



Analysis of Factors Affecting Company Revenue in Coffee Powder Industry at West Lampung District

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Abstract. This study aims to analyze the effect of income on business capital, working hours, length of business and halal certification in West Lampung Regency. This study uses primary data with a total of 30 respondents of ground coffee IKM in West Lampung Regency using multiple linear regression models. The dependent variable used is income and the independent variables include raw material, labor and production machine. The results showed that raw material had a positive and significant effect on the income of ground coffee IKM companies in West Lampung Regency while working labor and production machine had a positive but not significant effect on the income of ground coffee IKM companies in West Lampung Regency.

Keywords: Income · Raw Material · Labor and Production Machine

1 Introduction

The magnitude of the role of various fields of economic business in producing goods and services is very determining the regional economic structure. The added value created from each business field can illustrate how much of the regional dependence on the production capabilities of each business field. The natural and geographical conditions of support are one of the factors that play a role in coffee as one of the agricultural commodities from Lampung Province [1].

Based on Table 1 that West Lampung Regency has the largest coffee production compared to other districts. It can be seen that the production of coffee by 2019 is 52,320 tons in West Lampung Regency which is a district with the largest coffee production in Lampung Province, while the lowest coffee production in Lampung Province is the metro city of only 1 ton in 2019. The total amount of coffee production in Lampung Province by 2019 amounted to 110,264 tons.

One of the processed foods that are quite developed in West Lampung Regency is an IKM sector associated with plantations Coffee, this is because of the lights Western is known as the largest coffee producer in Lampung Province (Table 2).

Table 1. Production of Coffee Plantation (TONS) Kab/City in Lampung Province 2019.

Regency/City	2019
Lampung Barat	52.320
Tanggamus	33.450
Lampung Selatan	430
Lampung Timur	240
Lampung Tengah	299
Lampung Utara	8.725
Way Kanan	8.722
Tulang Bawang	35
Pesawaran	1.458
Pringsewu	705
Mesuji	43
Tulang Bawang Barat	6
Pesisir Barat	3.620
Kota Bandar Lampung	210
Kota Metro	1
Lampung	110.264

Source: BPS, 2019

The result of the identification of the IPM-coffee was the number of 106 IKM, which conducted its business in several sub-districts. Balik Bukit is a sub-district with the highest number of copy of the powder in West Lampung Regency that is as much as 30 IKM, while the Lumbok Seminung is a sub-district with the number of IKM the lowest as much 2 IKM.

2 Ease of Use

A. Types and Resources Research

This research uses the survey method and spread of questionnaires conducted in July 2022 to August 2022 on Balik Bukit District West Lampung. Which is one of the areas that process the powder coffee industry. This research analysis unit is the entrepreneurs of the processing of powder coffee processes located in West Lampung regency and

Table 2. Number of Ikm Coffee Powder in West Lampung Regency 2019

Subdistrict	Number of IKM ground coffee (Unit)
Air Hitam	10
Balik Bukit	30
Batu Brak	9
Batu Ketulis	4
Belalau	8
Gedung Surian	7
Kebun Tebu	7
Lumbok Seminung	2
Pagar Dewa	4
Sekincau	7
Sukau	4
Sumberjaya	6
Way Tenong	8
Total	106

'Sumber: Disperindagpas. 2019

primary data obtained from entrepreneurship coffee powder by using direct interview methods on business owners by using list of questions that has been prepared [1].

B. Types and Sources of Data

The type and source of data used is the primary data [2] obtained from the powder coffee processing entrepreneur with the direct interview method while the secondary data is earned from such as the statistical central body, the trade of the Indonesian Lampung and District Industry and Literature such as magazines and thesis.

C. Analysis Tool

Analytical tool is a multiple linear regression analysis method *Ordinary Least Square* (OLS). To prove the truth of the hypothesis, it is required data analysis. To know the effect of one free variable to the independent variable can be made the following formulation:

$$LNP = \beta_0 + \ln \beta_1 \times \ln \beta_2 + \ln \beta_3 \times 3m + \varepsilon t$$

Description:

LNP = Revenue (rupiah).

$\ln \beta_1$ = raw material (kg).

$\ln \beta_2$ = Labor (HOK).

$\ln \beta_3$ = Production Machine (Unit).

β_0 = Constant.

$\epsilon t = \text{Error Term.}$

D. Classic Assumption Test

There are some assumptions testing to find out whether the estimated model has been made deviant from classical assumptions or not. The test is among other things is auto-correlation with the LM-Test or Breush method Godfrey, heteroscedasticity with white test, multicollinearity with VIF method, and normality [3].

