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Indonesia Cooperative and Members Welfare : a Panel Data Analysis

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Abstract

Indonesia Cooperative is believed as the most appropriate institution in increasing the welfare of its members and the society, and also participating to build the national economic in order to create the advanced society, fair, and prosperous society based on Pancasila and the 1945 Constitution of the Republic of Indonesia. In proving, the purpose of this research is to analyze the effect of Indonesia cooperative existence to the welfare of its members. The method of analysis is the data panel regression, where cross section data covers all provinces in Indonesia, and time series data during 2010-2015. The result shows that the main factors that have effect to the members' welfare are number of members, number of managers, self-capital, and business volume. The variables that have no significant effect to the members' welfare are numbers of cooperatives, the annual member meeting (AMM), number of employees, outside capital, and macro economy variable in regional level. Economic growth and outside capital variables have indirect effect to the members' welfare through volume of cooperative business.

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INTRODUCTION

For almost two decades of reformation, the cooperative has increased significantly as seen on Figure 1. In 2000, the number of cooperatives was 103,077 units, raised into 212,135 units in 2015. It is about 105.80 percent during those years. The number of active cooperative had also increased in nominal from 88,930 in 2000, became 150,233 units in 2015. During 2000 to 2015 there was a raise at 68.93 percent of active cooperative. The number of active cooperative members also increased from 27.30 million people to be 37.78 million people in 2015 (raised 38.42 percent). Syarief Hasan (Minister of Cooperative and SMEs 2009 – 2014) in 100 Koperasi Besar Indonesia (Top 100 Indonesia Cooperatives) written by Muchtar and Taufiq (2013) said that the seize up of Indonesia Cooperative is the representative of economic growth that gets better in the grass-root level, especially in rural area. It is a significant economic strength in order to repress the unemployment rate and the poverty. The role of cooperative in repressing the unemployment rate and poverty has been acknowledged by the United Nation (UN). It is even believed that cooperative is able to build a better economy.

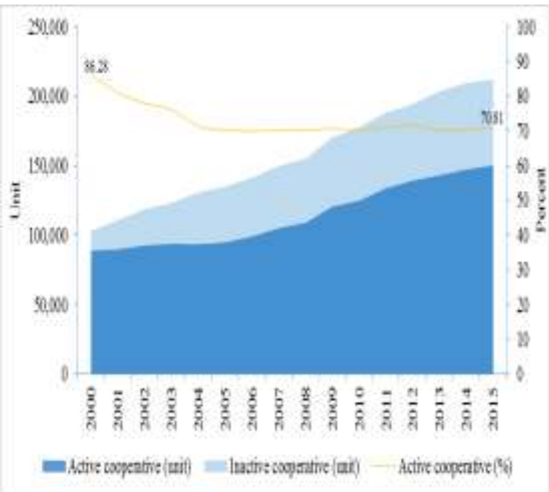

Figure 1. The Trend of Indonesia Cooperative
Source: Ministry of Cooperative and SMEs (data processed)

As we take a look closely on Figure 1, it looks that even though the number of active cooperative is increasing, the percentage of active cooperative is decreasing every year. It means, from year to year, the number of the inactive cooperative had also increased. It is one of the major problems of Indonesia Cooperative. Nevertheless, the spreading of cooperative among the regions is also improper. According to Hartono and Sarwono (2011) the biggest number of cooperative is concentrated in regions with a better economic situation. The Ministry of Cooperatives and SMEs (2015) released a data explained that the cooperatives more likely to be found in East Java, Central Java, West Java, and North Sumatera.

In international world, based on the data released by International Co-operative Alliance (ICA, 2016) there was no single cooperative in Indonesia be part of 300 biggest cooperative in the world. The number of cooperatives that being monitored were 2,370 units, Indonesia was one of the 63 countries monitored. The indicator used is value of business volume and the ratio of business volume to GDP of its country. The top countries are French, Germany, South Korea, Unites States, and Japan. The ASEAN countries that included in top 300 are Singapore in 225, and Malaysia in 260.

