

## PERFORMANCE ASSESSMENT OF COOPERATIVE FINANCIAL INSTITUTIONS USING THE BALANCED SCORECARD CONCEPT

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**Abstract:** *This study aims to determine the effect of the performance of cooperative financial institutions by using the concept of a balanced scorecard. Balance scorecard attributes used as independent variables in this study are financial, customer, internal business, growth and learning perspectives. The cooperative financial institution that is the object of research is the Putri Manunggal Cooperative in Sukoharjo. This research is a type of quantitative descriptive research. The population in this study were the employees and customers of the Putri Manunggal Cooperative, while the sample used was selected through a random sampling technique by distributing questionnaires to 500 respondents. The technique of collecting data is a questionnaire, which is done by giving a set of questions or written statements to the respondents to be answered. The weight of the assessment or the number of the questionnaire results in this study is in accordance with what is described in the Likert scale. The dependent variable in this study is Cooperative Performance (Y), while the independent variables in this study are financial perspective (X<sub>1</sub>), customer perspective (X<sub>2</sub>), internal business process perspective (X<sub>3</sub>), and learning and growth perspective (X<sub>4</sub>). The data analysis technique of this research uses multiple linear regression analysis, F test, t test, and coefficient of determination (R<sup>2</sup>) test. The results showed that the financial, customer and internal business perspective variables partially had a significant effect on financial performance. While the growth and learning perspectives have no significant effect on financial performance. Simultaneously the financial, customer, internal business, growth and learning perspectives have a significant effect on financial performance.*

**Keywords:** *balance scorecard, financial performance, cooperative financial institution*

### 1. Introduction

Cooperatives are one of the economic forces that encourage the growth of the national economy. Cooperatives can be referred to as a description of the basic economic foundation of the Indonesian nation because they have the basic principle of kinship, but the current conditions are not easy to carry out cooperative activities in Indonesia in the midst of business competition for financial institutions that exist today (Kadir & Yusuf, 2012); (Nurhayati & Wibowo, 2011). The problems faced by cooperatives are increasingly diverse in this era of globalization, from internal problems of cooperatives to external problems of cooperatives, especially those that are often faced, namely capital problems and the performance of the cooperative itself. One of the

indications of good or bad performance is whether the cooperative is developing or not in running its business. If the cooperative is growing and advancing, it can be ascertained that it has good performance, and vice versa.

Performance appraisal as a periodic determinant of the operational effectiveness of an organization, part of the organization, and employees based on predetermined goals, standards and criteria (Mulyadi, 2009); (Akuoko, 2012); (Asphalt & Malhotra, 2012). Thus, a performance appraisal is needed that can be used as a basis for designing a reward system so that personnel produce performance that is in line with the performance expected by the organization. In traditional management accounting, management performance measurement is only based on financial aspects, because financial measures can be easily obtained in the form of quantitative values derived from financial statements. Meanwhile, non-financial performances are ignored because they are considered difficult to measure and have quite disturbing weaknesses, namely the inability to measure intangible assets and intellectual property of human resources. (Rahman, 2001); (Aniș, et.al., 2012); (Roberts, et.al., 2017).

The Balanced Scorecard is a scorecard that is used to plan the score that someone wants to achieve in the future and to record the score of the actual performance results achieved by a person (Nørreklit, Kure & Trenca, 2018). The Balanced Scorecard is a management concept introduced by Kaplan and Norton (2005) as a development of the concept of performance measurement that measures company performance. The Balanced Scorecard provides a way to communicate a cooperative's strategy to leaders throughout the cooperative. The Balanced Scorecard is a collection of integrated performance measures derived from the strategy of the business entity that supports the overall strategy of the business entity (Kaplan, 2009); (Wu, 2012). The goals and measures of the Balanced scorecard are derived from the vision and strategy. Objectives and measures view the performance of business entities from four perspectives, financial, customer, internal business processes, and learning and growth (Kaplan and Norton, 2005). From some of the opinions of the experts above, it can be concluded that the Balanced Scorecard is a strategic management system that translates the mission and strategy of an organization into operational objectives and measures. Objectives and measures were developed for four perspectives, namely: financial perspective, consumer perspective, business process perspective, and learning and growth perspective.

