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ANALYSIS THE BUSINESS EFFICIENCY AND PROFITABILITY OF CATFISH (PANGASIU HYPOPHTHALMUS) IN TULUNGAGUNG, EAST JAVA

*Mimit Primyastanto¹, Candra Adi. I², Supriyadi³, Asro Nurhabib⁴, Aldy Khoiri⁵ Pingkan Ayu
Noer Intan⁶, Warzukni Fahma⁷*

^{1,2,3,4,5,6,7} Fisheries Social Economy, Faculty Fisheries and Marine Science, Brawijaya University,
Indonesia

Correspondence Author : mimitp@ub.ac.id

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ABSTRACT

Aquaculture becomes one superior fisheries potentials in Indonesia. Catfish is one aquaculture with wide market share. It has a large business opportunity for farmers. Every business wants to achieve the goal to get profits and increasing the business value. Profitability analysis is important for a business. It is one financial ratios to shows the financial performance of a business. Therefore this research is done with aim to explore the business figure, to analyze the value of unit costs and level of business efficiency and business profitability in 2018-2020. This research was done to enlarge catfish of Parsam MSME at Gondosuli Village, Gondang District, Tulungagung District, East Java. This is quantitative descriptive research type with case study approach. Data collection techniques are observation, interview and documentation. The data type is qualitative and quantitative. Data comes from primary and secondary sources. The method to analysis data is qualitative descriptive and quantitative descriptive. The level of business efficiency in this study uses the R-C ratio and profitability. The profitability ratios used are GPM (Gross Profit Margin), NPM (Net Profit Margin), OPM (Operating Profit Margin), TAT (Total Assets Turnover), BEP (Basic Earning Power), ROA (Return On Assets) and ROE (Return on Equity). The calculation of unit cost and business efficiency are used to assess the ability to manage the business costs to generate profits. The results showed that level of business efficiency are R-C ratio = 1.09 and Profitability = 19.44%. The profitability ratios are GPM (Gross Profit Margin) = 14.26%, NPM (Net Profit Margin) = 8.51%, OPM (Operating Profit

Margin) = 10.11%, TAT (Total Assets Turnover) = 3.25 times, BEP (Basic Earning Power) = 28.42%, ROA (Return on Assets) = 27.71%, and ROE (Return on Equity) = 8.89%. This analysis shows that value of unit cost is below the price, it is profitable. R-C ratio value > 1, value of efficient profitability in 2020 and value of profitability ratios increase every year, it means the business have a pretty good financial performance.

INTRODUCTION

The fisheries sector plays an important role in national economy, especially in provision of employment, income sources for fish farmers, high animal protein sources with high nutritional value and potential sources of foreign exchange (Primyastanto, M. 2011).

The potential of fisheries in Indonesia can come from capture fisheries, aquaculture and processing. Aquaculture is the fastest growing food production sector in world with a projection that production will double in next 15-20 years. Patin is one most cultivated freshwater fish, it is superior fish. In addition to tasty, delicious, and tasty meat, catfish also contain high protein and low cholesterol. Patin meat customer comes from various countries across continents. Therefore the catfish market is still wide open. As an economical fish, catfish cultivation is a prospective business opportunity, not only for large investors, but also for general public with small capital (Primyastanto, M 2011). The cultivation of catfish can increase business choices to increase income and create jobs.

Every business wants to achieve the goals effectively and efficiently. The companies need to pay attention to their financial performance in order to choose right strategies to win the competition. Sartono (2000) stated that financial ratio analysis was the main tool in financial analysis. It can be used to answer various questions about the financial condition of a company and improving the financial performance of a company.

Handayani (2013) stated that profitability ratios are one type of financial ratios used to assess the company's financial performance. It measures level of profits in a period. The companies can assess their productivity of business.

Parsam MSME is one of catfish farmers in Gondosuli Village, Gondang District, Tulungagung District, East Java. Profitability analysis needs to be done to determine the profits level from catfish business (Hanum, Z. 2012; Shabbir et al., 2020).

Profitability ratios used in this study include GPM (Gross Profit Margin), NPM (Net Profit Margin), OPM (Operating Profit Margin), TAT (Total Assets Turnover), BEP (Basic Earning Power), ROA (Return On Assets) and ROE (Return On Equity). The unit cost and business efficiency are also calculated in order to assess the ability to manage business costs to generate profits (Anugrah, Ferdiansyah, 2014; Arshad et al., 2020; Shabbir et al., 2020).

