

# EVALUATING THE INFLUENCE OF FINANCIAL CONTROL MECHANISMS ON THE FINANCIAL PERFORMANCE OF MALAYSIAN COOPERATIVES

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**Abstract:** *Malaysian cooperatives are an effective economic engine in helping the community, especially the B40 and M40 group, most affected by the unstable economic problems due to the Covid-19 pandemic. Hence, the government needs to ensure that the cooperative sector can improve its performance, particularly in financial aspects, to serve its members. This research is conducted to determine the improvement measures related to financial control mechanisms that need to be emphasized at the level of regulators, cooperatives and stakeholders to reduce the risk of loss and achieve the financial objectives set by the government. The research examines the relationship between financial control mechanisms: financial reporting, budgetary control, risk management, and cooperative financial performance. This study employed a quantitative approach and purposive sampling, with respondents selected based on predetermined criteria requiring them to utilize their experience and knowledge as cooperative board members to respond to the questionnaire. There were 122 returned surveys, of which only 119 were usable for analysis. The result showed that financial control mechanisms are positively related to financial performance as all three components of financial control mechanisms used in cooperatives, consisting of financial reporting, budgetary control and risk management, have a positive relationship with financial performance. The findings from this study generally aimed to provide helpful information for cooperatives' stakeholders, in determining the right approach to increase cooperatives' financial performance.*

**Keywords:** *Cooperative, Financial Reporting, Budgetary Control, Risk Management, Financial Performance*

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## Introduction

Cooperatives societies in Malaysia are administered by the Ministry of Entrepreneur and Cooperatives Development (MECD) and regulated by the Malaysian Cooperative Society Commission (MCSC). To support cooperatives' development and growth, the Cooperative Institute of Malaysia (CIM), an agency under MECD, plays the role of cooperatives' training institute, while Malaysian National Cooperatives Movement (ANGKASA) as the apex body for all cooperatives. There are 14,834 registered cooperatives with 7,079,119 memberships nationwide, and the statistics are up-trending yearly (Cooperative Statistic, 2021). According to National Cooperative Policy (NCP) 2011-2020, the government has set RM50 billion in contributions from the cooperative sector to national gross domestic production (GDP). However, despite the increase in registered cooperatives and memberships, the total cooperatives' earnings decreased from RM41.5 billion in 2020 to RM37.9 billion in 2021 (Cooperative Sector Economic Report, 2021) due to recovering from the pandemic Covid-19 that hit the global economy, including cooperatives (Billiet et. al., 2021). The objective of establishing a cooperative is to maximize its shareholders' value, but they do it differently from companies, where cooperatives increase their members' socioeconomic status. Cooperatives not only increase their members' income through monetary return but in non-monetary form (Cooperative Act, 1993; Noordin et al., 2012). In Malaysia, the Minister of Entrepreneur and Cooperatives Development has recognized cooperatives as social solidarity enterprise (SSE) that acts as an agent of social and community unification, promoting the concept of cooperatives as entrepreneurial institutions (Jusoh et al., 2022; Aris et. al., 2018) added, as a sustainable and inclusive form of business, cooperatives offer an alternative business model to social enterprises. Cooperatives are also considered an effective economic engine in helping the community, especially the 40 percent below and medium income citizens known as the B40 and M40 group, affected by the unstable economic problems due to the Covid-19 pandemic (Kosmo, 2022).

All business entities, including cooperatives, are established to achieve objectives of maximizing their profit, and in cooperatives, earnings are one of the essential indicators of achieving the cooperative's goals (Abd Rahman & Zakaria, 2018). High earnings indicate good financial performance because it will provide some insights into the business's activity is optimized, capitalization is high, and profits, allowing it to develop further and rely on positive financial results in the future (Alkhyyon et al., 2023) stated that earnings are a summary measure of a business entity's performance. Thus, to ensure cooperatives achieve their objectives, the government empowered cooperatives with several initiatives, such as the Malaysian Cooperative Transformation Plan 2021-2025 (Sinar Harian, 2021). Transkom 2021-2025 is a strategic document outlining transformation steps to empower the cooperatives in Malaysia as a catalyst for balanced, inclusive socio-economic, progressive and sustainable growth. Particularly in the second thrust, the government aims to strengthen the cooperatives' legal system and governance structure. The outcome of this thrust is to ensure that cooperatives' legal system and governance structure is smooth and in line with the current development needs of cooperatives. One of the strategic steps is to create a system of checks and balances on cooperative board members as well as cooperative management and subsidiaries to reduce the number of malpractices such as non-compliance, mismanagement, misappropriation of funds, and abuse of power (Transkom 2021-2025). This initiative is an example of an internal control system enforced in a cooperative to mitigate the risk of malpractice, hence, achieving their financial target. Regrettably, instances of misconduct involving cooperative board members continue to receive significant media attention. A notable example includes allegations against the chairman of a property cooperative who was reportedly involved in receiving bribes

exceeding RM16 million from Tan Sri for a joint venture project (New Street Times, 2012). A year before, a chairman of a farmers' cooperative was jailed for eight years for transferring the cooperative's money to his account, amounting to RM200,000 (Sinar Harian, 2021). These cases occurred because the public generally perceives Malaysian cooperatives as lacking transparency, poorly governed, and underperforming (Cheuk, 2012). (Hassan et al. (2018) added that the cooperative values based on understanding, trust, and cooperation among its members have deteriorated in recent years, leading to problems of corruption, crisis, and management collapse.

