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# Preface

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**Journal of Applied Sciences in Accounting, Finance, and Tax** is a forum provided for researchers, both from universities, practitioners and the industrial world. The publication is a result of research, studies or ideas on Accounting, Finance, and Tax.

JASAFINT is published with a focus and scope on issues on Accounting (Financial Accounting, Management Accounting, Public Accounting, Auditing, and Accounting Information Systems), Finance (Capital Market, Financial Statements Analysis, and Financing), and Tax (Income Tax, VAT, Tax Audit, and Tax Accounting).

Managed by the Department of Accounting and published by Politeknik Negeri Bali Research and Community Service Center (P3M-PNB), this journal is intended to disseminate scientific knowledge and the application of the Accounting, Finance and Tax and is expected to be able to broaden the readers' perspective and enrich the scientific repertoire.

Published on April and October (since 2018), the journal accepts articles in English with mentioned format: research results, literature studies and work reports in line with the focus and scope of JASAFINT.

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## Analysis of Cost Control on Food and Beverage in Mercure Resort Sanur

**A.A Istri Yunita D.D.A.S<sup>\*</sup>, I M M Arsana, and L M Wahyuni**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

<sup>\*</sup>e-mail: agungyunita18@gmail.com

**Abstract.** There is a deviation in the cost of food and beverages between the standard cost and the actual cost. Likewise, the weakness in controlling the cost of food and beverages. The purpose of this research, which is to identify the cause of conflict between the standard (standard cost) with the actual cost (actual cost) food for breakfast and beverage for cocktail, and to know how the control costs of food for breakfast and beverage for cocktail. Data collection method used in this research, namely the observation, interview, and documentation. To achieve the quantitative analysis is used to calculate the cost of food and beverage are sold, cost variance, economic order quantity (EOQ), safety stock, maximum inventory and re-order point and descriptive-qualitative analysis technique. The results of research conducted by using data collected showed that 1) The deviation between standard cost and actual cost food for breakfast and beverage for cocktail is caused by increasing percentage of purchasing, any shortage of food for breakfast and beverage for cocktail and the amount of processing raw materials which is not accordance with the standard recipe. 2) Cost control of food and beverage is not optimally, where the employees are inconsistent in running the Standard Operating Procedure (SOP) and there are advantages and disadvantages of inventory due to those not do the calculation economically so that the differences are unfavorable.

**Keywords :** Standard cost, actual, food and beverages, Standard Operating Procedure (SOP) and cost control

### 1. Introduction

Each of the hotel management has set revenue targets to be achieved. Therefore, need to be considered in the management and control of expenses incurred in the business of selling food and beverage, especially control over the cost of food and beverages [1]. Approach to controlling the cost of food and beverages is done by evaluating the actual cost at the standard cost. If there is difference, it is necessary to be adjusted [1]. In its analysis when the company suffered a loss due to the actual cost is greater than the standard cost. Mercure Resort Sanur has set the standard costs and actual costs that occurred during 2017.

**Table 1.** Standard Cost, Actual Cost, And Variance  
Food and Beverage At Mercure Resort Sanur In 2017

Quarterly	Month	Food Cost			Beverage Cost		
		Standard Cost	Actual Cost	Variance	Standard Cost	Actual Cost	Variance
First Quarter	January	36.39%	43.09%	-6.70%	30.99%	27.76%	3.23%
	February	36.22%	39.76%	-3.54%	30.99%	25.07%	5.92%
	March	36.20%	37.50%	-1.30%	30.99%	31.21%	-0.22%
Quarter	April	36.21%	38.15%	-1.94%	30.99%	28.78%	2.21%
	May	36.58%	36.31%	0.27%	30.99%	30.18%	0.81%
	June	37.23%	36.73%	0.50%	30.99%	27.41%	3.58%
Third Quarter	July	36.83%	36.97%	-0.14%	30.99%	26.19%	4.80%
	August	36.93%	37.40%	-0.47%	30.99%	27.32%	3.67%
	September	36.41%	38.62%	-2.21%	30.99%	29.28%	1.71%
Fourth Quarter	October	36.41%	38.56%	-2.16%	30.99%	29.76%	1.22%
	November	36.16%	39.25%	-3.09%	30.97%	32.06%	-1.08%
	December	36.22%	44.84%	-8.62%	30.98%	30.00%	0.98%

According to the table 1.1 in mind that in the fourth quarter of deviation standard cost and the actual cost of food and beverage that is high enough. In connection with a related problem, food and beverage cost control becomes very important to control the cost of food and beverage so that the costs incurred in accordance with established standards. The formulation of the problem in this research are: 1) What are the underlying causes of the deviation between standard cost and the actual cost of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur ?, 2) How do I control the cost of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur. Referring to the formulation of the problem, the purpose of this study are: 1) To identify the cause of the deviation between standard costs (standard cost) and the actual cost (actual cost) of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur, 2) to determine how to control the cost of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur.

## 2. Literature review

Cost is the sacrifice of economic resources is measured in units of money that is sacrificed or used in order to earn revenues and will be used as a deduction from earnings [2,3].

Food is one of the products sold in the restaurant or room service at the hotel. To help maintain the quality of service and quality of food served, the hotel must have a standard storage and processing of raw foods. The cost of raw food is the cost that should happen is calculated by applying the cost of the raw prescription food is concerned [1]. The actual cost price of food is the price of staple foods that actually happened to produce food for a period [1]. Generally, the actual cost of food is determined each month-end and year-end. The actual cost price of food is determined by physically counting on groceries were still there.

Beverage is one of the products sold in the restaurant and bar. Beverage is any fluid that can be taken, except drugs. The cost of standard beverage is the cost that should happen. For this type of soft beverage and beer, the price of raw staple for every bottle is the cost for the content of soft beverage and beer are paid by the hotel to partners [4].

Variance is an aberration actual cost of the standard cost [3]. The difference is twofold difference that profit if the standard cost is greater than the actual cost and the difference harm if the standard cost is less than the actual costs. Adverse Difference will be analyzed and investigated the cause of the analysis to then find a way out to overcome them.

Controlling costs is a tool for management in overseeing hotel operations to achieve goals effectively and efficiently by comparing the performance with the plan and make the appropriate action to correct the existing differences [5,6],

Controlling the cost of food and beverages by aiming to [4]:

- 1) Quality control of food products and beverages offered.
- 2) Controlling the cost of food and beverages.
- 3) Achieve specified earnings targets.
- 4) The necessary corrective actions.
- 5) Improve operational efficiency of food and beverages section.

### **3. The operational definition of variables**

#### *3.1 Control*

Control is a systematic effort to achieve goals effectively and efficiently by comparing the performance with the plan and make the appropriate action to correct the existing differences [5].

#### *3.2 Potential Cost*

Potential cost is the cost or price of staple foods and beverages that should be obtained if food or beverage are actually processed or prepared according to the recipe that is raw and has been set, and can be expressed in the form or the value of cash (bank notes), for example in the form of rupiah, dollar, pound sterling, and others, as well as in the form of a percentage (cost%) [7].

#### *3.3 Actual Cost*

*Actual cost* is the cost or price of staple foods or beverages which in fact occurs or acquired after food or beverage is processed or after processing until ready to serve. Actual cost will be seen from the calculation in food and beverage cost of reconciliation (monthly report) or daily report flash food costs [7].

