
Cooperatives and Economic Growth in Indonesia

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Abstract:

This research was conducted through quantitative descriptive analysis by distributing questionnaires to cooperatives in several big cities in Indonesia.

The analytical method used was probit analysis. The results of this study show that the development of cooperatives in Indonesia is still influenced by human capital, money capital, social capital, knowledge capital and the economic infrastructure.

Indonesia's economic growth in the future will be slow but surely influenced by the existence of cooperatives which are still less competitive than conglomeration companies that have grown rapidly. This is because human, money and knowledge capital are the foundation to manage the cooperatives which should be based on noble intentions, due to the fact that the cooperative is the lifeblood of the Indonesian economy.

Keywords: *Cooperative, Human Capital, Money Capital, Social Capital, Economic Basis, Knowledge Capital and Economic Growth of Indonesia.*

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1. Introduction

In the order of economic life, which is solely based on the spirit of competition, most of the weak lower class sections such as farmers, fishermen, laborers and others, will be left behind by the flow of progress because they do not have the ability to compete with other stronger groups. Therefore, the weak group of people in the village and in the city, who constitute the majority of the Indonesian people, need to be actively involved and given a wider opportunity to develop themselves through cooperatives. Because the Cooperative according to the Law no. 12 of 1967 is as follows: *"The social economic organization of the people, consisting of persons or cooperative legal entities which constitute the economic order as a joint business which is based on the principle of kinship"* (William and Fung, 2013).

The cooperative is not a typical business organization which originated in Indonesia. Cooperative activities and cooperative organizations were initially introduced in England around medieval times. The mission of the cooperative is to help the workers and peasants who face economic problems by mobilizing their own power. Later in France, this was driven by a labor movement which was oppressed by capitalist forces throughout the nineteenth century, with the ultimate goal of establishing an alternative economy of cooperative associations instead of capitalist-owned enterprises (Arneil, 2006). The idea of this cooperative then spread to the US and other countries in the world. In Indonesia, new cooperatives were introduced in the early 20th century.

In the case of Indonesia, this is affirmed in Article 33 of the 1945 Constitution concerning the national economic system. Various trading rules governing the cooperative were born and a special department or ministry was formed, namely the State Minister of Cooperatives and Small and Medium Enterprises, with the intention of supporting the development of cooperatives in the country. In article 33 above, it is stated that the cooperative is a corporate structure in accordance with the economy which is arranged as a joint business based on the principle of kinship. It is also mentioned that the branches of production that are important for the state and which affect the livelihood of the people must be controlled by the country. Earth and water and natural resources contained therein must be controlled by the state and used for the greatest prosperity of the people. Only companies that do not control the livelihood of a lot of people may belong to individuals. The Cooperative is a Business Entity formed in order to build the people's economy based on the principle of kinship. Therefore, the presence of cooperatives in the community has a very important role as described below:

Cooperative as an Economic Institution:

Where the cooperative seeks to meet the needs / interests of community groups who are members (Reynolds, 2005) it is also a form that arises because of a common need among its members. The need may arise:

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- Because of the initiative to avoid competition among members;
 - To divide the work according to interests and skills so that it is beneficial to the groups and individuals that are in it;
 - To get a fast and cheap loan service;
 - To get a decent price;
 - To earn profits due to a joint payment;
 - To unite potentials and citizens;
 - To avoid extortion from middlemen and others.

Cooperative as an Education Facility:

The point is that cooperatives seek to change the value system that exists in society to a togetherness which means that it not only focuses on individualism alone (Shildrick and MacDonald, 2006) but also on the balance and harmony between individuals in society.

Cooperative as a Mean of Democracy:

In the cooperative, the community/members of the cooperative can also solve various problems such as:

- Social justice;
- Inequality;
- Other community interests.

Cooperative as a Counterpart:

It is understood that most of our society is lower class (poor), so that if the society is contained in a cooperative it will be able to raise the strength that is expected and will be able to compete with non-cooperative business entities.

2. Theoretical Background

According to data from the International Cooperative Association (ICA), currently about 800 million people in the world are members of cooperatives and is estimated that cooperatives do work on more than a 100 million people, 20 per cent more than the number created by multi-national companies (Rourke, 2007). In 1994, the United Nations estimated that the lives of nearly 3 billion people or half of the world's population are guaranteed by cooperative companies.

