ANALYSIS OF FACTORS AFFECTING THE INCREASE IN SALES OF EUCALYPTUS OIL IN THE TRADITIONAL KETTLE REFINING INDUSTRY OF BURU REGENCY IN THE NEW NORMAL ERA

Oleh
Firman Gazali Djunaidi[1)], Rahma Satya Masna Hatuwe[2)], Feni Ayu Lestari[3)], A. Yusdianti T.[4)], M Chairul Basrun Umanailo[5)]
[1,2,3]Fakultas Ekonomi, Universitas Iqra Buru, Indonesia
[4]Fakultas Sastra, Universitas Iqra Buru, Indonesia
[5]Fakultas pertanian dan Kahutanan, Universitas Iqra Buru, Indonesia
Email: [1]djunaidiuniqbu@gmail.com

Abstrak

The Covid-19 pandemic is a test of the resilience of a nation. In the economic field, the crisis caused by the Covid-19 pandemic has developed in such a way and caused a contraction of the global economy. However, the current Covid-19 pandemic in Indonesia is a blessing for business players in the eucalyptus oil refining industry in Buru Regency. The number of former Covid-19 patients who claim to be cured after using the original eucalyptus oil from the island of Buru has made the price of eucalyptus oil in Buru Regency increase sharply. The price of eucalyptus oil which in January 2020 was still in the price range of Rp.150.000,-/640 ml, now in October 2020 it becomes Rp.250.000,-/640 ml. This study aims to determine what factors influence the increase in sales of eucalyptus oil in Buru Regency. This research is a quantitative research. The data sources in this study are company/refining industry data on production costs, marketing costs and sales volume from January 2019 to October 31, 2021. The data collection techniques in this study used interviews, questionnaires and documentation studies. The data analysis technique used is descriptive analysis with analytical tools using the IBM SPSS 24 Statistics program. The analytical method used to identify production costs and marketing costs that affect sales levels is multiple linear regression analysis. The results of this study indicate that production costs and marketing costs have a significant effect on the sales volume of eucalyptus oil in Buru Regency.

Keywords: Covid-19 Pandemic, Eucalyptus Oil, Traditional, New Normal Era

INTRODUCTION

The current Covid-19 pandemic in Indonesia is a blessing in itself for business players in the eucalyptus oil refining industry in Buru Regency. The increasing demand for genuine eucalyptus oil from Buru Regency has increased rapidly since the emergence of the Covid-19 pandemic. The number of former Covid-19 patients who claim to be cured after using the original eucalyptus oil from the island of Buru has made the price of eucalyptus oil in Buru Regency increase sharply. The price of eucalyptus oil which in January 2020 was still in the price range of Rp.150.000,-/640 ml, now in October 2020 it becomes Rp.250.000,-/640 ml. The phenomenon of a drastic increase in the selling price of eucalyptus oil during the Covid-19 pandemic has become an interesting object of study to be studied.

Until now, the traditional people of Buru Island still believe in the traditional distillation of eucalyptus oil as their main source of income. Eucalyptus oil refining in Buru Regency has been started a long time ago by previous people and the distillation business has become a family business for generations (Santoso, 2007). In fact, most of the people of the island hurry to live from the distillation

ISSN No. 1978-3787
Open Journal Systems

business. The people of the island of Buru have also not abandoned the ways of their ancestors in distilling. For the people of the island of Buru, these methods are ways of ancestral heritage that they should not leave for the smooth running of their business.

The small-scale eucalyptus oil refining industry is one solution for most local people to find work. This is because in general, small industries prioritize taking workers from the surrounding environment and are not too required to have higher education (Payne, 2006). The growing demand for eucalyptus oil, both nationally and globally, shows that the competition is getting stronger in this business sector to seize (contract) production areas, market share, and consumer buying interest. Consumers judge a product or service based on quality, benefits, price, and functions provided (Retnowati, 2009).

Given the increasingly rapid development of the business world, every company always improves its ability to achieve its goals (Fandy Tjiptono, 2001). Every company aims to earn profits, where these profits can be used to develop the company, this is determined by production factors such as production, labor, raw materials, marketing costs and so on (Lupiyoadi, 2001). Therefore, whether production costs and marketing costs affect the increase in sales of eucalyptus oil in the eucalyptus oil refining industry in Buru Regency, this is the focus of the problem in this study (Schiffman, 2008).