The objectives of this research activity are:

- a. Exploring the catfish cultivation business at Parsam MSME, Tulungagung.
- b. Analyzing the value of unit cost and the level of business efficiency in catfish cultivation business at Parsam MSME, Tulungagung.
- c. Analyzing the level of profitability of catfish cultivation business at Parsam SME, Tulungagung.

RESEARCH METHODS

This research was done at catfish (*Pangasius hypophthalmus*) cultivation business at Parsam MSME, Gondosuli Village, Gondang Subdistrict, Tulungagung District, East Java.

This is a quantitative descriptive research type with a case study approach (Bungin, B. 2001; Asraf et al., 2020). Data is collected by observation, interview and documentation. The qualitative data includes of technical aspects of catfish cultivation, marketing and cultivation processes. The quantitative data includes financial aspects, unit cost, business efficiency analysis and profitability ratio analysis in 2018-2020. The data is obtained from primary data and secondary data. Data descriptive analysis method is used to analyze the qualitative data and quantitative descriptive analysis is used to analyze the quantitative data (Abbas et al., 2020; Shabbir et al., 2020; Sugiyono, 2012). The formulas used are below.

a. Financial aspects

- Production cost

$$TC = TFC + TVC$$

Where: TC = Total Cost

TFC = Total Fixed Cost

TVC = Total Variable Cost

- Revenue

$$TR = P \times Q$$

Where: TR = Total Revenue

P = Price

Q = Quantity / number of products

- Profit and Zakat

$$\pi = TR - TC$$

$$\text{Zakat} = 2,5\% \times \pi \text{ (EBZ)}$$

$$\text{EAZ} = \pi \text{ (EBZ)} - \text{Zakat}$$

Where: π = profit

TR = Total Revenue

TC = Total Cost

b. Unit Cost

$$\text{Unit Cost} = \frac{\text{total cost (TC)}}{\text{Product quantity}}$$

c. Business Efficiency Analysis

- R-C ratio

$$\text{R-C ratio} = \text{TR} / \text{TC}$$

Where: TR = Total Revenue

TC = Total Cost

- Rentability

$$\text{Rentability} = (\text{L/M}) \times 100\%$$

Where: L = operating profit

M = business capital

d. Profitability Analysis

- Gross Profit Margin (GPM)

$$\text{GPM} = (\text{Gross Profit} / \text{Sales}) / 100\%$$

- Operating Profit Margin (OPM)

$$\text{OPM} = (\text{Operational Profit} / \text{Sales}) / 100\%$$

- Net Profit Margin (NPM)

$$\text{NPM} = (\text{Net Profit} / \text{Sales}) \times 100\%$$

- Total Asset Turnover (TAT)

$$\text{TAT} = (\text{Sales} / \text{Total Asset}) \times 1$$

- Basic Earning Power (BEP)

$$\text{BEP} = (\text{Earning before interest and debt} / \text{Total asset}) \times 100\%$$

- Return of Assets (ROA)

$$\text{ROA} = (\text{Net earning after tax} / \text{Total asset}) / 100\%$$

- Return on Equity (ROE)

$$\text{ROE} = (\text{Net earning after tax} / \text{Total equity}) / 100\%$$

RESULTS AND DISCUSSION

Technical aspects

Suwarsono (1994) in Primyastanto, M (2016) stated that technical aspect is an aspect related to process to implement a project technically and operation after the project was implemented. The technical aspects of this business are below.

Production facilities

The production facilities in this business are below.

1. Tarpaulin ponds are 13 units with a size of 10 x 8 x 1.5 meters.
2. The seeds usually have 7 cm size, from Tulungagung and Bogor at a price of IDR 300 per fish.
3. The feed is pellets from Surabaya. It is usually given 2 times a day.
4. Probiotics is used to treat disease, increase protein content, quality, quantity and maintain fish health.
5. Equipments consist of diesel, water pumps, tarpaulins, nets, scales, wheelbarrows, etc for business support.

Production infrastructure

The other production infrastructure consists are below.

1. Access road is made form asphalt for 4 wheels vehicles, but the condition of road is classified as damaged.
2. Water is obtained from well and river.
3. The electricity comes from PLN.
4. Communication system is mobile phones for promotional activities.

Process of catfish cultivation

The catfish cultivation process is below (Kordi, M. Ghufran 2010; Shabbir et al., 2020).