Consequently, in the NCP 2011-2020, cooperatives only achieved RM41.45 billion out of the RM50 billion targeted earnings. The set target could not be reached and then was replaced by the NCP 2021-2030 with a new higher earnings target of RM100 billion by 2030 (Cooperative Sector Economic Report, 2020). Meanwhile, from the regulatory perspective, the Malaysia Co-Operative Societies Commission (MCSC) performs the due diligence examination (DDE) annually to monitor cooperatives' compliance with applicable rules and regulations (Abd Rahman & Zakaria, 2018). Findings from DDE conducted by MCSC found areas for improvement in controlling the cooperative's business activities, apart from not providing a strategic business plan. These weaknesses lead to material misstatements that may cause a significant monetary impact on cooperatives besides resulting in non-compliance with applicable regulations (DDE Findings Briefing from MCSC, 2021). The effect of this non-conformance can be seen obviously as many fraud cases involving cooperative board members are reported due to poor internal control, particularly on financial aspects. It reflects that cooperatives need to double their efforts to increase their earnings by more than 100 percent within 10 years. This creates intense pressure for cooperatives to strengthen their financial control mechanisms to mitigate risk and minimize losses. Therefore, it is the right time to implement more effective financial controls to mitigate challenges, ensuring the targeted goal can be achieved (Tapas & Pillai, 2021). This study is to examine the relationship between the use of financial control mechanisms and cooperative financial performance.

## Literature Review

### Prospect Theory

This study aims to examine the impact of financial control mechanisms on the financial performance of cooperatives. It is presumed that the purpose of cooperatives imposing financial controls is to mitigate the risk of losses in achieving their financial objectives. Prospect theory assumes that losses and gains are valued differently, and thus individuals make decisions based on perceived gains instead of perceived losses. The general concept is that if two choices are put before an individual, both equal, with one presented in terms of potential gains and the other in terms of possible losses, the potential of gain will be chosen (Kahneman & Tversky, 1979). The cooperative legislation, including the Cooperative Act 1993, Cooperative Rulings 2010, business activity guidelines, and personalized cooperative by-law, outlined the financial control requirements on financial reporting, budgetary control and risk management. All these statutory requirements must be adhered to ensure cooperatives achieve their objectives. However, according to Ariffin et al. (2021), most credit cooperatives are aware and ready to implement an internal control system but unwilling to allocate a budget to get the services of skilled and competent people to implement an internal control system due to insufficient funds. Since implementing internal controls involves financial impact that will burden the cooperatives, some of the control mechanisms seem only on paper and ineffective in mitigating the risks.

### **Cooperative Financial Performance**

One of the most crucial aspects of a business entity is performance measurement, which is used to determine how successful a business is and as a foundation for decision-making (Estiasih, 2021). Pandey (2004) defines financial performance as a subjective evaluation of how well a company generates income using the resources from its primary stream of business. It can also be used as a broad indicator of an entity's overall financial health status over a certain period. Performance measurement will ease a business entity to spot weaknesses, clarify goals and strategies, and enhance management procedures (Jamil & Mohamed, 2011). Reski (2021) argued that performance measurement is used as a management tool in an entity to assess the activity and evaluate the effectiveness of management practices. According to Musa, Ghani and Ahmad (2014), the performance of a business can be measured using various indicators, and the measurement can be done subjectively or objectively. They added that the acquisition of financial data could reveal the exact position of a business's performance. However, due to the risk of misunderstanding and perception bias from the respondents, this study employed objective measurement using earnings from the cooperative's financial data. Estiasih (2021) also argued that performance measurements are more quantitative since the performance criteria are directly related to performance appraisals. Sales, return on sales, and return on equity are examples of common financial performance measures (Rabialdy, Noor & Isa, 2023). Sultana et al., (2020) emphasize that the capacity of a cooperative to raise capital, seize market share, and uphold member satisfaction is what makes it strong. Overall, performance measurement is critical for the sustainability and growth of cooperatives. It provides a framework for assessing financial health, regulatory compliance, and management efficiency, ultimately aiming to enhance the socioeconomic status of members.

