	.000	.000	.014	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Substantial Correlation
Commitment to Competence	r	.231**	.278**	.221**	.189**	.237**	.364**
	P – value	.001	.000	.008	.002	.004	.000
	Description	Low Correlation	Low Correlation	Negligible Correlation	Negligible Correlation	Negligible Correlation	Low Correlation
Integrity and Ethical Values	r	.400**	.197**	.171**	.157*	.212**	.349**
	P – value	.000	.000	.001	.003	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Low Correlation
Cash Receipts	r	.408**	.232**	.456**	.185**	.405**	.405**
	P – value	.000	.002	.008	.015	.001	.000
	Description	Substantial Correlation	Negligible Correlation	Negligible Correlation	Negligible Correlation	Low Correlation	Low Correlation
Procurement and Selling of Goods	r	.398**	.280**	.376**	.085	.371**	.444**
	P – value	.000	.000	.000	.004	.000	.000
	Description	Substantial Correlation	Low Correlation	Substantial Correlation	Negligible Correlation	Substantial Correlation	Substantial Correlation
Safeguarding of Assets	r	.354**	.304**	.377**	.144*	.337**	.398**
	P – value	.000	.000	.000	.189	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Substantial Correlation
Risk Assessment	r	.261**	.313**	.322**	.182**	.330**	.409**
	P – value	.000	.000	.000	.025	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Low Correlation
Information and Communication	r	.231**	.258**	.303**	.078	.336**	.366**
	P – value	.000	.000	.000	.005	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Substantial Correlation
Monitoring	r	.251**	.356**	.269**	.158*	.262**	.426**
	P – value	.000	.000	.000	.228	.000	.000
	Description	Low Correlation	Low Correlation	Low Correlation	Negligible Correlation	Low Correlation	Low Correlation

The internal control procedures in terms of human resource policies and practices, procurement and selling of goods, safeguarding of assets, and information and communication are substantially correlated to PESOS with r value of .278, .444, .398 and .366, respectively. Hence, it implies that the internal control procedures were moderately influenced the PESOS. It also indicates that the correlation is very significant at the .000 level. On the other hand, result reveals that there was low correlation on commitment to competence, integrity and ethical values, cash receipts, risk assessment and monitoring to PESOS with r – value at .364, .349, .405, .409 and .426, respectively. The

correlation is very significant at the .000 level. The relationship between internal controls and PESOS were found substantial and low correlation but very significant. It is because internal controls play an essential role for the attainment of operational efficiency and later on success of the cooperatives.

It was supported by the study of Muhunyo (2018) that the control environment, risk assessment, control activities and information and communication as indicators of internal control have significant influence on financial performance. Another study said that between control environment and control activities, and performance of cooperative found a significant relationship (Heda, 2017).

Internal Control Procedures in Predicting the Operational Efficiency of Selected Multi – Purpose Cooperatives

	Internal Control	R Square	R- Square Individual	B	Constant	F Value	P Value
P	Procurement and Selling of Goods (X ₁)	.167	.167	.223	1.649	47.82	.000 ^b
	Cash Receipt (X ₂)	.205	.038	.304			
E	Human Resource Policies and Practices (X ₃)	.127	.127	.488	1.791	34.679	.000 ^b
S	Procurement and Selling of Goods (X ₁)	.208	.208	.502	2.268	27.595	.000 ^d
	Cash Receipt (X ₂)	.223	.015	-.536			
	Safeguarding of Assets (X ₄)	.259	.244	.443			
O	Commitment to Competence (X ₅)	.038	.038	.228	2.311	9.559	.002 ^b
S	Procurement and Selling of Goods (X ₁)	.164	.164	.542	-.186	27.017	.000 ^c
	Monitoring (X ₆)	.185	.021	.376			
Over-all	Safeguarding of Assets (X ₄)	.197	.197	.139	-.755	26.824	.000 ^d
	Human Resource Policies and Practices (X ₃)	.225	.028	.329			
	Procurement and Selling of Goods (X ₁)	.253	.225	.256			

The predictors of operational efficiency in terms of Portfolio quality (P), Efficiency (E), Stability (S), Operations (O) and Structure of assets (S) are safeguarding of assets, human resource policies and practices and procurement and selling of goods when an accumulated probability of 25.3%. Individually, procurement and selling of goods can predict or influence the PESOS by 22.5% while safeguarding of assets and human resource policies and practices can influence only the PESOS by 19.7% and 2.8%, respectively. The highest r – square of procurement and selling of goods implies that it has a great influence on PESOS. The regression coefficients of safeguarding of assets (B = .139), human resource policies and practices (B = .329) and procurement and selling of goods (B = .256) reveal that for every unit change in three predictors PESOS will be affected by .139, .329 and .256, respectively. If safeguarding of assets is written as x₄, human resource policies practices as x₃ and procurement and selling of goods as x₁, by using their coefficients, a regression equation could be written as follows: PESOS= .139x₄+ .329x₃+ .256x₁-.755. This equation can be used to predict the influence of safeguarding of assets, human resource policies and practices and procurement and selling of goods to PESOS. These results were supported by the study of Byaruhanga et al (2014). Their study was designed to investigate the effect of internal control systems on the financial performance of sugarcane outgrower companies and it was found out that there was a positive significant effect of internal control system on the financial performance (R = 0.682), and R square 0.428 thus, internal control components accounts for 42.8% variance in performance. Another study was conducted by Saad and Bakar (2016) regarding the effects of internal control systems on cooperative's profitability: a case of Koperasi ABC Berhad. It was found out that the effective internal control systems are believed to have the ability to increase the profitability of cooperatives, which will directly help to promote the stability and growth of the cooperative. Likewise, a study conducted by Kiyieka and Muturi (2018) on the effect of internal controls on financial performance of deposit taking saving and credit cooperative, result showed that the coefficient of determination proved that internal controls contributed to 43.3% of the variation in financial performance as explained by adjusted R² of 0.433% which shows that internal controls influence Performance of cooperatives.

