

***EFFECTIVENESS OF COST CONTROL IN INCREASING  
PROFIT OPERATIONS***

Marlina Nur Lestari<sup>1)</sup>, Nina Herlina<sup>2)</sup>, Risna Kartika<sup>3)</sup>

<sup>1,2,3</sup>Program Studi Manajemen, Fakultas Ekonomi, Universitas Galuh  
Email: **marlina.nur.lestari@gmail.com**

Diterima: 10 Februari 2020; Direvisi: 26 Maret 2020; dipublikasikan: 30 April 2020

***ABSTRACT***

*The purpose of this research is to know the effect of how much the cost control of production to operating profit. The method used in this research is the survey method with a descriptive quantitative approach. The data used is the cost of production data and profit data from CV Insan Lestari. with sample pick up used purposive sampling. The Data analysis method in this research is a regression test, correlation test, determination coefficient, and signification test. The result from a statistic test, there known about a positive correlation from cost control to the production with an operating profit, with determination coefficient are 75,1% and 24.9% are factors outside this research. With the signification test, the conclusion is, the cost control had affected the operating profit.*

**Keyword:** *Cost control, Operating profit, Budget, standard*

***ABSTRAK***

Tujuan penelitian ini untuk mengetahui besarnya pengaruh pengendalian biaya produksi terhadap laba operasi perusahaan. Metode penelitian yang digunakan adalah metode survei dengan pendekatan deskriptif kuantitatif, data yang digunakan adalah data primer dengan teknik pengumpulan data yaitu dokumentasi dan studi kepustakaan, populasi dalam penelitian ini adalah data biaya produksi dan laba operasi pada CV Insan Lestari, dengan teknik pengambilan sample purposive sampling. Teknik analisis data dalam penelitian ini menggunakan uji regresi, ujikorelasi, koefisien determinasi juga Uji T & Uji F. Hasil pengujian secara statistic dapat diketahui bahwa terdapat korelasi positif antara pengendalian biaya produksi dengan laba operasi dengan besar pengaruh sebesar 75,1% sedangkan sisanya sebesar 24,9% merupakan faktor lain di luar penelitian ini. Dengan melakukan Uji T dan uji F, didapatkan suatu kesimpulan bahwa pengendalian biaya produksi berpengaruh secara signifikan terhadap laba operasi.

**Kata Kunci:** Pengendalian Biaya, Laba Operasi, Anggaran, Standar

## **INTRODUCTION**

Indonesia is an agrarian country where the economy is mostly in the agricultural sector. Indonesia is supported by large land and rich land, so the agricultural sector in this country has an important role to improve public welfare. In supporting the agricultural sector, the government and society try to support all needs in the agricultural sector, among them make the fertilizer industry. fertilizer has a role in success an output a plant, and preserving a plant too, yang so it can directly increase agricultural output.

The fertilizer industry is currently used as a commercial industry, it is not only the government that produces fertilizer in Indonesia, but the private sector also participated in producing fertilizer to meet an agricultural need, because that has market potential and wants to realize government program for national food independence.

In Indonesia there are several chemical or organic fertilizer producers, 355 companies were registered in 2018 (Kemenperin.go.id). that number has decreased from 2015 which amounted to 470 companies. Companies that are listed on a small scale (MSME) up to a large scale. With the decrease in the number of fertilizer producers, the supply of fertilizers has decreased to fulfill the agricultural sector's needs. Almost extinct fertilizer companies are SMEs in the field of organic liquid fertilizer production. Even though the government is currently promoting environmentally friendly agriculture (Organic), and the government also supports all programs from MSME, because MSMEs have a big contribution to the Indonesian economy in increasing PNB as well as in absorbing labor (Haryono sugeng, 2018).

Constraints on SMEs, namely in the management of companies, starting from planning to controlling the company so the company can go concern. One of the effort to maintain the company's survival is to run a good management system (Wijayanti, et al. 2013).