### **Financial Control Mechanisms**

The financial control mechanisms consist of the financial reporting system, the budgetary control environment, and the risk management control procedures and are viewed as a component of the organization's unified management system (Alkhyoon et al., 2023). They argued that financial control is a management function that enables prompt identification and elimination or minimization of the conditions and elements that hinder effective administration and goal achievement. Information on the actual state of the business, the organization's finances, the fulfilment of tax responsibilities, non-budgetary payments, and the usage of budget money are provided through financial controls. Similarly, Jochem et al. (2010) stated that financial indicators generally control and improve organizational efficiency besides functioning as an early warning system and supporting organizations in designing strategic, operational processes. Besides, the quality of internal control may significantly influence how financial information consumers make decisions (Huzaimi et al., 2023). In a business entity, financial control mechanisms assess financial activities to meet financial goals (Shamsudin et al., 2018). It is an umbrella term for various approaches, tactics, procedures, and concepts used to control and assess financial operations to meet financial goals (Dombeu et al., 2022). Komal et al., (2023) study on the impact of internal audit and control on the accomplishment of organizational goals discovered that the combination of internal audit and control significantly improves the ability of financial institutions to mitigate the risk and able generate more revenue and profit.

### **Financial Reporting**

Financial performance is the business's ability to manage and direct its resources. To guide their decisions, a business manager needs to understand financial information from cash flow, balance sheet, profit-loss, and capital change, which could be extracted from the financial

reports (Fatihudin et al., 2018). The accounting cycle encompasses a series of sequential activities, which include the journalized of transactions, subsequent posting to ledger accounts, the generation of an initial trial balance, the implementation of adjustment entries, the creation of an adjusted trial balance at the end of the reporting period, the preparation of financial reports accompanied by relevant disclosures (Kroeger & Weber, 2014). A cooperative's performance assessment can be measured on an economic, social, and socioeconomic basis based on financial reports (Ibironke & Elewor, 2020). However, the accuracy of the quality financial report will be jeopardized when the internal control is ineffective, mainly financial control (Zandi & Abdullah, 2019). As a business entity, cooperatives in Malaysia must prepare financial reports covering the cash flows, balance sheets, trading, profit, and loss account, and notes to the account as required by the Cooperatives Act 1993. To avoid delay in preparing the financial reports, each transaction must be recorded within 30 days from the transaction date (Section 58 of the Cooperative Act, 1993).

Amanamah et al. (2016) measure the accounting skills of business owners through the ability to record business expenses and sales, calculate profits, preparation of payroll, keep track and record inventory, write receipts, cheques, and invoices, calculation of tax and file tax returns, reading and interpreting bank statements and, ability to ensure safe custody of business documents, papers and books. The incompetence of business owners due to a lack of accounting skills may result in financial reporting delays. Besides, Agyei-Mensah (2018) found that financial reporting delay significantly negatively correlates with business performance. Hence, the hypothesis is constructed as below:

H1: Financial reporting has a significant positive relationship with cooperatives' financial performance.

### **Budgetary Control**

Budgetary control is a financial control mechanism widely used in organizations globally. The research conducted by Vadasi et al. (2021) state cooperation in Kenya highlighted a significant positive relationship between budgetary control and financial performance. The study findings indicated that the presence of budgetary features within an organization reflects its capability to effectively predict and achieve financial milestones. In Malaysia, a study conducted by Maelah and Yadzid (2018) on small and medium enterprises discovered a positive association between tight budgetary management and performance. However, the research revealed that consensual, entrepreneurial, and competitive cultures performed poorly under strict financial controls. Frow et al. (2010) argued that continuous budgeting shows how one organization balances contradicting goals. The continuous budgeting methods encouraged managers to utilize their judgment in operational matters when presented with unforeseen events by merging various budgeting uses with other management controls. As a result, it allowed managers to set priorities for revising plans and reassigning resources as needed to achieve more comprehensive strategic organizational goals. Along with giving managers more authority, continuous budgeting enforced strong accountability requirements to ensure that managers stayed dedicated to attaining their personal and the organization's financial goals. Ibrahim and Abu (2019) revealed that tight budgetary planning, control and implementation, monitoring and evaluation have led to a significant positive relationship between budgetary processes and organizational performance. Hence, the hypothesis is constructed as below:

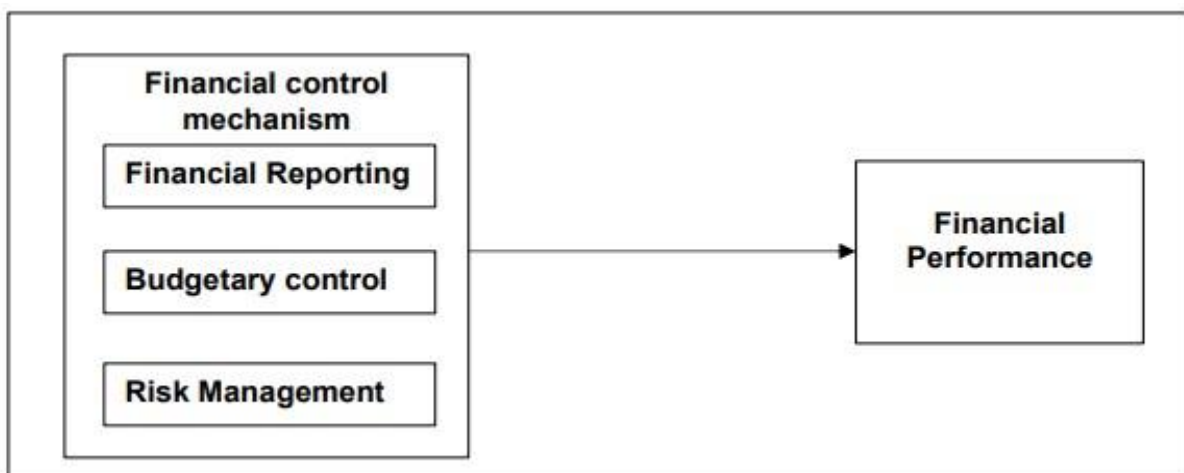
H2: Budgetary control has a significant positive relationship with cooperatives' financial performance.