The previous explained facts show that the cooperative in Indonesia has not shown any significant achievement, however still demanded by the society. It is also showed by a nation that specifically create a ministry institution to cope the cooperative and small medium enterprise. The history shows that the expansion of Indonesia Cooperative does not always work well, so it takes a deeper effort in developing it. Hatta (1987) once proposed a thesis explained that in order to pull the society out of the poverty, required to build a cooperative system in the first place, before it is able to build the economy to actualize the society welfare that later on could be the pillar of social welfare.

When the cooperative system is built properly, it will affect the process of both micro and macro development (Partomo, 2003). The effect caused by a certain cooperative is called micro effect, such as increasing the income and members' welfare. The study conducted by

Kumar et al., (2018) in India, Ma and Abdulai (2016) in China, and Verhofstadt and Maertens (2014) in Rwanda, found that cooperatives played an important role in increasing the income and welfare of their members.

In Indonesia, there are many studies of cooperative. A research conducted by Hanzian (2013) in Java Island shows that when there are high number of cooperatives in a region, the members' welfare level would increase. However, if the number of members increases, it will reduce the welfare of its members. This finding is also confirmed by Asmaranta (2012) study using multiple regression model. A different result claimed by Komariyah and Cahyono (2016), Cahyani (2015), and Winarko (2014) who stated that the number of cooperative members had positive effect in increasing the members welfare, especially when accompanied by the active participation of members in developing cooperatives. Nevertheless, the are some researches shows that the number of members have no significant effect on members welfare, as stated by Sudaryanti & Sahroni (2017), Yulianti et al (2017), Raidayani et al (20160, Agustina et al (2016), Pariyasa et al (2014), and Rianto et al (2012).

Hidayat et al., (2017) and Hanzian (2013) conducted research using panel data regression model found that business volume had positive effect in increasing the members welfare. This finding is confirmed by researches by Yuliani et al., (2012) and Pariyasa et al., (2014) which used multiple linier regression model. Meanwhile, Raidayani et al., (2016) by using panel data model and found the opposite, where the business volume of cooperatives actually had a negative effect on the welfare on its members.

The members welfare is also determined by business capital as Hidayat et al (2017), Raidayani et al (2016), Putri et al (2016), Syaiful et al (2016), Paryasa et al (2016) stated in their researches. According to Agustina et al., (2016) and Hanzian et al., (2013) capital that comes from members is determines the members welfare more when compared to capital originating from outside.

Referring the result of previous scientific studies, the cooperative existence in Indonesia has a different pattern of influence on the welfare of its members. It can be caused by several factors such as the study periods, research methods, location, and numbers of observations. From various previous studies, none of the researchers conducted macro and comprehensive research about whether the existence of Indonesia Cooperative can proper its members by using a quantitative approach. So far, the research on cooperative that used a quantitative approach is still partial only to certain cooperatives and certain regions, not nationwide. Meanwhile, macro research is more likely to uses a qualitative descriptive analysis approach.

Based on the background of that thought, the purpose of this research is to analyze whether the existence of Indonesia Cooperative was able to increase the members' welfare. Moreover, it is also conducted to provide recommendation of policy in order to improve the members' welfare.

RESEARCH METHODS

The type of data that used is secondary data such as time series data from 2010-2015 and cross section data from 33 provinces in Indonesia. Those data were taken from the Ministry of Cooperatives and SMEs and Statistics Indonesia. Literature study was taken from national and international journals, books, and other scientific literatures. The data processing was done through Microsoft Excel 2019 and STATA 15 program.

Based on the previous research and the type of data used, to answer the purpose of the research is used regression data panel model which combines time series data and cross section (Baltagi, 2005). According to Verbeek (2004), there are two advantages in using data panel model than time series data or cross section individually. First, by combining time series data and cross section in data panel, the number of observations is getting bigger. By using data panel, marginal effect from explanatory variable seen from two dimensions (individual and time) so that the estimated parameter can be more accurate than the other model. Second, more significant advantage from the usage of data panel is reducing the identification problem. The data panel is better in identifying and measuring the effect which in a simple form cannot be done in cross section data or time series individually. The data panel is able to control the individual heterogeneity so that the estimation made can explicitly insert the individual heterogeneity.

The same thing is also conveyed by Ekananda (2006) where by implementing the estimation process on data panel, so simultaneously able to estimate the individual characteristic by paying attention on the dynamic cross time from each variable in the research. That means, the estimation result analysis will be more comprehensive and coping things that are closer to reality.