The balanced scorecard uses a financial perspective as a perspective that occurs as a result of other perspectives (customers, internal business processes and learning & growth) or in other words this perspective will automatically be realized from the good or bad performance of the 3 perspectives below. Measurement of financial performance indicates whether the company's strategy, implementation, and implementation contribute to the fundamental improvement (Martello, M., Watson, JG, & Fischer, MJ (2008); (Tohidi, Jafari & Afshar, 2010). finance does not have strategic initiatives to achieve strategic goals. The balance scorecard uses financial performance measures such as net income and ROI, because these benchmarks are generally used in cooperatives to determine profit. Financial measures alone cannot describe the causes that make changes in wealth created company or organization (Katzenbach & Smith, 2015).

From a customer perspective, cooperatives identify and define their customers and market segments. This perspective has several key measures of successful outcome with good strategy formulation and implementation. The market segment is the source that will be the income component of the cooperative's financial goals. The customer perspective allows companies to align various sizes of customers (Boujena, Johnston, & Merunka, 2009). The strategic target from the customer's perspective is Firm equity. Among them are increasing customer confidence in the products and services offered by cooperatives, the speed of service provided and the quality of the company's relationship with its consumers. Cooperatives need to first determine the market segments and customers that are the targets for the organization or business entity. Furthermore, managers must determine the best measuring tool to measure the performance of each operating unit in an effort to achieve its financial targets. If a business unit wants to achieve superior financial performance in the long run, they must create and present a new product/service of better value to their customers (Kaplan and Norton, 2005).

The internal business process perspective displays critical processes that enable business units to provide a value proposition that is able to attract and retain customers in the desired market segment and satisfy the expectations of shareholders through financial returns (Qu, WG, Oh, W., & Pinsonneault, 2010) . Each company has a unique set of value creation processes for its customers. The strategic targets from this business process perspective are organizational capital such as improving the quality of service processes to customers, computerizing service processes to customers, and implementing technological infrastructure that facilitates service to customers. Each cooperative has a unique set of value creation processes for its customers.

This learning and growth perspective identifies the infrastructure that cooperatives must build to shape the growth and development of cooperatives in the long term. The strategic target from the perspective of learning and growth is human capital (Soderberg, et.al., 2011). For example, increasing the competence and commitment of cooperative staff. According to Kaplan and Norton (2005) the learning and growth perspective on the Balanced Scorecard develops goals that encourage cooperative learning and growth. The objectives set in the financial, customer and internal process perspectives identify what the cooperative must master to produce the best performance. The goal in the learning and growth perspective is to provide the infrastructure that will enable the ambitious goals in the other three perspectives to be achieved. Goals in the learning and growth perspective are the driving factors for the best performance in other perspectives. The learning and growth perspective includes the principle of capability or ability related to the internal conditions of the cooperative.

## **2. Research methods**

This research is a type of quantitative descriptive research. The population in this study were the employees and customers of the Putri Manunggal Cooperative, while the sample used was selected through a random sampling technique by distributing questionnaires to 500 respondents. The technique of collecting data is a questionnaire, which is done by giving a set of questions or written statements to the respondents to be answered. The weight of the assessment or the

number of the questionnaire results in this study is in accordance with what is described in the Likert scale (likert scale). This Likert scale uses five rating points, namely (1) Strongly Agree, (2) Agree, (3) Neutral, (4) Disagree, and (5) Strongly Disagree. The dependent variable in this study is Cooperative Performance (Y), while the independent variables in this study are financial perspective (X<sub>1</sub>), customer perspective (X<sub>2</sub>), internal business process perspective (X<sub>3</sub>), and learning and growth perspective (X<sub>4</sub>). The data analysis technique of this research uses multiple linear regression analysis, F test, t test, and coefficient of determination test (R<sup>2</sup>).

