

# Healthy Financial Performance of KUD Mina "Samudra Jaya" Panarukan Cooperative

Suryadinata Ningrum

Sekolah Tinggi Ilmu Administrasi Pembangunan

Ahmad Arifin

Sekolah Tinggi Ilmu Administrasi Pembangunan

**\*Correspondence:** Suryadinata  
Ningrum  
[nsuryadinata20@gmail.com](mailto:nsuryadinata20@gmail.com)

Received: 09-08-2024

Accepted: 16-09-2024

Published: 23-10-2024

Copyright © 2025 by author(s)  
and Scientific Research  
Publishing Inc.

This work is licensed under the  
Creative Commons Attribution  
International License (CC BY  
4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

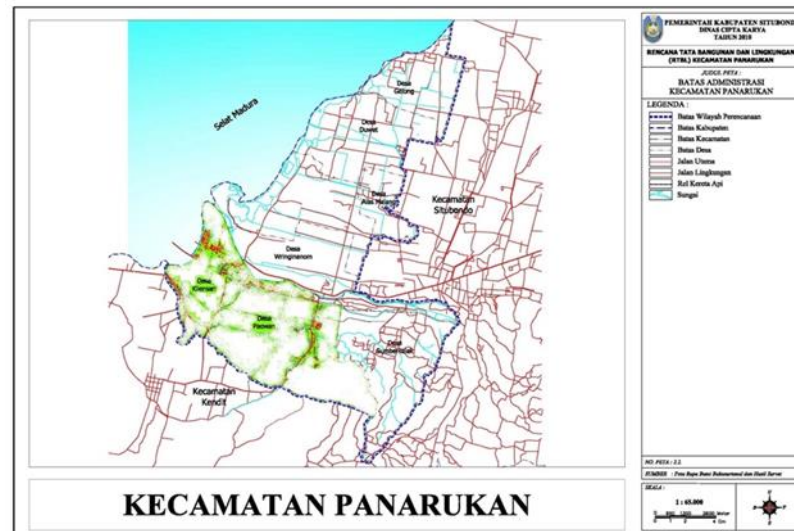
People who work as fishermen usually live close to coastal waters. They have an economic life related to marine resources. Fishing activities by fishermen affect the costs incurred. The large costs incurred by fishermen mean that fishermen's finances must be stable for expenses. This stability needs to be balanced with stable income. The urgency of this research is that fishermen's catch of fish is difficult due to weather changes and the damage to the potential of the Panarukan sea, which has triggered the development of the pesse budu' or childbirth money loan business to drive the fishermen's economy. The aim is that researchers are interested in analyzing the financial health of cooperatives. The research method used is qualitative. This qualitative method was used to find out more about the role of the healthy financial performance of KUD Mina "Samudra Jaya" on the fishermen's economy which influences the development of the money-bearing culture. Data collection in the field was carried out through direct observation, study literature. The result is Liquidity Ratio, namely the calculation of the current ratio with a result of 181.3% in 2018 with good criteria, in 2019 with a value of 160.6% with quite good criteria. Solvency Ratio, Total Debt to Total Assets Ratio with a value of 55.2% in 2018 with fairly good criteria and 62.3% in 2019 with poor criteria. Total Debt to Equity Ratio with a value of 66.7% in 2018 and 59.3% in 2019 with very good criteria in those 2 years. Profitability Ratio, Return on Assets (ROA) with a value of 12.3% in 2018 and 14.3% in 2019 with very good criteria in those 2 years. Return on Equity (ROE) was 14.8% in 2018 and 13.5% in 2019 with fairly good criteria in those 2 years.

