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RESEARCH PAPER

Analysis of the Efficiency Performance of Cooperatives in Indonesia: Analysis of Provincial Cooperatives Using the Data Envelopment Analysis Approach

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ABSTRACT

Cooperative performance efficiency describes the level of cooperative ability to utilize resources to generate profits. Efficient performance will increase productivity and strengthen business competitiveness. This study was conducted on 34 secondary cooperatives at the provincial level throughout Indonesia. Data was analyzed from 2019 - 2021 using the DEA (Data Envelopment Analysis) method. The results of the analysis show that the efficiency of cooperative performance in Indonesia is very low because the use of input resources exceeds the target needed to generate optimal profits. By using the DEA method, the level of achievement of input use in generating optimum profits is described in detail, starting from the number of cooperative members, utilization of own capital, utilization of external capital, utilization of assets, and the level of business volume developed by the cooperative. The results of this study greatly contribute to improving cooperative performance by evaluating the use of input resources in generating optimum profits according to the capacity of the cooperative.

KEYWORDS: *Cooperative Performance, Data Envelopment Analysis, Efficiency.*

1. Introduction

Cooperatives are seen as business entities that can drive the community's economy, especially in the agricultural, fishing, small and medium industry sectors. Cooperatives strengthen the community's business sector through the principle of cooperation in realizing common business goals. Strengthening cooperatives as the basis of the community's economy also seeks to build a social and cultural system based on the underlying values and principles, as mandated in Cooperative Law No. 17 of 2012, that the existence of cooperatives is expected to be able to fulfill shared aspirations and needs both in the economic, social and cultural fields based on cooperative values and principles.

The measure of the success of cooperatives as community economic leaders is largely determined by their performance in mobilizing the resources owned by members in particular and society in general. Maximum utilization of resources will create a competitive advantage and improve company performance [1]. Economically, a business is considered successful if it obtains an average profit both in the short term and in the long term. Profits are generated from the utilization of capital and production resources at a minimum cost level. The cooperative economic sector will function if the activities of members play an active role both as capital collectors and as users of products produced by cooperatives. The success of a cooperative business is determined by the extent to which members are committed and work together in realizing its functions on an ongoing basis. Commitment is needed to build a cooperative attitude of members towards the interests of the organization [2].

As a business institution, cooperatives are required to work professionally and are oriented to the interests of their members. The quality of cooperative performance is determined by its ability to manage the institutional, business, and financial arrangements and can benefit members and the community (Permenkop dan UMKM RI, 2015). Orientation on work quality has an impact on strengthening business institutions as capital to face business competition. Therefore, the performance of cooperatives is not only member service oriented but also must pay attention to

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measurable business development from an increase in product quality, productivity or technical efficiency, the service capability of a company, which leads to sustainable profits [4]. The level of return on investment indicates the level of cooperative performance, member satisfaction with the cooperative's goods and services, and members' and employees' education and training.

Performance appraisal of a company is a process of data analysis apart from being an accountability tool, it is also needed as a basis for making economic decisions. For company owners, performance appraisal is needed to provide an assessment of whether the investment will be maintained or not. For creditors, performance appraisal is needed to provide information on whether a company can pay on time. For employees, company performance appraisal provides information about the viability of the company as a place to depend for their lives. Company performance describes the company's financial position and shows the results of operations for a certain period, which are obtained by analyzing financial statements [5]. Financial ratios explain the level of liquidity, efficiency, solvency, and profitability as a measure of company performance [6]. Overall, performance describes the achievements of the company in its operations, both in terms of finance, marketing, raising and distributing funds, technology, and human resources. Therefore, for cooperative performance to be successful, cooperatives must have a competitive advantage be supported by internal and external environmental factors and manage according to industry mechanisms.

Company performance can be measured through the profits generated. However, how these profits are generated is the key to the answer to this performance. Profitability is seen as the main measure for companies that will determine the level of efficiency and performance in managing company resources. The level of efficiency shows the company's ability to use the right method of running a business, namely not wasting time, effort, and costs [7]. Economically, a business is considered efficient if it can maximize production and minimize production costs by using certain production inputs. This principle directs entrepreneurs in running their businesses. If resources are allocated efficiently, there will be an additional contribution from the business sector it runs. And vice versa, if the allocated resources are not efficient, then there will be lost potential or not optimally utilized from the business sector in generating profits. Efficiency is very important in determining the existence of business sector opportunities and their potential contribution to economic growth and improving the welfare of entrepreneurs.

