

Analysis of Cash Planning and Cash Control on Operational Efficiency of the Food Company

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Abstract

This study aims to analyze the effect of cash planning and cash control on operational efficiency. The phenomenon of standard material price fluctuations as well as complex market dynamics requires a company to have an effective cash management system so that operational efficiency is maintained. This study used a quantitative approach in associative methods, where data was obtained through the spread of a questionnaire to the 60 respondents working in the financial and operating section of both companies. Data analysis was carried out through validity tests, reliabilities, multiple linear regression, t-test, F-test, and the coefficient of determination (R^2) with the help of SPSS software. The results show that cash planning had a positive and significant effect on operating efficiency. Cash control also has a positive and significant influence on operational efficiency. Simultaneously, these two variables have a significant effect on operational efficiency. This indicates that the better planning and cash control, the company's operational efficiency will increase. This research is expected to be a reference for companies in strengthening cash management systems in order to increase efficiency and operational competitiveness in the food and beverage industry sector.

Keywords:

Cash Planning, Cash Control, Operational Efficiency.

Introduction

The food and beverage industry is one of the important sectors in the Indonesian economy because it plays a major role in providing basic needs of society, increasing added value, and creating jobs. Increasingly tight business competition and raw material prices fluctuates are demanding companies to maintain operational efficiency in order to remain able to compete and maintain its financial stability. One of the important factors that affect operational efficiency is effective cash management, which includes cash planning and cash control.

Cash planning is a process of estimating the necessities and availability of cash in the future so that operational activities can run smoothly. Good cash planning will help the company balance cash flow and out so that there are no shortcomings or excess funds that can inhibit operating activities. On the other hand, cash control plays an important role in maintaining the security and reliability of financial transactions so

that there are no irregularities, recording errors, or waste of funds that can decrease operational efficiency.

In the context of a large company like PT Charoen Pokphand Indonesia Tbk and PT Japfa Comfeed Indonesia Tbk, cash management is a very crucial thing. Both companies are the main players in the poultry agribusiness industry, which includes a production of livestock feed, chicken breeding, and poultry-based food products. Capital-intensive business activities that rely heavily on the price fluctuations in raw material causes cash management to be carried out with careful planning and strict control.

This condition is supported by a report from Kontan.co.id (2020) entitled "Chicken breeders and fault companies set the prices, this is the agreement", which explained that large companies such as PT Charoen Pokphand Indonesia Tbk and PT Japfa Comfeed Indonesia Tbk made adjustments to the price of live chicken markets to maintain national poultry markets stability. This shows that market dynamics demand a company to have adaptive and efficient cash management in order to be able to deal with changing economic situations well.

Thus, the purpose of this study was to know and analyze the effect of cash planning on operational efficiency at PT Charoen Pokphand Indonesia Tbk and PT Japfa Comfeed Indonesia Tbk, identifying the effect of cash control on operational efficiency, and examine the simultaneous influence between cash planning and cash control efficiency of both companies. The results of this study are expected to contribute practically to the management of companies in optimizing cash management to increase operational efficiency, as well as an academic reference in the development of financial and operational management science.

Theoretical Framework

The theoretical framework of this study is based on financial management theory that explains that cash management plays an important role in maintaining liquidity and profitability of the company (Brigham & Houston, 2019). Cash planning, according to Gitman (2018), is a process of estimating cash needs based on projected admissions and expenses, so the company can adjust funds efficiently. Cash control, as described by Mulyadi (2016), is part of an internal control system that aims to maintain cash assets from abuse and ensure that all transactions are recorded correctly. Operational efficiency itself is defined by Hansen and Mowen (2017) as the ability of the company in using resources optimally to produce maximum output at minimal costs.