The role of cooperatives is very important, not only in developing countries with low per capita incomes, but also in developed countries, especially in North America, Europe and Japan. A study by Eurostat (2001), conducted in seven European countries, shows that the share of cooperatives in creating employment accounts for about 1 percent in France and Portugal and up to 3.5 percent in Switzerland. According to the ICA, in Canada, 1 in 3 people (or about 33 percent of the population) is a member of the cooperative (Hamilton and Webster, 2009).

Cooperatives (including credit unions) employ more than 160 thousand people. The Desjardins Group (savings and credit cooperative), has more than 5 million members and is the largest provider of employment in North America (Bacon, 2001). Many agricultural cooperatives are found in the fertilizer industry and many cooperatives are involved in petroleum drilling activities. Many of its cooperatives have a substantial share in global markets, for example the sugar cooperatives control about 35 percent of the world's sugar production.

In Japan, 1 out of every 3 families are members of a cooperative. Agricultural cooperatives produce an output of about 90 billion US dollars with 91 percent of the total number of farmers in the country as members. The role of cooperatives in rural Japan has replaced the function of banks so that cooperatives are often referred to as "people's banks" because the cooperatives operate by applying the banking system. Even one of the major banks in Japan is a cooperative, the bank Nurinchukin Bank (Rourke, 2007).

In other Asian countries, with relatively high levels of economic development, such as Singapore and South Korea, the role of cooperatives is also enormous. In Singapore, 50 percent of the population is a member of the cooperative. Its consumer cooperatives hold 55 percent of the share in supermarket purchases and has an income of \$700 million. In South Korea, agricultural cooperatives have a membership of more than 2 million farmers (90 percent of farmers), and generate an output of \$11 billion. Co-operatives in the fishing sector have a share of 71 percent.

Consumer cooperatives in Singapore, as well as in Japan, Canada, and Finland are the strongest competitor to foreign retail giants that try to enter the country. Even in some of these countries, they try to direct the company to form a cooperative (Mutis, 2001).

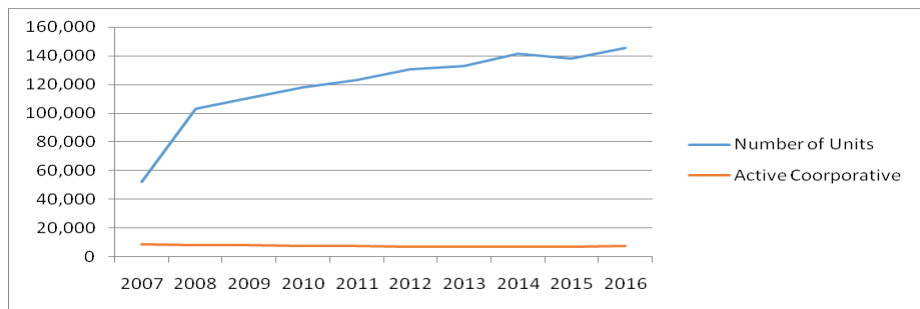
3. The Development of Cooperatives in Indonesia

In the Indonesian economic system, there are three main pillars supporting the economy, namely BUMN (State-Owned Enterprises), BUMS (Private-Owned Enterprises), and cooperatives. The three economic pillars have a role that is very specific with its capacity. Unfortunately, from the three pillars, the cooperative is often referred to as a pillar of the economy, which is generally a pillar of the economy that "the most stumbling path" compared to state-owned enterprises and Private-Owned Enterprises. In fact cooperatives have been supported by the government (even excessively) in accordance with the special position of cooperatives in the Indonesian economic system (Meutia *et al.*, 2017; Suryanto *et al.*, 2017).

As it is known, Cooperatives in Indonesia are the cornerstone of the economy. The basic idea of cooperative formation is often associated with article 33 of the 1945 Constitution, especially Paragraph 1 which states that "The economy is organized as