1. Pond preparation is started from draining, drying and high quality water preparation
2. The seeds is spread out in morning or evening to prevent fish stress.
3. Feeding is done 2 times a day.
4. Control of water quality is done every 2 days - once a week for the fish.
5. Eradication of pests and diseases are done by maintaining water quality and routine to provide probiotics.
6. Harvest is done at age of fish 8-9 months and size 6-7 ounces.

Marketing of catfish

Marketing is the process to distribute product from producers to consumers (Primyastanto, M. 2017b). The harvested catfish are sold to big traders and sent to Surabaya, Bojonegoro, Magelang, Klaten, Solo and factories as the become customers. The catfish were successfully sold at a price of IDR 13,500-IDR 15,000 in 2018-2020.

Financial aspects

Capital

Capital is the most important part in fisheries business (Primyastanto, M. 2018). The capital in catfish cultivation business at Parsam MSME is self capital and loan with a ratio of 90% and 10%. The details of capital are shown in table 1.

Table 1. Business Capital in 2018-2020

No	Capital Type	Year		
		2018 (IDR)	2019 (IDR)	2020 (IDR)
A	Fix Capital			
1	Tarpaulin pool	11,137,500	14,478,750	14,478,750
2	Shed	10,000,000	10,000,000	10,000,000
3	Equipment	26,075,000	27,590,000	28,090,000

∑ Fixed Capital		47,212,500	52,068,750	52,568,750
B	Current Capital			
1	Maintenance cost	3,000,000	3,900,000	3,900,000
2	Seeds	6,000,000	8,580,000	8,580,000
3	Pellet	120,000,000	171,600,000	171,600,000
4	Probiotics	3,900,000	5,590,000	5,590,000
5	Solar	515,000	669,500	669,500
6	Electricity	3,000,000	3,600,000	4,800,000
7	Salary	13,200,000	14,400,000	14,400,000
8	Telephone cost	1,200,000	1,200,000	1,200,000
∑ Current Capital		150,815,000	209,539,500	210,739,500
Total Capital		198,027,500	261,608,250	263,308,250
Debt Capital 10%		19,802,750	26,160,825	26,330,825
Interest 13%		2,574,357	3,400,907	3,423,007
Self Capital 90%		178,224,750	235,447,425	236,977,425

Source: MSME Parsam, 2020 (data processed)

Table 1 shows that fixed capital has increased every year due to addition of 3 ponds in 2019 and 2020. The current capital also increases each year because the number of seeds stock in 2019 and 2020 is larger than in 2018. It makes the cost of pond maintenance, feed, probiotics, fuel and salaries also increase.

Production cost

Production costs of catfish cultivation business at MSME Parsam consist of fixed costs and variable costs (Primyastanto, M. 2016a). The details of production costs are below.

Table 2. Production Costs in 2018-2020

No	Cost Type	Year		
		2018 (IDR)	2019 (IDR)	2020 (IDR)
A	Fixed cost			
1	Land rent	10,000,000	13,000,000	13,000,000
2	Depreciation	9,120,500	10,306,250	10,356,250
3	Maintenance	3,000,000	3,900,000	3,900,000
Total Fixed Cost		22,120,500	27,206,250	27,256,250
B	Variable cost			
1	Seed	6,000,000	8,580,000	8,580,000
2	Pellet	120,000,000	171,600,000	171,600,000
3	Probiotics	3,900,000	5,590,000	5,590,000
4	Gasoline	515,000	669,500	669,500
5	Electricity	3,000,000	3,600,000	4,800,000
6	Salary	13,200,000	14,400,000	14,400,000

7	Telephone cost	1,200,000	1,200,000	1,200,000
Total Variable Cost		147,815,000	205,639,500	206,839,500
Total Production Cost		169,935,500	232,845,750	234,095,750

Source: MSME Parsam, 2020 (data processed)

Table 2 shows that fixed costs have increased every year. The addition of aquaculture ponds has an effect to increase the cost of land rent, equipment, depreciation and pond maintenance. The variable cost of seed is differ for each year same. It which has an effect on the changes in purchase capacity of feed and probiotics. Electricity and labor costs also increase due to more ponds in 2019.

Revenue

Revenue is calculated from product multiplied by price (Primyastanto, M 2016b). The revenue of catfish cultivation business at Parsam MSME in 2018-2020 is shown in table 3.