The goal of the company is the achievement of high profitability (Septariani & Johan, 2018), profitability can be achieved by achieving maximum operating profit, profit is one measure of the success of a company in carrying out its activities and is a measure of performance for management in the future (Ohiomah, et al. 2019; Pérez-gómez, et al. 2018). To be able a maximum profits, good earnings management is needed, from profit planning to earnings control (Kho & Jeong, 2019). Companies must have a strategy to achieve maximum profit, in profit planing predetermined the main target of profitability, and thandetermine the cost which is the main factor in influencing profit (Pérez-gómez et al., 2018). profit is depend on amount of costs by the company (Teherkhani & Alumur, 2018). This are factors that affect a profit in the company: (1) cost, costs arising from the acquisition or processing of a product or service that will affect the selling price of the product, (2) selling price, the selling price of the product will affect the volume of sales of the product, (3) sales volume, amount of the sales volume affects the production volume. It will be affect amount the cost of production, so that it can be affect the company's operating profit (Patonah, 2018).

One appropriate way to achieve maximum profit is by controlling costs, so that it will be create a cost effective and efficient (Wijaya & Syafitri, 2011).

In manufacturing, production costs are the largest costs in the production process and will determine amount of the cost of production (Skagemo, Sonesson, Meuwissen, & Rye, 2010). The increase in operating profit is determined by the acquisition of cost of goods manufactured (Seok & Chen, 2019).

This research is doing at CV Insan Lestari, which is a small and medium scale organic fertilizer industry (MSME). This company wants to going concern, can even develop the company. The company saw a decline in operating profit, the decline in operating profit reached 20% in 2015 from the previous year. The next decline in 2017 by 10% from the previous year. This condition is indicated by the process of controlling production costs by the company which is not maximal, so resulting in inefficient production costs.

CV Insan Lestari for several years has been controlling costs, but the phenomenon the company's goal, in this case, the acquisition of operating profit has not been achieved to the maximum. If this is not researched it will have a systemic impact on the company where there will be a decline in profits and the end, the company will be a failure. So many things need to be reviewed, among them are the management process (planning, coordinating and controlling) to achieve company goals, that is maximum profit.

Previous research (Ayuningtyas, 2013) are concerning the evaluation of the application of standard costs as planning and controlling production costs. (Malue, 2013) are concerning the analysis of the application of target costing as a system of controlling production costs. (Martusa & Jennie, 2010) are the evaluation of standard costs in controlling production costs. (Hadya, Begawati, & Yusra, 2017) concerning the analysis of the effectiveness of cost control, working capital turnover, and economic profitability using panel data regression. From those previous research, all mention controlling cost production as dependent variable, while this paper use controlling cost production as independent variable. Also, to fill the gap, the object of this paper is CV. Insan Lestari, a small and medium scale organic fertilizer industry.

So the purpose of this study is to determine the effect of controlling production costs on the increase in operating profit. Controlling production costs in a company is important to be implemented in maximizing operating profit.

## **RESEARCH METHODS**

### **Types of research**

The method in this study is a survey method with a quantitative descriptive approach. This study uses secondary data from a sample of a population, the data will be processed and give a detailed description of the background, traits or events which are general or specific.

A descriptive approach that is to explain descriptively the cost control process at CV Insan Lestari. A quantitative approach is done by statistical analysis to determine the relationship between variables, and the influence of a variable on other variables, in this case, to find out the effect of controlling production costs on the increase in operating profit.

The purpose of this study, to make a systematic description of the facts and the relationship between the phenomena. There are two variables to be studied, namely controlling production costs as the independent variable and operating profit as the dependent variable. Data from the two variables are analyzed using relevant statistical tests to be able to see the influence of these variables which will be used as a conclusion.

The population in this study is the data of production costs and operating profits on CV Insan Lestari, the sampling technique uses purposive sampling, which is the determination of the sample with certain considerations. Researchers have considerations for the use of a sample that is the latest production cost report and operating profit (under 5 years). In that year the company has controlled production costs. Then the sample used in this study is monthly data from production costs and a complete income statement from 2014 to 2018.

The data source in this study is secondary data from the firm which is financial data contain production cost obtained from cost control with operating profit.