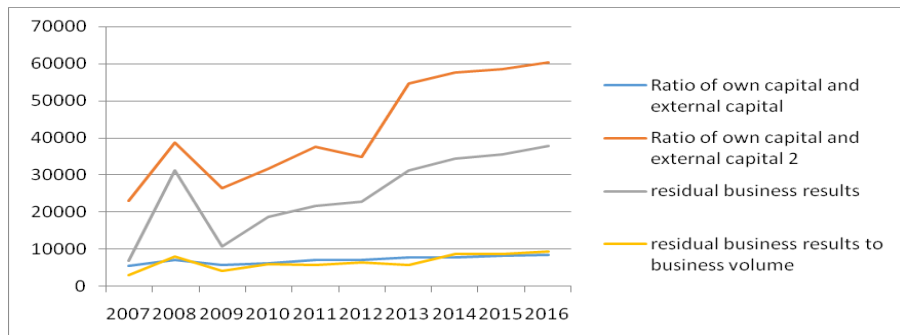
a joint business based on the principle of kinship". In the description of the 1945 Constitution, it is said that the establishment of the business that best fits the principle of kinship is a cooperative. This principle of kinship, though debatable, is often associated with cooperatives because the principle of cooperative business has an implication of kinship. To organize the cooperative group further, in 1967, the Indonesian government (President and Parliament) issued Law no. 12 and in 1992 the Act was revised with Law no. 25. In contrast to Law no. 12, Law no. 25 is not only more comprehensive, but also more oriented to the understanding of "Capitalism". This is due to the fact that the new law actually provides cooperative groups to act as a profit maximizing company.

Figure 1. Cooperative Business Development 2007-2016



One common indicator used to measure cooperative performance is the development of business volume and residual business results (SHU). Existing data indicate that both indicators have improved over the period of 2000-2005. For business volume, the value rose from about 23.1 trillion rupiahs in 2000 to almost 54.8 trillion rupiahs in 2006 while SHU increased from 695 billion rupiahs in 2000 to 3.1 trillion rupiahs in 2006.

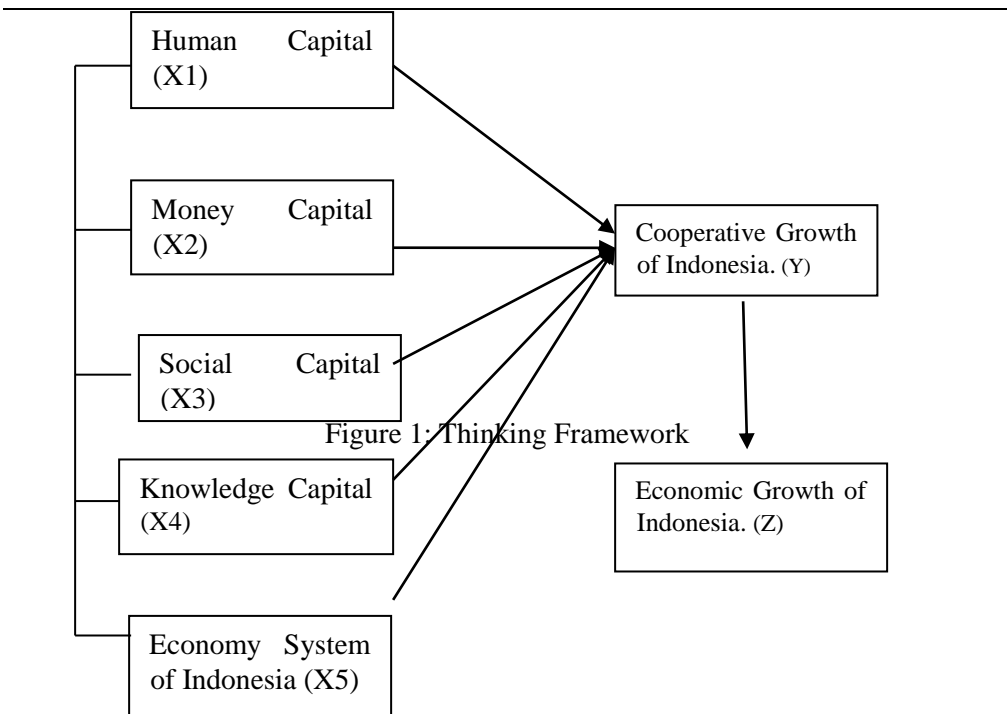
Figure 2. Development of Cooperative Enterprises Ratio 2007-2016



Entering the year 2010, Indonesia's cooperatives were dominated by credit cooperatives which controlled between 55 and 60 percent of the total assets of the cooperative. Thus, although the government program is quite enthusiastic the growth of cooperative independence, it only touches some of the existing cooperative population. So basically, there is still a large component for the growth of cooperative independence (Kar *et al.*, 2011).

Most of the provinces in Indonesia have over 50 percent of active cooperatives and these provinces are in low income groups. There are only three points that suggest a positive correlation between the number of active cooperatives and income levels. In other words, the results give the impression that the effect of a supply boost (because of being forced) is greater than the pull effect of demand (because there is a market opportunity). Therefore, it is necessary to examine further whether human capital, money capital, social capital, knowledge capital and the Indonesian economic system have an influence on the growth of cooperatives in Indonesia, and what are the implications for Indonesia's economic growth.