## Keywords

Financial Health, Cooperatives, Savings and Loans, Fishermen, Panarukan

## Introduction

A fisherman is every person whose livelihood is fishing, Fisheries Law Article 1 number 3 Law 7/2016. People who work as fishermen usually live close to coastal waters. They have an economic life related to marine resources. One of the jobs in the waters is fishing. "Pantarukan is one of the sub-districts of Situbondo, located adjacent to the city of Situbondo with the height of village from sea level is between 3 m to 15m. the width of Sub-district of Pantarukan is 54.55 km<sup>2</sup> consisting of 8 villages having many food processing and non-food processing centers based on marine resources"(1) . This research was conducted in the Pantarukan waters area, with a picture of the research location as follows:



**Figure 1.** Research Location

Sumber: pantarukan.situbondokab.go.id

Based on the map above, Pantarukan has marine potential that needs to be developed and maximized. Due to the geographic location of this region, Pantarukan's source of livelihood near the waters is fishermen. The following is the distribution of employment data in this region based on 2018 BPS data. Kilensari Village has the highest number of fishing workers compared to other villages in Pantarukan, this is in accordance with its geographical location close to the water. Fishermen work using 2 types of boats which are differentiated based on their fishing gear. Most of the boats used by Pantarukan fishermen are purse-in fishing gear, namely purse sein slereg fishing gear that uses lights as a distractor to concentrate schools of fish that are targeted. However, due to increasingly sophisticated developments, this tool has now become a purse-in axle (one boat) which is operated by one ship and the fishing gear is pulled with an axle auxiliary device." (2). Based on these differences in fishing equipment, fishermen and the public more often pronounce the type of vessel based on their fishing equipment. Differences in fishing gear affect differences in expenditure for each vessel. The costs incurred include:

**Table 1.** Slereg Ship Investment Costs  
**Slereg Ship investment costs**

| No | Items       | Amount        | Items                  | Price (Rp)      | Economic age |
|----|-------------|---------------|------------------------|-----------------|--------------|
| 1  | New Boat    | 1             | Units                  | IDR 430,000,000 | 10 years     |
| 2  | Second Boat | 1             | Units                  | IDR 250,000,000 | 5-10 years   |
| 3  | Purse Seine | 1             | Package                | IDR 25,000,000  | 3 years      |
| 4  | Machines    | 2             | Fruit                  | IDR 75,000,000  | 2 years      |
|    |             | <b>Amount</b> | <b>IDR 780,000,000</b> |                 |              |

Source: processed data, 2024

**Table 2.** Fixed Costs and Variable Costs for Purse Sein Slereg

| Fixed Costs and Variable Costs <i>Purse Sein</i> Slereg        |                                                         |        |                |                      |                        |                        |
|----------------------------------------------------------------|---------------------------------------------------------|--------|----------------|----------------------|------------------------|------------------------|
| No                                                             | Cost                                                    | Amount | Price per Item | Per Trip             | Per month              | Per year               |
| <b>Fixed cost</b>                                              |                                                         |        |                |                      |                        |                        |
| 1                                                              | Ship, Equipment and Machinery Maintenance (Operational) |        |                |                      |                        | IDR 47,850,000         |
| 2                                                              | Crew Wage Range                                         | 24     | 1              | IDR 800,000          | IDR 19,200,000         | IDR 230,400,000        |
| 3                                                              | Drainer Wage Range                                      | 1      | 1              | IDR 800,000          | IDR 4,800,000          | IDR 57,600,000         |
| <b>Fixed Cost Amount</b>                                       |                                                         |        |                |                      | <b>IDR 335,850,000</b> |                        |
| <b>Fixed Costs and Variable Costs <i>Purse Sein</i> Slereg</b> |                                                         |        |                |                      |                        |                        |
| <b>Variable Costs</b>                                          |                                                         |        |                |                      |                        |                        |
| 1                                                              | Diesel (liter)                                          | 150    | IDR 7,000      | IDR 1,050,000        | IDR 6,300,000          | IDR 75,600,000         |
| 2                                                              | Oil (liter)                                             | 10     | IDR 350,000    | IDR 3,500,000        | IDR 21,000,000         | IDR 252,000,000        |
| <b>Fixed Costs and Variable Costs <i>Purse Sein</i> Slereg</b> |                                                         |        |                |                      |                        |                        |
| 3                                                              | Supplies                                                | -      | -              | IDR 250,000          | IDR 1,500,000          | IDR 18,000,000         |
| 4                                                              | Ice Cubes (oblong)                                      | 6      | IDR 12,000     | IDR 72,000           | IDR 432,000            | IDR 5,184,000          |
| <b>Number of Cost Variables</b>                                |                                                         |        |                | <b>IDR 4,872,000</b> | <b>IDR 29,232,000</b>  | <b>IDR 350,784,000</b> |