### Risk Management

Effective risk management is essential for enhancing the financial performance of Malaysian cooperatives. Azizah et al. (2022) argue that cooperatives implementing comprehensive risk management frameworks significantly improve their financial outcomes by proactively identifying and addressing potential risks. Jia and Bradbury (2021) emphasize the importance of financial literacy among cooperative managers. Their study reveals that managers with strong financial knowledge are more adept at anticipating risks and making informed decisions, leading to better overall performance. This is echoed by Hussain (2022), who found a positive relationship between risk management practices and key financial indicators such as return on assets (ROA) and return on equity (ROE) in Malaysian cooperatives.

Moreover, Wong and Chua (2022) discuss the impact of regulatory compliance on risk management effectiveness. They highlight that adherence to regulations not only mitigates legal risks but also boosts investor confidence, thereby enhancing the financial stability of cooperatives. Additionally, Ahmad and Hassan (2023) point out that integrating technology into risk management practices can enhance data accuracy and improve decision-making processes, further supporting financial performance.

H3: Risk management has a significant positive relationship with cooperatives' financial performance.



**Figure 1: Theoretical Framework**

### Methodology

This study aims at cooperative board members as a population. This population encompasses board members of cooperatives across various functions, including credit, services, agriculture, industrial, construction, and others. The actual population is unknown, the determination of the minimum optimal sample size is 384 of respondents would make a good sample size for this number of population (Krejcie & Morgan, 1970). The sample used in this study cannot be assumed as completely a random sample. Non-probability purposive sampling was used to select the sample for this study via distributing the questionnaire since the database for individual cooperative board members is unavailable. The collection of data is conducted via a developed structured questionnaire. These questionnaires are distributed to all active cooperatives registered under MCSC as at 30 June 2024 in the online platform of Google Forms and WhatsApp application. As a result, the present study recorded the response rate of 119

respondents (after cleaning process), which exceeds the threshold of 30%, as suggested by Frohlich (2002).

As for research instruments, the present study uses survey questionnaires to identify relationships between the constructs. The questionnaires employed in this study are adopted from Ariffin et al. (2013) and Amanamah et al. (2016) as it focuses on implementation of the internal control system in Malaysian credit cooperatives. The questionnaire contains two major sections, the first section collects demographic information about the respondents, while the second section comprises questions regarding three factors which are financial reporting, budgetary control, risk management towards financial performance of cooperative. The study employed a corresponding 5 Likert scale (1 for “Strongly Disagree”; 2 for “Disagree”; 3 for “Neither Agree or Disagree”; 4 for “Agree” and 5 for “Strongly Agree”). The constructs, items and measurement are shown in Table 1.

**Table 1: Variable and Measurement of Study**

<b>Constructs</b>	<b>Items</b>	<b>Measurement</b>	<b>Adopted from</b>
<b>Financial reporting</b>	FR1	Cooperative has the ability to record business expenses and sales.	(Amanamah et al., 2016)
	FR2	Cooperative has the ability to calculate profits.	
	FR3	Cooperative has the ability to prepare payroll (salaries of staff).	
	FR4	Cooperative has the ability to keep track/record inventory (stock).	
	FR5	Cooperative has the ability to write receipts, cheques and invoices.	
	FR6	Cooperative has the ability to calculate tax and file tax returns.	
	FR7	Cooperative has the ability to read and interpret bank statements.	
	FR8	Cooperative has the ability to ensure safe custody of business documents and papers and books.	
<b>Budgetary control</b>	BC1	Budgetary control has led to cost effective procurement, thus surplus revenue in my cooperatives.	(Adongo & Jagongo, 2013)
	BC2	In my cooperative, surplus revenue is not assured through increased budgetary controls	
	BC3	Fitness of budgetary control is important to save cooperative’s cost.	
	BC4	Accurate budget prediction through budgetary control does not increase net profit margin.	
	BC5	Budget controls provide cash expenditure tracking and reduces operational costs.	
	BC6	Budgetary control provides an organization with avenues to invest in income-generating ventures.	

