

Profitability and Economic Efficiency of the Hair Craft Creative Industry in Purbalingga Before and During the Covid-19 Pandemic

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ABSTRACT

Purbalingga is a regency in Central Java Province which is famous for its hair craft creative industry. During the Covid-19 pandemic, like any other business, it also experienced a period of declining performance. The purpose of this study was to analyze its profitability and efficiency before and during the pandemic. The method used was profit analysis and R/C ratio. Samples were taken based on purposive random sampling with hair craft entrepreneurs as respondents. The results showed that: (1) Before the pandemic, on average each hair craft entrepreneur earned IDR 4.96 million per month, where there were entrepreneurs whose profits reached a maximum of IDR 25 million and a minimum of IDR 500 thousand. During the pandemic, on average each entrepreneur suffered a loss of IDR305 thousand per month, where there were entrepreneurs who could still earn a maximum profit of IDR 4.5 million but there were also those who suffered a maximum loss of IDR 400 thousand per month. (2) Before the pandemic, the average R/C ratio of each entrepreneur was 1.6, meaning that the revenue was 1.6 times greater than the costs incurred. During the pandemic, the average R/C ratio of entrepreneurs did not reach 1, i.e. 0.96, meaning that revenues were unable to cover the costs (inefficiency). Thus, it can be concluded that the occurrence of a pandemic caused a decrease in its performance. Therefore, full support is needed from various parties so that this creative industry can still exist as a leading industry.

Keywords: Creative industry; hair craft; profitability; efficiency; featured product.

1. Introduction

At the end of 2019, a new pneumonia disease originating from Wuhan, China, namely Covid-19, spread very quickly throughout the world, including to Indonesia (Dong et al., 2020; Kirigia & Muthuri, 2020; Bouey, 2020). As a result, many countries have taken various policies to respond to Covid-19, including lockdowns and social & physical distancing, including in Indonesia known as Large-Scale Social Restrictions (PSBB) (Hadiwardoyo, 2020). This policy caused micro, small and medium scale industries to experience a sharp decline in income so that many had to stop operating (Tairas, 2020; Parth, 2022).

The impact of the Covid-19 pandemic has also been felt by the hair craft creative industry in Purbalingga Regency, which has employed tens of thousands of workers. Based on data from the

Purbalingga Manpower Office (2020) that a total of 1,300 workers from 9 companies in Purbalingga were laid off and most of them came from factories/creative hair craft industries.

The PSBB policy in 2020 and becoming PPKM in 2021 was really felt by the workers in the hair craft industry. Besides their income being reduced or even non-existent (as victims who were laid off), another impact is that they have to reduce their household budget (Ghosh, 2020; Milzam, 2020; Jindrichovska, 2014). In other words, they as household actors of course have to change their consumption patterns and have to think hard to find other sources of income. The impact of changes in economic behavior of workers in the hair craft industry due to the Covid-19 pandemic is the problem in this study, especially their roles as part of producers (sub-producers/workers).

2. Literature Review

The World Bank (World Bank) and International Monetary Fund (IMF) reported that the world economy experienced a significant decline in the first quarter of 2020 and therefore many countries will experience a recession (Liu et al., 2020; Cowling et al., 2020). However, several countries were still able to maintain their economic growth at positive numbers this quarter (Carrillo-Larco & Castillo-Cara, 2020). In general, the Covid-19 pandemic in the first quarter of 2020 has caused a global crisis, namely an economic contraction of 6 percent compared to the same quarter last year (Nasution et al., 2020).

In Indonesia, Covid-19 has had a negative impact on industry, especially those on a micro, small and medium scale, such as in the tourism and retail trade sectors. According to the Central Statistics Agency (2020), the number of foreign tourist visits to Indonesia in the first quarter of 2020 decreased by 34.9 percent (only 2.61 million foreign tourists) compared to the same quarter the previous year (Pakpahan, 2020). The decline in foreign tourists directly reduces the income of business actors in the micro, small and medium scale industries because tourists usually buy local handicrafts (Iswahyudi, 2016). Weak tourism and retail trade sectors will have a domino impact on the performance of the micro, small and medium scale industrial sector nationally, for example, will cause a decrease in state tax revenues (Amri, 2020; Sugarda & Wicaksono, 2017). BPS noted, Covid-19 reduced exports of both oil and gas and non-oil to China as one of the largest importers of crude oil in the world. Meanwhile, Indonesia is one of China's largest trading partners (Lu, 2020). A negative correction in Chinese production will disrupt global trade supply chains (Nasution et al., 2020).

3. Research Methodology

This study uses primary data where the population is all entrepreneurs in the hair craft creative industry who are domiciled in Purbalingga Regency. Because the number of the population is difficult to determine, the sampling is done by incidental sampling, which is sampling based on chance, anyone who meets the researcher can be used as a sample and it is deemed that the person met is suitable as a data source (non-probability sampling) (Lemeshow, 1997).