Source: Data processed, 2024

**Table 3. Axle Ship Investment Costs**

| Gardan Ship investment costs |             |        |         |                        |              |
|------------------------------|-------------|--------|---------|------------------------|--------------|
| No                           | Items       | Amount | Items   | Price (Rp)             | Economic age |
| 1                            | New Ship    | 1      | Units   | IDR 450,000,000        | 10 years     |
| 2                            | Second Ship | 1      | Units   | IDR 250,000,000        | 5-10 years   |
| 3                            | Purse Seine | 1      | Package | IDR 25,000,000         | 3 years      |
| 4                            | Machine     | 4      | Fruit   | IDR 150,000,000        | 2 years      |
| Amount                       |             |        |         | <b>IDR 875.000.000</b> |              |

Source: Data processed, 2024

**Table 4.** Fixed Costs and Variable Costs *for Purse Sein Gardan*

| Fixed Costs and Variable Costs <i>for Purse Sein Gardan</i> |                                                         |        |                |                 |               |               |                        |
|-------------------------------------------------------------|---------------------------------------------------------|--------|----------------|-----------------|---------------|---------------|------------------------|
| No                                                          | Cost                                                    | Amount | Price per Item | Duration (days) | Per Trip      | Per month     | Per year               |
| <b>Fixed cost</b>                                           |                                                         |        |                |                 |               |               |                        |
| 1                                                           | Ship, Equipment and Machinery Maintenance (Operational) |        |                |                 |               |               | IDR 55,500,000         |
| 2                                                           | Crew Wage Range                                         | 5      | 1              | 3               | IDR 1,000,000 | IDR 5,000,000 | IDR 60,000,000         |
| 3                                                           | Drainer Wage Range                                      | 1      | 1              | 3               | IDR 800,000   | IDR 800,000   | IDR 9,600,000          |
| <b>Fixed Cost Amount</b>                                    |                                                         |        |                |                 |               |               | <b>IDR 125,100,000</b> |
| Fixed Costs and Variable Costs <i>for Purse Sein Gardan</i> |                                                         |        |                |                 |               |               |                        |
| No                                                          | Cost                                                    | Amount | Price per Item | Duration (days) | Per Trip      | Per month     | Per year               |
| <b>Variable Costs</b>                                       |                                                         |        |                |                 |               |               |                        |

|                                 |                          |     |                |   |                          |                           |                            |
|---------------------------------|--------------------------|-----|----------------|---|--------------------------|---------------------------|----------------------------|
| 1                               | Diesel<br>(liter)        | 150 | IDR 6,000      | 3 | IDR<br>2,700,000         | IDR<br>16,200,000         | IDR<br>194,400,000         |
| 2                               | Oil<br>(liter)           | 10  | IDR<br>350,000 | 1 | IDR<br>3,500,000         | IDR<br>21,000,000         | IDR<br>252,000,000         |
| 3                               | Supplies                 | 1   | IDR<br>250,000 | 3 | IDR 750,000              | IDR<br>2,250,000          | IDR<br>27,000,000          |
| 4                               | Ice<br>Cubes<br>(oblong) | 50  | IDR 12,000     | 0 | IDR 600,000              | IDR<br>3,600,000          | IDR<br>43,200,000          |
| <b>Number of Cost Variables</b> |                          |     |                |   | <b>IDR<br/>7,550,000</b> | <b>IDR<br/>43,050,000</b> | <b>IDR<br/>516,600,000</b> |