#### *3.4 Standard Cost*

*Standard cost* is the cost determined in advance, which is the amount of costs that should be spent for one unit of product or to finance certain activities, under the assumption of the economic, efficient and certain other factors [3]. Standard cost percentage set at Mercure Resort Sanur is different every month. This is because the standard cost set refers to the use of charge every day.

#### *3.5 Variance*

Variance is an aberration actual cost of the standard cost [3]. This cost difference can occur because the actual cost comparison to the standard cost. It can be said company experienced a profit if its actual cost is less than the standard cost planned by the company. Meanwhile, when the company suffered a loss, the actual costs are greater than the standard cost planned by the company.

### **4. Research methods**

#### *4.1 Data types*

Quantitative data is data in the form of numbers. The quantitative data in this study is the value of inventory beginning and the end, the amount of the purchase and the purchase price, the amount of usage / consumption of materials, cost of ordering food and beverage, storage costs of food and beverage, the amount of inventory the minimum and maximum set out hotel, the standard recipe, reconciliation reports the cost of food and beverages (food and beverage), as well as the income statement for departmental food and beverage. The qualitative data in this research is the organizational structure, job descriptions and indicators of strengths and weaknesses of food and beverage cost control.

## 4.2 Data source

Primary data in this study, the cost of food and beverage ordering and storage of food and beverage costs were obtained through interviews of parts purchasing, store and cost control at the Mercure Resort Sanur. Secondary data in this research is the organizational structure, job description, minimum and maximum inventory quantities specified hotel, standard recipe, reconciliation reports the cost of food and beverage, and the income statement of departmental food and beverage.

## 4.3 Sampling Procedure

In this study, observations were made by direct observation to the field to know the situation of food and beverage cost control and the problems encountered. In this study, interviews were conducted with parts purchasing, receiving, store and cost control on the activities of food and beverage cost control. Data obtained through documentation study in this research is the organizational structure, job description, the amount of inventory the minimum and maximum set out hotel, the recipe raw (standard recipe), reconciliation reports the cost of food and beverages (food and beverage), as well as the income statement departmental food and beverage.

## 5. Results and discussion

### 5.1. Analysis of Standard Cost with Actual Cost

To identify the cause of the deviation indicators of the standard cost and the actual cost it is done by comparing the reconciliation statement between the cost of food and beverage standard costs with actual costs, from this comparison can be identified indicators that cause strong-weak food and beverage cost control. Based on this comparison it can be seen that the cause of the deviation between the standard cost and the actual cost of food and beverages in 2017 is as follows:

In October 2017, it can be identified that the cause of the standard cost deviation with the actual cost of food ingredients is an increase in the total gross food cost of 1.15% from the standardized amount of 44.50% to 45.65%. Where the total gross food cost consists of the total opening inventory coupled with the total purchase to play store and direct to main kitchen minus the total closing inventory for main store and kitchen, and an increase in purchases in October 2017 which was 2.74%. While total credit outlets decreased by 1.01% because there were indicators that decreased, namely entertainment-FO by 1.04%, entertainment-T & C by 0.01% and food to bar by 0.03%, but there are also some indicators that experienced increases like officer check-A & G of 0.03%, officer check-FO of 0.01%, officer check-T & C of 0.01% and S & M entertainment of 0.03%. Then for beverage ingredients in October 2017 after a search, the causes of irregularities were identified as a decrease in the total gross beverage cost of 1.65% from the standardized amount of 33.22% to 31.56%. Where the total gross beverage cost consists of the total opening inventory coupled with the total purchase for Service Bar, Breeze Bar and Sahadewa Bar minus the total closing inventory for Service Bar, Breeze Bar and Sahadewa Bar and a decrease in purchases in October 2017 which is 7, 29% and credit outlets also decreased by 0.43% because there were several indicators that experienced a decline such as officer check-A & G of 0.09%, officer check-T & C of 0.01%, entertainment FO of 0.39%, entertainment A & G at 0.09%, but there are also indicators that have increased by bar to food by 0.15%.

Whereas for November 2017 identified the causes of irregularities were an increase in the total gross food cost of 3.71% from the standardized amount of 49.88% to 53.58%. Where the total gross food cost consists of the total opening inventory plus total purchase to play store and direct to main kitchen minus the total closing inventory for main store and kitchen and an increase in purchases in November 2017 which is equal to 0.36% and total credit outlets also increased by 0.62% because there were several indicators that experienced increases such as A & G officer check-in at 0.45%, FBK officer check-in at 0.03%, 0.01% check-sales officer, FBS officer check-in by 0.01%, entertainment S & M by 0.13%, A & G entertainment by 0.06%, entertainment FBK by 0.16%, T & C entertainment by 0.14% and food to bar by 0.22%, but there are also indicators that experienced a decrease were entertainment-FO by 0.61%.



Whereas the beverage cost identified the cause of the deviation was the increase in the total gross beverage cost of 0.77% from the standardized amount of 35.50% to 36.27%. Where the total gross beverage cost consists of the total opening inventory coupled with the total purchase for Service Bar, Breeze Bar and Sahadewa Bar minus the total closing inventory for Service Bar, Breeze Bar and Sahadewa Bar and a decrease in purchases in November 2017 which is 7, 95% and credit outlets also decreased by 0.32% because there were several indicators that experienced a decline such as officer check-A & G of 0.52%, officer check-FBK of 0.03%, officer check-sales of 0.02%, officer check-FBS of 0.02%, FO entertainment of 0.26%, but there are also some indicators that experienced an increase namely A & G entertainment by 0.47% and bar to food by 0.07%.

In December 2017 identified the causes of irregularities were an increase in the total gross food cost of 10.01% from the standardized amount of 41.87% to 51.88%. Where the total gross food cost consists of the total opening inventory coupled with the total purchase to play store and direct to main kitchen minus the total closing inventory for main store and kitchen and an increase in purchases in December 2017 that is equal to 1.21% and credit outlets also increased by 0.62% because there were several indicators that experienced an increase such as officer check-A & G of 0.45%, officer check-FBK of 0.03%, officer check-sales of 0.01%, officer check-FBS for 0.01%, entertainment S & M by 0.13%, A & G entertainment by 0.06%, entertainment FBK by 0.16%, T & C entertainment by 0.14% and food to bar by 0.22%. Beverage Cost in December 2017 identified the causes of irregularities, namely a decrease in the total gross beverage cost of 0.52% from the standardized amount of 36.74% to 36.21%. Where the total gross beverage cost consists of the total opening inventory coupled with the total purchase for Service Bar, Breeze Bar and Sahadewa Bar minus the total closing inventory for Service Bar, Breeze Bar and Sahadewa Bar and an increase in purchases in November 2017 which is 5, 49% and total credit outlets also increased by 0.45% because there were several indicators that experienced increases such as officer check-A & G of 0.70%, officer check-SPA of 0.02%, officer check-FO of 0.02% officer check-sales of 0.01%, A & G entertainment of 0.15% and bar to food of 0.15%, but there are also some indicators that have decreased, namely officer check-T & C of 0.02%, officer check- FBK is 0.02%, officer check-FBS is 0.02%, officer check-HK is 0.01%, entertainment-SM is 0.01% and entertainment-FO is 0.53%.