Generally, data panel model can be written as (Nachrowi and Usman, 2006):

$$Y_{it} = \alpha_{it} + \beta X_{it} + \varepsilon_{it} \quad \text{..........} \ (1)$$

where Y is dependent variable, X is independent variable, i shows cross section dimension and t shows time series dimension. Symbol α is intercept, β is regression coefficient, ε is error.

In estimating the model parameter by data panel, there are several techniques offered, such as Pooled Least Square (PLS) model, Fixed Effect Model (FEM), and Random Effect Model (REM) (Gujarati, 2012). The PLS is known as estimation common effect model is a simple regression technique by combining cross section data and time series (pooled data). This combination data is treated as one unity of observation which is used to estimate the model by using ordinary least square (OLS) model. According to Baltagi (2005) this model is called as model without individual effect. That data panel model can be written as:

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \quad \text{........................} \ (2)$$

The FEM model using additional technique of dummy variable so that this method is often called least square dummy variable (LSDV) model. FEM is a model that is obtained by considering that the omitted variables can caused a change in cross section and time series intercepts. The dummy variable can be added to the model to allow the intercept variables and this model is presumed with OLS which is:

$$Y_{it} = \alpha_i D_i + \beta X_{it} + \varepsilon_{it} \quad \text{..........} \ (3)$$

On FEM the differences in individual characteristics are accommodated on in intercept, while on REM, the individual characteristic differences and time are accommodated on error from the model. This technique also considers that error might be correlated during the time series and cross section.

$$Y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it} \ ; \ \varepsilon_{it} = u_{it} + v_{it} + w_{it} \quad \text{.......................} \ (4)$$

Where: u_{it} ~ N(0,δu2) is the component of cross section error, v_{it} ~ N(0,δv2) is the component of time series error, and w_{it} ~ N(0,δw2) is the component of *combination error*. We also assume that individual error also not mutually correlated, so does the error combination. By using REM, it is able to save the usage the degrees of freedom and not reducing the value as conducted on the fixed effect model. This implies parameter which is the estimation result will be efficient. It will get better when the estimation is more efficient. In this research, we adopt and modify the model used by Hidayat et al. (2017), Raidayani et al (2016), and Hanzian (2013). There are three models which are developed to analyze the effect of Indonesia Cooperative existence to members' welfare, they are Model 1 is remaining income per member; Model 2 is remaining income per cooperative; and Model 3 is remaining income per province. Other than that, in this research we also develop two determination models of business volume, they are Model 4 is business volume per cooperative and Model 5 is business volume per province.

RESULTS AND DISCUSSION

In deciding the technique analysis that is used in data panel regression, there are three types of testing that must be done. The first test is conducting Chow test. The Chow test is conducted in deciding the best technique used between PLS and FEM. The decision to use FEM happens when the result of Chow test shows that the F-prob value of Cross-Section less than confident level. Next, on the second test, conduct the Hausman test in deciding whether FEM or REM is better in data panel regression. The decision to use FEM or REM can be seen from the probability value of Chi Square. If the probability value is less than the confident level, we use FEM, and if the probability level is more than the real value, we use REM. Last is the Lagrange Multiplier (LM) test, conducted to choose whether REM or PLS is better. If the result of LM value calculation is bigger than Chi Square table, so the model used is REM model, so does the other way. Table 2 shows the result of the best data panel model choosing for the five models that had been developed. Based on the test result, the best model chosen is FEM for the whole models.

Table 2. Results of Panel Data Model Selection

Statistic Test	Remaining Income			Business Volume	
	Model 1	Model 2	Model 3	Model 4	Model 5
Chow test	Fixed Effect	Fixed Effect	Fixed Effect	Fixed Effect	Fixed Effect
Hausman test	Fixed Effect	Fixed Effect	Fixed Effect	Fixed Effect	Fixed Effect
Lagrange Multiplier test	Random Effect	Random Effect	Random Effect	Random Effect	Random Effect
Decision	**Fixed Effect**	**Fixed Effect**	**Fixed Effect**	**Fixed Effect**	**Fixed Effect**

Note: Model 1= Remaining income per member; Model 2= Remaining income per cooperative; Model 3= Remaining income per province; Model 4=Business volume per cooperative; Model 5= Business volume per province.