Table 3. Business Revenues in 2018-2020

Year	Fish quantity (unit)	SR 95%	Harvest weight (Kg)	Price(IDR/Kg)	Revenue (IDR)
2018	20,000	19,000	13,300	14,000	186,200,000
2019	28,600	27,170	19,019	13,500	256,756,500
2020	28,600	27,170	19,019	15,000	285,285,000
Total Revenue					728,241,500

Source: Parsam MSME, 2020 (data processed)

Table 3 shows that sales revenue for catfish cultivation business at Parsam MSME has increased every year. The lowest revenue was in 2018 because the seeds were decrease. There was an increase in 2019 because the seed increase while the highest revenue was obtained in 2020 because the selling price was increased. This was a characteristic in business (Purwanti, Endang. 2012).

Profit and Zakat

The profit is obtained from difference between revenue and production costs (Primyastanto, 2014). The details are shown in table 4.

Table 4. Profit and Zakat in 2018-2020

Year	EBZ (IDR)	Zakat (IDR)	EAZ (IDR)
2018	16,264,500	399,112	15,857,887
2019	23,910,750	587,768	23,312,981
2020	51,189,250	1,269,731	49,909,518

Source: MSME Parsam, 2020 (data processed)

Table 4 shows that the revenue has increased every year. The lowest profit is in 2018 because the seeds are decrease. The profit in 2019 has little increase due to lower fish prices. The profit in 2020 is the highest. The profit is reduced by 2.5% for bakat to get EAZ value (Primyastanto, M. 2015a)

Income statement

The income statement is a financial statement to shows the movement of business. It is used to assess the business success and management efficiency (Primyastanto, M. 2015b). The income statement for catfish cultivation business at Parsam MSME 2018-2020 is shown in table 5.

Table 5. Income Statement year 2018

Parsam MSME of Catfish Cultivation Business		
Income statement		
For 2018 Period		
Sales revenue		IDR 186,200,000
Sales Cost		<u>IDR 159,946,142 -</u>
Gross Profit		IDR 26,553,857
<u>Operational Cost</u>		
Maintenance	IDR 3,000,000	
Electricity	IDR 3,000,000	
Telephone	IDR 1,200,000	
Fuel	<u>IDR 515,000 +</u>	
Total Operational Cost		<u>IDR 7,715,000 -</u>
Operational Profit		IDR 18,838,857
Interest		<u>IDR 2,574,357 -</u>
π (EBZ)		IDR 16,264,500
Zakat (2.5%)		<u>IDR 399,112 -</u>
(EAZ)		IDR 15,857,887

Source: MSME Parsam, 2020 (data processed)

Table 6. Income Statement year 2019

Parsam MSME of Catfish Cultivation Business		
Income statement For 2019 Period		
Sales revenue		IDR 256,756,500
Sales Cost		<u>IDR 220,475,342 -</u>
Gross Profit		IDR 36,681,157
<u>Operational Cost</u>		
Maintenance	IDR 3,900,000	
Electricity	IDR 3,600,000	
Telephone	IDR 1,200,000	
Fuel	<u>IDR 669,500 +</u>	

Total Operational Cost		<u>IDR 9,369,500 -</u>
Operational Profit		IDR 27,311,657
Interest		<u>IDR 3,400,907 -</u>
π (EBZ)		IDR 23,910,750
Zakat (2.5%)		<u>IDR 587,768 -</u>
(EAZ)		IDR 23,312,981

Source: MSME Parsam, 2020 (data processed)

Table 7. Income Statement year 2020

Parsam MSME of Catfish Cultivation Business		
Income statement		
For 2020 Period		
Sales revenue		IDR 285,285,000
Sales Cost		<u>IDR 220,503,242 -</u>
Gross Profit		IDR 65,181,757
<u>Operational Cost</u>		
Maintenance	IDR 3,900,000	
Electricity	IDR 4,800,000	
Telephone	IDR 1,200,000	
Fuel	<u>IDR 669,500 +</u>	
Total Operational Cost		<u>IDR 10,569,500 -</u>
Operational Profit		IDR 54,612,257
Interest		<u>IDR 3,423,007 -</u>
π (EBZ)		IDR 51,189,250
Zakat (2.5%)		<u>IDR 1,269,731 -</u>
(EAZ)		IDR 49,909,518

Source: MSME Parsam, 2020 (data processed)

Table 5, 6 and 7 show that R-C ratio has increased every year. All R-C ratios are more than 1. It means that business is profitable (Primyastanto, M. 2013). The R-C ratio value in 2018 is 1.09, it means that the use of production costs of IDR 100 will generate revenue of IDR 109 and so on.