### 5.2 The Food And Beverage Cost Control At Mercure Resort Sanur

**Table 2.** Total Economic Order, Inventory Minimum, Stock Maximum And Re-Order Point Raw Food And Beverage In 2017

Type inventory	Total economic order quantity	Minimum inventory	Maximum inventory	Re-order point
Chicken Broiler	214 kg	32 kg	246 kg	48 kg
Bacon Smoked	139 kg	27 kg	166 kg	36 kg
Sausage Chicken	94 kg	9 kg	103 kg	15 kg
Balimoon Blanco	21 bottles	4 bottles	25 bottles	8 bottles
Vibe Tequila	24 bottles	3 bottles	28 bottles	5 bottles
Ice Land Vodka	24 bottles	6 bottles	30 bottles	10 bottles

So when Mercure Resort Sanur apply for controlling the quantity of the food and beverage inventory level economic order in 2017 are shown in the table at 4:20. Wherein, the number of economically that should be done in order to perform a first food ingredient broiler chicken is equal to 214 kg with a minimum amount of inventory is owned by 32 kg and maximum inventory owned amounted to 246 kg. When the supply is already showing the number as much as 48 kg, booking has to be done again (re-order point). Then for the second food material, economic quantities that should be done in order to

perform once smoked bacon is equal to 139 kg with a minimum amount of inventory is owned by 27 kg and maximum inventory owned amounted to 166 kg. When the supply is already showing the number as much as 36 kg, booking has to be done again (re-order point). Then for the third food material, economic quantities that should be done in order to carry out a chicken sausage is equal to 94 kg with a minimum amount of inventory is owned by 9 kg and maximum inventory is owned by 103 kg. When the supply is already showing the amount of 15 kg, the reservation has to be done again (re-order point). Reservations had to be done again (re-order point). Then for the third food material, economic quantities that should be done in order to carry out a chicken sausage is equal to 94 kg with a minimum amount of inventory is owned by 9 kg and maximum inventory is owned by 103 kg. When the supply is already showing the amount of 15 kg, the reservation has to be done again (re-order point). reservations had to be done again (re-order point). Then for the third food material, economic quantities that should be done in order to carry out a chicken sausage is equal to 94 kg with a minimum amount of inventory is owned by 9 kg and maximum inventory is owned by 103 kg. When the supply is already showing the amount of 15 kg, the reservation has to be done again (re-order point).

Economic quantities that should be done in order to perform a first beverage ingredient Balimoon Blanco is 21 bottles with a minimum amount of inventory is owned by 4 bottles and maximum inventory is owned by 25 bottles. When the supply is already showing the number as many as eight bottles, then the booking has to be done again (re-order point). Then for the second beverage ingredient vibe is equal to 24 bottles of tequila with a minimum amount of inventory is owned by 3 bottles and maximum inventory is owned by 28 bottles. When the supply is already showing the number as many as 5 bottles, booking has to be done again (re-order point). Then for the second beverage ingredient vibe is equal to 24 bottles of tequila with a minimum amount of inventory is owned by 6 bottles and maximum inventory is owned by 30 bottles. When the supply is already showing the number as many as 10 bottles, the reservation has to be done again (re-order point).

## 6. Conclusions

The cause of the deviation between standard cost and the actual cost of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur, among others: the percentage increase in purchases due to the frequency purchase material cannot be determined, any shortage of food for breakfast and beverage for a cocktail that caused the urgent purchase of materials inventory, raw material processing, especially of raw materials beverage that is not maximized in the use of dose beverage so it is not in accordance with the standard recipe.

Controlling the cost of food for breakfast and beverage for a cocktail at the Mercure Resort Sanur done less than the maximum, where employees are less consistent in running standard operating procedures (SOP) has been established, because they often purchase goods urgent because it is not done the calculations are economical to supply and reservations so result in the difference in cost is not profitable.

## 7. Acknowledgment

We would like to thank all those who helped and supported in completing this research, as well as the entire staff of Mercure Resort Sanur Accounting Department on the data provided. In addition, we also to thank all reviewers for their help in perfecting this article.

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## The Effects of Task Complexity, Professional Auditor Skepticism, and Motivation of Auditors Against Quality of Audit on Public Accountants in Bali

**I K Haryana\*, I B A Yasa, and K Nurhayanti**

Accounting Department, Politeknik Negeri Bali  
Jl. Kampus, Bukit Jimbaran, Badung, Bali, Indonesia

\*Email to: Haryana\_ketut@yahoo.co.id

**Abstract:** Audit quality is the probability of an auditor in finding violations and reporting an error or misappropriation that Occurs in the client's accounting system. Quality is influenced by various factors, while the factors used in this study to PROVE the effect on audit quality include the complexity of tasks, Skepticism of professional auditors, and auditors motivation. The purpose of this study is to Determine the effect of task complexity, Skepticism of professional auditors and auditors on audit quality motivation at KAP in Bali. Population in this research is all Public Accounting Firm Bali exist in the which have been registered in the directory of Certified 2017. Sampling method in this research use or saturated sample census method. The number of respondents used was 71 respondents. The hypothesis was tested with a significance level of 5% (percent) using Partial Least Square (PLS) through the SmartPLS 3.0 application. The results Showed that the complexity of tasks, professional Skepticism of auditors and auditors motivation have a significant effect on audit quality.

### 1. Background

Audit failure cases that occurred in recent decades have led to the crisis of confidence about the ability of the accounting profession in the audited financial statements. The emergence of this crisis is pretty much justified as the financial statements of a company that received an unqualified opinion, but also faced problems in its survival after the opinion was issued [1].

The number of cases of accounting scandals that occurred often associated with the failure of the auditors in the audit client's financial statements. In one case, resulting in poor audit quality that is in the public accounting firm of Ernst & Young's partner (EY) in Indonesia and the case of one Public Accountant (AP) in Denpasar.

The case was made public accountant office competition to create high-quality audit results more stringent, to generate client confidence against Public Accountant, then the resulting quality should be good. Audit quality is affected by various factors, as for the factors used in this study to demonstrate the effect on audit quality such as the complexity of the assignment, professional skepticism, the auditor

and the auditor motivation. The study was conducted in a public accounting firm located in the province of Bali. Based on this background, the objectives of this study was to determine whether the complexity of the assignment, professional skepticism and motivation auditor significant effect on audit quality in KAP in Bali.

## **2. Analysis method**

### **2.1 Theoretical basis**

Agency theory reveals that it takes the role of the independent third party as a mediator between principal and agent. These third party serves as an agent to monitor the behavior of managers and ensure the agent had acted in accordance with the interests of the principal, which here is a third-party auditor as a mediator between the principal and the agent [2]. Quality audits as the probability that an auditor found and reported about the existence of a breach in the client's accounting system [3]. The complexity of the task is the difficulty in resolving a problem because of their limitations and memory abilities in making decisions that affect the financial statements [4]. Auditor professional skepticism is an attitude that includes a questioning mind always, be alert to conditions that may indicate the possibility of misstatements, whether caused by fraud or error. Motivation is the desire in an individual who encouraged him to act [5]. This study aims to examine and obtain empirical evidence of the influence of the complexity of the task, the auditor's professional skepticism, and motivation auditor on audit quality. Based on the background and study Ref, as for the development of the following research hypotheses: (H1) The complexity of the task have a significant effect on audit quality. (H2) Professional Skepticism significant Influential Auditor to audit quality.