Source: Author's calculation uses Stata 15

After deciding the best model by using the model choosing, next part, we get the estimation result using FEM to be able to explain the factors that affecting the members' welfare of Indonesia Cooperative. The result interpretation on data panel regression model is no different with the double regression interpretation. First is conducting interpretation of R-squared (R2) value which shows how big the independent variable can explain precisely the dependent variable, the rest is explained by others variable that has not been in the model. Based on Table 3, the R2 value is gained from each model 1-3 in

Second, we conduct the F test to thoroughly understand whether the independent variable has any effect on the dependent variable. The test is conducted by comparing the F-prob value with the significant level 0.01, 0.05, and 0.10. Table 3 shows that the F-prob is smaller than 0.01 for the whole model. It means the independent variable thoroughly, gives significant effect altogether on dependent variable. order as 0.5195, 0.5227, 0.6329. It indicates that the independent variable which chosen together in every model can explain the diversity of members' welfare of cooperative more than fifty percent. Meanwhile, the R2 value is gained from each model 4-5 in order as 0.6473, and 0.6820. It shows that independent variable that is chosen together in every model can explain the diversity of business volume contribution for more than sixty percent.

Table 3. Estimation Results of Panel Data Model Using Fixed Effect Model

Variable	Description	Remaining Income			Business Volume	
		Model 1	Model 2	Model 3	Model 4	Model 5
_cons	Constanta	0.5219	4.1151	0.4751	8.5148***	-46.52.72***
Internal Factor						
lnmember_ac	Number of members per active cooperative	-1.3217***				
amm_ac	Number of annual member meetings per active cooperatives *100	0.0024	0.0019			
man_ac	Number of managers per active cooperative *100	-0.0076*	-0.0093*			
emp_ac	Number of employees per active cooperative *100	0.0002	0.0003			
lnowncap_ac	Amount of own capital per active cooperative	0.2650***	0.2638***		0.2847***	
lnoutcap_ac	Amount of outside capital per active cooperative	-0.0103	-0.0034		0.3138***	
lnbv_ac	Amount of Business volume per active cooperative	0.6833***	0.7156***			
lnnacm	Number of active cooperative members		-0.4511*	-0.4890*		
lnnac	Number of active cooperatives		-0.0121	0.0144		
lnamm	Number of annual member meetings			0.1214		
lnman	Number of managers per province			-0.1283		
lnemp	Number of employees per province			-0.0195		
lnowncap	Amount of own capital per province			0.2392***		0.2285***
lnoutcap	Amount of outside capital per province			-0.0029		0.3165***
lnbv	Amount of business volume per province			0.7297***		
External Factor						
Lngrdp	Gross regional domestic product			0.3338		1.5782***
lnhpov	Number of poor people by province			-0.544		0.6431
our	Open unemployment rate by province			-0.0288		0.0563
gini	Gini ratio by province			2.4113		-0.5108
	R^2 (R-squared)	0.5195	0.5227	0.6329	0.6473	0.6820
	F-statistic	32.77***	23.25***	20.61***	34.50***	22.07***

Note:

a) Model 1= Remaining income per member; Model 2= Remaining income per cooperative; Model 3= Remaining income per province; Model 4=Business volume per cooperative; Model 5= Business volume per province.

b) *** $p < 0{,}01$; ** $p < 0{,}05$; * $p < 0{,}1$

Source: Author's calculation uses Stata 15

Second, we conduct the F test to thoroughly understand whether the independent variable has any effect on the dependent variable. The test is conducted by comparing the F-prob value with the significant level 0.01, 0.05, and 0.10. Table 3 shows that the F-prob is smaller than 0.01 for the whole model. It means the independent variable thoroughly, gives significant effect altogether independent variable.

Third, we conduct the t test to decide whether the independent variables in regression equation individually have significant effect in predicting the dependent variable value. The main variable that effecting the members' welfare of cooperative on Model 1-3 are the number of members, manager, self-capital, the business volume. The analysis result shows that an increasing of cooperative members will cause the decreasing of members' welfare on Model 1-3.