Efficiency is a measuring tool to assess the selection of input-output combinations. There are three uses for measuring efficiency, namely: (1) as a benchmark for obtaining relative efficiency, facilitating comparisons between one economic unit and another; (2) If there are variations in the level of efficiency of several existing economic units, research can be carried out to answer what factors determine differences in levels of efficiency; (3) information regarding efficiency has policy implications because managers can determine company policies appropriately [8]. Low efficiency of company performance is caused by a lack of equipment that is by the needs of the labor market; lack of raw materials due to low budget; lack of knowledge, experience, and skills, and not following technological changes [9].

This research was conducted as an assessment of the performance of cooperatives by analyzing the level of Remaining Business Results (RBR) resulting from the utilization of resources owned by cooperatives so that the level of efficiency in their use is known. Several studies on cooperative performance are generally more studied from the financial side of cooperatives, such as research on the performance of conventional cooperatives assessed from the economic side, profitability, liquidity and solvency (RLS), and budget implementation [10].

According to him, the assessment has not been able to reflect the complexity of performance in business organizations. For this reason, a more comprehensive assessment is needed, namely using the Cooperative Capacity Assessment (CCA) method. This method focuses more on evaluating the organization and institutions of cooperatives as a participatory work system. The resulting work assessment describes the appropriate level of institutional performance as a cooperative resource manager. Cooperative performance is measured using the Balanced Scorecard method, namely balancing the measurement of financial aspects with non-financial aspects [11]. Cooperative performance is measured comprehensively including financial perspective, customer perspective, internal business process perspective, and learning and growth perspective. By using the Balanced Scorecard method, cooperative performance is considered good and satisfactory based on the perspective of internal business processes, learning/growth perspective, and customer

perspective on cooperative performance. Meanwhile, based on a financial perspective, cooperative performance is considered not good.

Several researchers have studied cooperative performance based on the growth in profits generated. Variables that are thought to influence cooperative profit growth are strategic planning and member participation. The results of his research explain that strategic planning in the long term has a significant effect on cooperative profit growth. Member participation plays little role in determining the growth of cooperative profits because they are not directly involved in managing the cooperative business. The variables of operating year, loan capital, number of employees, venture capital, linkage to business input, tax reduction policy, land rent, consumer products, and fixed assets are considered factors that affect the performance of cooperatives in Vietnam. These factors are inputs of cooperative businesses in generating profits [12]. The results of this study explain that the level of cooperative profits depends on the management of these inputs.

Intellectual capital and member participation have a big role in influencing cooperative performance [13]. The components of the intellectual model consist of structural capital, relational capital, and human capital. The results of the study explain that structural capital, relational capital, and member participation have a positive effect on cooperative performance while human resource development hurts cooperative performance. Several studies on the performance of cooperatives in Cooperative Banks operating in Jammu & Kashmir (India) used the Charnes, Cooper, and Rhodes (CCR) (1978) model of Data Envelopment Analysis (DEA) and Banker, Charnes and Cooper (BCC) (1984) [14]. The factors that influence the performance of cooperatives consist of the number of members, working capital, and deposits. The results of this study explain that 3 banks are relatively efficient when their efficiency is measured in terms of constant returns to scale and 5 banks are relatively efficient when their efficiency is measured in terms of returns to scale indicating that ineffective scale is the main reason for inefficiency among the cooperative banks studied.

Assessment of the efficiency of cooperative performance is a possible study to do. Cooperative performance is a standard measure of success like other businesses. RBR is the output produced by cooperatives as the final product that members and business development will enjoy. RBR is generated through the process of utilizing the resources owned by cooperatives based on the basic mechanisms and principles of cooperatives. The accuracy of the utilization of these resources is a measure of the efficiency level of cooperative performance which can be used as a measure of the quality of performance carried out.

This study aims to analyze the efficiency level of cooperative performance in Jambi Province in utilizing the resources they have. Through this study, it will be known the level of significance of the resources used in producing RBR so that it can be used as the basis for optimizing policies for their utilization. This study will be more comprehensive because it analyzes cooperative performance technically compared to previous studies.

