

# COOPERATIVE BUSINESS PERFORMANCE: QUANTITATIVE AND QUALITATIVE APPROACHES RELATED TO THE VALUE OF FIRM

<sup>1</sup>\*Rima Elya Dasuki,<sup>2</sup>Yenny Wipartini

<sup>1</sup>Indonesian Cooperative Management Institute -West Java-Indonesia

<sup>2</sup>Indonesian Cooperative Management Institute -West Java-Indonesia

\*Corresponding author: rimaelyadasuki@gmail.com

**Abstract.** West Java Province has a total of 25,741 cooperative unit, which is the third largest in number of cooperative in Indonesia. Although the awareness of the benefits of cooperatives has begun to grow in the community, however, there are about 30% cooperatives that are not active or deficient in the performance, this condition will impact to the value of firm. This study was aimed to determine the relationship between cooperative business performance and value of firm. The type of research used in this study was descriptive research methods, with 39 sample data from sharia savings and loan cooperatives in West Java. This study used descriptive research method with 39 samples. The results of this research show that the performance of sharia savings and loan cooperatives in West Java is still in the moderate category with an average score of 61.16, where the factor of productive asset quality is the most influential factor in the business performance of cooperatives (49.3%), Value of firm cooperatives in West Java is still showing poor performance, where the average Return of Asset was 6.7%, the performance of business cooperatives influence the value of the firm is 36%. Based on the result it is obligated to perform guidance from the relevant agencies so that the level of risk in the management of cooperatives, especially those related to the quality of earning assets is increase, the efficiency of cooperatives especially those related to business costs need to be managed well so that financial performance can be improved.

**Keywords:** Micro Finance, Cooperatives, Financial Performance, Value of Firm

## 1. INTRODUCTION

Cooperatives are one of the institution that can carry out economic empowerment for the community. Cooperative business is directly related to the improve the business and welfare of members, so that with good supervision will have a high beneficial impact for members. Cooperative development policy should give priority to quality of cooperatives, to produces quality cooperatives required good supervision. (Dasuki & Lestari, 2019). West Java Province is the province with the third largest number of cooperatives in Indonesia after East Java and Central Java with a total of 25,741 cooperative units

**Table 1.1.**

**Cooperative Performance in 2011-2018 West Java Province:**

Year	Number of Active Cooperative (unit)	Annual Member meeting (unit)	Business Volume (million rupiah)	Number of Members (people)	Surplus (million rupiah)
2011	14,856	4,995	10,663,795.33	4,908,954	1,076,371.82
2012	15,051	4,654	12,624,746.41	4,957,924	993,250.39
2013	15,130	5.981	10,746,226.81	5,864,690	1,569,912.76

2014	15,633	6.115	19,954,970.57	5,974,375	1,678,967.39
2015	16,855	6,697	21,157,522.70	5,974,375	1,849,061.34
2016	16,542	6,158	21,117,286.17	6,106,211	3,731,024.19
2017	16,2013	3,061	12,234,070	1,480,158	535,328
2018	11,127	3,352	15,077,648	1,761,469	616,094

Source: West Java Cooperative Office Performance Report 2019

From the table above it can be seen that the number of cooperatives tends to increase. The Sharia Savings and Loan Cooperative Product is the most established because its existence is considered to be very helpful for members. Sharia Savings and Loans Cooperatives developing in a number that is quite encouraging.

**Table 1.2.**  
**Development of Savings and Loans Cooperatives  
and Islamic Financing in West Java**

No.	Type of Cooperative	2013 (units)	2014 (units)	2015 (units)	2016 (units)	2017 (units)	2018 (units)
1	Saving and loan cooperative	638	700	769	819	987	1052
2	Savings and Loan Cooperatives and Islamic Financing	644	864	964	1010	1124	1278
	Total	1282	1564	1733	1829	2111	2330

Source: West Java Cooperative Office Performance Report, 2018

From the table above it can be concluded that the development of conventional savings and loan cooperatives and Islamic savings and loan cooperatives has increased. Savings and loan cooperatives and Islamic finance have experienced quite encouraging developments.

Cooperative business practices are based on cooperative values and principles. Cooperative practices apply economies of scale and scope to achieve economic efficiency and (collective) social efficiency. The cooperative business orientation is open while still adhering to the cooperative identity.

To preserve and protect the level of public confidence to cooperative, the cooperative is obliged to carry out the monitoring by implementing a system of internal control to be implemented by cooperative itself regularly. Based on the description above, this research will identify the business performance level of quantitative (financial) and qualitative (non financial) savings and loan cooperatives related to the value of firm.

## 2. LITERATURE REVIEW

### 2.1. Cooperative Concept

Understanding of cooperatives listed in article 1 of Law No. 25 of 1992 concerning Cooperatives describes the understanding both micro and macro : " *Cooperatives are business entities consisting of a person or a legal entity cooperating with the basis of their activities based on cooperative principles as well as the people's economic movement based on the principle of kinship*". Cooperatives have objectives that include two aspects, social and business aspects. Therefore, the lack of proper regulation and supervision if performed as applied to the bank under the Banking Act that already exists. However, on the one hand, the Cooperative has properties as a financial institution, it should be guaranteed a minimum of risk management within the framework of regulation and supervision. (Dasuki, 2016). According to Munkner (2005) the application of cooperative principles in practice is described by him in the table as follows:

**Table 2.1.**  
**Ideas, Principles and Cooperative Practices**

General idea	Principles of Cooperatives	Cooperative practice
Self Help Solidarity	Help each other through an association or self-help based on solidarity (cooperation between each person)	Regional, national and international associations. Cooperative between cooperatives. External assistance, if any, is only temporary and only intends to develop and develop a self-help spirit.
	Service to members (improvement of members through cooperative service efforts and their members) as a motive for independent actions and ways in which mutual assistance is realized.	Do not use the name of the cooperative other than for the purpose and purpose of emphasizing the needs of members. Determination of policies by members or representatives chosen by them. Services on the basis of approximate cost ( <i>Service near cost</i> ). Examination every year ( <i>senior control</i> ) by cooperative inspectors.
	Identity Joint owners and consumers of cooperative businesses	Limitation of transactions to non members. It takes the participation of each member in the financial sector individually. Only members can be elected as members of the board. Deposits (shares) only on behalf of members.
Democracy	Management and Democratic supervision from cooperative associations as a whole and from cooperative businesses.	The same position of the members. Each person has one vote. Decision making on the basis of the most votes. Meeting members as the highest authority. Participation of members directly or indirectly in the supervision of cooperatives.
Economy	Economic efficiency of cooperative enterprises is measured as a result of increasing members (long term and short term).	Applied modern administration methods and business management. Determination of policy ( <i>policy making</i> ) by selected members or representatives. Management-handed in the hands of elected personnel and a full day's work ( <i>full time</i> ) and by receiving a salary. Work is carried out by well-educated or trained staff. Provision for adequate financial equipment.

General idea	Principles of Cooperatives	Cooperative practice
		Sufficient area of business. Complementary transactions are not members, if necessary.
Freedom	Voluntary association (voluntary membership)	There is no forced relationship. There are no artificial restrictions. Regarding the right to leave the cooperative.
	Autonomy in determining targets, making management decisions	Rights of members to make and improve existing statutes. The right of members to make decisions to accept new members. Rights of members to conduct business transactions with them in their own discretion. Limited rewards for invested capital. Limited dividends or interest on paid-up share capital. Dividends are proportional to transactions with cooperative businesses.
		There are no artificial restrictions for the acceptance of new members. There is no discrimination against all people due to religion, ethnicity or political beliefs. The same status for both old and new members.
Justice	Fair Distribution of business results.Distribution of results arising from cooperative business operations, and fairly.	There is no claim by a member for a portion of the reserve fund. There is no distribution of funds that are not claimed, after the liquidation of an association, among its members.
Altruism	Open Membership	Upgrading an education commission in each cooperative association as part of its organizational structure. Provisions to allocate a certain percentage of the net proceeds from the net or turnover into an education fund. Required a minimum education standard for prospective new members.
Social progress. Through education	Reserve funds that cannot be shared (as social capital) Educational Development	

## 2.2. Cooperative Business Performance

Performance is a reflection of success in business. Performance measurement is a measurement action carried out on various activities in the value chain that exist in the company (Asad Kamran,

2010), used as feedback that will provide information about the achievement of the implementation of a plan and the point where the company requires adjustments to planning and control activities.

To measure the financial performance of Cooperative companies, especially cooperatives engaged in savings and loan business activities, will refer to the measure of the business performance of the savings and loan business (Ministry of Cooperatives and Small Medium and Medium Enterprises, 2016)

#### 2.2.1 Capital

The first aspect of business performance cooperative is capital. The assessment is carried out by using two capital ratios, namely the ratio of equity to total assets and the capital adequacy *ratio* (CAR) .

#### 2.2.2 Earning Assets Quality

Risks often fail to pay off, especially in business. And the impact of financial mismanagement can be profound. But not to all. The shareholder reels in the face of seeing an investment all but wiped out, which is disastrous enough in itself.(Group & Limited, 2004).

The assessment of the quality of earning assets is based on 3 ratios : 1. The ratio of the level of bad debt losses to the amount of receivables and financing; 2. Portfolio ratio to risky receivables and risky payments *Asset Risk Portfolio*; 3. The ratio of Allowance for Earning Assets to the Required Allowance for Earning Assets .

#### 2.2.3 Management

Assessment of aspects of cooperative management includes several components, namely: a. General Management; b. Institutional; c. Capital Management; d. Asset Management; e. Liquidity Management

#### 2.2.4 Efficiency

The assessment of cooperative efficiency is based on 3 ratios, namely the ratio of operational costs to services: 1. Fixed asset ratio to total assets; 2. Service efficiency ratio

#### 2.2.5 Liquidity

Liquidity as a measure of firm success has been studied in depth. Cleary (1999) evaluates existing studies to state the investment decisions of financially constrained firms are more sensitive to firm liquidity than those of less constrained firms.(Katchova & Enlow, 2013). Quantitative assessment of liquidity ratios :a. Cash ratio; b. Financing ratio

#### 2.2.6 Cooperative identity

Assessment of aspects of cooperative identity is to measure the success of cooperatives in achieving their goals, namely promoting economic members. The aspect of assessment of cooperative identity uses 2 ratios : a. Member Economic Promotion Ratio; b. Gross Participation Ratio

#### 2.2.7. Independence and Growth

The assessment of independence and growth is based on 3 ratios, which are Asset Profitability, Equity Profitability, and Operational Ratio: a. The Asset profitability ratio of assets is Profit after zakat and tax compared to total assets; b. The Equity Profitability ratio, that is member profit compared to total equity; c. Operational ratio, which is business income compared to operating costs

#### 2.2.8. Compliance with Sharia Principles

The assessment of compliance aspects of sharia principles is intended to assess the extent to which sharia principles are applied by cooperative in carrying out their activities as sharia financial institutions.

### 2.3 Cooperative Business Performance

Based on the calculation of 8 (eight) components as referred to in numbers 1 - 8, the overall score is obtained. The score is used to get prediction the level of business performance of operations that are divided into 4 (four) groups, good performance, fair performance, under supervision and under special supervision.