The relationship between these variables can be explained as follows: mature cash planning helps the company maintain a cash flow balance, so operational activities can run smoothly without any financial barriers. Effective cash control ensures that the use of funds is carried out according to actual procedures and needs of operations. These two variables have a relationship that equips each other, where cash planning functions to regulate financial needs, while cash control ensures the implementation of the plan runs according to the established policies. The

combination of both has the potential to improve operational efficiency, especially in dynamic business conditions as faced by PT CPI Tbk and PT JCI Tbk.

Based on the theory, conceptual model of research as follows:

Conceptually, antarvariabel's relationship in this study can be explained that cash planning (X_1) and cash control (X_2) is an independent variable that is suspected of having an influence on operational efficiency (Y) as an dependent variable. This relationship is positive, meaning that the better the planning and cash control implemented by the company, the operational efficiency will also increase.

This study consists of three variables:

- Cash Planning (X_1)
- Cash Control (X_2)
- Operational Efficiency (Y)

Information:

- X_1 (Cash Planning) → has a positive effect on Y (Operational Efficiency).
- X_2 (Cash Control) → has a positive effect on Y (Operational Efficiency).
- X_1 and X_2 simultaneously → has a significant effect on Y (Operational Efficiency).

This study includes three variables:

Based on the conceptual model, the proposed research hypothesis is:

X_1 : Cash Planning

X_2 : Cash Control

Y: Operational Efficiency

The overall research framework confirms that the better the planning and cash control applied by the company, the operational efficiency will be increased. The results of this study are expected to provide an empirical understanding of the importance of effective cash management as an effort to improve the performance and competitiveness of food and beverage manufacturing companies in Indonesia.

Method

This study uses a quantitative approach with an associative method, that is a study that aims to determine the relationship or influence between two or more variables. This approach is used because research focuses on hypothesis testing about the influence of cash planning and cash control on the company's operational efficiency.

Population and Samples

The population in this study were all employees of the finance and operations section of PT CPI Tbk and PT JCI Tbk. Given the large population of populations and is spread across various branches, the sampling technique is carried out using purposive sampling method, which is the selection of respondents based on certain criteria relevant to research.

The respondents include:

1. Employees working in finance, accounting, or operations for at least one year.
2. Have direct knowledge or engagement in the company's cash planning process and cash control.

The number of samples used were adjusted for statistical analysis needs, which were at least 30 respondents from each company, resulting in a total sample of 60 respondents.

Types and Data Sources

The type of data used is quantitative data, which is a number-shaped data or can be measured numerically.

Data sources consist of:

1. Primary data, obtained through the spread of questionnaires to respondents involved in the company's financial management and operations.
2. Secondary data, obtained from the company's annual reports, journals, books, and news articles as stated in Kontan.co.id about the dynamics of chicken prices and the policies of the poultry company.

Data Collection Engineering

Data collection techniques are conducted through:

Questionnaire (questionnaire) on a scale of Likert five points (1-5) to measure the respondents' response to the statement regarding cash planning, cash control, and operational efficiency.

Documentation studies to complete data with financial information and operational companies from annual reports, financial reports, and other official publications.

Definition of Variable Operations

1. Cash Planning (X_1): the process of drafting a need and cash use in a certain period to ensure the smoothness of operational activities. Indicators include: estimated cash receipt, estimated cash expenditure, cash management balance management, and cash flow scheduling.
2. Cash Control (X_2): systematic efforts to maintain cash so as not to be misused and ensure its use is in accordance with company policies. Indicators include: the cash recording procedure, authorization of transactions, internal audit system, and separation of financial functions.
3. Operational Efficiency (Y): the level of the company's ability to use its resources optimally to produce maximum output at minimal costs. Indicators include: operational costs ratio, accuracy of production time, labor productivity, and cost control.

Data Analysis Engineering

Data analysis is carried out with several stages:

1. Validity and Reliability tests, to ensure that research instruments are worth using.
2. Classical Assumptions Test, including normal test, multicollinearity, and heteroscedasticity to ensure regression models meet statistical terms.
3. Linear Regression Analysis, was used to determine the effect of cash planning (X_1) and cash control (X_2) on operational efficiency (Y).