6. The internal control procedures of selected multi – purpose cooperatives most influential to affect operational efficiency that can be prioritized by cooperatives.

Statistically, based on the result of anova and regression being utilized in the study the most influential internal control procedures to affect operationa efficiency that can be prioritized by cooperatives are shown on table.

Most Influential Internal Control Procedures to affect Operational Efficiency of selected Multi – purpose Cooperatives

Internal Control Procedures		
Control Environment	Control Activities	Monitoring
<p><u>Human Resource Policies and Practices</u></p> <ul style="list-style-type: none"> • Employees must be compensated well. • There must be an orientation program to new employees on their responsibilities. • In hiring employees, educational qualifications and industry experience must be rigidly determined and considered. • Regular trainings on cooperative operations and on trends and innovations must be given to the members of the Board, management and staff. • The cooperative must have enough manpower to attend to the needs of the members. 	<p><u>Safeguarding of Assets</u></p> <ul style="list-style-type: none"> • <i>Security Equipment</i> There must be adequate security equipment in and out of cooperatives' compound and premises especially in cash-iering areas. • <i>Cash and Inventories</i> Cash and inventories must be kept in proper custody. Likewise, inventory records must be maintained based on periodic physical counts of authorized personnel. • <i>Equipment</i> The cooperatives' equipment must be maintained regularly and any breakdown must be reported immediately. <p><u>Procurement and selling of Goods</u></p> <ul style="list-style-type: none"> • <i>Procurement of Goods</i> All goods must be received, counted and inspected prior to entry in storeroom/inventory records and must be reported immediately. The payment to supplier must be properly approved made by check, whenever practicable and given directly to supplier. • <i>Selling of Goods</i> Goods must be issued based only upon presentation of duly accomplished requisition and approved voucher and must be reported immediately. 	<ul style="list-style-type: none"> • The management must monitor procedures to ensure that all economic activity of the cooperative for the period is recorded and reflected in the financial statements. • The management must periodically review financial report and external audit reports and take corrective actions on recommendations/deficiencies.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the study, the following were drawn:

1. All of the respondent multi – purpose cooperatives in Occidental Mindoro engage in lending. Majority of the cooperatives' members were farmers. The small and large-sized cooperatives had the longest length of operation. Large-sized cooperatives had the highest dividend, asset and income. However, medium-sized cooperatives had the highest amount of interest on capital. The implication is that providing financial relief for their members in the best possible conditions is one of the cooperatives objectives so that lending is another way to help them improve their quality of life. The calculated dividend, asset, income and interest on capital proved that the multi – purpose cooperatives in the province were performing well throughout the longer period of its operation.
2. Among internal control procedures of selected multi – purpose cooperatives, cash receipts, procurement and selling of goods, safeguarding of assets, information and communication and monitoring were implemented to a very great extent. It is a good indicator that cooperatives have full control over their assets especially cash and inventories. Also, cooperatives implemented at full extent the dissemination and transparency of information and an effective communication that maintain relationship for growth and development. Furthermore, regular observation and recording of cooperative activities implemented at a great extent because it is an avenue to ensure that activities are on the right track to achieve its objective.
3. The level of operational efficiency of selected multi – purpose cooperatives were measured as moderately good. It means that the financial resources of the cooperatives were managed fairly well. They had a remarkable degree of protection for member savings and shares in the event of liquidation of the cooperative assets and liabilities. And, they had the ability to service its member's withdrawal and deposit on time and greater emphasis on mobilizing voluntary savings from its members and effectively used its assets to generate revenues.
4. There was a significant difference on the internal control procedures of selected multi – purpose cooperatives. They have different internal controls due to the sizes of cooperatives. This denotes that small-sized cooperatives had simpler internal control as compared to medium-sized and large-sized cooperative which had complex internal control procedures. Therefore, each of them has its own internal control procedures being implemented.
5. There was a significant relationship on the internal control procedures in terms of human resource policies and practices, procurement and selling of goods, safeguarding of assets, and information and communication and operational efficiency of selected multi - purpose cooperatives. The predictors of operational efficiency are safeguarding of assets, human resource policies and practices and procurement and selling of goods. This therefore presents that the internal control procedures influenced the performance of cooperatives' PE-SOS.

6. The most influential internal control procedures that can be prioritized by the cooperatives are safeguarding of assets, effective implementation of human resource policies and practices, efficient procurement and selling of goods and regular monitoring of cooperatives daily transactions. These internal control procedures will help improve the operational efficiency of the cooperatives.

Recommendations

The following are the recommendations based on findings and conclusion of the study.

1. The officers and management of cooperatives should maintain effective internal control strategies to ensure operational efficiency.
2. The cooperatives together with the Cooperative development Authority should come up with clear policies on internal control procedures.
3. Cooperatives should strive to continuously improve internal control procedures in monitoring, safeguarding of assets, human resource policies and practices, and procurement and selling of goods for better operational efficiency.
4. The Cooperative Development Authority should conduct regular training for internal control officers.
5. For other researchers, to conduct studies/researches on other areas of internal control.

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