Theoretically, an increasing of cooperative members will cause smaller amount of the remaining income that each member gets by assuming the remaining income is constant. It is caused by the raised of the number of cooperative members is not followed by the equal raised on remaining income. The result of this research fits Niswah and Septiarini (2017), Hanzian (2016), Pratiwi, (2016), Tere et al., (2014), and Asmarantaka (2012) findings. This such condition happens because the members addition is not followed by significant increase in cooperative income. On the other side, the costs incurred by the cooperative related to the fix cost tend to increase. Moreover, the participation rate in cooperative activity is low, such as saving and loan. Originally, the members' existence played major role in running the cooperative. The increasing of the number of members is hoped to increase the cooperative's activities, as the increasing of the members would increase the participation level so that the remaining income increasing. It is proven by Komariyah and Cahyono (2016), Cahyani (2015), and Winarko (2014) where in their research found that the increasing of number of members in cooperative would increase the remaining income. Nevertheless, the members' welfare is not only affected by the number of members but also decided by the members' participation level in the cooperative economic activities. When the participation level is low, the remaining income one got is also low, so does the other way.

Next, we found that the manager existence has negative effect to members' welfare. This finding is strengthened by the study conducted by Tambunan (2008) where change in the number of managers and change of remaining income give an unrelated impression with the theory. Meanwhile, theoretically, the manager existence is hoped to implement the proper principal of cooperative by using the proper managerial principal from the planning until the evaluation and controlling. Tjakrawerdaja (2014) stated that most of managers do not have modern cooperative managerial skills. Not only that, generally, they come from society that are lack of formal and informal educational background, especially the experience in business sector. Moreover, in general, do not have adequate knowledge and technical skill to produce, sell, and managerial skill to handle a business activity. The same thing found by Setyorini and Kusmurtanto (2016), Goncalves (2015), Yusuf and Gustomo (2007), Suprayitno (2007), and Pactha et al., (2007) in their research. Moreover, Mubyarto (2007) stated that sometimes the managers of cooperative misuse their authorization, to enrich their self. Beside the low quality of human resource in managing the cooperative, the number of managers inactive cooperative is low, only 24.77 percent in 2015. It means, there are 75.23 percent or 113,006 units of cooperative do not have manager (Ministry of Cooperative and SMEs, 2015).

In order to create a proper manager in cooperative so that it can increase the profit in the cooperative and increase the members' welfare, then the members of the cooperatives should pick a qualified executive. Those executives should be responsible in selecting a high-quality manager, developing a strong strategy, and implementing a proper financial structure. Moreover, the members should be active in monitoring the cooperative performance, board, and management (Tambunan, 2008). Bart (2005) and McKenna (2001) also suggest that the cooperatives should hire professional manager to increase the cooperative performance. Erman (2017) stated that manager should be able to create planning accurately for a advancement cooperative.

The manager is hoped to have a sharp strategy in keeping the members to abide the internal rule, and able to create strategy to build partnership with other institution. If they are unable to provide a professional manager, it requires a training for the manager both technical and non-technical training so that they could improve the performance. Furthermore, it requires central and regional government attention, especially the one who is in charge in cooperative to give full attention and concentration in promoting and developing cooperative (Emana, 2009). By having an effective and efficient managerial, it is hoped to lift up the members' welfare and have good impact for other society.

Another finding is the capital that comes from the members themselves has positive effect to the members' welfare. The high rate of the cooperative capital will increase the members' welfare. The own capital is the members' saving. The higher the members' saving (main savings and principle savings), the higher the remaining income one will get. According to Sari (2014), using self-capital to finance a business, would have more advantages where there is no interest rate, administration fee, do not depend on the other party, do not need any complicated term, and no obligation to return the capital, but the usage of the capital is limited. Syaiful et al., (2016), and Raidayani and Faisal (2016) found that the high rate of capital would increase the members' welfare. According to Agustina et al., (2016), the capital that comes from self-capital has more significant effect to the welfare than the capital that comes from loan. As seen on Model 4 and 5, the self-capital has positive effect to the business volume. The higher the capital, would increase the business volume. Nevertheless, based on model 1-5, it can be seen that the own capital has both direct and indirect effect to the raising of members' welfare.