Predicting the level of business performance of the operations is as follows:

**Table 2.2.**

#### **Business Performance Cooperative**

<b>SCORE</b>	<b>PREDICATE</b>
$80.00 \leq x < 100$	Good
$66.00 \leq x < 80.00$	Fair
$51.00 \leq x < 66.00$	Under supervision
$0 \leq x < 51.00$	In Special Supervision

*Source: Ministry of Cooperatives and Small and Medium Enterprises Number 07 / Per / Dep.6 / IV / 2016*

### 2.4. Cooperative Value Firm

The objective of cooperation is the element of benefit, which is to fulfill the interests of its members and the community in order to improve the welfare of life. To achieve this, even though the cooperative is not a profit-oriented capital organization, capital is an important factor to achieve this goal in addition to other resource factors. (Heiko, 2007)

Relating to certain interests towards the results of various cooperative activities, Hanel (1990) distinguishes three types of efficiency in cooperatives: a. Efficiency of Business Management; b. Efficiency Related to Development; c. Efficiency Oriented to the Interests of Members

The provision of services for goods / services offered by cooperatives must have a direct or indirect influence on increasing the economic value of the economy of member households. The function of services that must be carried out by cooperative companies is to support economic improvement of member households, which means that the service functions of cooperative companies must be related to the economic functions carried out by member households (Ariffin, 2013).

Cooperative business activities must be able to support the economic activities of members, in savings and loan cooperatives, members who have more money, are saved in the form of savings and members who need additional money, can apply for loans to cooperatives (Arifin, 2013).

From the point of view of cooperatives as a company, the success of cooperatives is measured from financial aspects such as assets, debt, equity, turnover / service, surplus and others. Assessment of the success of cooperatives must be seen from cooperatives as companies that carry out economic activities in serving their members.

### 2.5. Analysis of business performance related to the value of firm

Performance is a reflection of success in business ventures. Performance measurement is a measurement action carried out on various activities in the value chain that exist in the company (Rai Anand,2011), used as feedback that will provide information about the achievement of the implementation of a plan and the point where the company requires adjustments to planning activities and control. The business performance analysis of cooperatives can describe the cooperative business performance well relating to quantitative and qualitative aspects, where the results of the analysis can describe the value of cooperative companies. The higher the value of the cooperative company, the more independent the cooperative is, which in turn will provide direct benefits to the member (Dasuki, 2018)

The purpose of cooperatives is to prosper the members, meaning the cooperative is expected to meet the needs of members. To improve member welfare, several prerequisites are needed. According to Yuyun Wirasmita (2005) one of them is that cooperatives must create a "Cooperative Effect" (the impact of cooperatives). *Cooperative Effect* is benefits obtained by members, both direct benefits and indirect benefits. These benefits are obtained because of the efficiency created by the cooperative, namely through joint action (*Joint Action*), which results in synergies, or economies of scale which

among others consist of "Real Economies" and "Pecuniary Economies". *Real Economies*, for example, reduce costs, reduce risk, reduce transaction costs, increase bargaining position, while the impact of cooperatives in the form of "Pecuniary Economies" include facilities that can be obtained by cooperatives such as price discounts, loan interest rates and others. The impact of "Real Economies" and "Pecuniary Economies" is the difference in benefits between cooperating and not cooperating, which will have an impact on the welfare of members. (Yuyun Wirasmita, 2005).

Social cooperatives are characterized by their private nature. They are autonomous associations of people who voluntarily cooperate for mutual, social, economic and working benefits. In addition, the decision-making power is not based on capital ownership but on the principle of one member one vote. Generally speaking, these businesses are owned and managed by partners and their purpose is to satisfy the needs of people who have been ignored (or inadequately fulfilled) by the private or public sectors. (Bontis, 2018)

The analysis of the business performance of the cooperative can describe the conditions of the cooperative business both related to quantitative and qualitative aspects, where the results of the analysis can describe the value of the cooperative company. The higher the value of the cooperative company, the more independent the cooperative is, which in turn will provide direct benefits to the members. When members get direct benefits, it is expected that member participation will increase. This will have an impact on improving business performance which will increase the cooperative value of the company along with the welfare of its members. The association of cooperative assessment of the cooperative company value can be done using the Return On Asset approach. ROA and return on equity (ROE) are popular measures of firm performance in financial literature. Hansen and Wernerfelt (1989) utilize ROA as an organization determinant of firm performance. (Katchova & Enlow, 2013)

Return on assets is a ratio that measures the ability of assets to generate profits. Or as the effectiveness of asset use. The type and level of participation may obviously differ depending on the kind of service or the environment in which the service is delivered, and this then affects the level of satisfaction perceived by the customer. Customer participation in the delivery process may also be perceived in different ways by the customers themselves. It can actually lower their perception of the quality of the service (consider, for instance, the interaction of customers unfamiliar with vending machines), and so have a negative effect on their level of satisfaction. (Ippolito, 2009)

### 3. METHODOLOGY

To determine the sample used *nonprobability sampling technique*. This technique is considered appropriate because the population size has not or cannot be determined in advance. The model used in this study is *purposive sampling* because in this model the researcher determines what characteristics are worth sampling. These characteristics are the completeness of 8 aspects of the cooperative health assessment. If only 1 aspect has no value (blank) it will not be a sample. So based on these criteria, there are 38 cooperatives that fulfill the criteria.

The type of research used in this study is descriptive research method, with a quantitative approach that is research that uses numerical data (numbers) which are then processed and analyzed to be taken as conclusions. Type of data are primary data and secondary data, through observation, interviews, questionnaires, documentation studies and literature studies

#### 3.1. Operationalization of variables

**Table 3.1**  
**variable 1: Business Performance**

No	Sub Variable	Indicator
1	Capital	Equity to Total Asset Ratio Equity to Risk Receivable Ratio Equity to Total Capital Ratio

2	Earning Assets Quality	Member Loan to Total Loan Ratio Bad Debt Losses to Total Loan Ratio Risk Reserve to Bad Debt Losses Ratio
3	Management	General Management Institution Capital Management Asset Management
4	Efficiency	Member Operation Cost to Gross Member Participation Operation Cost to Surplus Ratio Service Efficiently Ratio
5	Liquidity	Cash Ratio Loan to Fund Ratio
6	Independence and Growth	Surplus to Total Asset Ratio Surplus to Equity Ratio Service Operational Ratio
7	Identity of the Cooperative	Gross Member Participation Ratio Member Promotion Ratio