Unit cost

Unit cost is calculated by comparing the total production cost and products quantity. The unit cost value of this business is shown in table 8.

Table 8. Unit Cost for 2018-2020

Year	Total Cost (IDR)	Product Quantity (Kg)	Unit Cost (IDR)
2018	170,235,500	13,300	12,777
2019	233,245,750	19,019	12,242
2020	234,495,750	19,019	12,308

Source: MSME Parsam, 2020 (data processed)

Table 8 shows that the unit cost value of catfish in Parsam MSME is similar for each year, ranging from IDR 12,000 - IDR 12,500 per kg. This value is the minimum value for business owners to get profits (Riswan and Kesuma, 2014). The catfish have been successfully sold at IDR 13,500 - IDR 15,000. Therefore, the business gets profits for the success to sell catfish above the value of unit cost.

Business efficiency analysis

R-C Ratio

The value of R-C ratio can be obtained by comparing the total revenue (TR) and total cost (TC) (Kasmir, 2010). The value of the R-C ratio for this business is shown in table 9.

Table 9. R-C Ratio in 2018-2020

Year	Total Revenue (IDR)	Total Cost (IDR)	R-C ratio
2018	186,200,000	170,235,500	1.09
2019	256,756,500	233,245,750	1.10
2020	285,285,000	234,495,750	1.21

Source: MSME Parsam, 2020 (data processed)

Table 9 shows that the R-C ratio has increased every year. All R-C ratios are larger than 1, it means the business is profitable (Primyastanto, M. 2013). The R-C ratio value in 2018 is 1.09, it means that in every usage in production costs of IDR 100 will generate revenues of IDR 109 and so on.

Profitability

Profitability is obtained by comparing profits with venture capital and multiplied by 100%. The profitability of catfish business in Parsam MSMEs is shown in table 10.

Table 10. Profitability in 2018-2020

Year	Net Profit (IDR)	Capital (IDR)	Rentability (%)
2018	16,264,500	198,027,500	8.21
2019	23,910,750	261,608,250	9.13
2020	51,189,250	263,308,250	19.44

Source: MSME Parsam, 2020 (data processed)

Table 10. Show that rent ability has increased every year. However, value of rentability in 2018 and 2019 is classified as less efficient because it is below the loan interest rate of 13%. While the rent ability in 2020 of 19.44% is classified as efficient (Fitrianto, and Mawardi, 2006). The rentability of catfish cultivation business at Parsam MSME in May 2018 was 8.21%, meaning that business was able to generate a profit of 8.21% from business capital or from every IDR 100 business capital usage, then the profit is IDR 8.21 and so on.

H. Profitability Ratio Analysis

Profitability ratios measure the company's ability to generate profits using company resources, such as assets, capital or company sales (Sudana, 2011). The profitability ratios values of catfish cultivation business at Parsam MSME are shown in table 11.

Table 11. Profitability Ratios for 2018-2020

Rasio Profitabilitas	Tahun			Description
	2018	2019	2020	
Gross Profit Margin (%)	14.26	14.28	22.84	Increase
Operating Profit Margin (%)	10.11	10.63	19.00	Increase
Net Profit Margin (%)	8.51	9.07	17.49	Increase
Total Asset Turnover (kali)	3.25	3.94	4.35	Increase
Basic Earning Power (%)	28.42	36.74	78.21	Increase
Return of Asset (%)	27.71	35.82	76.11	Increase
Return on Equity (%)	8.89	9.90	21.06	Increase

Source: MSME Parsam, 2020 (data processed)

Table 11 shows that profitability ratio increases every year and the lowest value is 2018 while the highest value is 2020. The description is below.

Gross profit margin (GPM)

Gross Profit Margin (GPM) is a ratio to shows the amount of gross profit from total sales revenue (Oktania, Anne Erika and Soedjono, 2013). Gross profit is obtained from sales deducted by cost of goods sold (COGS). The Gross Profit Margin (GPM) in 2018 was 14.26%, it means that total gross profit in 2018 was

IDR 14.26% from total sales or from every IDR 100 sales of catfish can generate gross profit of IDR 14.26, also in 2019 and 2020.