	BC7	Budgetary controls do not necessarily increase employee productivity through internal motivation.	
	BC8	As management tools, budgets facilitate prediction of financial milestones by the company.	
<b>Risk management</b>	RM1	Cooperative has a functional internal audit committee (JAD).	(Jusoh et al., 2022)
	RM2	Cooperative has an efficient risk management committee.	
	RM3	Cooperative has an efficient investment committee.	
	RM4	Cooperative board members held meetings on a monthly basis.	
	RM5	Cooperative has standard operating procedures (SOPs) to manage cash.	
	RM6	Cooperative has rules of activity “aturan aktiviti” for every activity.	
	RM7	The internal audit committee produce internal audit report every quarter.	
	RM8	Internal audit report is being discussed in cooperative board meeting.	
	RM9	Some of the cooperative staff need to handle more than 1 function/job.	
	RM10	Cooperative has an insufficient number of management staff.	
<b>Financial performance</b>	FP1	I understand the financial performance of my cooperative.	(Estiasih, 2021)
	FP2	Turnover/sales is an important indicator of cooperative success.	
	FP3	Profit is an important indicator of cooperative success.	
	FP4	Financial statements in my cooperatives are effective.	
	FP5	Financial statements in my cooperative are transparent.	
	FP6	Cash is well managed in my cooperative.	
	FP7	My cooperative is able to manage its debts and obligations.	
	FP8	I understand the key risks that may affect the financial performance I my cooperative.	
	FP9	My cooperative takes necessary controls to mitigate risks and ensure financial stability in the future.	



## Result

### Demographic result

The respondents for this study are cooperative board members of registered cooperatives in Malaysia. The descriptive analysis of respondents includes demographic characteristics such as gender, age, marital status, and so forth. Additionally, cooperative earnings and profit according to cooperative size were analyzed. Based on the Table 2, Most respondents are males (67%) and remaining are females (33%). Most (56%) of the respondents are above 51 years old, followed by 41 -50 years old (23.3%), 31-40 years old (19.2%), and a minority (1.7%) are between 21-30 years old. Most respondents (93.3%) were Malay, while the other races were less than five percent. 62 percent of respondents live in the city, and 38 percent live in the suburban area. On the education level, most of the respondents have SPM (32.5%), followed by a bachelor's degree (29.2%), Diploma (21.7%), Master onwards (12.5%), others 50 (2.5%) and PMR below (1.7%). The occupation sector of the respondents showed that 45 percent were government servants, followed by self-employed 25.8 percent, 18.3 percent in the private sector, and 10.8 percent were working in other sectors or retirees.

Next, the cooperative board composition and cooperative board members' service length was examined. Most of the respondents have served as cooperative board members for more than six years (35%), 1- 3 years (one term) (29%), 4-6 years (two terms) (23%) and only small group serve less than three years (13%). 91 percent of cooperatives have an ideal composition of board members, between six to 15 members, as required by the Cooperative Act 1993. On the other hand, only less than 10 percent of cooperatives reported either not complying with the minimum number of board members or having exceeded the maximum number allowed. The second part of the demographic profile is on the cooperatives' earnings, comprised of annual sales or turnover according to cooperative size and annual cooperatives' profit. The result shows the distribution of cooperative annual earnings (sales turnover) based on a few ranges. Most cooperatives have annual earnings (sales turnover) below RM200,000, categorized as micro cooperatives (60%). The second highest is medium cooperatives with annual earnings of RM500,000 to RM2,00,000. Only nine percent of cooperatives are categorized as small (RM200,001- RM500,000) and large cooperatives (above RM2,000,000 earnings). On the bottom line, 89 percent of cooperatives have an annual profit of less than RM100,000, while only 10 percent can make more than RM1,000,000 in profit annually.

**Table 2: Demographic profile and Characteristics of Respondents**

<b>Gender</b>	<b>Number</b>	<b>Percentage</b>
Male	79	67
Female	40	33
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Age</b>	<b>Number</b>	<b>Percentage</b>
21 – 30 years	2	2
31 – 40 years	23	19
41 – 50 years	28	23
Above 51 years	66	56
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Race</b>	<b>Number</b>	<b>Percentage</b>
Malay	111	93
Chinese	1	1
Indian	4	3

Others	3	3
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Living area</b>	<b>Number</b>	<b>Percentage</b>
City	73	62
Suburban	46	38
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Education level</b>	<b>Number</b>	<b>Percentage</b>
PMR	2	1
SPM	39	33
Diploma	26	22
Degree	34	29
Master	15	13
PhD/Professional	3	2
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Job sector</b>	<b>Number</b>	<b>Percentage</b>
Government	54	45
Private	22	18
Self employed	30	26
Others	13	11
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Term Cooperative Board</b>	<b>Number</b>	<b>Percentage</b>
Less than 1 year	16	13
1-3 years	34	29
4-6 years	27	23
More than 6 years	42	35
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Board Members</b>	<b>Number</b>	<b>Percentage</b>
Less than 6 persons	1	1
6-9 persons	54	46
10-15 persons	54	46
More than 15 persons	10	7
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Cooperative Sales/Turnover</b>	<b>Number</b>	<b>Percentage</b>
Micro (Less than RM200,000)	71	60
Small (RM200,001 – RM500,000)	11	9
Medium (RM500,001 – RM2,000,000)	26	22
Large (above RM2,000,001)	11	9
<b>Total</b>	<b>119</b>	<b>100</b>
<b>Cooperative Annual Profit</b>	<b>Number</b>	<b>Percentage</b>
Less than RM100,000	82	69
RM100,0001 – RM250,000	12	10
RM250,001 – RM999.999	13	11
Above RM1,000,000	12	10
<b>Total</b>	<b>119</b>	<b>100</b>

### Descriptive statistics

Table 3 presents the descriptive result in measuring research variables. Mean and standard deviation describe the level of variation there is from the mean. A low standard deviation indicates that the data point tends to be close to the mean, whereas a high standard deviation indicates that the data is spread out over a large range of values. According to Geisser (1974), the mean score between 1.00 to 2.00 is considered low, 2.01 to 3.00 is medium-low, 3.01 to 4.00 is medium-high, and 4.01 above is high. In this study, mean scores for variables are acceptable and considered medium low.