2. Theoretical Review

Cooperative performance shows the level of ability of cooperatives in managing resources to generate profits. This ability is a benchmark for the success of cooperatives in achieving their business goals [15]. The purpose of the cooperative is to realize prosperity for all its members through the profits generated from the business being carried out. Profits in cooperatives are known as Business Remaining Results (RBR) which are obtained from income after deducting costs in a certain budget period. Cooperative efforts to generate maximum profit by reducing costs and increasing revenue require cooperatives to work on an efficient scale [16]. Efficient performance shows the accuracy of the company in utilizing resources to achieve maximum goals [17]. Technically, efficiency shows the accuracy in using a series of inputs to produce maximum output. Thus, efficiency is a measure of the success of a company's performance. The greater the value, the greater the company's performance in optimizing the use of inputs so that there is no excess or shortage of input [18].

Assessment of the efficiency of cooperative performance illustrates the ability of cooperatives to control operational costs. Efficient performance if cooperatives can operate at minimum costs [19]. Cooperative performance measurement generally uses the Data Envelopment Analysis (DEA) method. This method will produce an efficiency score as a measure of the success of cooperative performance in transforming resources [20].

Cooperative performance describes efforts to manage resources to generate profits. In general, cooperative resources consist of the number of members, capital, assets, and business volume. The existence of members in cooperatives functions as a source of financing and utilization of goods and services produced by cooperatives.

The greater the number of cooperative members, the stronger the position of the cooperative as a business entity [21]. Capital outside of cooperatives is loan capital that comes from non-members, other cooperatives, banks, or other financial institutions Cooperative capital sources come from equity (member savings, donations, reserves, and undistributed profits) and loan capital [22].

Assets are a description of working capital owned by cooperatives that are needed to support operations and run a business so that their utilization will determine the benefits of cooperatives. Cooperative performance is also shown from its efforts in determining business volume. The business volume shows the level of activities carried out by cooperatives which are expressed in terms of money. Thus the greater the volume of business run by the cooperative, the more likely it is to generate income. However, if the business volume generates a lot of costs, it will have an impact on the low profits to be generated [23].

3. Research Gap

In general, performance efficiency studies are conducted on companies or industries. Cooperatives themselves are a form of business entity that has the same goal as companies, namely to gain profit from their business. However, cooperatives emphasize more on the welfare of their members or the benefits for their members. Thus, the analysis of cooperative performance efficiency is very important to be studied as a form of study that will be useful in evaluating cooperative performance and formulating improvement policies for managing efficient input resources. The efficiency of cooperative performance in this study was studied based on the factors that influence it, such as the number of cooperative members, equity, external capital, business volume, and assets. The level of cooperative performance efficiency was analyzed using the DEA method so that the level of effectiveness of each use of input in generating optimal profit was known. This study, will reveal the issue of cooperative performance that is currently being worried about by the government, private sector, and society, and answer the causes, as well as alternative solutions to overcome them.

4. Data and Methodology

4.1. Data set

This study was designed quantitatively to determine the efficiency level of cooperative performance through analysis of cooperative financial and resource data. The object of this research is secondary cooperatives located in provinces throughout Indonesia, namely as many as 34 cooperatives from 2019 to 2021. The data was obtained from the website of the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia. Because the data involves the number of cooperatives and the year, the data analysis uses panel data.

4.2. Methodology

To measure the efficiency level of cooperative performance, the Data Envelopment Analysis (DEA) analysis model is used. This model follows the efficiency analysis technique of savings and loan cooperatives which is based on previous researchers such as Farrell and Berger in measuring the efficiency of financial services institutions [24]. This model is used because it is effective in accommodating input and output and fulfills the linear programming assumptions of the non-stochastic forces contained therein. The DEA model will produce an estimate of the efficient input usage limit in company performance [9].

Cooperatives are seen as intermediaries between members as providers of capital and users of services/goods produced by cooperatives. this concept is known as the mediation approach or asset approach [25]. Cooperatives in carrying out their business use labor, materials, and members' savings as inputs which are managed based on the cooperative business system to obtain profits as the output of the goods/services produced. This intermediation process forms a function that explains the relationship between the use of the input and the resulting output [24]. Mathematically it is formulated in the form of the following function:

$$DMU_{it} = \frac{\sum_{it}^{m} u_{it} y_{it}}{\sum_{jt}^{n} v_{jt} x_{jt}} \quad (1)$$

Where DMU is Cooperative Performance; i is the evaluated Cooperative (i = 1,2,3,…N); t is the period of the year; m is the observed cooperative output; n is the observed cooperative input; y is the amount of output produced by the Cooperative; x is the number of inputs used by the cooperative; u is the weight of the output produced by the cooperative; v is the input weight used by the cooperative.