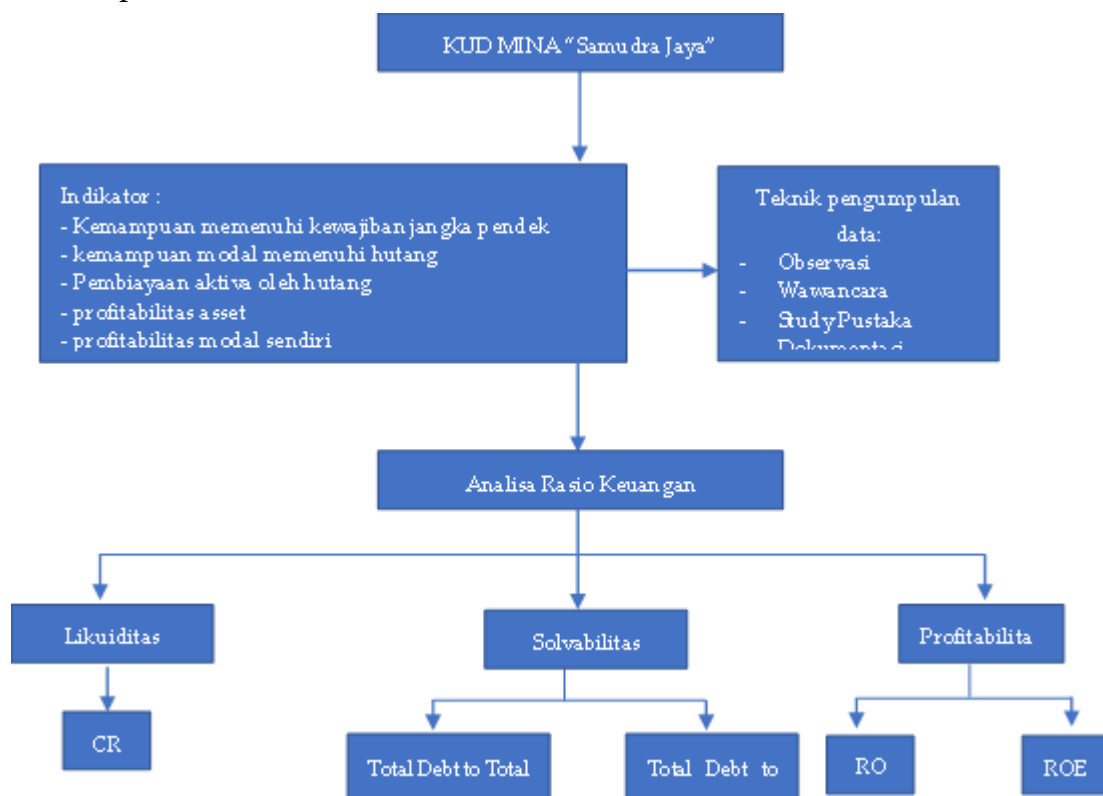
Source: Data processed, 2024

This stability needs to be balanced with stable income. However, fishing work is not a fixed income but is determined by the catch, while the number of fish will depend on the season. Climate change can make it difficult for fishermen to determine the fishing season due to unpredictable weather and this risks changing the stability of the ecosystem, social economy of the community, and damaging the function of the planet Earth as a supporter of life (3) The process of fishing using a slereg or axle is very influential on fishermen's income. . The difference between the two ships can be seen in the duration, the axle only works for a duration of 1 day because it is fishing at close range while the axle will work for a duration of 3 days because it is looking for fish in areas outside the island. "The variety of types of fishing gear and their sizes will cause variations in the operational techniques used to catch fish (4). The lack of fish harvests forces Panarukan fishermen to try to search in other areas by collaborating. This collaboration triggers increasing operational needs, while fish income cannot be used as a guarantee to cover fishermen's needs. Finally, to meet fishermen's needs for going to sea, they seek funds from loans. The need for loans provides an opportunity for capital owners to open a savings and loan business. The emergence of this type of borrowing business, which is usually called child money (pese budu') from moneylenders, was triggered by the pressing need for fishermen to meet operational needs, supplies and pocket money. Loan patterns for fishing work are quite varied because they are given and carried out by several parties. Loans made by debtors will be paid not only in cash but also in the form of fish that can be sold. Creditors from collectors will get a share of the boat while loan sharks will get interest profits calculated per week. The existence of cooperatives provides assistance to fishing members for savings and loans. In this regard, the activity of KUD Mina "Samudra Jaya" needs to be measured for its level of health based on the results of the observations above, the problem that can be formulated is how do fishermen adapt to changes in catch that affect their economic behavior?