**Table 4.2.**  
**variable 2: Value of Firm**

No.	Sub Variable	Indicator
1	Total Assets	Current asset Fixed assets
2	Loan Capital	Long-term debt Short-term Debt
3	Equity	Deposit Grant Reserved
4	Return On Asset	Surplus Total Assets

## 4. RESULTS

### 4.1. The Performance Level of Savings and Loans Cooperative Businesses and Sharia in West Java

To find out how far the level of performance of the Saving Loan Cooperative in West Java can be measured by 8 aspects of cooperative business performance assessment. The 8 aspects are capital, productive asset quality, management, efficiency, liquidity, independence and growth, identity, and compliance with sharia principles. Each of these aspects has questions and ratio calculations and given different weights according to what has been set. The following are the results of the business performance cooperative assessment per aspect:



**Tabel 4.1**  
**The Performance Level of Savings and Loans Cooperative Businesses and Sharia in West Java**

No. Cooperative	Capital	Earning Assets Quality	Management	Efficiency	Liquidity	Independence and Growth	Cooperative Identity	Compliance with Sharia Principles	Total Score	Category
1	10	14	5.22	7.5	12.5	1.5	0	5	55.72	Under supervision
2	7.5	18.5	5.67	10	5	3.5	6.25	10	66.42	Fair
3	6.5	3.75	4.85	6.5	3.75	3.5	6.25	3	38.1	In Special Supervision
4	10	20	6.39	6.5	5	4.25	6.25	10	68.39	Fair
5	10	20	6.3	7.5	6.25	6.25	10	10	76.3	Fair
6	1.75	20	6.66	8.5	5	5.5	1.25	10	58,66	Under supervision
7	7.5	3.75	6.3	7.5	5	5.5	5	10	50.55	In Special Supervision
8	6.5	20	5.67	10	8	9	6	10	75,17	Fair
9	6	10	6.69	6	6.65	5.75	7	8	56.09	Under supervision
10	6.5	19	6.75	8.5	13.75	7.75	10	10	82.25	Good
11	6.25	20	5.55	10	6.25	9.25	2.5	9	68.8	Fair
12	10	15	4.13	8.5	10	5.5	6.25	6	65,38	Under supervision
13	10	12.25	5,12	5.5	10	5.75	6.25	9	63.87	Under supervision
14	8.75	5	4.44	8.54	3.75	3.75	2.5	7	43.73	In Special Supervision
15	6.25	6.75	3.95	6.25	5	1.5	6.25	6	41.95	In Special Supervision
16	2.75	15.25	6.03	5.5	8.75	3.5	6.25		54.03	Under supervision
17	6.5	18	6.66	8.5	11.25	5.25	8.75	6	72.91	Fair
18	3.75	17.5	5.85	4.5	10	3.5	3.75	8	58.85	Fair

The International Conference on Innovations in Social Sciences and Education  
(ICoISSE) Bandung, Indonesia, July 25<sup>th</sup>,2020

19	10	8.75	5.31	5.5	3.75	3.5	8.75	10	51,56	Under supervision
20	10	17.85	6.41	6.5	8.75	3.5	10	6	71.01	Fair
21	10	20	6.39	7	14	6	10	8	83.39	Good
22	10	18	6.39	8.5	3	10	10	10	74.89	Healthy
23	6.25	15.5	6.03	8.5	11.25	7.25	10		74,78	Good
24	10	6.25	5.48	10	12.5	7	10	9	71.23	Fair
25	6.25	6.25	5,15	8.5	12.5	3.5	8.75	10	60.9	Fair
26	6.25	19	6.3	6.5	12.5	7.75	8.75	10	76.05	Under supervision
27	10	17	6.32	8.5	12.5	5.5	6.25	10	75.07	Fair
28	8.75	8.5	4.68	10	11.25	4.5	7.5	9	62,18	Fair
29	6.5	10.5	5,13	8.5	5	3.5	7.5	9	55,63	Under supervision
30	10	8.75	5.63	8.5	6.25	6.5	10	7	59.63	Under supervision
31	8.75	6.25	2.84	7.5	3.75	4.5	3.75	9	37.34	Under supervision
32	10	6.25	5.6	8.5	8.75	4	10	4	63,1	In Special Supervision
33	6.5	16.25	6.14	8.5	8.75	3.5	10	0	68,64	Under supervision
34	6.5	7.25	6.3	8.5	7.5	5.75	10	10	61.8	Fair
35	6.5	16.25	5.58	8.5	7.5	6.25	6.25	9	65.83	Under supervision
36	1.5	20	5.83	5	6.25	3.75	10	10	59.33	Under supervision
37	8.75	18	6.39	5	5	10	7	9	68.14	Fair
38	3.75	10	5,84	5	3.75	5.75	1.25		42.34	In Special Supervision
39	5	10	5.25	4.5	5	7.5	2.5	7	42.75	In Special Supervision

The following is an analysis of each business performance element with a total score:  
Relationship of Capital (X1) to Business Performance(Y)

a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.081	6.028		8.639	.000
	Permodalan	1.361	.776	.277	1.754	.088

a. Dependent Variable: Total Kesehatan

In the Coefficients table, in column B at constant (a) is 52.081, while the value of X<sub>1</sub> (Capital) is 1.361 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 52,081 + 1,361X$$

b. Hypothesis Test (t test)

- Pair of Hypotheses

Ho :  $\beta_1 = 0$ , There is no relationship between Capital (X1) and Business Performance (Y)

Ha :  $\beta_1 \neq 0$ , There is a relationship between Capital (X1) and Business Performance (Y)