### 3. Research Result and Discussion

#### 3.1 Multiple Linear Regression Analysis Results

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n + e$$

Y = Cooperative Performance

a = Constant

X<sub>1</sub> = Financial Perspective Variables

X<sub>2</sub> = Customer Perspective Variables

X<sub>3</sub> = Internal Business Process Perspective Variables

X<sub>4</sub> = Variables of Learning and Growth Perspective

B = Regression coefficient

E = error

Table 1  
Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0,787	2,849		-0,276	0,784
Financial Perspective	0,143	0,063	0,197	2,260	0,030
Customer Perspective	0,581	0,147	0,421	3,946	0,000
Internal Business Process Perspective	0,345	0,094	0,384	3,688	0,001
Learning & Growth Perspective	0,133	0,120	0,125	1,114	0,273

a. Dependent Variable: Cooperative Performance

Source: SPSS data processing

- 1) The constant of -0.787 indicates that if the financial perspective variable (X<sub>1</sub>), customer perspective (X<sub>2</sub>), internal business process perspective (X<sub>3</sub>), and learning and growth perspective (X<sub>4</sub>) is zero, the magnitude of the cooperative performance variable is -0.787.
- 2) The regression coefficient of the financial perspective variable (X<sub>1</sub>) is 0.143, meaning that the financial perspective variable (X<sub>1</sub>) has increased by one unit, while the customer perspective variable (X<sub>2</sub>), internal business process perspective (X<sub>3</sub>), and learning and growth perspective

( $X_4$ ) is fixed, then the magnitude of the cooperative performance variable (Y) will increase by 0.143.

- 3) The regression coefficient of the customer perspective variable ( $X_2$ ) is 0.581, meaning that if the customer perspective variable ( $X_2$ ) has increased by one unit, while the financial perspective variable ( $X_1$ ), internal business process perspective ( $X_3$ ), and learning and growth perspective ( $X_4$ ) is fixed, then the magnitude of the cooperative performance variable (Y) will increase by 0.581.
- 4) The regression coefficient of the internal business process perspective variable ( $X_3$ ) is 0.345, meaning that if the internal business process perspective variable ( $X_3$ ) has increased by one unit, while the financial perspective variable ( $X_1$ ), customer perspective ( $X_2$ ) and learning and growth ( $X_4$ ) is fixed, then the magnitude of the cooperative performance variable (Y) will increase by 0.345.
- 5) The regression coefficient for the learning and growth perspective variable ( $X_4$ ) is 0.113, meaning that the learning and growth perspective variable ( $X_4$ ) has increased by one unit, while the financial perspective variable ( $X_1$ ), customer perspective ( $X_2$ ) and internal business processes ( $X_3$ ), is fixed, then the magnitude of the cooperative performance variable (Y) will increase by 0.113.

### 3.2 F Test Results

Table 2  
F Test Results

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	371,135	4	92,784	39,237	,000 <sup>b</sup>
Residual	82,765	35	2,365		
Total	453,900	39			

a. Dependent Variable: Cooperative Performance

b. Predictors: (Constant), Learning and Growth Perspective, Financial Perspective, Internal Business Process Perspective, Customer Perspective

Source: SPSS data processing

In this study,  $F_{count}$  was  $39.237 > F_{table}$  was 2.84. Where  $F_{table}$  is obtained from  $df_1$  (horizontal) =  $k - 1 = 4 - 1 = 3$ , and  $df_2$  (vertical) =  $n - k = 40 - 4 = 36$ , so that  $F_{table}$  is found with a value of 2.84. While the significance of F in this study is  $0.000 < \alpha = 0.05$ , meaning that the variables of financial perspective ( $X_1$ ), customer perspective ( $X_2$ ), internal business process perspective ( $X_3$ ), and learning and growth perspective ( $X_4$ ) simultaneously have a significant effect on cooperative performance (Y).

### 3.3 t test results

The t-test was used to determine whether the financial perspective variable regression model ( $X_1$ ), customer perspective ( $X_2$ ), internal business process perspective ( $X_3$ ), and learning and growth perspective ( $X_4$ ) partially affected the cooperative's performance. From table 1 of multiple linear regression, the t-test is carried out in two ways, first by looking at the probability value compared to an alpha of 0.05. Second, by comparing  $t_{count}$  with  $t_{table}$  ( $t_{table} = n-k-1$ ,  $40 - 4 - 1 = 36$  with 5% alpha). If it has a probability value  $< \alpha = 0.05$  or  $t_{count} > t_{table}$ , which means that there is a significant influence between the independent variable and the dependent variable.