## Methods

Panarukan is one of the districts in East Java which has extensive potential and strategic coastal waters and is a center for capture fisheries production. (5) This should be a potential area for fish growth and development. However, it turns out that the fishing results were not optimal due to several factors so that the fishermen's catches were not maximized. This catch makes fishermen's income disproportionate to their expenses, resulting in illegal savings and loans behavior through child money which is triggered by the inactivity of village unit cooperatives in this area. In overcoming the problem of fishermen's economic behavior due to catches that are not optimal, several efforts that can be made are by expanding fish houses in the Panarukan waters, so that slereg fishermen can find fish more optimally every day. Meanwhile, axle fishermen who work outside the area focus on the outside area and do not disturb the nearby area. Considering

that the role of cooperatives is very important in helping the fishermen's economy, it is necessary to conduct an analysis regarding the reasons for the inactivity of savings and loans as seen from an analysis of their financial health. Financial reports are the result of the accounting process as a means of communication between financial data or company activities and those. (9) financial reports also provide useful information if no analysis is carried out on them. Employee cooperatives are cooperatives that exist within a company. Cooperative membership consists of all employees from the environment. Savings and loan cooperatives are financial institutions that have business activities to collect savings funds and give them back to members as a form of loan aimed at improving the welfare of their members. (9) Savings and loan activities need to pay attention to financial conditions as a sign that it is appropriate to provide loans. Therefore, in its activities, cooperatives need to be analyzed regarding their financial health. This assessment is based on the Regulation that "the implementation of health assessments of savings and loan cooperatives and cooperative savings and loan units needs to be adjusted to the development of financial accounting standards that have passed." (10) The following are the assessment weights for aspects and components:



**Figure 2.** Cooperative Health Assessment

The research method used is qualitative. This qualitative method was used to find out more about the role of the healthy financial performance of KUD Mina "Samudra Jaya" on the fishermen's economy which influences the development of the money-bearing culture. The approach used in this research is descriptive which is useful for making systematic, factual and accurate explanations of the facts that occurred. The research strategy used in ethnography is a very in-depth study of behavior that occurs naturally in a culture or a particular social group to understand a particular culture from the perspective of its perpetrators. Data collection in the field

was carried out through direct observation and in-depth interviews with respondents. The data analysis technique used in this research uses data analysis techniques used in analyzing this research data using tools based on

The way to assess financial performance is using ratio analysis which is divided into three groups as follows:

#### 1. Liquidity Ratio

Current Ratio, current ratio, is calculated by dividing current assets by current liabilities using the following formula:

Current ratio = current assets: current liabilities x 100%

The current ratio criteria used are:

Very good = 200% - 250%

Good = 175% - <200%

Fairly good = 150% - <175%

Poor = 125% - < 150

Not Good = 125%

#### 2. Solvency Ratio

##### a. Total Debt to Total Assets Ratio

Total Debt to Total Assets Ratio is calculated by dividing total debt by total assets.

Total Debt to Total Assets Ratio= Total Debt: Total Assets x 100%

The total debt to total asset ratio criteria used are:

Very good = <40%

Good = 40% - <50%

Fairly good = 50% - <60%

Poor = 60 - <80%

Not Good = >80%

##### b. Total Debt to Equity Ratio

Total debt to equity ratio is the ratio between debt and own capital, with the following formula:

Total debt to equity ratio= Total Debt: Capital x 100%

The criteria for assessing the total debt to equity ratio are as follows:

Very good= < 70%

Good= >70% - 100%

Fairly good= >100% - 150%

Poor= >150% - 200%

Not Good= >200%

### 3. Profitability Ratio

#### a. Return on Assets (ROA)

ROA is the ratio of return on assets, with the following formula:

$$\text{ROA} = \frac{\text{Net Profit from SHU Calculation}}{\text{Total Assets}} \times 100\%$$

ROA assessment criteria are as follows:

Very good =  $>10\%$

Good =  $7\% - <10\%$

Fairly good =  $3\% - <7\%$

Poor =  $1\% - <3\%$

Not good =  $<1\%$

#### b. Return on Equity (ROE)

ROE is calculated using the following formula:  $\text{ROE} = \frac{\text{Net Profit from SHU Calculation}}{\text{Capital}} \times 100\%$  The ROE criteria used are:

Very good =  $21\%$

Good =  $15\% - <21\%$

Fairly good =  $10\% - <15\%$

Poor =  $3\% - <10\%$

Not good =  $<3\%$

## Results and Discussion

Based on the analysis results from 2018 – 2019, the cooperative's financial performance uses the following financial ratio assessment:

- a. Liquidity Ratio. In this aspect, the loans to members are assessed against the loans provided. This aspect describes the ability of KUD Mina "Samudra Jaya" to fulfill its obligations. Through *current ratio analysis*, the calculation can be done by dividing the nominal current assets by the nominal current liabilities in the 2018 - 2019 period.

Table 5. Liquidity Ratio

|      | Current asset  | Current liabilities | Current Ratio (%) |
|------|----------------|---------------------|-------------------|
| 2018 | IDR 21,755,700 | IDR 12,000,000      | 181.3             |
| 2019 | IDR 19,270,700 | IDR 12,000,000      | 160.6             |

Source: processed data, 2024

Based on the results of the calculations above, it is known that in 2018 the cooperative's health level was in the good category, while in 2019 it experienced a decline in the quite good category. The analysis of this decrease is that there was a decrease in current assets in 2019 while there was no change in current liabilities. This means that the cooperative's ability to manage its current debt cannot be balanced with the amount of current assets. According to the chairman of the cooperative, this was because in 2019 he began to be affected by the Covid-



19 virus, which caused buying and selling activities to decline and resulted in reduced income.

b. Solvency Ratio.

This ratio describes the relationship between cooperative debt to assets and capital. The results of this calculation show the ability of the cooperative's obligations or debt to finance the cooperative. The calculation is done by dividing total debt by total assets which is called *the total debt to total assets ratio*, here is the calculation:

**Table 6.** Total debt to total assets ratio

|             | <b>Total Amoun of debt</b> | <b>Total assets</b> | <b>Ratio (%)</b> |
|-------------|----------------------------|---------------------|------------------|
| <b>2018</b> | IDR 12,000,000             | IDR 21,755,700      | 55.2             |
| <b>2019</b> | IDR 12,000,000             | IDR 19,270,700      | 62.3             |

Source: processed data, 2024

Based on the calculation results above, the cooperative's solvency ratio in 2018 was 55.2%, indicating that the cooperative's condition was in the quite good category. Meanwhile, in 2019 conditions experienced a decline, where the ratio value was 62.3%, indicating that the condition of debt's ability to finance assets was in poor condition. This decrease shows that the debt owned by the KUD Mina "Samudra Jaya" cooperative cannot be guaranteed by the assets owned because cash activity is not optimal. This is different from research by Ruwanda, Minarti, and Rusliansyah (2022) which shows that production quality is in the quite healthy category, which is because production activities are able to cover the ability to pay debts.(8)

**Table 7.** Debt to Equity Ratio

|             | <b>Total Amoun of debt</b> | <b>Capital</b> | <b>Ratio (%)</b> |
|-------------|----------------------------|----------------|------------------|
| <b>2018</b> | IDR 12,000,000             | IDR 18,005,700 | 66.7             |
| <b>2019</b> | IDR 12,000,000             | IDR 20,257,700 | 59.3             |

Source: processed data, 2024

Based on the calculation results above, the *Debt to Equity Ratio results* are nominally <70%, which means that the cooperative is in the very good health category. This shows that the ability to pay debts with the capital owned is very guaranteed. In 2018, the capital obtained was smaller than in 2019, but throughout 2018 this affected the capital in 2019. As a result, the ratio value in 2019 became smaller, indicating that the less than 70%, the greater the cooperative's ability to guarantee its debt. The *total debt to equity ratio* shows that the cooperative's total loans are smaller than the capital it has. This means that the capital owned is able to guarantee productivity from 2018 - 2019 and does not cause cooperatives to increase their debt.

c. Profitability Ratio

This analysis is an analysis that calculates the ratio to assess the capability of the cooperative as seen from the report on the calculation of Remaining Business Results (SHU) through the level of cooperative management. The ratios used in this calculation are ROA and ROE:



**Table 8.** ROA Calculation

|      | Net Profit (SHU) | Total assets   | ROA (%) |
|------|------------------|----------------|---------|
| 2018 | IDR 2,666,000    | IDR 21,755,700 | 12.3    |
| 2019 | IDR 2,742,000    | IDR 19,270,700 | 14.3    |

Source: processed data, 2024

Based on the calculation results above, the ROA value in 2018 - 2019 is in the very good category. This shows that the cooperative is able to generate profits effectively and efficiently. The greater or > 10% ROA value generated, the greater the cooperative's ability to generate profits. This result is the same as research by Aswata et al., (2021) which explains that the rise and fall of assets resulting in operating profits shows that performance is not yet optimal (16). Based on this, it can be seen that optimizing profits depends on financial performance resulting from the level of productivity.

**Table 9.** ROE Calculation

|      | Net Profit (SHU) | Total Capital  | ROE (%) |
|------|------------------|----------------|---------|
| 2018 | IDR 2,666,000    | IDR 18,005,700 | 14.8    |
| 2019 | IDR 2,742,000    | IDR 20,257,700 | 13.5    |

Source: processed data, 2024

The results of the ROE calculation above show that the ROE value of this cooperative is within the fairly good criteria. The smaller the ROE value produced, the smaller the cooperative's ability to generate profits. This shows that the criteria are good enough to indicate that the cooperative's ability to generate net profits is still not optimal.

Based on the results of the ROA and ROE calculations above, the financial performance condition is still less effective and efficient in generating net profit, seen from the difference in income and expenses at the end of 2018 and 2019 through SHU. The remaining operating results (SHU) show that the income obtained cannot be maximized because the expenses incurred are still quite large.

## Conclusion

Based on the results of calculations using the cooperative health assessment, the results can be concluded as follows:

1. Liquidity Ratio, namely the calculation of *the current ratio* with a result of 181.3% in 2018 with good criteria, in 2019 with a value of 160.6% with quite good criteria. There is a need to increase assets for cooperatives to increase their ability to fulfill their obligations from a financial perspective. This can be done by increasing income by increasing the number of fishing members which is expected to increase the cooperative's income.
2. Solvency Ratio
  - a. *Total Debt to Total Assets Ratio* with a value of 55.2% in 2018 with fairly good criteria and 62.3% in 2019 with poor criteria.
  - b. *Total Debt to Equity Ratio* with a value of 66.7% in 2018 and 59.3% in 2019 with very good criteria in those 2 years.

Based on these results, the amount of debt owned needs to be balanced with the increase in assets owned. So that debt payments can be made with timely payment. This timeliness will affect

the cooperative's loan history to the debt owner. If the history produced is good, it will make cooperative loans easier and will help members increase their productivity so that it does not help in developing a money-making culture.

### 3. Profitability Ratio

- a. *Return on Assets (ROA)* with a value of 12.3% in 2018 and 14.3% in 2019 with very good criteria in those 2 years.
- b. *Return on Equity (ROE)* was 14.8% in 2018 and 13.5% in 2019 with fairly good criteria in those 2 years.

Based on these calculations, cooperatives are considered capable of generating net profits even though they have not been maximal in increasing these profits. Therefore, it is necessary to evaluate unproductive and productive activities. So that the activities carried out will be more effective and efficient.