Basic Decision Making

- Based on the significance value

If the significance value is less than 0.05 then H0 is rejected

If the significance value is more than 0.05 then H0 is accepted

- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.081	6.028		8.639	.000
	Permodalan	1.361	.776	.277	1.754	.088

a. Dependent Variable: Total Kesehatan

- Interpretation

Based on the coefficient table, a significance value of 0.088. From these results it can be concluded that H0 is accepted in other words there is no relationship between Capital (X1) and Business Performance (Y)

2. Relationship between Produktiv Asset Quality (X2) to Business Performance (Y)

a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.647	3.691		11.283	.000
	Kualitas Aktiva Produktiv	1.520	.254	.702	5.995	.000

a. Dependent Variable: Total Kesehatan

In the Coefficients table, in column B at constant (a) is 41,647, while this number X2 (Quality of Production Assets) is 1,520 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 41,647 + 1,520X$$

- b. Hypothesis Test (t test)
  - Pair of Hypotheses
    - Ho :  $\beta_1 = 0$ , There is no relationship between the Quality of Productive Assets (X2) with Business Performance (Y)
    - Ha :  $\beta_1 \neq 0$ , There is a relationship between the Quality of Productivities (X2) with Business Performance (Y)
  - Basic Decision Making
    - Based on the significance value
      - If the significance value is less than 0.05 then H0 is rejected
      - If the significance value is more than 0.05 then H0 is accepted
  - Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.647	3.691		11.283	.000
	Kualitas Aktiva Produktiv	1.520	.254	.702	5.995	.000

a. Dependent Variable: Total Score

- Interpretation
 

Based on the coefficient table, a significance value of 0,000. From these results, it can be concluded that H0 is rejected in other words, there is a relationship between the Quality of Productivity (X2) and Business Performance (Y).
- c. Coefficient of Determination ( $r^2$ ).
- Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.702 <sup>a</sup>	.493	.479	8.74123	.493	35.938	1	37	.000

a. Predictors: (Constant), Kualitas Aktiva Produktiv

b. Dependent Variable: Total Kesehatan

- Interpretation
 

Based on the table above, the Quality of Production Assets (X2) affects the variable Business Performance(Y) of 0.493 or 49.3%.

### 3. Relationship of Management Quality (X3) to Business Performance (Y)

#### a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.488	10.645		1.173	.248
	Manajemen	8.750	1.856	.613	4.713	.000

a. Dependent Variable: Total Score

In the Coefficients table, in column B at constant (a) is 61.749, while the X3 (Management) value is 8.750 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 12,488 + 8,750X$$

**b. Hypothesis Test (t test)**

- Pair of Hypotheses
  - Ho :  $\beta_1 = 0$ , There is no relationship between Management (X3) with Business Performance (Y)
  - Ha :  $\beta_1 \neq 0$ , There is a relationship between Management (X3) with Business Performance (Y)
- Basic Decision Making
  - Based on the significance value
    - If the significance value of g is 0.05, then H0 is rejected
    - If the significance value is more than 0.05 then H0 is accepted
- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.488	10.645		1.173	.248
	Manajemen	8.750	1.856	.613	4.713	.000

a. Dependent Variable: Total Score

- Interpretation
 

Based on the coefficient table, a significance value of 0,000. From these results it can be concluded that H0 is rejected in other words there is a relationship between Management (X3) and Business Performance (Y)
- c. **Coefficient of Determination ( $r^2$ ).**
  - Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.613 <sup>a</sup>	.375	.358	9.70138	.375	22.215	1	37	.000

a. Predictors: (Constant), Manajemen

b. Dependent Variable: Total Kesehatan

- Interpretation
 

Based on the table above, Management (X3) affects the Business Performance variable (Y) of 0.375 or 37.5%.
- 4. Relation of Quality Efficiency (X4) to Business Performance (Y)
  - a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	40.588	8.564		4.739	.000
	Efisiensi	2.864	1.113	.390	2.573	.014

a. Dependent Variable: Total Score

In the Coefficients table, in column B at constant (a) is 40.588, while the value of X4 (Efficiency) is 2.864 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 40,588 + 2,864X$$

- b. Hypothesis Test (t test)
  - Pair of Hypotheses
    - Ho :  $\beta_1 = 0$ , There is no relationship between Efficiency (X4) and Business Performance (Y)
    - Ha :  $\beta_1 \neq 0$ , There is a relationship between Efficiency (X4) and Business Performance (Y)
  - Basic Decision Making
    - Based on the significance value
      - If the significance value is less than 0.05 then H0 is rejected
      - If the significance value is more than 0.05 then H0 is accepted
- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	40.588	8.564		4.739	.000
	Efisiensi	2.864	1.113	.390	2.573	.014

a. Dependent Variable: Total Score

- Interpretation
  - Based on the coefficient table, a significance value of 0.014. From these results it can be concluded that H0 is rejected in other words there is a relationship between Efficiency (X4) and Business Performance (Y)
- c. Coefficient of Determination ( $r^2$ ).
- Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.390 <sup>a</sup>	.152	.129	11.30355	.152	6.618	1	37	.014

a. Predictors: (Constant), Efisiensi

b. Dependent Variable: Total Kesehatan

- Interpretation
  - Based on the table above, Efficiency (X4) affects the variable Business Performance (Y) of 0.152 or 15.2%.