Data collection techniques used in this study are (1). field research by conducting interviews with all sections related to financial data, as well as documentation of company financial data. (2) Library Study, namely by collecting and studying various theories

### **Data analysis technique**

Data analysis techniques in this study used statistical tests with calculations using SPSS. The first analysis is to find out the relationship between variable X (free) and variable Y

(bound), by using a correlation test. The results of this correlation test are interpreted with the interpretation table presented in table 1.

**Table 1**  
 Interpretation of correlation coefficients

Coefficient interval	Relationship Level
0.0 – 0.199	Very low
0.20 – 0.399	Low
0.40 – 0.599	Medium
0.60 – 0.799	strong
0.80 – 1000	Very Strong

Sugiyono, 2013

The next analysis is to determine the effect of variables X on Y, by calculating the coefficient of determination. And to test the research hypothesis, the F test and the T test were used with a 95% confidence level.

**RESULTS AND DISCUSSION**

***Effectiveness of Controlling Production Costs***

Production costs are the main costs in manufacturing companies, with production costs manufacturing companies can change raw materials into a finished goods (Rustamiet al, 2014). Production costs are variable, the size of the cost of production is depended by the number of goods to be produced (Setyaningrum & Hamidy, 2008)

Controlling production costs aims to obtain production results as planned with reasonable costs as possible (Hadya et al., 2017). Cost control is done through the process of comparing actual results with those budgeted by the company. So that management can analyze cost efficiency and the ability to make a profit. Cost control is carried out by companies in general as follows: (1) set measurement standards (budget), (2) comparing realization with standards (variants analyze). (3) look for the causes of deviations. (4) take corrective actions (corrections) (Martusa& Jennie, 2013).

Effective cost control can be seen from the difference between a cost budget and a realization. Every company has a standard to determine the standard number of cost control effectiveness, in this case, the standard results from the difference between the budget and a realization (Watania, 2013). In general, when the difference between the budget and the realization of the results is negative, it is said to be ineffective (Unvorable) if the result is positive, it is said to be effective (favorable)(Hadya et al., 2017).

Cost control in CV Insan Lestari that is by comparing the budget and realization (difference in variants), to see the cost deviations and then take corrective actions. CV Insan Lestari makes a standard tolerance of variance in production costs between a range 0-15%, if the difference in variance exceeds or is less than the tolerance limit it can be said that the control of production costs is not yet effective. This is the result of an analysis variants of production costs on CV Insan Lestari:

**Table 2**  
Analysis Variants of Production Costs  
CV Insan Lestari 2014 – 2018

Month	Year				
	2014	2015	2016	2017	2018
Jan	5.10%	7.97%	5.29%	-3.57%	3.80%
Feb	-3.30%	4.02%	3.80%	-2.95%	5.19%
Mar	1.40%	-1.36%	2.23%	-1.25%	-2.26%
Apr	1.53%	-3.84%	1.37%	-1.32%	-3.22%
Mei	-2.23%	-5.07%	4.52%	3.52%	-3.03%
Jun	-1.37%	0.69%	3.03%	5.98%	-1.54%
Jul	-2.74%	-3.09%	2.55%	3.06%	-1.47%
Agt	-2.04%	-5.22%	5.14%	-1.69%	3.21%
Sept	-1.89%	3.23%	4.15%	-2.29%	4.49%
Okt	-3.52%	7.63%	3.40%	2.26%	5.01%
Nov	-1.70%	-1.86%	1.13%	3.49%	5.87%
Dec	0.70%	-2.23%	-1.75%	-1.66%	5.75%

Resource from CV insan Lestari 2019 data calculated

The table above shows the trend of numbers towards negative numbers, which means that the realization of production costs is more than a production cost budget or the controlling unfavorable costs. Amount of the variance difference obtained is below the range of tolerance limits who set by a company, this indicates that CV Insan Lestari has not yet effectively controlled production costs.

Cost control is effective, if there is no difference in variance between the production cost budget with the realization of production costs or the difference in variance is within the tolerance range who set by the company. (Ayuningtyas, 2013). This indicates that the planned budget has been realized well. So that the company's goals can be achieved effectively.