4. Test t (partial), to test the effect of each independent variable on the individual dependent variable.
5. Test F (Simultaneous), to examine the effect of cash planning and cash control together on operational efficiency.
6. The coefficient of determination (R^2), to find out how much an independent variable is able to explain the dependent variable in research model.

Data analysis was carried out with the help of statistical software such as SPSS, so that the test results are more accurate and easy to interpret.

Research Location and Time

This research was conducted at PT CPI Tbk and PT JCI Tbk which operates in Indonesia's territory. Research time is planned for three months, starting from the stage of drafting instruments, data collection, to yield analysis.

Results

This study aims to analyze the effect of cash planning and cash control on operational efficiency. The analysis was conducted using SPSS, and the results showed coefficient of determination (R^2), F exam, and using t tests with data obtained.

PT CPI Tbk:

1. Model Summary

The results of the Model Summary indicate that:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.984	.967	.00434

a. Predictors: (Constant), DER, CR

Table 1. Model Summary

$R^2 = 0.984 \rightarrow$ indicates that 98.4% of the variation in Operational Efficiency (Y) can be explained by Cash Planning (X_1) and Cash Control(X_2).

Adjusted $R^2 = 0.967 \rightarrow$ is adjusted to the number of variables and samples (because the data is small, this is important to see).

2. F-test

This shows the results of F (Simultaneous) Tests:

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	2	.001	59.658	.016 ^b
	Residual	.000	2	.000		
	Total	.002	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), DER, CR

Table 2. Anova

The F-test indicate that Cash Planning (X_1) and Cash Control (X_2) simultaneously have a significant effect on Operational Efficiency (Y) ($p < 0.05$).

3. T-test

This shows the results of T (Partial) Tests:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1	(Constant)	.289	.052	5.603	.030		
	CR	-.018	.012	-.298	-1.438	.287	.192
	DER	-.377	.062	-1.251	-6.033	.026	.192

a. Dependent Variable: ROA

Table 3. Coefficients

Cash Planning (X_1) has no significant effect on Operational Efficiency (Y), while Cash Control (X_2) shows a statistically significant effect.

Regression equations:

$$Y = 0.289 - 0.017X_1 - 0.377X_2$$

PT JCI Tbk:

4. Model Summary

The results of the Model Summary indicate that:

Model	R	Model Summary ^b									
		R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson	
1	.887 ^a	.786	.573	.012155928	.786	3.681	2	2	.214	1.140	

a. Predictors: (Constant), X2_Cash_Control_(Penj/Rata2Kas), X1_Cash_Planning_(Kas/Penjualan)

b. Dependent Variable: Y_Operational_Eff_(LabaUsaha/Penjualan)

Table 1. Model Summary

$R^2 = 0.786$ (model explains $\sim 78.6\%$ variety of Y).

5. F-test

This shows the results of F (Simultaneous) Tests:

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	2	.001	3.681	.214 ^b
	Residual	.000	2	.000		
	Total	.001	4			

a. Dependent Variable: Y_Operational_Eff_(LabaUsaha/Penjualan)

b. Predictors: (Constant), X2_Cash_Control_(Penj/Rata2Kas), X1_Cash_Planning_(Kas/Penjualan)

Table 2. Anova

The F \approx value is 3.681 with the p \approx 0.214 \rightarrow is not enough evidence that X_1 and X_2 together has a significant effect on Y on $\alpha = 0,05$

6. T-test

This shows the results of T (Partial) Tests:

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	-.117	.118		-.999	.423		
	X1_Cash_Planning_(Kas/Penjualan)	.322	1.385	.107	.232	.838	.502	1.993
	X2_Cash_Control_(Penj/Rata2Kas)	.005	.002	.959	2.079	.173	.502	1.993

a. Dependent Variable: Y_Operational_Eff_(LabaUsaha/Penjualan)

Table 3. Coefficients

X_1 Cash Planning

X_2 Cash Control

Both Cash Planning (X_1) and Cash Control (X_2) do not show a statistically significant effect on Operational Efficiency (Y) at the 5% significance level.