Operating Profit Margin (OPM)

Operating Profit Margin (OPM) is a ratio to shows the amount of operating profit from total sales revenue (Khan, Asma and Jyoti Singhal. 2015). Operating profit is obtained from gross profit minus operating costs, it means that OPM calculations involve the operating costs but do not take into account the interest and zakat costs (Primyastanto, M. 2017a). The value of Operating Profit Margin (OPM) in 2018 of catfish cultivation business at Parsam MSME is 10.11%, it means that the operational profit obtained is 10.11% of total sales of catfish or from each sale of IDR 100 catfish can produce an operational profit of IDR 10.11.

Net profit margin (NPM)

Net Profit Margin (NPM) is a ratio to shows the amount of net Earning After Zakat (EAZ) from sales revenue. EAZ is obtained from net Earning Before Zakat (EBZ) reduced by zakat. The EBZ is the difference between operating income and loan interest. The value of NPM has taken into account the operating costs, interest and zakat. The Net Profit Margin (NPM) value of catfish cultivation business at Parsam MSME in 2018 is 8.51%, it means that net Earning After Zakat (EAZ) is 8.51% from sale of catfish or every IDR 100 catfish sales can produce an EAZ of IDR 8.51.

Total asset turnover (TAT)

According to Syamsuddin, L. (2009), Total Assets Turnover shows the level of efficiency of overall use of company assets in generating certain sales volumes. The lowest TAT value was obtained in 2018 and highest TAT in 2020. The Total Assets Turnover (TAT) value obtained in 2018 was 3.25 times the turnover, meaning that every IDR 100 total assets usage can generate sales of IDR 325.

Basic earning power (BEP)

Basic Earning Power (BEP) is a ratio to shows the amount of net profit before zakat (EBZ) from total assets usage. The BEP value increases every year. The lowest value is in 2018 and highest value is in 2020. The value of Basic Earning Power (BEP) of catfish cultivation business at Parsam MSME in 2018 amounted to 28.42%, it means the net Earning Before Zakat (EBZ) in 2018 is 28.42% from total assets usage, or for every IDR 100 total assets usage can generate EBZ of IDR 28.42.

Return of assets (ROA)

Return of Assets (ROA) is a ratio that shows the amount of net Earning after Zakat (EAZ) obtained from total assets usage. The ROA value of catfish cultivation business at Parsam MSME in 2018 is 27.71%, it means that Earning after Zakat (EAZ) in 2018 is 27.71% from total usage, or every IDR 100 total assets usage can produce an EAZ of IDR 27.71.

Return on equity (ROE)

Return On Equity (ROE) is a ratio to shows the net Earning After Zakat (EAZ) from own capital usage. The Return on Equity (ROE) value of catfish cultivation business at Parsam MSME in 2018 is 8.89%, it means that net Earning After Zakat (EAZ) is 8.89% of capital usage, or every IDR 100 own capital usage can produce an EAZ of IDR 8.89, and so too in 2019 and 2020.

The analysis of financial efficiency and profitability ratios show that catfish cultivation business has a large opportunity to develop into a sustainable business to become Minapolitan businesses model in future (Primyastanto, M. 2012.).

CONCLUSIONS

The conclusions of this study are as follows:

1. The catfish cultivation business at Parsam MSME uses tarpaulin media. The cultivation technique is pond preparation, seed dispersal, feeding, water quality control, pests and diseases eradication and harvesting. The marketing system is done through intermediary wholesalers and marketed to Surabaya, Bojonegoro, Magelang, Klaten, Solo and factories.
2. The Unit Cost value in 2018-2020 is below the fish selling price, value of Unit Cost ratio increases every year and all the values are above 1, it means the business is classified as profitable. The rentability values in 2018 and 2019 are classified as less efficient because it is below the interest rate of 13% while the rentability in 2020 is classified as efficient.
3. The profitability ratios analysis used are GPM, OPM, NPM, TAT, BEP, ROA, and ROE. All the values increase every year, it means that business is profitable and business financial performance is good.

SUGGESTION

Suggestions that can be given in this study are below.

1. Business owners should be able to increase the value of profitability ratios by increasing the amount of catfish production in their businesses and providing feed and artificial probiotics to minimise the production costs. The head of P2MKP Mekar Sari, Mr. Parsam, should be able to invite other group members and residents around to develop catfish cultivation business in Gondosuli Village.
2. Investors and Financial Institutions. The calculation of profitability ratios shows that the profits increase every year. Therefore, investors and financial institutions should to invest their capital in this business.