The last variable that affects the welfare is the business volume. It has positive effect to the members' welfare. A higher volume business capacity will increase the members' welfare. This result is in line with Hidayat et al., (2017), Yuliani et al., (2017), Pariyasa et al., (2014), and Sitio & Tamba (2001) who stated that in order to increase members' welfare, it requires enhancement of the business volume. Therefore, when business volume is high, the chance of cooperative to increase the remaining income is also high. On model 3, it can be seen that there are no any external factor that has direct effect in increasing the members' welfare.

In this research, there are several variables that have no significant effect on members' welfare, namely the number of cooperatives, annual members meeting (AMM), number of employees, outside capital, variable of macro economy in regional level such as poverty, unemployment, and income inequality level.

Indonesia is a country that has the largest number of cooperatives in the world, which is 212,135 units in 2015 (Ministry of Cooperative and SMEs, 2015). Unfortunately, among those numbers, only 70.81% is active. Moreover, none of the cooperatives in Indonesia is part of the top 300 biggest cooperative in the world (ICA, 2016). The cooperative development has not given significant implication for members' welfare.

AMM is the reflection of the economic democracy that embodies the aspiration of members and highest stakeholder in the cooperative. As the highest stakeholder in cooperative, all applicable policies in the cooperative should pass the board of annual members meeting first, including the election, appointment and dismissal of executive personnel and supervisors. AMM supposed to give essential effect for the members' welfare however empirically it has not been proven in Indonesia. According to Retnowati (2009) the quality of AMM implementation is weak. Most of the members are passive so AMM in the end is dominated by a certain group. It is caused by the lack of members' awareness and business activity that is not built on the group interest, so that the members' participation is low. This argumentation is strengthened by the Ministry of Cooperative and SMEs (2015) where during 2000-2015 period, the average of AMM is less than 50 percent.

The cooperatives existence was able to hire 537,234 employees in 2015. By that many employees, it is estimated that every cooperative has three to four employees. However, based on the estimation on Model 1-3, the employee existence has not given significant effect to the members' welfare. Employee is one of the production factors that need to be increased by capacity so that it can give positive effect in cooperative development. Loan has not given real effect to members' welfare for individual, cooperative, and province. Outside capital has indirect effect to members' welfare through business volume enhancement (look at the estimation result on Model 4-5).

The successful of a business is determined by the ability of an economic institution in identifying the chance and the obstacle. It is also considering the resource availability, social factor and financial power (Rahman, 2007). However, while the business is run by a single person, then the institution is not an essential matter, thus the effect and the results are oriented to individual considerations. Institution become more important while those business are run in a group and have a wide effect on natural resources and the social society, which is need a controlling system in building shared values. The cooperative movement as mandated by the constitution must occupy the main role in various economic sectors in Indonesia. Cooperative is a business that based on the family root as mentioned in Article 33 (1) in the 1945 National Constitution and Broad Outlines of State Policy and later was derived to Cooperative Act Number 12/1967 and revised into Cooperative Act Number 25/1992. The existence of cooperative is to promote members' welfare and society in general and contribute in building the national economic order to fulfill an advance, fair, and prosperous society based on Pancasila and the 1945 National Constitution.

Here are some actions that can be done to strengthening the role of Indonesia Cooperative institution. First, strengthening the cooperative role in Indonesia should be started by developing the basic framework of the cooperative system that is comprehensive and able to give direction, shape, and long-term order of people economy. Second, encourage the farmers, employees, and micro economic agents to gather and collaborate to increase economy's scale so that able to increase the productivity, create efficiency (collective efficiency), expand market reach, create creative and innovative idea, risks sharing (responsibility range) that could lead to well competition with other business agents. In cooperative, the micro business agents unite in a solid and a strong economy that become people's economy institution.

Third, increase the ability and the quality of human resources, especially the administrators and the managers who run the cooperative. Most of the cooperatives run by the ones who lack of training and experience in running a business. It has become a public secret. It requires a training and partnership for the manager and the administrators. Every manager should be certified so that able to run the cooperative by considering the accountability and transparency aspects. They should have knowledge about information and technology that has become a well-known thing especially in this 4.0 industrial era. During this age, all kinds of service are based on technology, internet of thing, and social media. Moreover, the central government and region, especially the related agency also have a major role in assuring the successful implementation of cooperative service and supervision.