### **2.2 Research methods**

The sampling method in this study uses saturated samples or census methods. The number of respondents used in this study was 71 respondents from 10 KAP in Bali. Data collection method is done by giving a set of questions or written statements to the respondent to answer [6].

The hypothesis was tested with a significant level of 5% by using the application partial least square (PLS) through the application smartPLS 3.0 The following are the steps for creating modeling with PLS: (a) Designing structural models (inner model) inner model or models of structural illustrate the causal relationships between variables latent built on the substance of the theory [7]. (b) Designing a measurement model (outer model), in this study the relationship between indicators with latent variables are reflective. (c) Construct path diagram. (d) Conversion path diagram to the system of equations. (e) Estimated. (f) The goodness of fit and (g) The hypothesis testing.

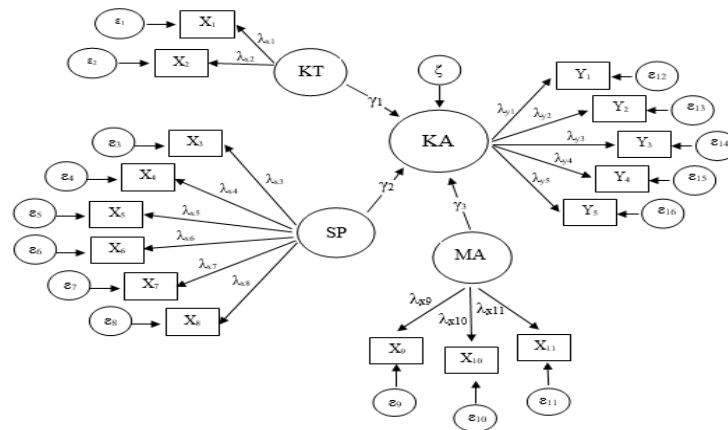


Figure 1. Line diagram

Information:

$\lambda_x$  : Lambda (small) is the loading factor exogenous latent variables.

$\lambda_y$  : Lambda (small) is the loading factor endogenous latent variables.

$\gamma$  : Gamma (small) is the coefficient of the influence of exogenous variables on endogenous variables.

$\varepsilon$  : Epsilon (small) is a measurement error in the manifest variables on endogenous variables.

$\zeta$  : Zeta (small) is a model error.

Table 1. List of Indicators Each Variable

Latent variable	Indicator	Code
Task complexity	clarity Assignment	X1
	Clarity Remedies	X2
Auditor Professional Skepticism	Attitudes have Skepticism	X3
	Finding violations	X4
	Evaluating Audit Findings	X5
	Demands of Professional Auditors	X6
	Fair or Not Naturally Financial Statements	X7
	Meticulously and Thoroughly	X8
Motivation Auditor	toughness	X9
	Tenacity	X10
	Consistency	X11
Quality Audit	experience auditor	Y1
	Education auditor	Y2
	professionalism auditor	Y3
	The structure of the company audit clients	Y4
	The auditor's independence	Y5

### 3. Results and Discussion

#### 3.1 Results of study to

##### 3.1.1 Measurement models or Outer Model

Evaluation of the measurement model or models outer performed to assess the validity and reliability of the model. The indicator in this study is reflective because the latent variable indicator influences the indicator, which can be evaluated through convergent and discriminant validity of the latent construct constructor and composite reliability indicators as well as the Cronbach alpha for the indicator block [8]. Convergent validity with the measuring principles (manifestation variables) of constructs is highly correlated. Convergent validity occurs when scores obtained from two different instruments that measure the same construct have a high. Test the validity of reflexive convergent indicators with the SmartPLS 3.0 program can be seen from the average value extracted (AVE). The stripped thumbs for loading is more than 0.7 for the confirmatory category and the loading value between 0.6 - 0.7 for explanatory research is still acceptable [8]. SmartPLS output for loading factor indicates that the loading factor value of each indicator is greater than 0.7. These results indicate that the indicators used in this study are valid or have met convergent validity. AVE testing must be greater than 0.5. The output of AVE is as follows:

**Table 2. Output Results Average Variance Extracted**

Construct	Value Average Variance Extracted (AVE)
Task complexity	0.830
Auditor Professional Skepticism	0.648
Motivation Auditor	0.698
Quality Audit	0.686

Table 2 indicates that the AVE value for each variable that is above 0.5. variables The complexity of the task, Auditor Professional Skepticism, Motivation auditors and Audit Quality the AVE value greater than 0.5 which means that the indicators used in this study is valid or has met the validity Convergent. Discriminant validity relates to the principle that the gauges (manifest variables) distinct constructs should not be highly correlated. How to test the discriminant validity with reflective indicator is to look at the value of cross loading for each variable must be > 0.70 [8].

In addition to the validity of the test, the measurement model is also done through a reliability test constructs. Reliability testing done to prove the accuracy, consistency, and accuracy of instruments to measure the construct. Reliability testing is done through reliability and Cronbach alpha compositing. The composite reliability values are as follows:

**Table 3. Results composite output reliability**

Construct	Value Composite Reliability
Task complexity	0.907
Auditor Professional Skepticism	0.917
Motivation Auditor	0.874
Quality Audit	0.916

Table 3 shows that the reliability of composite value that is owned by the complexity of the task, the auditor's professional skepticism, motivation auditors and audit quality greater than 0.7 so that it can be said of reliability for these variables is high and reliable. The second test is through Cronbach alpha. Cronbach alpha value are presented in Table 4, as follows:

**Table 4. Output results Cronbach alpha**

Construct	Value Cronbach Alpha
Task complexity	0.796
Auditor Professional Skepticism	0,829
Motivation Auditor	0.783
Quality Audit	0.886

Table 4 shows that values *Cronbach alpha* for each variable is greater than 0.7 so that it can be said consistency each answer is quite well tested.

### 3.1.2 Inner Model

Structural models were evaluated using the R-square (<sup>2</sup>) for each endogenous latent variables as the predictive power of the structural model [8]. The results of the R-square (<sup>2</sup>) in this research model is 0.660. Model influence the complexity of the task, the auditor's professional skepticism, motivation auditors on audit quality provides the R-square value amounted to 0.660 can be interpreted that the variability construct audit quality by 66.6%, while 34.4% is explained by other variables outside the research. R-square value amounted to 0.660 also indicated that the models classified as "moderate".

### 3.2 Discussion

Hypothesis testing is done through bootstrapping procedure. The results of the analysis presented in Table 6 as follows:

**Table 5. Hypothesis test results**

Information	Original Sample	T Statistics	P Values
The complexity of the task -> Quality Audit	-0.426	5.155	0,000
Auditor Professional skepticism -> Quality Audit	0.279	3.422	0,001
Motivation Auditor -> Quality Audit	0.235	2,228	0,026

Hypothesis 1 states that the complexity of the task *significant* effect on audit quality. Table 5 shows that the relationship between the complexity of the task to audit quality is significant with a p-value of 0.000 ( $\leq 0.05$ ) and the value of the T-statistic of 5.155 above 1.96. The original value estimate sample was negative in the amount of -0.426 which indicates that the direction of the relationship between the complexity of the task with the quality of the audit is negative. Thus, the hypothesis H1 in this study which states that the complexity of the task have a significant effect on audit quality received.