This study aims to determine the factors that influence the increase in sales of eucalyptus oil in Buru Regency. The specific purpose of this study was to determine whether production costs and marketing costs had an effect on increasing sales of eucalyptus oil. This research is important to do considering that there is no research that analyzes the factors that influence the increase in sales of eucalyptus oil in Buru Regency during the new normal period. In addition, this research can be a contribution of thought for the company to determine the critical success factors in increasing sales.

2. Methods

The research method is a comprehensive way or strategy to find or obtain the data needed (Arikunto, 2002). This research is quantitative research. Quantitative research is a scientific research that develops and uses mathematical models, theories and hypotheses related to the phenomena that occur (Simamora, 2004).

The population is a generalization area consisting of objects / subjects that have certain qualities and characteristics that have been determined by researchers to be studied and then drawn conclusions, while the sample is part of the number and characteristics possessed by the population (Sugiyono, 2009). This study uses time series data (limited by time), so the sample of this study is company/refining industry data on production costs, marketing costs and sales volume from January 2019 to October 31, 2021..

The data in this study consisted of qualitative and quantitative data. Qualitative data is data in the form of information about the operational process of eucalyptus oil production at CV. Firman Jaya Corporation. While quantitative data is data in the form of numbers obtained from companies/refining industries regarding the amount of costs used for production and promotion costs which are then analyzed using mathematical or statistical calculation techniques. The source of data in this study is primary data which is data obtained directly from the source in the form of company data on production costs, marketing costs and sales volume. And secondary data is data taken indirectly from the source, secondary data in this study include previous research journals (Swastha, 2001).

The data collection techniques in this study used the interview method and the study of documentation (Mattila, 2004). The data analysis tool used in analyzing the research data is by using the IBM SPSS 24 Statistics program (F. Tjiptono, 2005). The data analysis technique used is descriptive analysis to find out the data contained in the CV company. Firman Jaya Corporation related to data on the development

of production costs, marketing costs and sales data over a period of time (time series). The analytical method used to identify production and marketing costs that affect the level of sales at the company CV. Firman Jaya Corporation is a multiple linear regression analysis, which is to analyze the relationship and influence of the independent variables on the dependent variable (Wong, A., & Sohal, 2006). The factors that affect the increase in sales at the company CV. Firman Jaya Corporation.

Then the function is transformed into a multiple linear regression equation model with the following model specifications: $Y=\alpha+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\mu$

Dimana :

Y	= Sales Volume
A	= Constant
X1	= Production cost
X2	= Marketing Fee
β1,β2, β3, β4,	= Regression Coefficient
μ	= Error Term

3. Findings and Discussions

3.1 Findings

3.1.1 A General Description of The Company

CV. Firman Jaya Corporation which was originally named CV. Firman Jaya is a company registered with the Regional Integrated Licensing & Investment Services Office, Buru Regency, which is engaged in the Procurement of Goods, Services & Construction which is registered based on the Deed of Establishment of the Company at Notary Rosdiana Ely. SH No. 18 since April 29, 2005 having his/her address at Jl. Home Lapter Pasar Baru Namlea, which is stated in the notary deed in the management of CV. Firman Jaya Corporation, the Director is Mr. Firman, and the Deputy Director is Miss Indy Iva Febriyanti.

Then on October 18, 2012, Notary Lidia Gosal, SH. M.Kn, CV. Firman Jaya registered the deed of amendment by entering as an ally, as well as the Amendment to the Articles of Association and the name of CV. Firman Jaya" became CV. Firman Jaya Corporation where the commissioner's share participation was revoked from the company.

From the joint stock of allies, the line of business expanded to the fisheries & agriculture sector before finally making changes to the Articles of Association of Notary & PPAT Subeidar Pieter.SH in 2016. Where the Statute of ownership of CV. Firman Jaya Corporation is owned by the Director of Firman himself. Since early 2017, the focus of its business has been focused on the eucalyptus oil processing industry. which is produced in 12 areas of eucalyptus land owned by the local government of Buru Regency and 6 areas owned by individuals (waris) with a contract system per harvest season on eucalyptus land areas in Buru district.

The scope of CV. Firman Jaya Corporation is as follows:

1. Running a business in the field of eucalyptus oil refining.
2. Running a business in the field of civil building construction and irrigation.
3. Running a business in the field of procurement of goods & services.