Fourth, increase the access for the capital. In Indonesia, the loan sharks live above the poor people suffering. They exist because the poor thought that if it is easier to lend money from them than from the bank or other financial institution that requires collateral or other terms. The cooperative need to create a credit guarantee agency to help other cooperatives which has not get enough guarantee to access the bank.

Fifth, organize a consistency of education, training, counseling to create an efficient and healthy cooperative management. Nevertheless, cooperative needs to have system and educational institution, training and counseling to increase the members' role and to create professional man power to be working at the cooperative. Moreover, it needs to create a cooperative audit services institution that can encourage cooperative to create an accountable and transparent management so that they can increase members' trust in cooperative management.

Sixth, promote and build cooperative to that it has ability to breakthrough, expand and dominate market share of people's economic activity to give maximum and efficient business service to members. It should be done together by government and stakeholder to provide avocation and encouragement to make cooperative as an economic institution in the globalization era to prosper the society.

Seventh, develop the cooperative by top down and bottom up approaching. Sitio and Tamba (2001) explained that the cooperatives that are in the developing countries such as Indonesia has been helped by the government in the development. The government takes part because, in general, the human resource and the capital in the developing country is limited, so it takes government action. According to Ismail et al., (2014) when the cooperative is in hand of society, it would never expand. Nevertheless, the development of cooperative in developing country at the beginning is on the top down approach. Next, the construction is changed gradually to a bottom up approach so that the society feels the importance of cooperative existence, and make cooperative not only as the government tools, but also become a movement that grows from the bottom to fight for society's prosperity. According to Tjakrawerdaja (2014) development process of cooperative is done through three steps which are initialization, deofisalization, and autonomy (independent). During initialization, the government plays major role as cooperative partner, especially in various programs that include cooperative establishment initiatives, providing guidance and facilities assistance. On the next step, the implementation of various programs is directed to foster the ability and strength the cooperative. This step is essential and called deofisialization to reach the autonomy (independent). In the early stage before, the government is not only initiating the establishment of the cooperative, but also linking the cooperative business activities with government programs as a form of learning and working approach.

Eighth, develop an equal partnership with other economic agent through fair market institution, the government should be able to be facilitator so that the equal partnership can be established at the level of cooperative and other business institution in order to create a harmonize and fair competition. This equal partnership will create interdependent relationship between business agents so it can build mutually beneficial cooperation in economic activity. Even when the competition occurs, must be done fairly, mutual and supporting each other. This model market can be realized if there is a pattern of role planning among economic actors that has been determined in advance by the government. On that pattern role, the cooperative is directed to do business activities that control the lives of many people and can be done by many people (people's economy), not by PBEs or SOEs. With the strengthening of the role of Indonesia cooperatives, informal sector business agents such as micro and small business and farmers can be convinced to join the cooperative (formal sector) with the aim to prosper themselves together.

With those efforts, the direction of future cooperative development policies formulated in this architecture is based on the vision of achieving a healthy, strong, and efficient to speed up the realization of cooperative as pillar of the people's economy and strengthen the structure of national economy.

CONCLUSION

Base on the research, the purpose is to find out whether the existence of Indonesia cooperative can improve the welfare of their members. The result of the study found that the main variables that influence the members' welfare are the number of members, managers, own capital, and business volume. The results of the analysis show that more members of cooperatives will cause a decrease in the members' welfare. Furthermore, the presence of managers in cooperative shows a negative effect on members' welfare. Other findings are that the capital from members has a positive effect on members' welfare. Finally, business volume has a positive effect on members' welfare. In this research found several variables that do not have any effect the members' welfare, including the number of cooperatives, annual members meeting, number of employees, outside capital, and macro-economic variables at the regional level such as economic growth, poverty, unemployment, and income inequality. Although it does not have any direct effect, economic growth and outside capital have a positive effect on the business volume of the cooperatives which later affect the members' welfare. In subsequent study, it is expected that there will be an in depth understanding of the competence and education level of Indonesian cooperative managers. Studies on outside capital are needed so that the capital channeled to cooperatives can improve the members' welfare.

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