3 Prepare Your Paper Before Styling

A. Hypothesis Testing

Hypothesis testing is done to know there is no correlation between the free variable with the bound variable. This hypothesis test uses 5% significance level. The calculations obtained from statistical counts are consulted with the value in the table. If the T-count is greater than t-tables then the coefficient is said to have as the other way as well [4].

Based on Table 3 obtained regression equation:

$$LNP = \beta_0 + \ln \beta_1 \times \ln \beta_2 + \ln \beta_3 \times 3m + \epsilon t$$

$$LNP = 12.008 + 0.6696LNX 1 + 0.0923LNX 2 + 0.1125LNX 3$$

Of the above equation can be explained that:

- The value of constants of 12.008 indicates that if the dependent variable is Income is zero then Income is a construction of 12.008%.
- Value of coefficient raw materials by 0.6996 indicates that the increase The amount of production in one unit number will result in a rise income a force of 0.6996% unit with other constant variable assumption.
- Value of labor the work a 0,0923 indicating that the increase day labor unit number will result in a rise income a. 0.0923% unit with other constant variable assumption.

Value of coefficient Old business a.0,0990 indicates that the increase Old business in one unit number will result in a rise income A.09090 unit with other constant variable assumption (Fig. 1).

Table 3. Multiple Linear Regression Test Results

Variable	Coefficient	STD. Error	t-statistics	Prob.
X1materials	0.669666	0.173588	3.857786	0.0007
X2labor	0.092394	0.090239	1.023879	0.3153
X3productionmachine	0.112556	0.099051	1.136344	0.2662
C.	12.00801	0.699613	17.16379	0.0000

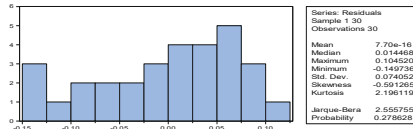


Fig. 1. Normality test P-value Jarque-Bera

Based on the result of normality test seen in the picture the above that value *P-value* Jarque-Bera is 0.278628 where are the more big from on (α) 5 percent (0,05). It can be concluded that in this research model of normal distributed data (Table 4).

Based on the result of multicollarity test above the showthat there is no variable that has a valueVIF more than number 10 so that can be concluded that there is no multicolinierte (Table 5).

Based on the results of the above heteroscedasticity test shows that when the probability value of OBS * R-Square is greater than α (5%) that is 0, 1731So it can be concluded by data no heteroscedasticity problem (Table 6).

Table 4. Multicolineary Test

	Coefficient	Uncentered	Centered
Variable	Variance	Vif	Vif
X1materials	0.030133	7837.710	5.863419
X2labor	0.008143	1923.566	3.774658
X3productionmachine	0.009811	1809.773	5.494066
C.	0.489458	2400.680	NA

Table 5. Heteroskedasticity Test

HERTOSKEDASTICIES Test: White			
F-statistics	1.648085	Prob. F (9,20)	0.1684
OBS * r-squared	12.77484	Prob. Chi-square (9)	0.1731
Scaled Explained SS	5.738574	Prob. Chi-square (9)	0.7658

Table 6. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistics	0.565735	Prob. F (2,24)	0.5753
OBS * r-squared	1.350662	Prob. Chi-square (2)	0.5090

Table 7. T-Stat Test

Variable	T-stat	T-table	Conclusion
Raw materials	3,857	1,706	H ₀ rejected
Labor	1,023	1,706	H ₀ received
Production machine	1,136	1,706	H ₀ received

Based on the results of the above heteroscedasticity test shows that When the probability value of OBS * R-Square is greater than α (5%) that is 0, 1731So it can be concluded by data no heteroscedasticity problem (Table 7).

Then the result of the SIG test from the table above as Better:

- There is a significant positive influence between varraw materials (X1) against Income(Y), due to the t-count of T-Table (3,857 > 1,706) and significance value of 0.007 < 0, 05.So there is an influence between the variable of X1 against Y, or in other words h0 Rejected and Haaccepted.
- There is no effect between variable labor (X2) against Income(Y), due to the t-counted tit-title (1.023 < 1,706) and significance value AM 0, 3153 < 0.05.So there is no influence between the X2 variable against y, or in other words h0 acceptable and ha rejected.
- There is a significant positive influence between varproduction machine(X3) againstIncome(Y), due to the t-count of T-Table (1.136 < 1,706) and significance value of 0, 2662 > 0.05.So there is an influence between the variable of X3 against y, or in other words h0acceptable and ha rejected.