Hypothesis 2 states that Auditor Professional Skepticism has a significant effect on audit quality. Table 5 shows that Auditor Professional Skepticism has a significant effect on audit quality with a p-value of 0.001 ( $\leq 0.05$ ) and a T-statistic value of 3.422 above 1.96. The original sample estimate value is 0.279 which indicates that the direction of the relationship between Auditor Professional Skepticism



on audit quality is positive. Thus, the H2 hypothesis in this study states that Auditor Professional Skepticism has a significant effect on audit quality.

Hypothesis 3 states that motivation auditor significant effect on audit quality. Table 5 shows that the relationship between motivation auditors on audit quality is significant with a p-value of 0.026 ( $\leq 0,05$ ) and the T-statistic of 2.228 above 1.96. The original value estimate sample was positive in the amount of 0.235 which indicates that the direction relationship between motivation auditor the quality of the audit was positive. Thus, the hypothesis H3 in this study which states that motivation auditor significant effect on audit quality received.

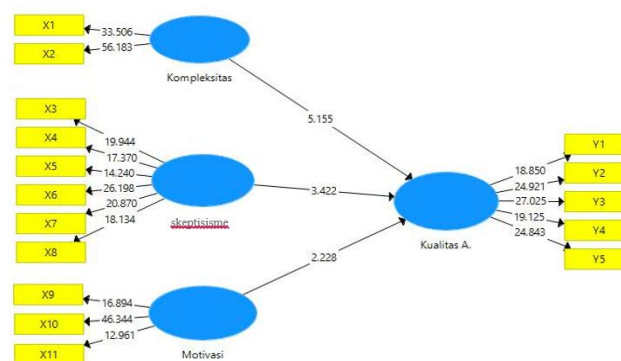


Figure 2. Result of bootstrapping

#### 4. Conclusions

Based on the results of the analysis and discussion in the previous chapter, the research can be summarized as follows: 1) the complexity of the task significant effect on audit quality. 2) the auditor's professional skepticism significant effect on audit quality. 3) Motivation auditor significant effect on audit quality.

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## The Implementation of Activity-Based Costing System in Determining the Price of Rooms at Swiss-Belhotel Rainforest

I W G Mahayasa\*, I M A Putrayasa, and P Subiyanto

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: wayangedemahayasa@gmail.com

**Abstract.** This study aims to determine the selling price calculation room by using Activity Based Costing System and the magnitude comparison between the selling price of the rooms Traditional Cost Accounting System with Activity Based Costing System to determine a more accurate selling price. The analysis technique used in this study was a comparative descriptive with quantitative approach. Results from this study showed that the selling price calculation room with Activity Based Costing System produces a smaller cost than the Traditional Cost Accounting System. From the results of these calculations produce The excess on the type Deluxe Room as big as Rp70.753,00, type Grand Deluxe Room for Rp81.605,00, type Junior Suite Room as big as Rp125.846,00 and type Executive Suite Room as big as Rp131.874,00. Selling price difference is due to On Activity Based Costing System use a lot of cost driver so that the results are more accurate.

### 1. Introduction

Swiss-Belhotel Rainforest as one of the four-star hotel located on the street Sunset Road, Kuta provide as many as 161 rooms with several types such as: Deluxe Room, Grand Deluxe Room, Junior Suite Room and Executive Suite Room.

Swiss-Belhotel Rainforest in calculating the cost of the rooms are still using the Traditional Cost Accounting System. The calculation is done by charging the cost of production at the expense of the direct and indirect costs associated with the product. Then these costs are allocated on the basis of the distribution of income from each of the rooms to the overall room revenues, thus generating cost of the room by room type. The cost of goods is the amount that can be measured in terms of money in the form of cash paid, the value of other assets transferred / sacrificed, the value of the services rendered / sacrificed, or additional debt incurred in the framework of ownership of capital goods and services needed by the company, both in the past (cost being the case) and the future (the price of the acquisition will occur) [1]. Determining the cost of a hotel room in a way that will cause problems, because the products are not able to show the actual cost is absorbed to produce the products that have an impact on the high price and product competition by competitors yang can be seen in the low occupancy rate in 2017. Traditional cost accounting charge only the cost of production to the product while the other costs associated with products such as the cost of research and development, marketing costs, distribution costs and customer service costs not charged to the price of the product [2].

Activity Based Costing System an alternative solution that can be taken by the company. Activity Based Costing System is a system of accumulation of costs and charges to products using different cost

drivers, conducted by tracking the cost of the activity and then browse through the cost of the activity to the product. Identifying the cost of activities and then to products is a step in preparing the Activity Based Costing System [3].

In a previous study in the journal entitled "Analysis of Application Method of Determining Activity Based Costing In Room Rental Prices In Pandanaran" (Semarang: University Dian Nuswantoro) [4], there is a difference with the research done is in the process of identifying the activity, the determination of cost drivers for each type of activity that have been identified and the determination of the profits, this study uses the method of Cost Plus Pricing.

Based on the above background, the authors are interested in doing research to develop determining the selling price of rooms, with the title "Implementation of activity based costing system in determining the price of rooms at the Swiss-Belhotel Rainforest"

## 2. Methodology

Data needed in this research is Number of Rooms, Report Number of Room Occupancy, Revenue Report Room, Internet Usage Fee Statements, Reports Energy Costs, Report Room Size, Income Statement per Department, Income Statement Swiss-Belhotel Rainforest and the List of Employee Work Hours in 2017. The technique used in the collected data is documentation. The collected data will be analyzed using a comparative descriptive analysis techniques, with quantitative research approaches. Quantitative research is data in the form of numbers or qualitative data in arrogance / scoring [5]. The implementation process of Activity Based Costing System to determine the selling price of the room is divided into several phases:

1. In the first stage of determining the cost based on the activity comprises four steps, namely the classification of various activities, linking costs with activity and determine the appropriate cost driver, the determination of groups of cost (cost pools) are homogeneous and pricing of group (pool rate).
2. In the second stage, each group of overhead charged to the room by using tariff cost pool is already known then multiplied by the cost driver each room so getting the total overhead. Determining the cost of the room is done with total overhead costs divided by the number of rooms sold and room price determination based on Cost Plus Pricing [6].

