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# ANALYSIS OF SEVERAL FACTORS THAT INFLUENCE THE PRODUCTION VALUE OF THE WOVEN CRAFT INDUSTRY IN GIANYAR REGENCY

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**Abstract**

The industrial sector has a close relationship with production activities, so that building a good industrial situation requires continuous planning and supervision. By paying attention to the determining factors that influence the production process, it will make running an industry easier. The aim of this research is to analyze working capital, labor and technology on the production value of the woven craft industry in Gianyar Regency. This research uses primary data with a quantitative approach obtained from interviews. The population in this study was 65 woven craft industry business units using the entire population as a sample. The sample collection method used was a saturated sample. Data analysis techniques use descriptive statistical analysis, double log regression analysis, Cobb-Douglas production function equation. The results of this research show 1) working capital and labor simultaneously have a significant effect on the production value of the woven craft industry in Gianyar Regency. 2) working capital and labor partially have a positive and significant effect on the production value of the woven craft industry in Gianyar Regency. 3) there is a technological mix of capital and labor on the production value of the woven craft industry in Gianyar Regency. The implication of this research is that the efficiency of production factors plays an important role in an industry, where an industry expects the maximum possible production by spending or using the minimum possible production costs.

**Keyword**: Value, Industrial Production, Weaving Crafts, Gianyar Regency.

## Introduction

Regional economic development is a process in which the regional government and community manage existing resources, by establishing partnership patterns between the regional government and the private sector in order to create jobs, and can stimulate economic growth in the area concerned (Suparmoko, 2002). Economic growth is one of the benchmarks used to increase the development of a region from various economic

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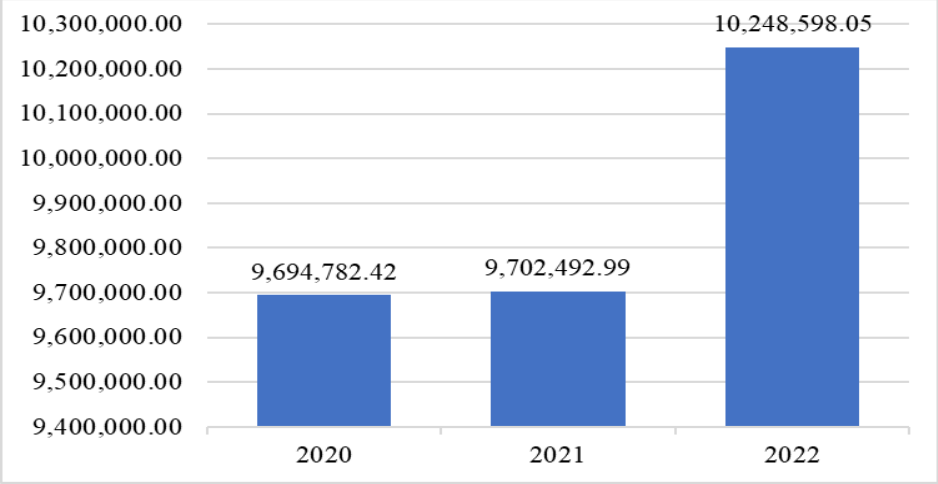
sectors which indirectly describes the level of economic change. According to Sukirno (2008), economic growth means the development of activities in the economy which causes the goods and services produced to increase and the prosperity of society to increase.

The industrial sector is one of the leading sectors for the country's economy. The existence of the industrial sector is an asset that can strengthen the economic foundations of a region as well as a tool for introducing a region's culture (Widyastiti and Karmini 2021). In the development process, the industrial sector is made a development priority which is expected to play a role*leading sector*sor a leading sector for the development of other sectors. What is meant by leading sector is that industrial development spurs and elevates the development of other sectors such as the agricultural sector and the service sector. Directed industrial development can become a high-quality role in the economy, so that it is able to compete both domestically and abroad.




*Source: Bali Province Central Statistics Agency, 2022*

**Figure 1.**
**Bali Province Processing Industry GDP Based on Constant Prices 2010 According to Business Fields 2020-2022**

The processing industry sector has a major role in supporting fairly high economic growth every year, by expanding business fields, expanding employment opportunities and so on (Rahmah and Sugeng 2019). Figure 1. explains the Gross Regional Domestic Product of Bali Province at Constant Prices 2010 According to Business Fields for 2020-2022, showing that the processing industry sector has experienced an increase in the last three years from 2020 to 2022, amounting to 0.05 percent even though it is not the main

contributor. Gross Regional Domestic Product (GRDP) plays a very important role in the processing industry in the process of supporting the economy of Bali Province. This characteristic is very much in line with the charm of people's lives in Bali who rely on the cultural industry.