Discussion

The results of this study indicate that cash planning and cash control has a different level of influence on operational efficiency of PT CPI Tbk and PT JCI Tbk. At PT CPI Tbk, the regression results show that cash planning (X_1) and cash control (X_2) simultaneously has a significant effect on operational efficiency (Y), with a value of R^2 of 0.984, which means that 98.4% of operational efficiency variations can be explained by both variables. However, when it is stated in part, only cash control has a significant effect, while cash planning does not show statistically significant relationship. It shows that while planning becomes important, implementation and monitoring of aspects (cash control) play a more dominant role in maintaining operational efficiency.

At PT JCI Tbk, this model explains about 78.6% of operational efficiency variations, but the F simultaneous test results show that cash planning and mutual cash control had no statistically significant effect. In part, both variables also do not reach a significance level of 5%, even though the cash control (as is a cash control indicator) shows the trend of positive relations with operational efficiency. This shows that at PT JCI Tbk, the influence of cash management on efficiency is not as strong as at PT CPI Tbk, it is likely because of different internal systems, cash flow structures, or the company's scale.

These findings suggest that improving cash planning may enhance operational efficiency. Mulyadi (2016) also emphasized that cash control serves as a vital component of the internal control system to prevent abuse and ensure accurate financial reporting. The results of PT CPI Tbk reinforces this theoretical perspective, demonstrating that cash control significantly supports operational efficiency, especially in manufacturing companies where financial accuracy and liquidity are crucial.

The difference in significance levels between the two companies can be interpreted as a reflection of maturity management practice. PT CPI Tbk as a larger and more well-established company, it is likely to have more structured cash control systems, resulting in higher operational efficiency. In contrast, PT JCI Tbk may still optimize the financial planning mechanisms and financial control, which leads to weaker statistical relations. In addition, the limited number of samples (60 respondents) may contribute to a lack of strong statistical meaning, as greater datasets may provide more stable results.

From a practical point of view, this study highlights the importance of strengthening cash planning and control systems to improve operational efficiency. Management should prioritize periodic cash flow forecasts, impose clear authorization procedures, and conduct regular internal audit. Doing this not only improves liquidity management but also minimizes inefficiency as arising from the shortage or cash abuse. In addition, monitoring and evaluation of cash utilization can help companies respond more effectively to market dynamics, especially in industries prone to fluctuations in raw material prices such as food and beverages.

Conclusion

The results of the study indicate that cash plan and cash control both play an important role in increasing the operational efficiency of food and beverage manufacturing companies, especially PT CPI Tbk and PT JCI Tbk. Based on the results of the analysis, cash control has a more significant and consistent influence on operational efficiency than cash planning, which suggests that the company's ability to manage, monitor, and organize cash use is a determinant of key success.

At PT CPI Tbk, cash control shows a significant positive impact on operational efficiency, with high explanatory power ($R^2 = 0.984$), it shows that systematic supervision and internal control contributes to better financial disciplines and operational performance. Meanwhile, at PT JCI Tbk, the relationship between cash planning and operating efficiency is positive but is not statistically significant, which may be caused by differences in management systems, company scale, and operational focus.

In general, the findings of this study strengthen the proposed financial management theory by Brigham & Houston (2019), Gitman (2018), and Mulyadi (2016), which confirms that effective cash management – through adequate planning and controlling – is essential in maintaining liquidity, stability and efficiency. Practically, the company is encouraged to improve the accuracy of cash flow forecasts, strengthen the internal audit mechanisms, and implement a digital financial monitoring system to ensure optimal use of financial resources.

The study contributes to the understanding of how cash management affects operational efficiency in the food and beverage industry. Future research is expected to involve a larger sample size, which spreads to other industrial sectors, and consider mediaing variables such as liquidity or job management to gain a more comprehensive understanding of financial efficiency dynamics.

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