3. The local government should increase counselling and training on catfish cultivation and providing assistance in form of funds and technology to help poor people set up their businesses. The government should also improve the road of Gondosuli Village.
4. Future researcher should conduct researches with a similar theme by further expanding the ratio used.

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REFERENCES

- Anugrah, Ferdiansyah. 2014. Perbandingan Profitabilitas Sebelum dan Sesudah Privatisasi pada PT Wijaya Karya, Tbk. Fakultas Ekonomi dan Bisnis, Universitas Brawijaya : Malang.
- Abbas, Mazhar & Muhammad, Shabbir M. S., Muhammad & Nimer, Qayum & Mir, & Bibi, Asia & Siddiqi, Ahmed. (2020). Ciencias Sociales y Arte Año 10 N° 28 Septiembre -Diciembre 2019 Tercera Época Maracaibo-Venezuela Ecological Consequences of Climate Change on Pioneer Business.
- Arshad, Mohd Anuar & Shabbir, M. S., Mahmood, Arshad & Khan, Shahid & Sulaiman, Mohammed. (2020). An exploration of IQ, EQ, spiritual quotient (SQ) elements in the human reengineering program (HRP) practices: A study on the drug rehabilitation Centre in Malaysia. 10.14198/jhse.2020.15.Proc2.32.
- Asraf, Muhammad & Ahmad, Jamil & Sharif, Wareesa & Raza, Arslan & Shabbir, M. S., & Abbas, Mazhar & Ramayah, T. (2020). The role of continuous trust in usage of online product recommendations. Online Information Review. ahead-of-print. 10.1108/OIR-05-2018-0156.
- Bungin, Burhan. 2001. Metodologi Penelitian Sosial Format-format Kuantitatif dan Kualitatif.
- Fitrianto, H. Dan W. Mawardi. 2006. Analisis Pengaruh Kualitas Aset, Likuiditas, Rentabilitas, Dan Efisiensi Terhadap Rasio Kecukupan Modal Perbankan Yang Terdaftar Di Bursa Efek Jakarta. Jurnal Studi Manajemen & Organisasi. Volume 3 (1): 1-11.
- Handayani, D. 2013. Analisis Kinerja Keuangan Berdasarkan Rasio Profitabilitas Pada PT Bhimex Di Samarinda.
- Hanum, Z. 2012. Pengaruh Profitabilitas Terhadap Modal Kerja Pada Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia. Jurnal Manajemen & Bisnis. 11(02). 1693-7619.
- Kasmir. 2010. Analisis Laporan Keuangan. PT. Rajagrafindo Persada : Jakarta

- Khan, Asma dan Jyoti Singhal. 2015. Growth and Profitability Analysis of Selected IT Companies. IRACST – International Journal of Commerce, Business and Management (IJCMB). Vol. 4 (3) : 1189-1195.
- Kordi, M. Ghufuran. 2010. Budidaya Ikan Patin di Kolam TeIDRal. Lily Publisher : Yogyakarta.
- Oktania, Anne Erika dan Soedjono. 2013 Analisis Profitabilitas dan Likuiditas dalam Menilai Kinerja Keuangan pada PT Telekomunikasi Indonesia, Tbk. Jurnal Ilmu dan Riset Manajemen. Vol. 2 (3) : 1-15.
- Primyastanto, Mimit. 2011. Manajemen Agribisnis Antara Teori dan Aplikasinya. UB Press : Malang.
- Primyastanto, Mimit. 2012. Mina Politan (Suatu Pendekatan Ekonomi, Sosial dan Lingkungan). Universitas Brawijaya Press (UB Press) Malang. Anggota IKAPI No. 017/JTI/94. ISBN : 978-602-203-091-1. Cetakan I Maret 2012.
- Primyastanto, Mimit. 2013. Analisis Faktor Produksi dan Kelayakan Usaha tangkap Payang di Gili Ketapang Kabupaten Probolinggo Jawa Timur. Jurnal Ecsosim. ISSN : 2338-3100. Vol. 1, No. 1 (2013)
- Primyastanto, Mimit. 2014. Study on Entrepreneurship Spirit and Production Factors Affecting Sail Income of Madura Strait Fishermen. Jurnal International Journal of Civil & Enviromental Engineering IJCEE/IJENS ISSN: 2077-1258 (online) 2227-2763 (Print). Vol.14, No.01
- Primyastanto, Mimit. 2015a. Ekonomi Perikanan Kajian Pemberdayaan Masyarakat Pesisir Berbasis Teknologi Tepat Guna. Intelegensia Media. Malang.
- Primyastanto, Mimit. 2015b. Economic Analysis Of Pandega Fishermen Household At Madura Strait To Keep Food Security International Journal of Oceans and Oceanography (IJOO). ISSN 0973-2667 Volume 9, Number 2 (2015), pp. 97-104.
- Primyastanto, Mimit. 2016a. Evapro (Evaluasi Proyek) Teori dan Aplikasi pada Usaha Pembesaran Ikan Sidat (Anguilla sp). UB Press: Malang.
- Primyastanto, Mimit. 2016b. Feasibility Study of Fish Capture with Payang tool before Using Electronic Onjhem Fads in Madura Strait, Indonesia. International Journal of Applied Business and Economic Research (I J A B E R), ISSN : 0972-7302. Vol. 14, No. 9 (2016): 6615-6628.
- Primyastanto, Mimit. 2017a. Ilmu Kelautan dan Perikanan (Kebijakan Pembangunan dan Pengelolaan Sumberdaya Perikanan dan Kelautan) INTRANS PUBLISHING. ISBN: 978-979-3580-99-9. Cetakan I Februari 2017. 316 halaman.
- Primyastanto Mimit. 2017b. Effect Marketing Knowledge Competency and Entrepreneurship Orientation on Marketing Capabilities Performance of Fishery Small Scale Entrepreneurs(SMEs) in Malang City East Java. Journal of Economic and Social of Fisheries and Marine. E-ISSN : 2528-5939 Vol. 05, No. 01. Pp. 53-57.
- Primyastanto, Mimit. 2018. Financial Plan of Red Snapper (Lutjanus