5. Liquidity Relationship (X5) to Business Performance (Y)

- a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	44.839	4.066		11.029	.000
	Likuiditas	2.207	.479	.604	4.607	.000

a. Dependent Variable: Total Kesehatan

In the Coefficients table, in column B at constant (a) is 44,839, while the value of X5 (Liquidity) is 2,207 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 44,839 + 2,207 X$$

b. Hypothesis Test (t test)

- Pair of Hypotheses
  - Ho :  $\beta_1 = 0$ , There is no relationship between Liquidity (X5) and Business Performance (Y)
  - Ha :  $\beta_1 \neq 0$ , There is a relationship between Liquidity (X5) with Business Performance (Y)
- Basic Decision Making
  - Based on the significance value
    - If the significance value is less than 0.05 then H0 is rejected
    - If the significance value is more than 0.05 then H0 is accepted
- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	44.839	4.066		11.029	.000
	Likuiditas	2.207	.479	.604	4.607	.000

a. Dependent Variable: Total Kesehatan

- Interpretation
  - Based on the coefficient table, a significance value of 0,000. From these results it can be concluded that H0 is rejected in other words there is a relationship between Liquidity (X5) and Business Performance (Y)
- c. Coefficient of Determination ( $r^2$ ).
- Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.604 <sup>a</sup>	.365	.347	9.78375	.365	21.222	1	37	.000

a. Predictors: (Constant), Likuiditas

b. Dependent Variable: Total Kesehatan

- Interpretation
  - Based on the table above, Liquidity (X5) affects the Business Performance variable (Y) of 0.365 or 36.5%.
- 6. Relationship between Quality of Independence and Growth (X6) to Business Performance (Y)
  - a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	47.141	4.778		9.865	.000
	Kemandirian dan Pertumbuhan	2.782	.828	.484	3.361	.002

a. Dependent Variable: Total Kesehatan

In the Coefficients table, in column B at constant (a) is 47.141, while the value of X6 (Independence and Growth) is 2.782 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 47,141 + 2,782 X$$

Hypothesis Test (t test)

- Pair of Hypotheses
  - Ho :  $\beta_1 = 0$ , There is no relationship between Independence and Growth (X6) with Business Performance (Y)
  - Ha :  $\beta_1 \neq 0$ , There is a relationship between Independence and Growth (X6) with Business Performance (Y)
- Basic Decision Making
  - Based on the value signifikansi
    - If the significance value is less than 0.05 then H0 is rejected
    - If the significance value is more than 0.05 then H0 is accepted
- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	47.141	4.778		9.865	.000
	Kemandirian dan Pertumbuhan	2.782	.828	.484	3.361	.002

a. Dependent Variable: Total Kesehatan

- Interpretation
  - Based on the coefficient table, the significance value is 0.002. From these results it can be concluded that H0 is rejected in other words there is a relationship between Independence and Growth (X6) with Business Performance (Y)
- c. Coefficient of Determination ( $r^2$ ).
- Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.484 <sup>a</sup>	.234	.213	10.74253	.234	11.293	1	37	.002

a. Predictors: (Constant), Kemandirian dan Pertumbuhan

b. Dependent Variable: Total Kesehatan

- Interpretation



Based on the table above, Independence and Growth (X6) affects the variable Business Performance (Y) of 0.234 or 23.4%.

7. Relationship between Cooperative Identity (X7) to Business Performance (Y)
  - a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	46.192	4.200		10.998	.000
	Jatidiri Koperasi	2.312	.562	.560	4.114	.000

a. Dependent Variable: Total Kesehatan

In the Coefficients table, in column B at constant (a) is 46.192, while the value of X7 (Cooperative Identity) is 2.312 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 46,192 + 2,312 X$$

- b. Hypothesis Test (t test)
  - Pair of Hypotheses
    - Ho :  $\beta_1 = 0$ , There is no relationship between Cooperative Identity (X7) and Business Performance (Y)
    - Ha :  $\beta_1 \neq 0$ , There is a relationship between Cooperative Identity (X7) and Business Performance (Y)
  - Basic Decision Making
    - Based on the significance value
      - If the significance value is less than 0.05 then H0 is rejected
      - If the significance value is more than 0.05 then H0 is accepted
  - Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	46.192	4.200		10.998	.000
	Jatidiri Koperasi	2.312	.562	.560	4.114	.000

a. Dependent Variable: Total Kesehatan

- Interpretation
 

Based on the coefficient table, a significance value of 0,000. From these results it can be concluded that H0 is rejected in other words there is a relationship between Cooperative Identity (X7) and Business Performance (Y)
- c. Coefficient of Determination ( $r^2$ ).
  - Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.560 <sup>a</sup>	.314	.295	10.16585	.314	16.928	1	37	.000

a. Predictors: (Constant), Jatidiri Koperasi

b. Dependent Variable: Total Kesehatan

- Interpretation  
Based on the table above, Cooperative Identity (X7) affects the variable Business Performance (Y) of 0.314 or 31.4%.

8. Sharia Principles Compliance Relationship (X8) to Business Performance (Y)  
a. Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.296	7.059		7.409	.000
	Kepatuhan Prinsip Syariah	1.259	.834	.251	1.510	.140

a. Dependent Variable: Total Score

In the Coefficients table, in column B at constant (a) is 52,296, while the value of X8 (Compliance with Sharia Principles) is 1,259 so the regression equation can be written:

$$Y = a + bX$$

$$Y = 52,296 + 1,259 X$$

- b. Hypothesis Test (t test)
- Pair of Hypotheses  
Ho :  $\beta_1 = 0$ , There is no relationship between Sharia Principle Compliance (X8) and Business Performance (Y)  
Ha :  $\beta_1 \neq 0$ , There is a relationship between Sharia Principle Compliance (X8) and Business Performance (Y)
  - Basic Decision Making
    - Based on the significant value of the  
If the significance value is less than 0.05 then H0 is rejected  
If the significance value is more than 0.05 then H0 is accepted
  - Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.296	7.059		7.409	.000
	Kepatuhan Prinsip Syariah	1.259	.834	.251	1.510	.140

a. Dependent Variable: Total Score

- Interpretation  
Based on the coefficient table, a significance value of 0.140. From these results it can be concluded that H0 is accepted in other words there is no relationship between Sharia Principle Compliance (X8) and Business Performance (Y)

Table 4.1 Relationship Between Each Variable of Business Performance To Total Business Performance

VARIABLES	INFLUENCE
X1 (Capital)	-
X2 (Quality of Product Assets)	49.3%
X3 (Management)	37.5%
X4 (Efficiency)	15.2%
X5 (Liquidity)	36.5%
X6 (Independence and Growth)	23.4%
X7 (Cooperative Identity)	31.4%
X8 (Sharia Principle Compliance)	-