**Table 3: Descriptive Statistic of Variable**

	Mean	Median	Standard Deviation
<b>Financial performance</b>	1.759	1.833	0.509
<b>Financial reporting</b>	1.807	2.000	0.603
<b>Budgetary control</b>	2.083	2.062	0.481
<b>Risk management</b>	2.105	2.100	0.547

### Convergent validity

Convergent validity is to determine if the items of the same concept are in agreement. According to Hair et al. (2010), three instruments are used to measure convergent validity which included average variance extracted, composite reliability and factor loadings. The first instrument is average variance extracted (AVE). This instrument indicates the amount of variance contained in the indicators that contribute to the latent constructs. The results indicated that the AVEs were in the range of between 0.619 to 0.700. These values were higher than 0.5 as suggested by Hair et al. (2010).

The second instrument is composite reliability that assesses internal consistency among items. For this study, the values were in the range of 0.897 to 0.942; above the suggested value of 0.7 (Hair, Black & Babin, 2010). The third instrument is factor loadings, whereby the loading for every item should be at least 0.60 or above (Chin, 1998). The results indicated that the loadings were between the range of 0.733 to 0.895. Seven items of loading were less than 0.6 which were deleted. The deleted items consisted of 1 item for financial reporting (FR6), 3 items for budgetary control (BC2, BC4 and BC7) and 3 items for risk management (RM4, RM9 and RM10). Hence, all the three instruments indicated that the measurement model exhibited acceptable convergent validity. The results of the measurement model are depicted in Table 4.

**Table 4: The Measurement Model**

Variable	Items	Factor Loading	Cronbach Alpha	Composite reliability	AVE
<b>Financial performance</b>	FP1	0.761	0.922	0.936	0.619
	FP2	0.740			
	FP3	0.739			
	FP4	0.792			
	FP5	0.863			
	FP6	0.860			
	FP7	0.779			
	FP8	0.800			
	FP9	0.733			

<b>Financial reporting</b>	<b>FR1</b>	<b>0.895</b>	<b>0.928</b>	<b>0.942</b>	<b>0.700</b>
	FR2	0.875			
	FR3	0.804			
	FR4	0.858			
	FR5	0.839			
	FR7	0.731			
	FR8	0.843			
	<b>Budgetary control</b>	BC1	0.771	0.856	0.897
BC3		0.801			
BC5		0.837			
BC6		0.823			
BC8		0.753			
<b>Risk management</b>	RM1	0.823	0.913	0.931	0.659
	RM2	0.816			
	RM3	0.822			
	RM5	0.833			
	RM6	0.735			
	RM7	0.868			
	RM8	0.779			

### Discriminant Validity

Discriminant validity is known as the degree to which a measure diverges from another measure whose underlying construct is conceptually unrelated to it. Discriminant validity can be assessed by observing the Heterotrait-Monotrait Ratio (HTMT) (Henseler et al., 2014). Comparing predetermined thresholds is used to evaluate HTMT as a criterion. If the HTMT value is greater than this threshold, it can be concluded that there is a lack of discriminant validity. Hair et al. (2019) proposes a value of 0.90. Table 5 shows the results of the discriminant validity assessment of the measurement model using the HTMT ratio, which shows that the model has acceptable discriminant validity.

**Table 5: Discriminant validity**

<b>Constructs</b>	<b>Financial performance</b>	<b>Financial reporting</b>	<b>Budgetary control</b>	<b>Risk management</b>
<b>Financial performance</b>				
<b>Financial reporting</b>	0.702			
<b>Budgetary control</b>	0.688	0.718		
<b>Risk management</b>	0.649	0.731	0.588	

### Structural Model

The SmartPLS 4 Software algorithm was used to analyse the relationship between the variables, and further studies were performed using SmartPLS4 Software bootstrapping of 5000 to evaluate the degree of significant and t-statistics for all paths. Figure 2 shows the path analysis summarized. Table 6 shows the results of  $R^2$ , and  $f^2$ , along with the corresponding t-values.