When the value $F-Stat > F-Table$, then reject H₀, it means that free variables together have a significant effect on the bound variable. On the output results $F-stat(60, 90909) > F-Table(2.99)$ then Reject H₀ This means that variables (raw materials, day people work, production machines) together with a significant effect on the revenue of the processing of powder coffee processing in Balik Bukit (Table 8).

B. Coefficient of Determination (R²)

From estimates obtained the result of coefficient of determination (r²)0, 8754means that overall free variables can explain the correlation relationship between variables. While the 0.1246can be explained by the variable other the Not included in the model. In other words, free variables can affect revenue by0, 8754 percent, and 0.1246 Percent can be explained by other variables that are not included in the model.

Table 8. TEST F

Df	A	Prob	F-table	F-statistics	Information
(26; 3)	5%	0. 0000	2.99	60,90909	H ₀ is rejected

4 Results and Discussions

A. *The Effect of Materials Raw Against Revenue*

Based on the result of the significance test parameters indicate that the variable of raw material stake effect positive significant against the IPM COFFE AR revenue. The value of raw material regression coefficient (X1) is as big as 3,857 which is positive value (+) with significant value of $0,0007 < 0.05$. This study shows the regression coefficient of capital venture amount 0.6696 means that the increase of raw materials by 1% will result in significant improvement in efficiency of IPM coffee powder by 0.6696%. From the results of the study, the material raw Positive positive effect on the earnings of IPM coffee powder. That means the more of the material lrawThe greater the income of Coffee Powder.

This is in line with the research of [5] based on partial test results, obtained the calculation value of $3,357 > t\text{-table}$ by 1.989 or SIQ of 1,989 larger Alpha 0.05, thus it can be concluded that raw materials partially significantly influence the production.

B. *The Effect of Labor to Revenue*

Based on the result of the significance test parameters indicate that the capital of variable capital influence positive significant gainst the IKM coffear revenue. The value of labor regression coefficient (X2) is as big as 0.0923 which is included in the model. Positive but not significant (+) with significant value of $0,3153 < 0.05$. This study shows the registration coefficient of capital vertility of 0.0923 means that the increase in capital load of 1% will result in an increase in efficiency of IKM coffee powder by 0.0923%.

This is in line with [6] that the workfires have no effect on revenue based on the regression equation that the labor variables (X2), the labor has no significant effect on revenue based on the regression results that the working hours.

C. *Influence of Production Machine for*

Based on the result of the significance test parameters indicate that the capital of variable capital influence positive significant against the IKM COFFEAR revenue. The production coefficient of production engine coefficient (X3)1, 1363 which is positive (+) with significant value of $0.2662 > 0.05$. This study shows the regression coefficient of capital vertility of 0.1125 means that the increase in production machines of 1% will result in significant improvement in IKM Coffee powder revenue by 0.1125%. From the results of the study the production machine has positive effect but is not significant to the earnings of IPM coffee powder.

This is in line with [6] that the production machine has no significant effect on the production volume on UD.Light Restu City Probolinggo.

5 Conclusion

Based on testing on the hypothesis that exist in this study, it can taken Conclusion that:

- Material raw Influential positive and significant effect on the powder coffee industry income. This proves that the first hypothesis states that materialrawInfluential to the efficiency of powder coffee industry.

- Labor of influence positive but it is not significant to the efficiency of powder coffee industry. This proves that the first hypothesis states that the labor has a positive effect on the efficiency of the powder coffee industry.

The production machine has a positive effect but is not significant to the efficiency of the coffee powder industry. This proves that the first hypothesis states that the old labor effort positive.

6 Suggestion

Suggestions that can be used for the party who wants to continue this research is:

- After knowing the results of that research raw materials influential to revenue the coffee industry powder, then thus the cocoon entrepreneur of the powder continues optimize the material of the coffee so increase the amount of production and perform variations of the production of powder coffee production so as to produce quality products and more varied packaging for e-component coffee puldee.
- For variables labor the entrepreneur production machine as well as its look at the need the time of time workers and The amount of production machinery to produce coffee powder for revenue more maximal.
- For the following researchers should consider other variables outside material raw, labor and production machinery as well as finding the sphere of a wider population. Thus the advanced can further give a more specific picture of the efficiency of the powder coffee industry.

For the Government of West Lampung Regency and the relevant agencies to be able to pay attention and ease for the coffee powder industry in the rapid acquisition of raw materials and training to labor by conducting seminars for workers more competent in making production process for revenue more increasing.

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