The quality aspect of earning assets has the highest influence, this is in accordance with the main activities of the cooperative, namely savings and loans where the management of accounts receivables is very important affecting the performance of the cooperative

#### 5.5. Cooperative Financial Performance (value of Firm)

**Table 4.2.**

**Cooperative Financial Performance Table**

<i>NO COOPERATIVES</i>	TOTAL ASSETS	TOTAL AMOUN OF DEBT	EQUITY	SHU	ROA	ROE
1	3,153,901,278	1,702,873,566	1,451,027,712	104,351,360	0.03309	0.07192
2	5,621,227,693	39,507,500	542,046,572	65,066,559	0.01158	0.12004
3	19,646,675,730	9,189,178,551	2,863,339,879	117,764,048	0.00599	0.04113
4	37,003,754,439	24,288,063,975	23,288,063,975	446,818,165	0.01207	0.01919
5	13,784,421,486	6,654,509,515	1,690,076,746	37,156,723	0.00270	0.02199
6	42,367,614,728	37,181,630,357	4,975,243,118	210,741,303	0,00497	0.04236
7	2,084,612,123	1,802,000,000	132,680,401	-	0.00000	0.00000
8	19,768,867,217	148,985,000	1,835,726,351	279,669,052	0.01415	0.15235
9	819,330,068	-	60,166,000	59,740,579	0.07291	0.99293
10	2,099,367,041	148,985,000	1,950,382,041	292,878,753	0.13951	0,15016
11	35,778,081,400	20,021,006,218	15,757,076,182	226,461,977	0,00633	0.01437
12	1,747,756,493	-	1,416,684,447	99,250,000	0.05679	0.07006
13	350,000,000	300,000,000	50,000,000	22,775,000	0.06507	0.45550
14	49,739,442,729	3,563.141.123	6,710,683,475	1,606,172,006	0.03229	0.23935
15	26,402,142,544	1,642,091,458	1,273,507,981	-	0.00000	0.00000
16	48,858,878,775	40,956,702,220	7,902,175,545	838,517,305	0.01716	0.10611
17	2,844,603,901	250,000,000	1,135,292,056	135,050,920	0.04748	0.11896
18	36,864,013,391	2,315,339,730	7,897,863,073	608,823,229	0.01652	0.07709
19	1,102,413,145	6,518,920,246	4,908,808,164	1,102,413,145	1.00000	0.22458
20	1,104,662,813	883,255,068	199,640,851	16,766,894	0.01518	0.08399

21	9,975,355,451	-	1,815,077,918	116,202,881	0.01165	0.06402
22	6,386,669,798	375,845,798	6,010,824,000	-	0.00000	0.00000
<b>TOTAL</b>	<b>364,349,890,965</b>	<b>156,279,161,759</b>	<b>92,415,358,775</b>	<b>6,282,268,539</b>	<b>0.01724</b>	<b>0.06798</b>

From the financial data of the research results, it is known that the total assets of the cooperatives are Rp. 364,349,890,965, with total debt amounting to Rp. 156,279,161,755, while the total capital is Rp. 92,415,358,775. , -

This shows that funds managed by cooperatives are very large and will have an impact on members' business turnover. Good at helping member business capital and to meet the consumption needs of members.

Viewed from the capital structure as a whole the comparison between total debt and assets shows a ratio of 42.89%. This shows that 42% of funding and asset financing are financed by debt. Means that the remaining around 57.11% is financed by self-capital. This is quite good because it shows that financing with own capital is greater than financing from a loan.

Judging from the ability of the cooperative as a whole to produce the remaining operating results the ratio is 1.72%, which means that from Rp. 100 assets, it can only produce a SHU of Rp. 1.72. This ratio is very small when compared to the ratio of return on investment (ROI) which must be achieved in the amount of more than 10%. But in a cooperative the success is measured not only from profits achieved but also from the benefits felt by members. Benefits can be obtained from cooperative transactions with low prices, low costs, which are called direct benefits and indirect benefits in the form of sharing the amount of SHU to members on the basis of member transactions with cooperatives.

*The average amount of asset value is Rp. 16,561,358,680.23. The average amount of debt is Rp. 7,103,598,261.77.*

*The average amount of own capital is Rp 4,200,698,126.14 and the average SHU is Rp 285,557,660.86*

*Relationship between business performance and Value of Firm*

Relationship of Business Performance ( X ) to ROA (Y)

Regression Equation

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.081	.017		4.662	.000
	X	-.001	.000	-.606	-3.320	.004

a. Dependent Variable: Y

In the Coefficients table, in column B at constant (a) is 0.081 , while the X value ( Business Performance ) is (-0.001) so the regression equation can be written:

$$Y = a + bX$$

$$Y = 0.081 + (-0.001) X$$

**e. Hypothesis Test (t test)**

- Pair of Hypotheses

Ho :  $\beta_1 = 0$ , There is no relationship between Business Performance ( X ) to ROA (Y)

H<sub>1</sub>:  $\beta_1 \neq 0$ , There is a relationship between Business Performance ( X ) to ROA (Y)

- Basic Decision Making
  - Based on the significance value sig
    - If the significance value is less than 0.05 then H0 is rejected
    - If the significance value is more than 0.05 then H0 is accepted
- Test results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.081	.017		4.662	.000
	X	-.001	.000	-.606	-3.320	.004

a. Dependent Variable: Y

- Interpretation
 

Based on the coefficient table, the significance value is 0,004 . From these results it can be concluded that H0 dit megrim in other words there is a relationship between Business Performance ( X ) to ROA ( Y).

**f. Coefficient of Determination ( r <sup>2</sup> ).**

- Test results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.606 <sup>a</sup>	.367	.334	.02763413	.367	11.023	1	19	.004

a. Predictors: (Constant), X

b. Dependent Variable: Y

- Interpretation
 

Based on the table above, Business Performance ( X ) affects the ROA ( Y ) variable of 0.367 or 36.7 % .