## 3. Result and Discussion

### 3.1 Calculation Selling Price Rooms Traditional Cost Accounting System

The first step before calculating the selling price of the room you need to know is the amount of room available, the room occupied, the income of each type of room, the percentage of revenue from Each room of the overall room revenue, the allocation of direct costs of each type of room and the allocation of indirect costs came from the room support departments based on percentage revenue overall room. After doing these calculations then, made the sale price calculation room table, as follows:

**Table 1.** A calculated price of the rooms of traditional cost accounting system

Description	Deluxe	Grand Deluxe	Junior Suite	Executive Suite
Direct Cost	Rp 1.899.129.675	Rp 895.312.649	Rp 185.487.929	Rp 50.918.255
Indirect Costs				
62,66%   Rp 6.507.746.475	Rp 4.077.753.942			
29,54%   Rp 6.507.746.475		Rp 1.922.388.309		
6,12%   Rp 6.507.746.475			Rp 398.274.084	
1,68%   Rp 6.507.746.475				Rp 109.330.141
Total Cost	Rp 5.976.883.616	Rp 2.817.700.958	Rp.583762.013	Rp 160.248.396
Room Number Sold	23.836	10.676	1.898	462
Cost Room	Rp 250.750	Rp 263.929	Rp 307.567	Rp 346.858
Profit	Rp 287.351	Rp 302.453	Rp 352.461	Rp 397.487

Percentage Profit (%)	114,60%	114,60%	114,60%	114,60%
Selling price Room	Rp 538.101	Rp 566.382	Rp 660.028	Rp 744.345

Source: Swiss-Belhotel Rainforest

### 3.2 Selling price calculation Room with Activity Based Costing System

The calculation of the selling price of the room with Activity Based Costing System, the cost of the rooms will be multiplied with the desired profit by the company, so get the final result in the form of the selling price of the room, while the calculation is as follows:

**Table 2.**The selling price of the deluxe room

Cost Pool	Rates Cost Pool	Cost Drivers	Total
Cost Pool I	Rp 63.674	23.836	Rp 1.517.723.512
Cost Pool II	Rp 16.076	47.902	Rp 770.056.229
Cost Pool III	Rp 986	33.945	Rp 33.464.964
Cost Pool IV	Rp 17.941	2.604	Rp 46.718.994
Cost Pool V	Rp 24.726	114.172	Rp 2.823.044.863
Total Cost			Rp 5.191.008.563
Room Number Sold			23.836
Cost Room			Rp 217.780
Profit (Rp 217 780 x 114,60%)			Rp 249.568
Selling Price Room			Rp 467.348

Source: Swiss-Belhotel Rainforest, the data is processed

**Table 3.**The selling price of a grand deluxe room

Cost Pool	Rates Cost Pool	Cost Drivers	Total
Cost Pool I	Rp 63.674	10.676	Rp 679.779.167
Cost Pool II	Rp 16.076	21.928	Rp 352.504.615
Cost Pool III	Rp 986	18.980	Rp 18.711.593
Cost Pool IV	Rp 17.941	1.664	Rp 29.854.227
Cost Pool V	Rp 24.726	53.824	Rp 1.330.876.879
Total Cost			Rp 2.411.726.480
Room Number Sold			10.676
Cost Room			Rp 225.902
Profit (Rp 225.902 x 114,60%)			Rp 258.875
Selling Price Room			Rp 484.777

Source: Swiss-Belhotel Rainforest, the data is processed

**Table 4.**The selling price of a junior suite room

Cost Pool	Rates Cost Pool	Cost Drivers	Total
Cost Pool I	Rp 63.674	1.898	Rp 120.852.460
Cost Pool II	Rp 16.076	4.095	Rp 65.823.917
Cost Pool III	Rp 986	2.920	Rp 2.878.707
Cost Pool IV	Rp 17.941	400	Rp 7.176.497
Cost Pool V	Rp 24.726	11.151	Rp 275.726.693
Total Cost			Rp 472.458.273
Room Number Sold			1.898
Cost Room			Rp 248.924
Profit (Rp 248.924 x 114,60%)			Rp 285.258
Selling Price Room			Rp 534.182

Source: Swiss-Belhotel Rainforest, the data is processed

**Table 5.** The selling price of the executive suite room

Cost Pool	Rates Cost Pool	Cost Drivers	Total
Cost Pool I	Rp 63.674	462	Rp 29.417.195
Cost Pool II	Rp 16.076	985	Rp 15.834.415
Cost Pool III	Rp 986	2.920	Rp 2.878.707
Cost Pool IV	Rp 17.941	448	Rp 8.037.676
Cost Pool V	Rp 24.726	3.061	Rp 75.689.680
Total Cost			Rp 131 857 673
Room Number Sold			462
Cost Room			Rp 285.406
Profit (Rp 285 406 x 114,60%)			Rp 327.065
Selling Price Room			Rp 612.471

Source: Swiss-Belhotel Rainforest, the data is processed

Results of the calculations in Table 2 to Table 5 of the selling price of the room by using Activity Based Costing System obtained the results for Type Deluxe Room for Rp467.348, 00, Grand Deluxe Room for Rp484.777, 00, Junior Suite Room for Rp534.182,00 and Executive Suite Room for Rp612.471,00, In the calculation of the desired profit by companies carried at cost price multiplied by the percentage of profit room and then the results are combined with the cost of the room resulting in the selling price of the room for each room type. Seen the difference between the results of calculation of Traditional Cost Accounting System with the calculated price of Activity Based Costing System. The difference can be seen in Table 6 below:

**Table 6.** Comparison of the sale price

Type of room	Selling price Traditional Cost Accounting System	Selling Price Activity Based Costing System	Difference	Information
Deluxe	Rp 538.101	Rp 467.348	Rp 70.753	Over costing
Grand Deluxe	Rp 566.382	Rp 484.777	Rp 81.605	Over costing
Junior Suite	Rp 660.028	Rp 534.182	Rp 125.846	Over costing
Executive Suite	Rp 744.345	Rp 612.471	Rp 131.874	Over costing

Based on Table 6 it can be seen that the result of the calculation using the sales price rooms Traditional Cost Accounting System for Type Deluxe Room for Rp538.101,00 while for Activity Based Costing System produces a value of Rp467.348,00 so generate difference of Rp70.753,00 that cause over costing, where the selling price and the Traditional Cost Accounting System is greater than the selling price calculation results by using Activity Based Costing System. for type Grand Deluxe Room with a selling price Traditional Cost Accounting System generates a value of Rp566.382,00 while for Activity Based Costing System produces a value of Rp484.777,00 so generate difference of Rp81.605,00 that cause over costing, where the selling price and the Traditional Cost Accounting System is greater than the selling price calculation results by using Activity Based Costing System. for type The junior suites rooms with a sales price Traditional Cost Accounting System generates a value of Rp660.028,00 while for Activity Based Costing System produces a value of Rp534.182,00 so generate difference of Rp125.846,00 that cause over costing, where the selling price and the Traditional Cost Accounting System is greater than the selling price calculation results by using Activity Based Costing System. for type Executive Suite Room price of the room with the Traditional Cost Accounting System generates a value of Rp744.345,00 while for Activity Based Costing System produces a value of Rp612.471,00 so generate difference of Rp131.874,00 that cause over costing, where the selling price and the Traditional Cost Accounting System is greater than the selling price calculation results by using Activity Based Costing System.

From the results of this comparison Traditional Cost Accounting System produces a higher price than the Activity Based Costing System. Because indirect costs in determining the selling price of the room is done by using the basic overall loading per department on the basis of overall room revenue allocation without identifying those costs. So that the resulting costs do not reflect that all the costs related to the charging of the room overhead and indirect costs are charged only on one type of cost driver only.