Company organizational structure CV. Firman Jaya Corporation is composed of company leaders and employees.

Production Activities CV. Firman Jaya Corporation In the process of refining eucalyptus oil starting from the land contract, the manufacture of production houses and boiler equipment, the raw materials that will be used are eucalyptus leaves and wood as fuel. It takes a lot of freelance labor to take the eucalyptus leaves and then steam them. The distillation process takes 6 hours to produce eucalyptus oil. The results are then packaged in bottles for retail sales and drums for party requests and then distributed on demand.

ISSN No. 1978-3787
Open Journal Systems

3.1.2 Description of Production Cost Data

The following is the development of CV production. Firman Jaya Corporation in several years which is formulated in monthly form.

Tabel 1. Production Development CV. Firman Jaya Corporation 2019 - 2021 (In Millions)

Month	2019 (Rp/Mth)	2020 (Rp/Mth)	2021 (Rp/Mth)
January	25.110	48.114	193.536
February	35.235	46.500	291.276
March	29.160	82.305	213.408
April	37.179	98.208	359.316
May	29.322	183.861	416.988
June	65.246	156.984	292.680
July	47.385	181.350	270.216
August	54.675	183.582	362.880
September	32.238	238.824	613.980
October	47.142	255.285	680.400
November	61.601	239.661	-
December	25.110	141.546	-

Source: CV. Firman Jaya Corporation (2021)

The development of production costs CV. Firman Jaya Corporation experienced an increase in fluctuations from 2019 to 2020. This is because there is an increase in demand from time to time so that the costs incurred to make additional eucalyptus oil refining production equipment. In addition, the workforce also increases so that production results increase along with the costs incurred.

The natural resources of eucalyptus land on Pulau Buru are rich and abundant which makes the production process increase which is marked by fluctuations in cost increases from 2019 to 2020. Then, supported by workers who work picking eucalyptus leaves, the production costs also increase. . For labor, they use a piece rate system for one area of eucalyptus land area.

Permanent workers who produce also work according to distillation standards, only if demand conditions are required to pursue the target quantity demanded, then they carry out a non-stop distillation process using a shift system. Morning shift and evening shift to do eucalyptus oil refining.

Sources of financing in the production of eucalyptus oil at CV. Firman Jaya Corporation is fund sharing 80% Down Payment (DP) between CV. Firman Jaya Corporation with the company based on a mutual agreement made and stated in a notarial deed.

3.1.3 Description of Production Cost Data

The following is the development of CV Marketing costs. Firman Jaya Corporation in several years which is formulated in monthly form.

Table 2. Development of Marketing Costs CV. Firman Jaya Corporation 2019 - 2021 (In Millions)

Month	2019 (Rp/Mth)	2020 (Rp/Mth)	2021 (Rp/Mth)
January	9.416	11.625	72.576
February	8.809	13.718	48.546
March	10.935	16.368	80.028
April	6.197	45.965	89.829
May	10.996	39.246	104.247
June	16.311	68.006	73.170
July	11.846	45.896	101.331
August	9.113	59.706	90.720
September	12.089	63.821	153.495
October	11.786	59.915	170.100
November	15.400	35.387	-
December	8.019	78.469	-

Source: CV. Firman Jaya Corporation (2021)

As with production, CV marketing costs. Firman Jaya Corporation experienced an increase in fluctuations from 2019 to 2020. This happened because responding to market challenges, the company intensively carried out promotions and communications to answer requests from time to time so that the costs incurred for the marketing function continued to increase in line with the increase in sales.

The intended marketing function is a function that is really carried out in the CV. Firman Jaya Corporation such as warranti function, guarantee for before shipping, CV. Firman Jaya Corporation must perform laboratory tests for 1 drum of eucalyptus oil. So these costs are included in marketing costs. Then packing (drums, bottles), warehouse, market coverage or membership fees (expenditures for bonuses, testers, stickers, etc.).

The costs incurred from marketing costs which are also promoted (public relationship) use the services of a mediator/broker to be able to meet international markets whose demand is sustainable. Shipping via the sea toll expedition route, or using a regular expedition route is certainly an expense in marketing costs which is included in the explanation in the table above.

3.1.4 Sales Volume Data Description

The following is the development of Sales Volume CV. Firman Jaya Corporation in several years which is formulated in monthly form.