From table 1 above, the magnitude of the effect of each independent variable on the financial perspective variable ( $X_1$ ), customer perspective ( $X_2$ ), internal business process perspective ( $X_3$ ), and learning and growth perspective ( $X_4$ ) on the dependent variable (cooperative performance) is as follows:

- 1) Test the hypothesis of the independent influence of the financial perspective variable ( $X_1$ ), on the performance of cooperatives (Y). In this study the financial perspective variable ( $X_1$ ), has a  $t_{count}$  of  $2.260 > t_{table}$  of  $1.688$ , and a significance of  $0.030 < \alpha = 0.05$ , meaning that there is a significant influence between the financial perspective variable ( $X_1$ ), on the performance of cooperatives (Y).
- 2) Test the hypothesis of the influence of the customer perspective ( $X_2$ ), on the performance of cooperatives. In this study, the customer perspective ( $X_2$ ), has a  $t_{count}$  of  $3,946 > t_{table}$  of  $1, 688$ , and a significance of  $0.000 < \alpha = 0.05$ , meaning that there is a significant effect between the customer perspective variables ( $X_2$ ) on cooperative performance (Y).
- 3) Test the hypothesis of the effect of the internal business process perspective ( $X_3$ ) on the performance of cooperatives. In this study, the internal business process perspective ( $X_3$ ), has a  $t_{count}$  of  $3.688 > t_{table}$  of  $1.688$ , and a significance of  $0.001 < \alpha = 0.05$ , meaning that there is a significant influence between the variables of the internal business process perspective ( $X_3$ ), on the performance of cooperatives (Y).
- 4) Test the hypothesis of the effect of learning and growth perspectives ( $X_4$ ) on cooperative performance. In the learning and growth perspective research ( $X_4$ ), it has a  $t_{count}$  of  $1.114 < t_{table}$  of  $1.688$ , and a significance of  $0.273 > \alpha = 0.05$ , meaning that there is no significant effect between the variables of learning and growth perspective ( $X_4$ ) on cooperative performance (Y).

### 3.4 Coefficient of Determination Test Results

Table 3  
Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,904 <sup>a</sup>	0,818	0,797	1,538

a. Dependent Variable: Cooperative Performance

From table 3 above, the Adjusted R Square value is 0.797. This figure means that the independent variables of financial perspective ( $X_1$ ), customer perspective ( $X_2$ ), internal business process perspective ( $X_3$ ), and learning and growth perspective ( $X_4$ ) on the dependent variable of cooperative performance (Y) are 79.7% while the remaining 20.3% is influenced by other variables not examined in this study.

## 4. CONCLUSION

Based on the results of data analysis and discussion, the conclusions that can be drawn from this research are:

- Partially, the financial perspective has a positive effect on the performance of cooperatives, having a  $t_{count}$  of 2.260 >  $t_{table}$  of 1.688, and a significance of 0.030 < alpha = 0.5, meaning that there is a significant influence between the variables of the financial perspective ( $X_1$ ), on the performance of cooperatives (Y). In accordance with the conditions for the acceptance of the significance of the partial test, namely  $t_{count} > t_{table}$ .
- Partially, the customer perspective has a positive effect on the performance of cooperatives, having a  $t_{count}$  of 3.946 >  $t_{table}$  of 1.688, and a significance of 0.000 < alpha = 0.5, meaning that there is a significant influence between the customer perspective variables ( $X_2$ ) on the performance of cooperatives (Y). In accordance with the requirements for the acceptance of the significance of the partial test, namely  $t_{count} > t_{table}$ .
- Partially, the perspective of the community's internal business process has a positive effect on the performance of cooperatives, has a  $t_{count}$  of 3.688 >  $t_{table}$  of 1.688, and a significance of 0.001 < alpha = 0.5, meaning that there is a significant influence between the variables of the internal business process perspective ( $X_3$ ), on performance. cooperative (Y) In accordance with the conditions for the acceptance of the significance of the partial test, namely  $t_{count} > t_{table}$ .
- Partially, the perspective of learning and growth ( $X_4$ ) on cooperative performance. In the study of learning and growth perspective ( $X_4$ ), it has  $t_{count}$  1.114 <  $t_{table}$  of 1.688, and a significance of 0.273 > alpha = 0.5, meaning that there is no significant effect between learning and growth perspective variables ( $X_4$ ) on cooperative performance (Y).

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