Here is a table of the realization of production costs generated after the process of controlling production costs at CV Insan Lestari.

**Table 3**  
Realization of production costs  
CV Insan Lestari 2014 – 2018

	2014	2015	2016	2017	2018
January	69419120	66323720	70745720	77378720	77820920
February	67230230	66788030	71210030	71210030	77843030
March	63957950	63029330	67451330	69662330	76295330
April	70148750	65505650	65505650	74349650	77843030
Mei	68866370	66876470	71298470	75720470	76295330
June	68578940	68578940	68578940	75211940	77666150
July	69839210	69264350	69264350	71475350	77776700
Agust	63891620	64444370	66665370	68866370	77422940
September	61636400	64156940	64267490	68689490	77975690
October	59005310	61702730	68335730	68335730	81247970
November	62410250	62012270	68645270	73067270	77268170
December	66942800	62189150	68822150	71033150	79213850

Sourch CV Insan Lestari 2019 data, calculated

In the table above, the realization of production costs fluctuates every month, with an upward trend every month. Controlled costs are not always at low costs, in general, company operations, management always trying to achieve minimum costs, but this is not always appropriate, in some situations cost increases may be the best way to increase profits.

In CV Insan Lestari, production costs tend to increase every month, and the difference between the variant of the budget with the realization of production costs is negative (Unfavorable), this indicates that the realization of production costs is greater than the production cost budget, in CV Insan Lestari the condition is not followed by an increase in production, so the production costs incurred are considered inefficient, and this will have an impact on decreasing operating profit.

So in CV Insan Lestari there is an inconsistency between the realization of costs and what has been budgeted, meaning that the control of production costs carried out by CV Insan Lestari is considered ineffective.

**Operating Profit at CV Insan Lestari**

Operating profit is the profit the company makes before deducting interest and tax expenses (Dharma Kwon, Lippman, & Tang, 2011). Operating profit is largely determined by sales volume, price, production costs, marketing costs and other general costs (widhiani, 2015).

**Table 5**  
 Operating Profit  
 CV Insan Lestari 2014 – 2018

Month	YEAR				
	2014	2015	2016	2017	2018
January	33728880	22414280	24292280	27109280	24297080
February	32799270	32611470	24489470	24489470	23306470
March	31409550	21015170	22893170	23832170	24199170
April	34038750	32066850	22076850	25822850	26306470
Mei	33494130	32649030	29527030	26405030	25649170
June	33372060	23372060	23372060	26189060	25231350
July	33907290	23663150	30663150	24602150	26278300
August	31381380	21616130	31555130	23494130	25128060
September	30423600	21494060	31541010	23419010	24362810
October	29306190	20451770	29268770	23268770	23732530
November	30752250	30583230	30400230	25278230	24062330
December	32677200	27658350	32475350	24414350	23888650
<b>Total</b>	<b>387290550</b>	<b>309595550</b>	<b>332554500</b>	<b>298324500</b>	<b>296442390</b>

Source CV Insan Lestari data 2018

In CV Insan Lestari, the company's operating profit has decreased. Especially in 2015 decreased by 20% from the previous year and in 2017 decreased again by 10% from the previous year. One of the reasons is the company's production cost control which is not yet effective. Production costs incurred are not in accordance with the budgeted, also with a decrease in productivity at CV Insan Lestari so that production costs incurred are not efficient, it is a cause of decreased operating income at CV Insan Lestari.

If the company has effectively controlled production costs, realization of production costs will be in accordance with the production budget. The target of producing goods will be

achieved with the cost of production in accordance with the dianggakan. So the company can increase operating profit as planned.