## References

- Andrian, J., Chairullani, J., Rahmani, U., & Syafrie, H. Comparative business analysis of purse seine Gardan and purse seine Slereg in Beach Fishing Port (PPP) Muncar, Banyuwangi, East Java Available at: <http://perikanan.usni.ac.id>.
- Andrian, J., Chairullani, J., Rahmani, U., & Syafrie, H. Household economic behavior of small-scale fishermen in reaching.
- Djurisic, S. (2017). Barriers to the conduct of randomized clinical trials within all disease areas. *Trials*, 18(1). ISSN 1745-6215. <https://doi.org/10.1186/s13063-017-2099-9>.
- Doàn, L. N. (2019). Trends in clinical research including Asian American, Native Hawaiian, and Pacific Islander participants funded by the US National Institutes of Health, 1992 to 2018. *JAMA Network Open*, 2(7). ISSN 2574-3805. <https://doi.org/10.1001/jamanetworkopen.2019.7432>.
- DPR RI, President of the Republic of Indonesia. (2008). *Laws of the Republic of Indonesia*.
- Gobai, A., Tumbel, T. M., Keles, D., et al. (2019). Analysis of the financial performance of the Langgeng Village Unit Cooperative, Inauga Village, Mimika Baru District, Mimika Regency. *Journal of Business Administration*, 8(1).
- Hadi, S., Wahyudi, M. I., Hazmi, M., & Prayuginingsih, H. (2018). Assessment of value added and development opportunity of agroindustry activity based on marine resources in Sub District of Panarukan, District of Situbondo. *E3S Web of Conferences, EDP Sciences*.
- Harrison, J. D. (2019). Patient stakeholder engagement in research: A narrative review to describe foundational principles and best practice activities. *Health Expectations*, 22(3), 307-316. ISSN 1369-6513. <https://doi.org/10.1111/hex.12873>.
- Helmi, A., & Satria, A. (2012). Fisherman adaptation strategies to ecological changes. *Makara Human Behavior Studies in Asia*, 16(1), 68.
- Helmi, A., & Satria, A. (2012). Strategi adaptasi nelayan terhadap perubahan ekologis. *Makara Human Behavior Studies in Asia*, 16(1), 68.
- Karam, M. (2018). Comparing interprofessional and interorganizational collaboration in healthcare:

A systematic review of the qualitative research. *International Journal of Nursing Studies*, 79, 70-83. ISSN 0020-7489. <https://doi.org/10.1016/j.ijnurstu.2017.11.002>.

Khatulistiwa, A. S., & Wafaretta, V. (2022). Health analysis of savings and loans cooperative "A" [Internet]. 2. Unfortunate, June. Available at: <https://journal.moestopo.ac.id/index.php/jakpi/index>.

KU Savings and Loans Business Cooperative. (2015). *State News of the Republic of Indonesia* [Internet]. Available at: [www.peraturan.go.id](http://www.peraturan.go.id).

Kusnadi, O. Culture of fisherman communities [Internet]. [Cited March 24, 2024]. Available at: [https://repositori.kemdikbud.go.id/1066/1/Budaya Masyarakat Nelayan-Kusnadi.pdf](https://repositori.kemdikbud.go.id/1066/1/Budaya_Masyarakat_Nelayan-Kusnadi.pdf).

Li, X. (2017). The primary health-care system in China. *The Lancet*, 390(10112), 2584-2594. ISSN 0140-6736. [https://doi.org/10.1016/S0140-6736\(17\)33109-4](https://doi.org/10.1016/S0140-6736(17)33109-4).

Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia. (2016).

Ramoni, R. B. (2017). The Undiagnosed Diseases Network: Accelerating discovery about health and disease. *American Journal of Human Genetics*, 100(2), 185-192. ISSN 0002-9297. <https://doi.org/10.1016/j.ajhg.2017.01.006>.

Ruwanda, D., Mintarti, S., & Rusliansyah. (2022). Analysis of the health assessment of cooperative employees in the financial services business sector in Balikpapan City. *Mulawarman Journal of Accounting Science (JIAM)* [Internet]. 7(2). [Cited March 30, 2024]. Available at: <https://journal.feb.unmul.ac.id/index.php/JIAM/article/view/7580>.

Suryadinata, N., & Rindi, N. (2023). Analysis of financial performance health [Internet]. June. [Cited March 29, 2024]. Available at: [https://www.researchgate.net/publication/372508499 Analysis Of Financial Performance Health](https://www.researchgate.net/publication/372508499_Analysis_Of_Financial_Performance_Health).

Suryadinata, N., Toha, A., & Prakoso, A. (2018). The role of the internal control system in reducing bad credit numbers (Case study at PT. FIFGROUP Jember Branch Office) [Internet]. 11. Available at: <http://publikasi.mercubuana.ac.id/index.php/profita>.

Ulfa, M. (2018). Perceptions of fishing communities in facing climate change (Viewed in socio-economic aspects) [Internet]. November. Available at: <http://journal2.um.ac.id/index.php/jpg/ISSN:0853-9251>.