**Table 1.**
**Labor, Average Total Investment Value, and Average Total Production Value in Bamboo Woven, Rattan and Similar Industries for Each Regency/City in Bali Province**

| Regency/City | Labor (person) | Average Total Investment Value (Million Rupiah) | Average Total Production Value (Million Rupiah) |
|---|---|---|---|
| Badung | 194 | 186,641 | 7,579,572 |
| Bangli | 4,266 | 3,886,620 | 101.479.415 |
| Buleleng | 764 | 183,594 | 9,080,514 |
| **Gianyar** | **389** | **48,067,447** | **11,685,400** |
| Jembrana | 170 | 928,390 | 1,404,699 |
| Karangasem | 386 | 637,683 | 1,383,613 |
| Klungkung | 25 | 3,797 | 44,000 |
| Tabanan | 6 | 98,000 | 3,240 |
| Denpasar | 190 | 1,211,428 | 4,145,155 |
| **Bali** | **6,390** | **55,203,600** | **36,805,609** |

*Source: Bali Province Small and Medium Enterprise Cooperative Service, 2022*

The number of woven bamboo, rattan and so on industrial businesses in Gianyar Regency with a total investment value of 48,067,447 is the largest in Bali Province and a production value of 11,685,400, the second largest after Bangli Regency. Seeing this phenomenon where the investment value is the highest but the production value is still in second place, because the investment value influences the production value, production activities require capital to produce goods (Andriyani and Susanti, 2019). This indicates that the woven industry in Gianyar Regency has the potential to be fostered and developed for the sustainability of the industry so that it can provide employment opportunities which will work together in synergy so that it will have an impact on the community of woven workers.

The production factor is a function that shows the relationship between levels*output*and input usage. Production factors consist of natural resources, labor, capital and technology (Arif, 2010). Production factors or inputs are things that must be present to produce productionProduction factors greatly influence the production value

of an industry. The results of research from Silvia and Budiana (2017) entitled Production Scale Analysis of Labor, Capital and Raw Materials on Bamboo Woven in Bangli stated that labor and capital had a positive and significant effect on the production of bamboo woven in Bangli. Research results from Udiana and Sudibia (2017) on the income of the jewelry crafts industry in Celuk Village show that technology has a positive and significant influence on production.

The Cobb-Douglas production function theory is a function that involves two or more variables, namely the dependent variable and the independent variable. This model connects production factors (input) with output (output) and this relationship is directly easier to understand and operate, where the dependent variable is symbolized by Y and the variable X is called the independent variable. The relationship between variables Y and The Cobb-Douglass production function used in this research is a multiple linear production function with the Cobb-Douglass function equation.

Based on this background study, the objectives of this research can be formulated as 1) Simultaneously analyzing working capital and labor on the production value of the woven craft industry in Gianyar Regency. 2) Partially analyze working capital and labor on the production value of the woven craft industry in Gianyar Regency. 3) Analyze the technology mix of capital and labor on the production value of the woven craft industry in Gianyar Regency.

**Research methods**

This research uses an associative quantitative approach with Gianyar Regency as the research location. Working capital, labor, technology mix and production value are the objects of this research. Production value (Y) in one month is measured in millions of rupiah. Working capital (X1) in one month is measured in millions of rupiah. Labor (X2) in one month is measured in person-hours. The technology mix is measured through the modal Cobb-Douglas equation by substituting the constant A through the value of the regression input constant.The data in this study can be in the form of quantitative data (in the form of numbers) such as woven production values and qualitative data (not in the form of numbers) such as theories and empirical articles. The data in this research was collected by direct researchers (primary data) such as working capital and labor, while secondary data was obtained from certain agencies such as the number of woven craft industry units.

Methods for collecting data use observation, structured interviews and in-depth interviews. In this study there were 65 populations of woven craft industrial units which were the focus of the research. The method used in determining the research sample was a saturated sample where the entire population was used as a sample so there were 65

samples. The data analysis technique used is regression analysis*double log*which aims toused to determine the relationship between the independent variable and the dependent variable (Sugiyono, 2021) as follows:

Y =$\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu_i$ (1)

Information:

Y = ProductionWoven Craft Industry in Gianyar Regency

β0 =Intercept/constant

X1 = Working Capital

X2 = Labor

β1 =Working Capital Coefficient

β2 =Labor Coefficient

μi =Nuisance variables (residual error) which represent other factors have an influence on Y but are not included in the model

The technique used to determine the technology mix uses the Cobb-Douglas production function equation model in multiple linear form by calculating the equation as follows:

lnQ = A + α.ln.K + β ln.L+ e..... (2)

Information:

Q = Production of the Woven Craft Industry in Gianyar Regency

A = Positive Constant (technology)

K = Working Capital

L = Labor

α = Working capital coefficient

β = Labor coefficient

e = error term

**Conclusion**

Based on the results of the analysis described in the previous chapter, conclusions can be drawn, namely as follows:

1) Working capital and labor simultaneously have a significant effect on the production value of the woven craft industry in Gianyar Regency.
2) Working capital and labor partially have a positive and significant effect on the production value of the woven craft industry in Gianyar Regency.
3) There is a technological mix of working capital and labor on the production value of the woven craft industry in Gianyar Regency.

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