The maximization of these functions is constrained by the condition that all DMUs have an efficiency level of no more than 1 or 100 percent. Thus the formulation turns into the following functional form:

$$MaxDMU_{it} = \frac{\sum_{it}^{m} u_{it} y_{it}}{\sum_{jt}^{n} v_{jt} x_{jt}} \quad (2)$$

Constraint

$$\frac{\sum_{it}^{m} u_{it} y_{it}}{\sum_{jt}^{n} v_{it} x_{jt}} \leq 1; i = 1,2,3,..n \quad (3)$$

$$u_{it}, v_{jt} \geq 0$$

This function is transformed into a linear program (ordinary linear programming) in the form of the DEA function, as shown in the following equation:

$$MaxE_{it} = \sum_{it=1}^{m} u_{it} y_{it} \quad (4)$$

Constraint

$$\sum_{jt=1}^{n} v_{jt} x_{jt} = 1 \quad (5)$$

$$\sum_{it=1}^{m} u_{it} y_{it} - \sum_{jt=1}^{n} v_{jt} x_{jt} \leq 1 \quad (6)$$

$$u_{it}, v_{jt} \geq 0$$

Where E_{it} is the value of relative efficiency, u_{it} and v_{it} as decision variables from the results of linear programming iterations.

5. Results and Discussion

The performance of cooperatives in Indonesia is based on efforts to utilize input sources (number of cooperative members, own capital, outside capital, assets, and business volume) to generate profits (RBR). During the last three years (2019 – 2021), the average input and output development of cooperatives in Indonesia has increased as shown in Tab. 1 below:

Tab. 1. Descriptive cooperative input and output for 2019 – 2021

Year	Variable	Mean	SD	Min	Max
2019	Inputs				
	Number of Active Cooperatives	3,619	4,278	476	21,757
	Owner's equity	2,085,973	2,873,005	44,993	12,442,586
	Outside Capital	2,387,943	4,176,058	9,511	17,323,157
	Asset	4,473,916	6,841,894	54,504	26,275,315
	Business Volume	4,550,545	7,094,536	48,321	28,116,735
	output				
	RBR	184,390	252,023	8,575	1,056,007
2020	Inputs				
	Number of Active Cooperatives	3,739	4,402	558	22,464
	Owner's equity	2,332,626	3,302,452	37,421	13,941,209
	Outside Capital	2,661,402	4,859,677	9,157	21,725,959
	Asset	6,529,152	10,398,419	66,717	41,472,923
	Business Volume	5,118,622	8,211,580	39,862	33,261,607
	output				
	RBR	212,503	307,175	6,856	1,327,550
2021	Inputs				
	Number of Active Cooperatives	3,760	4,413	612	22,845
	Owner's equity	2,694,298	3,922,062	43,891	14,813,782
	Outside Capital	3,128,262	5,561,335	21,143	22,903,744
	Asset	7,381,833	11,708,543	80,483	47,113,480
	Business Volume	5,363,305	8,858,349	40,883	35,749,158
	output				
	RBR	211,153	305,686	4,170	1,302,856

Source: Secondary data processed, 2022

Based on Tab. 1, the average use of inputs has increased from 2019 to 2021. The biggest increase occurred in the use of assets, previously in 2019 amounting to IDR 4,473,916,000,000; in 2021 it

increased to IDR 7,381,833,000,000 or an increase of 67 percent. On the other hand, the increase in RBR was only 14.51 percent from 2019 to 2021. This condition indicates that cooperative performance is less efficient in utilizing resources to generate profits. By using the DEA method, input and output data for cooperatives are obtained to explain the efficiency level of the cooperative's performance as the results are described in Tab. 2 below:

Tab. 2. Cooperative Performance Efficiency in Indonesia in 2019 – 2021

Interval		Category	2019		2020		2021	
			F	%	F	%	F	%
0.81	1	Very high	3	8.82	2	5.88	4	11.76
0.61	0.8	Tall	1	2.94	3	8.82	2	5.88
0.41	0.6	Currently	2	5.88	1	2.94	1	2.94
0.21	0.4	Low	7	20.59	6	17.65	6	17.65
0	0.2	Very low	21	61.76	22	64.71	21	61.76
Total			34	100	34	100	34	100
Means				0.23		0.22		0.26

Source: Processed DEAP output (2022)