Below is a framework where one can see every independent variable being studied more clearly to the dependent variable and its implications on the economic growth in Indonesia.



4. Methodology

For the purpose of this study, the author is using quantitative analysis. Quantitative analysis comprises data which is expressed in numbers and analyzed by statistical techniques. This research is being conducted to explore and explain the influence of independent variables on dependent variables.

The effectiveness of testing a hypothesis about the influence of research variables depends on the quality of the data used in the test. Testing the research hypothesis will not reach the scope if the data used is not reliable and does not accurately describe the concept measured. Therefore, the validity and reliability of the instrument are tested. For data analysis the author used probit analysis. Before analyzing the data, various tests were conducted, as follows:

Test Validity:

Instrument validity tests are conducted to ascertain how well the instrument is used to measure the concepts that should be measured. Validity testing is needed to measure how valid or not a questionnaire is. A questionnaire is said to be valid if the questions and answers are able to reveal something that will be measured by the questionnaire. Thus, the validity test shows how much a test measures what should be measured etc. *"The method used is the Item analysis, where each value in each question item is correlated with the total value of all questions for a variable using the product moment correlation formula"*. The criteria assessment validity test is:

- a. If $r_{\text{arithmetic}} > r_{\text{table}}$ (at 5% significance level) then it can be said the item of questionnaire is valid
- b. If $r_{\text{arithmetic}} < r_{\text{table}}$ (at the level of significance 5%) then it can be said the item of questionnaire is not valid (Martin and Marin-Garcia, 2006).

Test Reliability:

Reliability testing is to test whether the results of the questionnaire can be trusted or not. Instrument reliability testing can be done internally or externally. Internally, the reliability of the instrument can be tested by analyzing the consistency of the items in the instrument with certain techniques. Externally it can be done with retest test (stability), equivalent and the combination of both. The calculation of reliability testing in this study was done using Alpha Cronbach. Instruments have a high degree of reliability if the coefficient value obtained > 0.60 (Adamopoulos, A. 2010, 75-88). Thus, in this study reliability exists if alpha count is greater than 0.60 where the following criteria:

- $\alpha \geq 0.60$ means a reliable instrument;
 $\alpha \leq 0.60$ means the instrument is not reliable.

5. Classical Assumption Testing

An important part of the statistical procedure of the model is to determine how well the model works, as well as detect possible deviation of assumptions required in the data being analyzed. For that, in this research there are three formula used (Data processed by using program of SPSS version 22) which are:

Normality Test:

To find out whether there is normal or near-normal distribution of data, this can be done by looking at a normal probability plot that compares the cumulative distribution of the actual data with the cumulative distribution of the normal distribution. Normal distribution will form a straight line diagonal and plotting the data will be compared with the diagonal line. If the data distribution is normal, then the line representing the real data will follow its diagonal line. Whereas if the visible spots spread far around the diagonal line, then the data does not meet the assumption of normality.

Multicollinearity Test:

Multicollinearity means the existence of a very strong linear relationship between independent variables in regression. The regression model assumes the absence of multicollinearity or the absence of a perfect correlation between one independent variable and the other independent variable. To detect the presence of multicollinearity one has to look at the value of the correlation coefficient between independent variables, where there is a very strong correlation value ($r > 0.9$), then there are symptoms of multicollinearity in the regression model. To detect the presence or absence of multicollinearity this can be done by looking at the value of Variance Inflation Factor (VIF) on each independent variable. If VIF value is less than 10, then in regression model there is no symptom of multicollinearity.

Heteroscedasticity Test:

Another serious problem that may arise in multiple regression analysis is heteroscedasticity. This arises at the time of the assumption that the variance of the error factor is constant for all unfilled free variables. If the variance is not the same, it is said that heteroscedasticity occurs in the regression model. It can also be used as residual analysis in the form of graphs on the basis of decision making in certain patterns, such as points that form a certain pattern.

Autocorrelation Test:

The multiple regression assumption test of autocorrelation is used to test whether in a linear regression model there is a correlation between the confounding error in period t with error in period $t - 1$ (previous).

Model:

To solve the problem as well as to prove whether the hypothesis is accepted or rejected in this study, then analysis tools are used for multiple linear regression of statistics.