**Efektivitas Pengendalian Biaya Produksi Terhadap Laba Operasi**

To see the relationship and the effect of controlling production costs on operating income, a statistical test was performed. The results are presented in the image below:

**Picture 1**  
 SPSS Correlation Test Results, Coefficient of determination, T Test and F Test  
 Controlling Production Costs To Operating Income At CV Insan Lestari

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.867 <sup>a</sup>	.751	.747	1.21517E6

a.Predictors: (Constant), Pengendalian\_Biaya\_Produksi  
 b.Dependent Variable: Laba\_Operasi

coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std Error	Beta	t	Sig.
1 (Constat)	6.576E6	2.061E6		3.191	.002
Pengendalian_Biaya_Produksi	.389	.029	.867	13.232	.000

a. Dependent Variable: Laba\_Operasi

ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.586E14	1	2.586E14	175.095	.000 <sup>a</sup>
Residual	8.564E13	58	1.477E12		
Total	3.442E14	59			

a. Predictors: (Constant), Pengendalian\_Biaya\_Produksi  
 b. Dependent Variable: Laba\_Operasi

The results of the correlation test, there is a positive correlation between controlling production costs to operating profit of 0.86, if interpreted with the correlation interpretation table, the correlation is included in the strong category, meaning that in CV Insan Lestari there is a strong positive correlation between controlling production costs to operating profit of 86.7%.

As for the results of the coefficient of determination amounted to 0.751, which means controlling production costs has an effect of 75.1% on operating profit. In this case it appears that controlling the cost of production affects amount of the operating profit.

the results of the hypothesis test using the F Test and T Test, using a degree of confidence of 95% produces a figure of 0,000 which means that in CV Insan Lestari effectively controlled production costs have a positive and significant effect on the company's operating profit. This is in line with the results of the study from(Hadya et al., 2017) that controlling costs and capital turnover has a significant effect on corporate economic profitability. also in line with the results of research from (Muktiadji & Soematri, 2009)that the cost of production that has been effectively controlled has an effect on company profits.

The increase or decrease in operating profit is largely influenced by controlling production costs. If operating profit want to increase, production costs must be efficient, because the large production costs will directly reduce the cost of goods sold and will directly increase the company's operating profit.

## **CONCLUSIONS AND SUGGESTIONS**

### **Conclusions**

Control of production costs is done so that companies can evaluate and make improvements in production costs so that production costs can be spent optimally. This will affect the acquisition of operating profit. The results of the statistical test, that controlling production costs is positively correlated with operating profit, effective cost control can increase a company's operating profit, it is tested with a 95% confidence level, stating that effective production cost control has a significant effect on operating profit.

### **Suggestions**

In order to create an effective production cost control, the company must be able to make standard costs well and realistically, it becomes the standard for cost control at the end of the company's period so that the company can make improvements to increase operating profit.

## **ACKNOWLEDGMENT**

Thank you to Kemenristekdikti for the grant funding for this study. We are also grateful to Universitas Galuh Ciamis for the support it has provided, especially from the various facilities that have been provided to improve the skills and competence of its human resources.

## **REFERENCES**

- Ayuningtyas, D. (2013). *Evaluasi Penerapan Biaya Standar Sebagai Alat Perencanaan Dan Pengendalian Biaya Produksi Pada Harian Tribun Manado*. EMBA, 1(4), 1911–1921.
- Dharma Kwon, H., Lippman, S. A., & Tang, C. S. (2011). *Sourcing decisions of project tasks with exponential completion times: Impact on operating profits*. International Journal of Production Economics, 134(1), 138–150. <https://doi.org/10.1016/j.ijpe.2011.06.007>
- Hadya, R., Begawati, N., & Yusra, I. (2017). *Analisis Efektivitas Pengendalian Biaya, Perputaran modal kerja, dan Rentabilitas Ekonomi Menggunakan regresi Data Panel*. Research of Management, Accounting, and Economics, 01(03), 153–166. Retrieved from <https://ojs.akbpstie.ac.id/index.php/jurnal-pundi/article/view/53/44>
- Haryono sugeng. (2018). *Pengaruh Penggunaan Website Terhadap Penjualan produk Pengusaha UMKM Pada Asosiasi Industri Kreatif Depok*. Sosio e - Kons, 10(1), 39–46.
- Kho, J. S., & Jeong, J. (2019). *ScienceDirect On On Reflecting Reflecting Optimal Optimal Inventory Inventory of of Profit Profit and and Loss Loss Perspective Perspective for for Production Planning Production Planning*. Procedia Computer Science, 155(2018), 722–727. <https://doi.org/10.1016/j.procs.2019.08.104>
- Malue, J. (2013). *Analisis Penerapan Target Costing Sebagai Sistem Pengendalian Biaya Produksi Pada PT Celebes Mina Pratama*. EMBA, 1(3), 949–957.
- Martusa, R., & Jennie, M. (2010). *Evaluasi Biaya Standar Dalam Pengendalian Biaya Produksi (Studi Kasus Pada PT Rajawali Subang)*. Bisnis, Manajemen Dan Ekonomi, 9(11), 1–22.