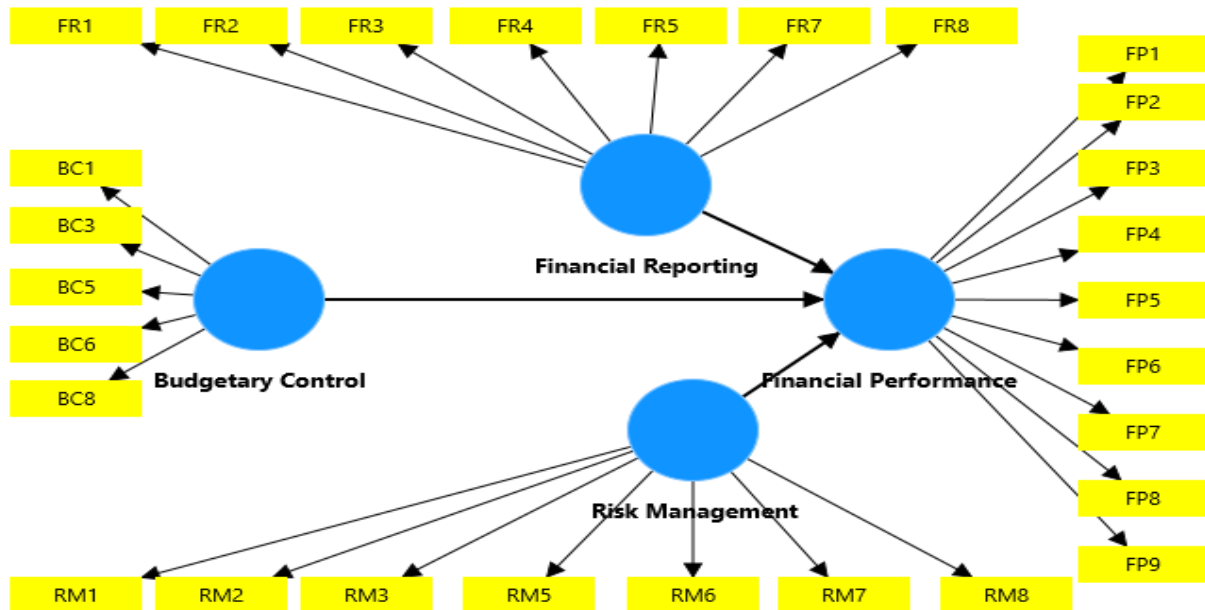


Figure 2: The Structural Model

The results indicate in Table 6, that financial control mechanism which is financial reporting ( $\beta = 3.068$ ,  $p < 0.05$ ), budgetary control ( $\beta = 3.428$ ,  $p < 0.05$ ), and risk management ( $\beta = 2.665$ ,  $p < 0.05$ ) were positively related to financial performance of cooperative and explained 52% of the variance. Thus, H1, H2 and H3 were supported. According to the Cohen (1988), if the  $R^2$  value was above the 0.50 indicating that this a moderate model.

Table 6: Hypothesis Testing

Constructs	$\beta$	S. E	t-value	p-value	$f^2$	VIF	$R^2$	Decision
H1	0.311	0.101	3.068	0.00	0.088	2.326	0.519	Supported
H2	0.292	0.086	3.428	0.00	0.105	1.745		Supported
H3	0.248	0.089	2.665	0.00	0.063	1.886		Supported

According to Sullivan & Feinn (2012), despite the p-value is used to assess the significance level of any association between exogeneous and endogenous components, but it is unable to show the magnitude effect. Thus, this study used the Cohen (1988) rule of thumb which is 0.02, 0.15 and 0.35 representing small, medium, and large effects. Based on Table 6, result of  $f^2$  effect size, showed that only all the variables have small effect size. Hair et al. (2010) stated that the effect size is difficult to determine using a rule of thumb since it depends on the complexity of the model, the study context and research field.

## Discussion

The study examined the impact of financial control mechanisms on the financial performance of cooperatives. Three financial control mechanisms were analyzed: financial reporting, budgetary control, and risk management. A questionnaire measured the relationship between these mechanisms with financial performance. The first independent variable of financial reporting and its impact on financial performance was examined in this study. Examining the relationship between financial reporting and financial performance using the coefficient table, the beta value for financial reporting (3.068) was significant (p value = 0.05). Financial reporting as a financial control mechanism could predict cooperative financial performance. As a result, hypothesis 1, stating that financial reporting has a significant positive relationship with

cooperatives' financial performance, was accepted. The result was consistent with Huzaimi et al. (2023), who found that the accuracy of the quality financial report will not be jeopardized when financial control is effective. Financial reporting as a control mechanism can be used to predict cooperative financial performance, Fatihudin et al.(2018) argued that financial achievement is the business's ability to manage and direct its resources; thus, it is important for cooperative board members to understand the accounting information in financial reports.

Examining the relationship between budgetary control and financial performance using the coefficient table, the beta value for budgetary control (3.428) was significant ( $p$  value = 0.05). Therefore, budgetary control as a financial control mechanism can be used to predict cooperative financial performance. As a result, hypothesis 1b, which states that budgetary control has a significant positive relationship with cooperatives' financial performance, was accepted. The results were aligned with prior studies that found a positive relationship between budgetary control and financial performance (Adongo & Jagongo, 2013; Maelah & Yadzid, 2018). This study found that budgetary control plays a significant role in cooperative financial performance. The study concludes that an effective budgetary control process, encompassing planning, implementation, monitoring, and evaluation, is essential for improving cooperative performance.