Calculation of the Activity Based Costing System in this study provide a more accurate determination of the selling price of the room. because loading cost driver used for each type of room is done not only in one kind of cost driver but according to the activity that is consumed for every type of room such as the number of rooms sold, the number of guests staying, number of rooms are available, the amount of floor space and number of hours worked. Meanwhile, before calculating the sale price of rooms with Activity Based Costing System, first identify the activities that occur in the room. Activities obtained from the identification consists of activities related to the inn where the costs on these activities is dry and chemical supplies, guest supplies, guest transportation, flower and decoration, uniform lady, operating supplies, tv movie subscription, contract services, equipment rentals, refund, travel - entertainment and meals and complimentary services and gifts. Furthermore, the activity room where the costs related to these activities are laundry & dry linen, on Internet activity where costs related to these activities is the Internet provider, the electrical activity in which the costs related to these activities is the electricity, the water activity where charges related to these activities is water, the activity of telecommunications where costs related to these activities is the cost of telecommunications for room, the cost of telecommunications for food and beverage, the cost of telecommunications for administration and general, the cost of telecommunications for sales and marketing, the cost of telecommunications for POMECA and fees telecommunication services for information and telecommunications system,

Imposition of overhead that has been done with Activity Based Costing System is used to determine the load on each type of room. In calculating the selling price applied the same room with the policies that have been used by companies in calculating the selling price of rooms are using the method of Cost Plus Pricing.

#### 4. Conclusions

Based on the results of research and discussion conducted at the Swiss-Belhotel Rainforest, it can be concluded that the calculation by using Activity Based Costing System showed smaller yield of Traditional Cost Accounting System (over costing) and get the difference to the type Deluxe Room at Rp70.753, 00, Grand Deluxe Room for Rp81.605,00, Junior Suite for Rp125.846,00 and Executive Suite Room for Rp131.874,00.

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## Evaluation of the Operational Budget Variance and Its Impact on Financial Performance at BRC Bar & Restaurant

**K F Andriani<sup>\*</sup>, I W Karman, and I M Sudana**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

<sup>\*</sup>E-mail to: fitripradjna@gmail.com

**Abstract:** This research aims to determine 1) Effectiveness of operational budget implementation in 2017 at BRC Bar & Restaurant. 2) Efficiency of operational budget implementation in 2017 at BRC Bar & Restaurant. 3) The impact of the budget variance on the financial performance of 2017 at BRC Bar & Restaurant. This research used primary data that is the form of tolerance limits deviations, effectiveness and efficiency criteria, and cost percentage, and also used secondary data, that is operational budget reports, item sales report of food and beverages in 2017, quantity and price of food and beverage that obtained from BRC Bar & Restaurant through interview and documentation. Analysis techniques that used in this research are quantitative analysis technique by calculating the ratio of effectiveness, ratio of efficiency, variance analysis, and profitability ratio and also used descriptive qualitative technique which explains the cause of variance and the impact of budget variance to financial performance. The results show that the effectiveness level of operational budget implementation in 2017 is still less effective, because it has a ratio below 90,01% caused by the variance in operating income and for the efficiency level of operational budget implementation is still less efficient because it has a ratio above 65,01% due to the variance in operational costs. The difference in operational budget that occurs affects the decreased financial performance seen from profitability ratios. This shows that the implementation of the operational budget that has been arranged is still not going well.

Key words: Operational Budget, Effectiveness, Efficiency, Variance Analysis, Financial Performance

### 1. Introduction

The main purpose of a business-oriented company is to increase added value and improve the welfare of the parties in the company (stakeholders). The condition of the growing business and tight competition, it requires companies to be able to manage their business well to be able to achieve its objectives by maximizing the management functions include planning, coordinating, and monitoring, so that the company objectives can be achieved.

Budget is one of the management tools in planning, coordinating, and monitoring. Budget is a plan of systematically arranged, which covers all activities of the company, which is expressed in units (unity) monetary and valid for a period of time certain to come [1]. Budgets can be used as reference and guidance to act to achieve the company objectives and also useful as an assessment tool if the activities already carried out in conformity with the plan or not.

One of budget relating to the profit is the operating budget. The operational budget is a plan that includes all activities of the company in obtaining profits covering all company revenue and operating



costs. Operating budget has been prepared and carried out should be evaluated to determine the effectiveness and efficiency of each activity. Effectiveness can be understood as the level of success of a company to achieve its goals. While the efficiency demonstrates the use of human resources in acquiring the company's revenue. If the goal is still not reached, and the lack of budgeted cost efficiency, it shows the difference between the realization of the standard or predefined budget.

BRC Bar & Restaurant is one of a combination of a restaurant, lounge, bar and pool which maximizes management functions include planning, coordinating, and monitoring. BRC Bar & Restaurant prepare operating budgets of the company for the future so that the company can survive amid the competition. Although the BRC Bar & Restaurant has developed an operating budget, but in practice still occurs irregularities. Here is the variance between the operating budget and the realization that occurs at the BRC Bar & Restaurant in 2017 is shown in Table 1.

**Table 1.1.** Operating budget and realization in 2017

INFORMATION	BUDGET	REALIZATION	VARIANCE	
			Rp	%
Revenue	5.473.791.322	3.985.128.512	(1.488.662.810)	-27,20%
Cost of Sales	1.515.767.148	1.256.355.736	(259.411.413)	-17,11%
Operating Expenses	2.069.920.416	2.058.072.953	(11.847.463)	-0,57%
Operating Profit (Loss)	1.888.103.758	670.699.824	(1.217.403.934)	-64,48%

In Table 1 it can be seen that there is a difference between budget and realization. Budget revenue amounting to Rp5.473.791.322 with the realization of Rp3.985.128.512, so get the variance of which is unfavorable. Budget cost of sales amounted to Rp1.515.767.148 with the realization of Rp1.256.355.736 and achieve the results are favorable. Budget operating expenses amounted to Rp2.069.920.416 with the realization of Rp2.058.072.953, so get a variance that is favorable. Having in mind the difference between income and expenses, it can be known the variance of the profit / loss surgery in 2017. The difference obtained is adverse variance (unfavorable) amounting to Rp1.217.403.934 or 64,48%.

Variance in the operating budget can have an impact on profit or loss for the BRC Bar & Restaurant. Therefore, the variance needs to be evaluated for future improvement. The evaluation was conducted to assess the effectiveness and efficiency of the implementation of the operating budget, determine the cause of the variance and the impact of variance on financial performance. This evaluation is important because in the absence of a deeper evaluation of the difference of the budget, then the potential to recur in the future be great.

## 2. Literature Review

### 2.1 Operational budget

The operating budget is a budget which aims to draw up a budget of income [2]. The operating budget is the budget plan of activities of the company during the period certain to come [1]. Basically the company's activities for a certain period covers two sectors: 1) Sector Income (revenues), sector revenue was the increase of the assets of companies that increase their own capital, but not because of the capital injection new owners, and also not due to the addition of new debt acquired from creditors. 2) Sector Cost (expenses), cost sector is the reduction of the company's assets resulting in reduced capital itself.

Based on the above it can be seen that the operating budget plan of activities of the company during a certain period in the future, either sector activities relating to income or activities related to the cost sector. The activities related to the sector income and costs at the end of the period will be stated in profit/loss statement. Therefore, the operating budget can also be referred to as profit/loss budget.