Based on Tab. 2, it is explained that most of the performance of cooperatives in Indonesia is not efficient. From 2019 to 2021 there are only 4 to 6 cooperatives whose performance is very efficient. Cooperative performance that is very efficient with a score of 1 is achieved by West Papua Province cooperatives. The performance of cooperatives in West Sulawesi Province in 2021 will reach an efficiency level of 1, an increase from previous years. The efficiency of the performance of cooperatives in the Province of Papua has increased in 2021, was previously inefficient. West Kalimantan Province has shown an efficient performance at a score above 0.8 in the last three years. In more detail, the efficiency level of cooperative performance in Indonesia is shown in Fig. 1 below:

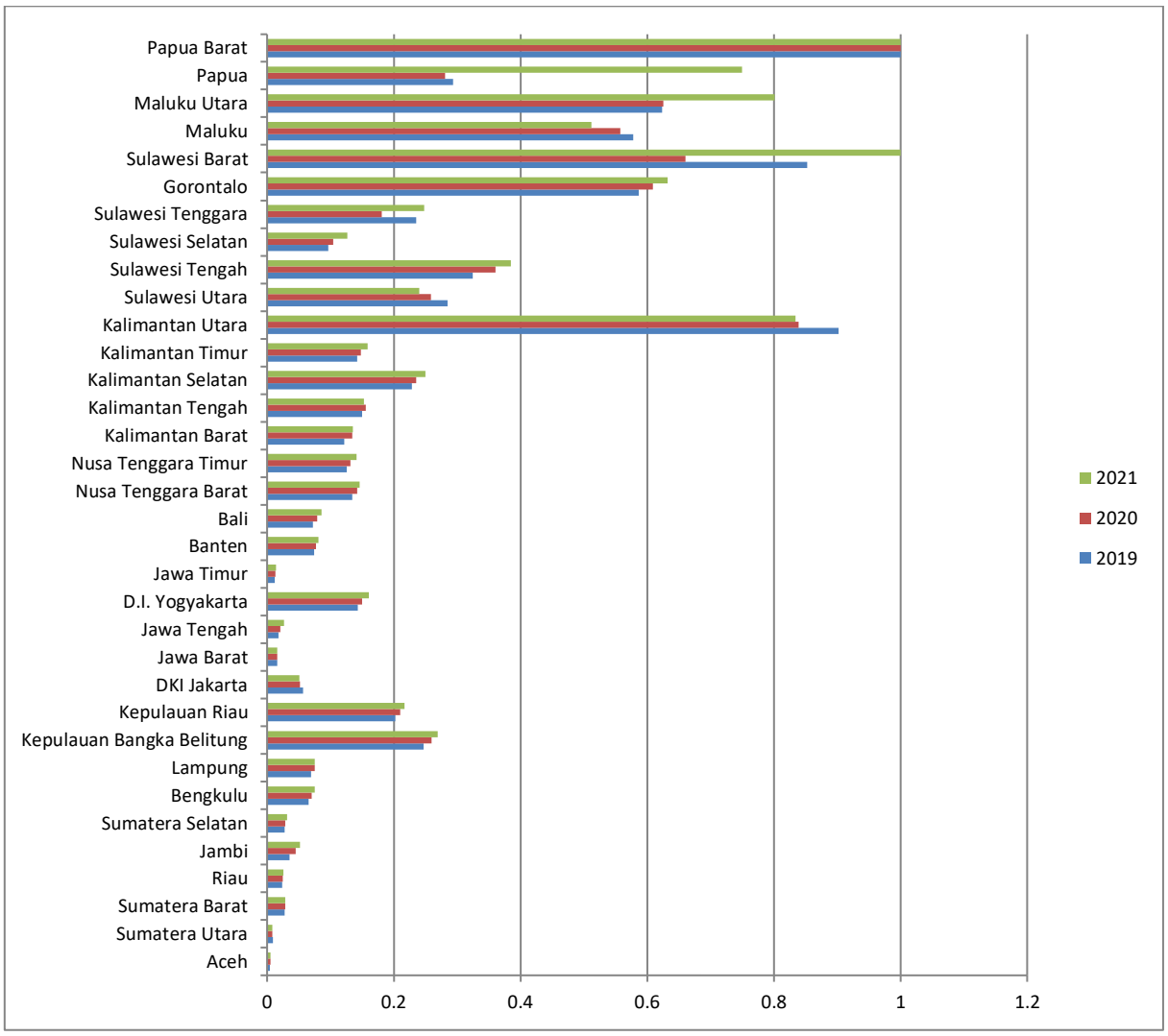

Fig. 1. Cooperative performance efficiency levels in indonesia 2019 – 2021

Fig. 1 shows that most cooperatives in provinces with advanced economies show inefficient performance, such as cooperatives in the provinces of Jakarta, Central Java, West Java, and East Java, as well as cooperatives on the island of Sumatra, especially cooperatives in the province of Aceh, which are very low. level of performance efficiency. This condition explains that small cooperatives will be more proportional in using input to produce optimal output [25]. Small cooperatives allow for cost savings and achieve significant efficient profits from the scale of business operations being carried out.

The low level of efficiency in the performance of cooperatives in Indonesia is due to the level of input use that exceeds the required target, as shown by the results of data processing using the DEA method in Tab. 3 below:

Tab. 3. Actual average value, target, radial movement input output of cooperatives in indonesia

Variable Input	Original Value	Radial Movement	Slack Movement	Projected Value	Achieved (%)
Number of Active Cooperatives	184,390	-172,317	-7,659	4,414	2.39
Owner's equity	3,619.06	-3,252.30	-53.82	312.94	8.65
Outside Capital	2,085,972.74	-1,961,210.49	-101,604.08	23,158.16	1.11
Asset	2,387,943.06	-2,257,483.45	-125,564.24	4,895.37	0.21
Business Volume	4,473,915.85	-4,218,693.99	-227,168.33	28,053.53	0.63

Source: Processed DEA output (2022)

Cooperative performance efficiency describes the accuracy of the use of inputs in producing optimal profits. Based on the results of DEA data processing shows that most of the performance of cooperatives in Indonesia is inefficient. The inefficient performance will have an impact on wasting the company's operational financing it will reduce the company's profit level. Production costs will increase when companies do not produce on an efficient scale [26]. The level of inefficiency in the performance of cooperatives in Indonesia in managing resources can be seen in Tab. 3 In general, cooperatives in Indonesia are not yet good at utilizing resources to generate optimum profits. On the input of