Model 1:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Model 2:

$$Z = \alpha + \beta Y + \varepsilon$$

Where:

Y = The Growth of Indonesian Cooperatives

X1 = Human capital

X2 = Capital money

X3 = Social capital

X4 = Knowledge capital

Z1 = Indonesia's economic growth

α = Constants

$\beta_1 - \beta_5$ = Regression coefficient

E = Error limit / error factor

The coefficient of determination is used to measure how far the model's ability to explain variation of dependent variable goes. The value of the coefficient of determination is $0 < R^2 < 1$. The coefficient of determination approaching one means the independent variables provides almost all the information needed to predict the dependent variable.

The use of R square is biased against the number of independent variables which are entered into the model. Unlike R square, adjusted R square values can rise or fall if there are additional independent variables inside the model. It is therefore desirable to use adjusted R square values to evaluate the best regression model (N. Bacon. 2001, 361-372)

6. Results

The results were obtained using SPSS Version 22. A value of multiple linear regression equation between independent variable X, that is human capital (X1), money capital (X2), social capital (X3), knowledge capital (X4), economic system (X5) and the dependent variable that is the growth of Indonesian cooperatives (Y), is obtained as well as the dependent variable of Indonesia's economic growth. A clearer value of the coefficients of each variable can be seen as follows:

Model 1:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + \varepsilon$$

$$Y = 9,437 + 0,768 X_1 + 0,483 X_2 + 0,091 X_3 + 0,482 X_4 + 0,069 X_5$$

$$T \text{ count} = (3,214) (2,173) (3,860) (2,941) (3,096) (1,894)$$

The numbers contained in parentheses are the sum of the t counts of each independent variable, in which human capital (X1), money capital (X2), social

capital (X3), knowledge capital (X4) and economic system (X5) is positive, meaning that this variable has a significant effect on the development of Indonesian cooperative (Y) and unidirectional so that if the independent variable increases, then the value of the dependent variable will also increase or vice versa. When the value of the intercept and the coefficient value of each variable including human capital (X1), money capital (X2), social capital (X3), knowledge capital (X4) and economic system (X5) are positive it means that this variable has a significant effect on the development of Indonesian cooperatives (Y). In the above-mentioned equation it can be described as follows:

1. Intercept: 9,437 states that without any dependent variable the development of cooperatives in Indonesia is 9,437 units.
2. Human capital (X1): 0.768 means that if this variable increases by 1 unit then it will improve the performance of the independent variable by 0.768 units.
3. Money capital (X2): 0.483 means that if this variable increases by 1 unit then it will improve the performance of the independent variable by 0.483 units.
4. Social capital (X3): 0,091 means that if this variable increases by 1 unit then it will improve the performance of the independent variable by 0.091 units.
5. Knowledge capital (X4): 0.482 means that if this variable increases by 1 unit then it will improve the performance of the independent variable by 0.482 units.
6. Economic system (X5): 0.069 means if this variable increases by 1 unit then it will improve the performance of the independent variable by 0.069 units.

Model 2:

$$Z = \alpha + \beta Y + \varepsilon$$

$$Z = 11,427 + 0,439 Y$$

1. Intercept: 11,427 states that without any dependent variable the development of cooperatives in Indonesia is 11,427 units.
2. Indonesian cooperative variable: 0.439 means that if the Indonesian cooperative variable increases by 1 unit it will increase the economic growth of Indonesia by 0.439 units.

7. Conclusions

The development of cooperatives in Indonesia is still influenced by human capital, because human resources are the foundation and they must be prepared with the sense of kinship, due to the fact that the cooperative is the lifeblood of the Indonesian economy. The growth of Indonesian cooperatives are still influenced by money capital which is still a tool to move this business, because today many cooperatives have heavy rivals from the big companies that thrive in Indonesia, and even can drive the growth of Indonesia's economy significantly.

Social capital produces a positive influence consisting of health indicators, honesty and welfare. Humans are healthy, honest and expect prosperity which makes them

able to manage the cooperative well. The people of Indonesia have started to increase their knowledge in terms of cooperative capital which can be influential in increasing the growth of cooperatives in Indonesia. The development of cooperatives in Indonesia up to now is still influenced by the economic system used.

The system of togetherness and mutual cooperation underlying cooperatives has a positive effect and can be developed again for the future. The growth of the Indonesian economy in the future will slowly but surely be influenced by the existence of cooperatives in Indonesia which is still less competitive with conglomeration companies that have developed rapidly.

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