The relationship between risk management and financial performance using the coefficient table, the beta value for risk management (2.665) was significant ( $p$  value = 0.05). This suggests that risk management as a financial control mechanism can be used to predict cooperative financial performance. As a result, hypothesis 3, which states that risk management has a significant positive relationship with cooperatives' financial performance, was accepted. The result is consistent with Horvey and Ankamah (2020), who revealed that business entities employ risk management as one of the most crucial strategies to increase earnings. Besides, there are several other prior studies found that effective financial risk management practices have a positive relationship with financial performance (Florio & Leoni, 2017; Muslih & Marbun, 2020; Malik, Zaman & Buckby, 2020; & Azizah). In summary, the study found that while cooperatives have implemented certain aspects of risk management, there are areas where improvement is needed. Risk management was found to have a significant positive relationship with financial performance, indicating its importance in achieving better financial outcomes for cooperatives. Implementing effective risk management practices can enhance financial performance and align with prior studies' findings.

## **Practical Contribution and Conclusion**

### **Practical contribution**

Based on the findings and discussion, there are a few contributions to the cooperative's stakeholders, including the Ministry of Entrepreneurship and Cooperative Development (MECD) and Malaysia Cooperative Society Commission (MCSC) as the regulator and governing bodies of the cooperative sector, the cooperative itself particularly the cooperative board members, and others such as Cooperative Institute of Malaysia (CIM) and the Malaysian National Cooperatives Movement (ANGKASA) as the apex body for all cooperatives. The contributions are as follows as the governing bodies of the cooperative sector in Malaysia, MECD and MCSC are responsible for ensuring all cooperatives contribute significantly to the total earnings to achieve NCP 2021-2030 in the set time. To ensure cooperatives meet the set objective, this study was conducted to provide information on the impact of financial control mechanisms in cooperatives that are being used to mitigate the risk of losses that hinder the

achievement of financial objectives. The finding is relevant to the regulator in developing appropriate enforcement policies for cooperatives in Malaysia. Some constructive recommendations for regulators are:

- i. The governing bodies should enhance cooperative financial reporting by emphasizing the importance of accurate and timely financial reporting for cooperatives. For example, MCSC can intensify the enforcement of all cooperatives, regardless of their size, on applying standardized financial reporting frameworks (Guideline 23: Preparation of Financial Statements). To improve the quality of financial reports, MSCS can establish mechanisms for regular financial performance assessment and benchmarking within the cooperative sector.
- ii. The regulator should promote good cooperative governance and leadership for all cooperatives, especially for cooperative boards, to ensure diverse representation, accountability, and independence.
- iii. The regulator shall provide financial support and incentives for cooperatives, such as advocating for government funding programs and grants specifically designed to support cooperative financial management initiatives and offering incentives, such as tax reliefs or reduced regulatory requirements, to cooperatives that demonstrate strong financial performance and adherence to sound financial management practices.

From a financial reporting perspective, the area that needs to be improved is inventory management and taxation. Those accounting skills are lacking in most of the cooperative board members. The improvement in inventory management is vital as it affects the profit of a cooperative. Additionally, the ability to calculate taxation is also important to ensure cooperatives comply with tax regulations, govern effectively and contribute substantially to the country. By doing so, the contribution of the cooperative sector will become significant; hence the government will allocate more resources essential for expansion.

## Conclusion

This study examined the relationship between financial control mechanisms and their components on cooperative financial performance using a sample of cooperative board members of registered cooperatives in Malaysia. Based on the analysis and discussion results, it can be concluded that financial control mechanisms positively impact cooperative financial performance. In particular, the findings showed that three components of financial control mechanisms examined in this study have a significant positive relationship with cooperative financial performance, which is financial reporting, budgetary control and risk management. In addition, this study used the concept from the prospect theory in explaining the implementation of financial control mechanisms in cooperatives. The adoption of the prospect theory is relevant to rationalizing the effectiveness of financial control mechanisms in cooperatives, as the mechanisms will only be implemented when the potential gain outweighs the cost of implementing financial control mechanisms (potential loss).

Specifically, this study's findings assist the regulatory bodies with relevant information and providing some constructive recommendations in developing appropriate enforcement policies. Overall, sound financial control mechanisms are essential for the efficiency and effectiveness of cooperatives' operations which snowball to superior performances. Thus, a collaboration between cooperatives, regulatory bodies and stakeholders is essential to ensure that the financial control mechanisms in cooperatives can effectively mitigate the risk of losses and malpractices, hence achieving the targeted financial performance. The findings of this study are significant and essential to cooperatives' stakeholders, particularly MECD, MCSC, CIM, and ANGKASA,

in determining the right approach to increase cooperatives' financial performance, hence achieving NCP 2021-2030 target of RM100 billion earnings from cooperative sector. Finally, this study contributes to the value adds the knowledge inventory with empirical findings on the impact of financial control mechanisms on cooperatives in the Malaysian context.

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