the number of active cooperatives, the level of efficiency in empowering them only reaches 2.39 percent. The large number of cooperative members who are less productive in increasing profits is one of the causes of the low level of efficiency in the performance of cooperatives in Indonesia. Cooperatives that are unable to maintain efficient performance will reduce member commitment to the business run by cooperatives [27]. Therefore, to achieve efficient performance, it is necessary to reduce the number of unproductive cooperative members by 172,317 units with an inequality value of 7,659. The performance of cooperatives is largely determined by the level of commitment of members both in the form of capital, product marketing, and purchasing of cooperative inputs as well as cooperation based on mutual trust among members [28]. Economically businesses involved in cooperative membership will show better performance than if they are not members of cooperatives [29]. Members who are committed to collective endeavors will be willing to sacrifice short-term economic gains to realize successful cooperative performance in the long term [30].

The next cause of inefficiency in the performance of cooperatives in Indonesia is the inaccurate use of their own capital in generating profits. Own capital shows the internal financial capacity of the cooperative which is built from the solidity of the members in financing the cooperative business. Own capital will determine the cooperative's ability to absorb losses caused by a decrease in assets [19]. Ineffective use of the model itself will have an impact on the performance of the cooperative in gaining profits [31]. To achieve efficient performance, the target of own capital required is IDR 312,940,000 while IDR 3,619,060,000 is used so that a reduction of IDR 3,252,300,000 is required with an inequality level of IDR 53,820,000.

Cooperative external capital or loan capital can increase the amount of business capital, but its use results in interest that must be paid by the cooperative on the loan [21]. The need for outside capital is to accelerate the growth of cooperative businesses [32]. The use of outside capital also contributes to the inefficiency of cooperative performance in Indonesia. On average, cooperatives in Indonesia utilize outside capital that is greater than what is needed to achieve an efficient performance. The level of external capital needed to achieve efficient performance is IDR 23,158,160,000 while the capital used is IDR 2,085,972,740,000 so it needs to be reduced by IDR 1,961,210,490,000 with an inequality level of IDR 101,604,080,000. The use of external capital will directly increase business volume, but if it is not done carefully it can cause interest costs that will indirectly reduce profits [33]. Fulfillment of capital requirements must consider the risks and costs and the level of benefits that will be generated by prioritizing the interests of members [34].