- sangujnesus) Fishing and Freezing Business in Probolinggo Regency. ECSoFiM: Journal of Economic and Social of Fisheries and Marine. 2018. 05(02): 173 - 180 e-ISSN: 2528-5939.
- Primyastanto, Mimit. Candra Intyas, Mohamad Fattah, Ira Rosita, Aldy Khoiri. W.
2019. The Business Evaluation Analysis of Milkfish Otak-Otak (Chanos chanos) at Gresik District, East Java. International Journal of Scientific and Technology Research (IJSTR). ISSN 2277-8616. Vol. 8 Issue 12. December 2019.
- Purwanti, Endang. 2012. Pengaruh Karakteristik Wirausaha, Modal Usaha, Strategi Pemasaran Terhadap Perkembangan UMKM di Desa Dayaan dan Kalilondo Salatiga. Among Makarti. Vol. 5 (9) : 13-28.
- Ramakrishnan, Dr & Shabbir M. S., Muhammad & Kassim, Normalini & Nguyen, Phong & Mavaluru, Dinesh. (2020). A comprehensive and systematic review of the network virtualization techniques in the IoT. International Journal of Communication Systems. 33. 10.1002/dac.4331.
- Riswan dan Kesuma Y. F. 2014. Analisis Laporan Keuangan Sebagai Dasar Dalam Penilaian Kinerja Keuangan PT. Budi Satria Wahana Motor. Jurnal Akuntansi & Keuangan. Vol. 5 (1) : 93-121.
- Shabbir, M. S., Muhammad & Arshad, Mohd Anuar & Mahmood, Arshad & Bait, Mohammed & Sulaiman, Ali. (2020). 4th Industrial Revolution and TVET: The Relevance of Entrepreneurship Education for Development. Opcion. 35. 11-21.
- Shabbir, M. S., Siddiqi, Ahmed & Kassim, Normalini & Mustafa, Faisal & Salman, Rabia. (2020). A Child Labour Estimator: A Case of Bahawalpur Division. Social Indicators Research. 147. 10.1007/s11205-019-02146-4.
- Shabbir, M. S., Mohammed & Rana, Seemab & Shabbir, Muhammad. (2020). Oman's Ability to Attract FDI: Dunning Instrument Survey Analysis. Propósitos y Representaciones. 8. 10.20511/pyr2020.v8nSPE2.640.
- Sartono, A. (2000). Ringkasan Teori Manajemen Keuangan. BPFE Yogyakarta: Yogyakarta.
- Sudana, I Made. 2011. Manajemen Keuangan Perusahaan. Penerbit Erlangga : Jakarta. Hlm 22-23.
- Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta :Bandung.
- Syamsuddin, L. 2009. Manajemen Keuangan Perusahaan. PT. Raja Grafindo Persada : Jakarta.