**CONCLUSION**

Business Performance of cooperative savings and loan sharia in West Java still in the category “fair” with an average score 61.16, where productive assets quality factor is the element that most affects the business performance of cooperatives (49.3%) . The value of firm of sharia savings and loan cooperatives in West Java is still low, with the average return on asset is 6.7 %, and cooperative business performance having an effect on the Value of firm of 36%

The need for sustainable development of relevant agencies so that the level of risk in the cooperative management, especially with regard to better quality of earning assets. Efficiency of cooperatives in particular with regard to the cost effort needs to be managed properly to prevent financial performance can be further improved.

Cooperatives need to cooperate with various parties in order to obtain a cheaper source of financing which in turn can improve the economic benefits of direct and indirect economic benefits for its members

## REFERENCES

### Journal article, one author

- Asad Kamran Ghalib, *Measuring the Impact of microfinance intervention : a conceptual framework of social impact assesment*, 2009
- Donsyah Yudistira, Efficiency In Islamic Banking: An Empirical Analysis Of Eighteen Banks , *Islamic Economic Studies* Vol. 12, No. 1, August 2004
- Munawar Iqbal, *Islamic and Conventional Banking in The Nineties: A Comparative Study*, *Islamic Economic Study* , Vol. 8, No. 2, April 2001
- Venkata Vijay Kumar P , VK Gupta *Analysis of Performance Indicators on Sustenance of Micro The Finance Institutes: A Comparative Study of East Asian & Pacific, and South Asian Countries* , Research Journal of Finance and Accounting, ISSN 2222-1697, Vol 2, No. 3 2011

### Journal article, two authors

- Abdel Hameed M Bashir *Risk and Profitability Measures in Islamic Banks: The Case of Two Banks*, *Islamic Economics Studies*, Vol 6, No 2, May 1999
- Basel Committee on Banking Supervision, *Principles for Sound Liquidity Risk Management and Supervision* , Bank For International Settlements, June 2008
- Roshane Zaigham, Nadia Asghar, *Sustainability of Micro Finance Banks: A Comparative Case Study from Pakistan*, *Interdisciplinary Journal of Contemporary Research in Business*, Vol 3 No 8, Dec 2011
- Tsangyao Chang, Kuei Chiu Lee, *Does Capital Structure Affect Operating Performance Of Credit Cooperatives in Taiwan - Application Panel Threshold Method*, *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 32 (2009)

### Journal article from a subscription database (no DOI)

- Dasuki, R. E. (2016). Estimated financial performance model based on scale business cooperative (study in cooperatives in west java. *Risk Governance & Control: Financial Markets & Institutions*, 6(4), 113–238. Retrieved from [http://www.virtusinterpress.org/IMG/pdf/RGC\\_Volume\\_\\_6\\_Issue\\_4\\_\\_Fall\\_2016\\_Continued\\_1.pdf#page=104](http://www.virtusinterpress.org/IMG/pdf/RGC_Volume__6_Issue_4__Fall_2016_Continued_1.pdf#page=104)
- Dasuki, R. E. (2018). Kinerja usaha koperasi melalui pendekatan tingkat kesehatan kaitannya dengan penciptaan value of firm, *I*(1), 41–56.
- Dasuki, R. E., & Lestari, A. (2019). Implementation of good corporate governance to the value of cooperative, *O2*(01), 24–41. Retrieved from <http://journal.kopertis-4.org/index.php/jees/article/view/33/19>
- Group, E., & Limited, P. (2004). Towards good corporate governance: Realistic or idealistic? *Strategic Direction*, 20(9), 18–20. <https://doi.org/10.1108/02580540410556429>
- Heiko Hesse , Martin Čil *Cooperative Banks and Financial Stability* ,2007
- Ippolito, A. (2009). Creating value in multiple cooperative relationships. *International Journal of Quality and Service Sciences*, 1(3), 255–270. <https://doi.org/10.1108/17566690911004195>
- Katchova, A. L., & Enlow, S. J. (2013). Financial performance of publicly-traded agribusinesses, *73*(1), 58–73. <https://doi.org/10.1108/00021461311321311>
- Münkner, *The European Co-operative Society (Société Cooperative Européenne SCE) and European Cooperative Tradition* . University of Mar , 2005 in
- Rai Anand, Anill Kanwal , *Financial Performance of Microfinance Institution: Bank vs. NBFC*, *International Journal of Management and Strategy*, VolII, IssueII, January-June 2011
- Rai Anand K. Rai, Sandhya , *Factors Affecting Financial Sustainability of Microfinance* , *Journal of Economics and Sustainable Development*, ISSN 2222-1700, Vol 3, No 6, 2012
- Ropke Jochen , *The Economic Theory of Cooperative* , University of Marlburg-Germany , 1989
- Vicki Bogan, *Capital Structure and Sustainability: An Empirical Study of Microfinance Institutions*, Department of Applied Economics and Management, Cornell University, 2009

- Yannis Ananjadis, Ourania Notta, Kosta *Oustapassidis Cooperative Competitiveness and Capital The Greek Dairy Industry structure* , Journal of Rural Cooperation, 31 (2) 2003.9
- Yuyun Wirasasmita, Cooperative Effect, Unpad, 2005
- Undang-Undang Nomor 25 Tahun 1992 tentang Perkoperasian.
- Peraturan Menteri no 14 Tahun 2009 Tentang kesehatan Koperasi
- Peraturan Menteri KUKM Nomor 15 Tahun 2015 tentang Pelaksanaan Kegiatan Usaha Simpan Pinjam Oleh Koperasi
- Peraturan Menteri KUKM No 10 Tahun 2015 tentang kelembagaan
- Peraturan Menteri KUKM No 16 Tahun 2015 tentang Unit Usaha Pembiayaan Syariah
- Peraturan Menteri KUKM No 17 Tahun 2015 tentang Pengawasan Koperasi