Assets in a cooperative show the level of working capital that can be used to operate a business. The ability of cooperatives to manage assets will increase the performance of cooperatives in generating profits [21]. The utilization of assets in supporting cooperative businesses plays a very large role in the level of inefficiency in cooperative performance. The results of other studies also reveal that asset utilization has a significant relationship with cooperative financial performance. Inefficient use of assets usually occurs in small-scale cooperatives [35]. Based on the results of data processing with DEA in Tab. 3, cooperatives in Indonesia have not utilized assets efficiently in supporting business success. The utilization of assets needed to achieve efficient cooperative performance is IDR 4,895,370,000 while the assets used are IDR 2,387,943,060,000 so it is necessary to reduce asset utilization by IDR 2,257,483,450,000 with an inequality level of IDR 125,564,240,000. Excessive use of working capital will cause cooperatives to experience financial difficulties, especially in obtaining financial resources [36]. This problem is often found in cooperative business entities because they are not careful in adjusting asset needs with risk preferences and investment strategies [37]. Underutilized assets should be distributed to other cooperatives that need them so that they can continue to provide added value to the cooperative [38]. According to him, the concept of sharing assets in the economy can be in the form of the

exchange of assets, loans, or leases and in the form of grants.

Business volume is a measure of cooperative performance that describes the level of business development [15]. The larger the cooperative's business volume, the greater the potential income that will be generated. In addition, the business volume is also determined by the solvency level of the cooperative's financial performance [39]. So the volume of business that is less productive will have an impact on the level of cooperative profits. Based on the Tab. 3, the average cooperative in Indonesia is not yet efficient in managing its business to generate optimum profits. The level of business volume needed to realize efficient performance is IDR 28,053,530,000 while the actual is IDR 4,473,915,850,000 so it is necessary to reduce IDR 4,218,693,990,000 with an inequality level of IDR 227,168,330,000. Not a few cooperatives use capital from debt to increase the business volume so an increase in business volume has an impact on increasing business costs and cost of goods sold. Business costs arising from less productive business volume cause cooperative performance to be inefficient [21]. Therefore, a balance is needed between efficient cost use and the resilience of the cooperative performance system as a basis for managers in making strategic decisions and maintaining performance stability in the long term [40].

6. Concluding Remarks

The performance of cooperatives in Indonesia over three years (2019 - 2021) is still inefficient. The average level of efficiency shown by cooperatives in Indonesia in utilizing resources to generate profits is only 0.23. The low level of efficiency of cooperative performance in Indonesia is caused by (1) The role of cooperative members in generating profits only reaches 2.39 percent of the required role. Members in cooperatives have a huge role as owners and users of goods and services produced by the cooperative. The low role of members will hinder the performance of cooperatives both in financing and in the distribution process. (2) The realization of using own capital has only reached 8.65 of the required target. Own capital shows the internal financial capacity of cooperatives which is built from member solidarity in financing cooperative businesses. Ineffective use of own models will have an impact on cooperative performance in gaining profits. (3) The realization of the use of foreign capital exceeds the required target, which is 1.11 percent. It should be realized that the use of external cooperative capital or loan capital can increase the amount of business capital, but its use results in interest that must be paid by the cooperative on the loan. (4) The realization of asset utilization does not match the needs of 0.21 percent. Assets in cooperatives indicate the level of working capital that can be used in operating a business. Productive asset utilization will burden the cooperative's performance in gaining profit. (5) The realization of business volume against the required target only reached 0.63 percent. The greater the cooperative's business volume, the greater the potential income that will be generated. So a less productive business volume will have an impact on the cooperative's profit level.

The results of this study provide implications for secondary cooperatives in Indonesia to evaluate their performance in managing input resources to generate maximum profit. Among the recommendations we suggest are:

- Verifying cooperative membership to determine the number of active members and fostering or removing inactive members so as to provide certainty of the role and contribution of members in the cooperative.
- Making effective use of own capital and external capital according to business needs so as not to incur costs and increase capital productivity.
- Managing the use of assets in productive businesses and distributing underutilized assets to other cooperatives in need so that they continue to provide added value to the cooperative in the form of asset exchange, loans or leases and in the form of grants.
- Determining business volume based on profitable market needs.

The researcher realizes that there are still limitations in this study, which are only input-oriented in measuring the efficiency level of cooperative performance. Cooperative performance efficiency can be studied from various aspects, such as through the output approach and productivity levels. Future researchers can carry out this work to strengthen these findings.

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