Table 3. Sales Volume Development CV. Firman Jaya Corporation 2019 - 2021 (In Millions)

Month	2019 (Rp/Mth)	2020 (Rp/Mth)	2021 (Rp/Mth)
January	41.850	77.500	322.560
February	39.150	91.450	323.640
March	48.600	109.120	355.680
April	41.310	204.290	399.240
May	48.870	261.640	463.320
June	72.495	302.250	487.800
July	52.650	305.970	450.360
August	60.750	265.360	604.800
September	53.730	283.650	682.200
October	52.380	266.290	756.000
November	68.445	235.910	-
December	53.460	348.750	-

Source: CV. Firman Jaya Corporation (2021)

Sales is one of the marketing functions that is very important and decisive for the company in achieving the company's goals, namely obtaining profits to maintain the survival of the company. the development of sales volume CV. Firman Jaya Corporation experienced an increasing fluctuation from year to year.

In 2019 the sales volume reached Rp. 633,690,000,- with the volume of eucalyptus oil sold as much as 2,347 Kg. In 2020, CV. Firman Jaya Corporation is expanding. The market segment is added, in addition to local retail sales, market expansion is carried out at national private factories in Indonesia so that production is boosted and increased in 2020 where the volume of eucalyptus oil sold reached 8.8 tons, or Rp. 2,752,180,000,-

In 2021, there will be a very significant increase. CV. Firman Jaya Corporation is expanding again in national exporting companies such as PT. Multi Karunia Nusantara and importing companies that have representative branches in Indonesia, namely Haihang Industry Co.Ltd where the volume of eucalyptus oil sold in 2021 reaches 15.9 tons, or Rp. 5,750,280,000,-.

3.2 Discussions

The classical assumption test is used to detect whether or not there is a deviation from the classical assumption or the multiple regression equation used. This test consists of normality test and multicollinearity test.

To test the normality of the data can also use the Kolmogorov Smirnov statistical test (K-S). The magnitude of the K-S value with a significance level above 0.05 means that it can be concluded that the residual data is normally distributed. The results of the normality test of the data briefly the results can be seen in table 4 below:

Table 4. Normality Test Results One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	30.71494656
Most Extreme Differences	Absolute	.131
	Positive	.076
	Negative	-.131
Kolmogorov-Smirnov Z		.829
Asymp. Sig. (2-tailed)		.497

Source: Data processed, 2021

Kolmogorov-Smirnov calculation results show that the significance value is 0.497 > 0.05. Thus, it can be concluded that the regression model is feasible to use because it meets the assumption of normality or it can be said that the research data is normally distributed.

ISSN No. 1978-3787
Open Journal Systems

Multicollinearity test aims to detect the presence or absence of multicollinearity in the regression model, it can be seen from the tolerance value and variance inflation factor (VIF) (Ditchin, J. A., & Oakland, 1994). The cut off value commonly used to indicate the presence of multicollinearity is the tolerance value > 0.10 or equal to the VIF value < 10. The results of the multicollinearity test can be seen in table 5 below.

Table 5. Multicollinearity Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	287,826	61,798		4,657	,000	,161	6,213
	Biaya_Produksi	1,351	,295	,569	4,576	,000	,200	5,007
	Biaya_Pemasaran	,869	,279	,387	3,114	,004	,144	6,928

a. Dependent Variable: Volume_Penjualan

Source: Data processed, 2021

Based on the table above, it can be seen that the value of tolerance and VIF of Production Costs is 0.161 and VIF is 6.213. Marketing Cost is 0.200 and VIF is 5.007 and Sales Volume is 0.144 and VIF 6.928. These results indicate a tolerance value of more than 0.10 and a VIF value of less than 10, then the research variable is considered to be free from multicollinearity symptoms. As the results of the analysis above, it can be stated that the variables in this study can be stated not to have multicollinearity disorders.

Multiple linear regression is used to determine the magnitude of the effect of differences from one variable on other variables, namely the variable production costs, marketing costs on sales volume with the following formula: $Y=\alpha+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\mu$ (Dimitriades, 2006).

Based on the results of the analysis using SPSS, the following results were obtained.

Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	287,826	61,798		4,657	,000	,161	6,213
	Biaya_Produksi	1,351	,295	,569	4,576	,000	,200	5,007
	Biaya_Pemasaran	,869	,279	,387	3,114	,004	, 144	6,928

a. Dependent Variable: Volume_Penjualan

Based on table 4.6. The regression equation is obtained as follows: Y = 287.826 + 0.569 X1 + 0.387X2 = e From the results of the multiple linear regression equation above, it can be seen that all independent variables (Production Costs and Marketing Costs) have a positive and significant impact on Sales Volume Variables. With the following interpretation.

a. The constant is 287.826, meaning that if the independent variable is considered constant, the resulting Sales Volume is Rp. 287,826.
b. The production cost regression coefficient (X1) is 0.569, meaning that if the Production Cost increases by 1 rupiah, it will increase the Sales Volume by Rp. 0.569 and vice versa.
c. The regression coefficient of Marketing Costs (X2) is 0.387, meaning that if Marketing Costs have increased by Rp. 1 will increase Sales Volume by IDR 0.387 and vice versa.

The coefficient of determination (R^2) measures how far the model's ability to explain the variation of the independent variables. The value of the coefficient of determination is between zero and one. A small R^2 value means that the ability of the independent variables in explaining the variation of the dependent variable is very limited. However, based on the analysis, the results of the analysis are as follows:

Table 6. R^2 Test Results

R	R Square	Adjusted R Square
0,956[a]	0,913	0,929

Source: Data processed, 2021

From the test results, it can be seen that the coefficient of determination (R Square) obtained is 0.913. This shows that the variables of Production Costs and Marketing Costs can explain the increase in Sales Volume by 91.3%. While the remaining 8.7% is explained by other variables that are not included in the analysis model of this study.

Table 7. R^2 Test Results

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.321E12	2	6.603E11	277.694	.000[a]
	Residual	7.847E10	33	2.378E9		
	Total	1.399E12	35			
a. Predictors: (Constant), Marketing_Cost, Production_Cost						
b. Dependent Variable: Sales_Volume						

Source: Data processed, 2021

Based on table 7, it can be seen that the Fcount results show a value of 277.694 which is greater than Ftable of 4.113 with a significance value of 0.000. This shows that the regression model can be used to predict the variables of production costs and marketing costs on sales volume or it can also be said that there is a simultaneous influence between production costs and marketing costs on sales volume.

The t-statistical test basically shows how far the influence of one explanatory or independent variable individually in explaining the variation of the dependent variable. Based on the analysis, the results of the analysis are as follows:

Table 8. Test Results - t

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	287,826	61,798		4,657	,000	,161	6,213
	Biaya_Produksi	1,351	,295	,569	4,576	,000	,200	5,007
	Biaya_Pemasaran	,869	,279	,387	3,114	,004	, 144	6,928
a. Dependent Variable: Volume_Penjualan								

From the data above, the results of the analysis are as follows: The results of the t count of the Production Cost variable (X1) are 4,576 while t table = 1,690, then the value of t count > t table. Meanwhile, the significance value of t count variable Promotional Costs (X1) is 0.000, meaning <0.05. Based on these results, H0 is rejected and H1 is accepted, which means that Production Cost Variable (X1) has a significant effect on Sales Volume (Y).

The results of the t-count of the Marketing Costs variable (X2) are 3.114 while t-table = 1.690, then the value of t-count > t-table. Meanwhile, the significance value of t count variable Promotional Costs (X1) is 0.004, meaning <0.05. Based on these results, H0 is rejected and H1 is accepted, which means that the Marketing Cost Variable (X1) has a significant effect on Sales Volume (Y).

4. Conclusion

Based on the data analysis and discussion previously presented, some conclusions can be drawn as follows: a) The regression coefficient of Production Costs (X1) on sales volume is 0.569, meaning that if Production Costs increase by 1 rupiah, the Sales Volume will increase by Rp. 0.569; b) The regression coefficient of Marketing Costs (X2) on sales volume is 0.387, meaning that if Marketing Costs increase by Rp. 1, it will increase Sales Volume by Rp. 0.387; c) Production Costs and Marketing Costs have a positive and significant effect on the Sales Volume Variable of 0.913 and the remaining 0.087 is explained by other factors.

5. Acknowledgement

Thank you to the Ministry of Education and Culture of the Republic of Indonesia for funding this research. The researcher also thanks the respondents who have worked well together, and thanks to the LPPM Universitas Iqra Buru for helping during the research process.

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