Sampling of workers is determined using the Lemeshow (1997) formula, namely:

$$n = \frac{p(1-p)\left(\frac{Z\alpha}{2}\right)^2}{D^2} \quad (1)$$

$$n = \frac{p(1-p)\left(\frac{Z\alpha}{2}\right)^2}{D^2}$$

$$n = \frac{0,5(1-0,5)(1,96^2)}{0,1^2}$$

$$n = 96$$

where:

n = minimum sample size

Z = standard value from distribution, $\alpha = 5\% = 1.96$

p = *outcome prevalence*, using maximum estimation, i.e. 50% or 0.5

D = *error tolerance*, 10%

So the sample size in this study is 96 entrepreneurs, with the consideration that this number is representative enough to represent the population. The survey method in this study was carried out using two techniques, namely deep interview and questionnaires.

The profitability is calculated by Total Revenue (TR) minus Total Cost (TC), written by:

$$\text{Profit} = \text{TR} - \text{TC} \tag{2}$$

Then, the economic efficiency is determined by Revenue/Cost (R/C) ratio, which shows the amount of revenue and costs incurred by hair craftsmen. R/C ratio is the ratio between total revenue and total cost (Soekartawi, 1995), written by:

$$\text{R/C ratio} = \text{TR/TC} \tag{3}$$

Total Revenue (TR) is all revenue earned from the sale of hair craft products while Total Cost TC is all costs incurred in each hair craft production process. The greater the R/C ratio, the greater the profit that will be obtained. This can be achieved if the allocation of production factors is more efficient (Soekartawi, 1995).

4. Results

To determine the level of profitability, total revenue (TR) and total cost (TC) variables are needed. In this research, the profitability level conditions were compared before and during the pandemic. In the Table 1 below, it can be displayed those conditions.

Table 1. Profitability and Efficiency Before the Pandemic (IDR/month)

Statistic	Total Revenue (TR)	Total Cost (TC)	Profit	R/C
Total	1.265.734.900,00	789.770.000,00	475.964.900,00	1,60
Average	13.184.738,54	8.226.770,83	4.957.967,71	1,60
Maximum	34.750.000,00	9.250.000,00	25.000.000,00	
Minimum	2.500.000,00	1.976.000,00	500.000,00	

Before the pandemic, on average every hair craft entrepreneur earned IDR 4.96 million per month, where there were entrepreneurs whose profits reached a maximum of IDR 25 million, but there were also those who only achieved a profit of IDR 500 thousand. Profit conditions like this are

quite promising and can be used as the main livelihood. Overall, the total revenues of all respondents (96 entrepreneurs) shows around IDR 1.27 billion while the total costs shows around IDR 789.77 million. This is a great value for a center of micro and small industries, and there are even entrepreneurs whose sales reach IDR 34 million. However, some of them still have minimum profit, IDR 500 thousand a month, so it is necessary to help them for better performance.

Then, during the pandemic the situation changed drastically. Their total revenue could drop by almost 60 percent, from around IDR 13.18 million to around IDR 8.32 million per month. In fact, their total cost actually increased from around 8.22 million rupiah to 8.62 million rupiah per month. Therefore, on average, entrepreneurs experienced a loss of around 305 million rupiah per month. Financial condition during the pandemic can be seen in Table 2 below.

Table 2. Profitability and Efficiency During the Pandemic (IDR/month)

Statistic	Total Revenue (TR)	Total Cost (TC)	Profit	R/C
Total	798.645.700,00	827.950.000,00	-29.304.300,00	0,96
Average	8.319.226,04	8.624.479,17	-305.253,12	0,96
Maximum	16.250.000,00	10.750.000,00	4.500.000,00	
Minimum	1.200.000,00	1.500.000,00	-400.000,00	

However, in this situation there is entrepreneur who can still earn a total revenue of around IDR 16.25 million. Of the average loss of IDR 305 thousand per month, there is entrepreneur who loses IDR 400 thousand. Here, the drastic point can be seen in the profit term, where before the pandemic they could get a lot of revenues but during the pandemic they actually suffered loss.

The following analysis is economic efficiency. This analysis encourages to observe whether their business have been performed. It is needed R/C ratio to answer that question. When the value is equal to 1, then it is quite efficient, even more than 1, it is better. Conversely, when the value is less than 1, then it is not efficient or inefficient. Those conditions can be seen in the Table 1 and Table 2 above.

Before the pandemic, the average R/C ratio of each entrepreneur was 1.6, meaning that the revenue was 1.6 times greater than the costs incurred. However, during the pandemic, the average R/C ratio of entrepreneurs did not reach 1, i.e. 0.96, meaning that revenues were unable to cover the costs (inefficiency). In the other words, they have to struggle during the recession conditions and have to attempt everything possible in order to continue their business, otherwise shut down the business might be the right decision for a while.

5. Conclusion

Thus, it can be concluded that the occurrence of a pandemic caused a decrease in the micro and small enterprise performance, including the hair craft creative industry. The average profitability of entrepreneurs has fallen drastically where before the pandemic it could be achieved in large numbers but during the pandemic it turned into a loss. Similarly, their economic efficiency also dropped significantly where the R/C ratio before pandemic could reach 1.6, meaning that revenues could better cover costs but during the pandemic it changed to less than 1, i.e. 0.96, meaning that costs exceed revenues. For this condition, it should be needed full support from various parties so that this creative industry can still exist as a leading industry.

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