- Muktiadji, N., & Soematri, S. (2009). *Analisis Pengaruh Biaya Produksi Dalam Peningkatan Kemampuanlabaan Perusahaan Studi Kasus di PT HM Sampoerna Tbk*. Jurnal Ilmiah Kesatuan, 11(1).
- Ohiomah, A., Andreev, P., Benyoucef, M., & Hood, D. (2019). *The role of lead management systems in inside sales performance*. Journal of Business Research, 102(May), 163–177. <https://doi.org/10.1016/j.jbusres.2019.05.018>
- Patonah, R. (2018). *Pengaruh Loan to Deposit Ratio terhadap Laba Operasional (Suatu Kasus pada PT.Bank Mandiri (Persero) yang Terdaftar di Bursa Efek Indonesia)*. Sosio E-Kons, 10(3), 253. <https://doi.org/10.30998/sosioekons.v10i3.2872>
- Pérez-gómez, P., Arbelo-pérez, M., & Arbelo, A. (2018). *Profit efficiency and its determinants in small and medium-sized enterprises in Spain*. Cuadernos de Economía y Dirección de La Empresa. <https://doi.org/10.1016/j.brq.2018.08.003>
- Seok, H., & Chen, C. (2019). *An intelligent wind power plant coalition formation model achieving balanced market penetration growth and profit increase*. Renewable Energy, 138, 1134–1142. <https://doi.org/10.1016/j.renene.2019.02.064>
- Septariani, D., & Johan, R. S. (2018). *Analisis Pengaruh Struktur Modal Terhadap Profitabilitas Program Studi Pendidikan Ekonomi*, 10(3), 261–269.
- Setyaningrum, R. M., & Hamidy, M. F. (2008). *Analisis Biaya Produksi Dengan Pendekatan Theory of Constraint*. Riset Ekonomi Dan Bisnis, 8(1), 26–36. Retrieved from <http://www.ejournal.upnjatim.ac.id/index.php/rebis/article/view/51>
- Skagemo, V., Sonesson, A. K., Meuwissen, T. H. E., & Rye, M. (2010). *Increased profits in aquaculture through optimised dissemination schemes*. Aquaculture, 300(1–4), 65–72. <https://doi.org/10.1016/j.aquaculture.2010.01.004>
- Teherkhani, G., & Alumur, S. A. (2018). *Profit Maximizing Hub Location Problem*. Omega, 1–36. <https://doi.org/10.1016/j.omega.2018.05.016>
- Watania, I. (2013). *Analisis Varian Biaya Operasional dalam Mengukur Efektivitas Pengendalian Biaya Operasional PT Pegadaian*. EMBA, 1(3), 692–702.
- Wijaya, O., & Syafitri, L. (2011). *Analisis Pengendalian Biaya Produksi Dan Pengaruhnya Terhadap Laba Pabrik Penggilingan ( PP ) Srikandi Palembang*. Retrieved from [http://eprints.mdp.ac.id/681/1/Jurnal 2009.21.0049 Yuke Oktalina Wijaya.pdf](http://eprints.mdp.ac.id/681/1/Jurnal%202009.21.0049%20Yuke%20Oktalina%20Wijaya.pdf)
- Wijayanti, R. R. (n.d.). *Strategi Pemberdayaan UMKM Menghadapi Pasar Bebas Asean*, 1–32.