## 2.2 Variance analysis

Variance is the difference between a plan or a target and a result [3]. Analysis is the process of comparing the difference between the standard of performance to actual performance and can be done by division, department, program, product, region or units of other responsibilities [4]. Variance analysis can show where the difference between the actual results with predetermined budget. The differences that occur in operating income caused by the variance in quantity and price [1]. there are three models of the actual cost difference from the standard is one variance model, two variance model, and three variance model [5].

## 2.3 Effectiveness

The effectiveness is a measure of output as the level of the company's success in achieving its objectives [6]. Effectiveness can be understood as the level of success of a company to achieve its goals. Measurement of effectiveness must first set the destination (output to be achieved). This objective is the criteria for the effectiveness of the implementation of activities. The measurement of effectiveness can be measured by comparing the actual revenues with the revenue budgeted, which is defined as follows [7]:

$$\text{Effectiveness} = \frac{\text{Actual Revenue}}{\text{Budget Revenue}} \times 100\%$$

The interpretation of the value of the effectiveness is as follows [7]:

- > 100% : Very effective
- 100% : Effective
- 90-99% : Effective enough
- 75-89% : Less effective
- <75% : Ineffective

## 2.4 Efficiency

Efficiency relates to how the company conducts its operations, so as to achieve optimal use of available resources. The efficiency is a measurement process that connects between the input and output in the company's operations [6]. Measurement of efficiency can be measured by the ratio between the actual expenditure with the budget [7]. This expenditure efficiency ratio is used to measure the level of budget savings that do formulated as follows [8]:

$$\text{Efficiency} = \frac{\text{Actual Expenses}}{\text{Budget Expenses}} \times 100\%$$

## 2.5 Profitability

Profitability is the company's ability to make a profit in a particular period and see how effective the management of the company as a whole [9]. The profitability ratios can be grouped as follows [10]:

### 2.5.1 Gross profit margin

This ratio measures how much percentage of revenue generated from each sale. The higher the gross profit margin, the better. Gross Profit Margin is calculated by the following formula:

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}}$$

### 2.5.2 Operating profit margin

This ratio measures how much percentage of profits before interest and taxes from sales. The higher the operating profit margin, the better. Operating Profit Margin is calculated by the following formula:

$$\text{Operating Profit Margin} = \frac{\text{Earning Before Interest and Tax (EBIT)}}{\text{Sales}}$$

### 3. Research method

This research uses quantitative data covering the budget operational report, report of food and beverage budgeted and realized, the cost of food standards, the income statement in 2017 at BRC Bar & Restaurant, and the qualitative data that includes the policy limits of tolerance deviations operating budget, interpretation of effectiveness and efficiency, the cause of the difference, and the cost percentage.

The analysis technique used in this study is a quantitative and qualitative analysis. Analysis of the quantity used the assessment of effectiveness, efficiency ratio, variance analysis, and profitability ratios. While the qualitative analysis that includes a description of the cause of the differences and the impact of the difference in the financial performance.

### 4. Results and Discussion

The object of this research is the variance between the operating budget and the realization that include revenue and operating costs. The variance that occurs for 2017 require attention and improvements to the implementation of the operations can conform to the standards set. This resulted in the need for an evaluation of the difference in the operating budget to determine the effectiveness and efficiency of the implementation of the operating budget in 2017 as well as knowing how differences impact on financial performance.

**Table 4.1.** Operating income budget and realization in 2017

INFORMATION	BUDGET	REALIZATION	VARIANCE		
			RP	% VARIANCE PER ACT.	% TO TOTAL VARIANCE
Food Revenue	3.496.446.281	2.647.971.074	(848.475.207)	-24,27%	-15,50%
Beverage Revenue	1.713.595.041	1.094.607.438	(618.987.603)	-36,12%	-11,31%
Other Revenue	263.750.000	242.550.000	(21.200.000)	-8,04%	-0,39%
<b>Total Revenue</b>	<b>5.473.791.322</b>	<b>3.985.128.512</b>	<b>(1.488.662.810)</b>	<b>-27,20%</b>	<b>-27,20%</b>

**Table 4.2.** Operating expenses budget and realization in 2017

INFORMATION	BUDGET	REALIZATION	VARIANCE		
			RP	% VARIANCE PER ACT.	% TO TOTAL VARIANCE
Cost of Sales	1.515.767.148	1.256.355.736	(259 411 413)	-17,11%	-7,23%
Payroll & Rel. Expenses	1.351.800.000	1.326.358.800	(25.441.200)	-1,88%	-0,71%
Other Operating Expenses	718.120.416	731.714.153	13.593.737	1,89%	0,38%
<b>Total Expenses</b>	<b>3.585.687.564</b>	<b>3.314.428.689</b>	<b>(271.258.876)</b>	<b>-7,57%</b>	<b>-7,57%</b>

**Table 4.3.** Budget and realization of profitability ratio in 2017

<b>RATIO</b>	<b>BUDGET</b>	<b>REALIZATION</b>
GPM	72,31%	68,47%
OPM	34,49%	16,83%

Based on data in Table 4.1 it can be seen that the level of effectiveness is measured by comparing the revenue targets to be achieved by the realization during the period. Based on the results of these calculations can be seen that the budget operating revenues of Rp5.473.791.322 and the realization Rp3,985,128,512 with the variance amounting to Rp1.488.662.810, then obtained the degree of effectiveness of 72.80% which is considered less effective because they are in the range of 60.01 % - 80%. 72.80% effectiveness rate shows that the persistence of unfavorable difference of 27,2% sourced from food revenues of 15,5%, beverage revenue of 11,31%, and other of 0,39%. A significant variance or exceed 10% occurred in the food and beverage revenue. The variance that occurs in food revenue caused by the adverse variance of quantity and price. The excess quantity that is harmful due to the amount budgeted too high and most food sold decreased as well due to the number of guests who come to decline significantly in November-December, this happens due to external factors of natural disasters that cannot be predicted by management. While the difference in adverse price caused by the decrease in sales price per unit on most types of food available. The decline in the selling price is made to be able to anticipate the fierce competition in the restaurant industry who have appeared in the environment surrounding the company. The company hopes to decrease the price can increase revenues in terms of quantity. However, in 2017 the increase in quantity cannot be realized.

Based on data in Table 4.2 it can be seen levels of efficiency can be measured by means of a comparison between actual expenses or the cost to the budget. Based on the results of these calculations can be seen that the actual operating costs of Rp3.314.428.689 and the budget of Rp3.585.687.564, then obtained an efficiency of 92.43% were categorized as less efficient, which BRC Bar & Restaurant is only able to carry out the cost-efficiency of Rp259.258.876 or 7,57% of the budget has been drawn up. The efficiency comes from the efficiency of spending on cost of sales amounted to Rp25.411.413 or 7,23%, efficiency on the payroll and related amounted to Rp25.411.200 or 0,71%, and inefficiency on other operating expenses amounting to Rp13.593.737 or 0,38%. When looking for the percentage variance that occurs in every activity, then the favorable variance in cost of sales of Rp259.41.413 or 17,11%, the favorable variance in the payroll and related expenses of Rp25.441.200 or 1,88%, and the unfavorable variance in the operating expenses of Rp13.593.737 or 1,89%. There were significant difference in cost of sales consists of the cost of food fan cost of beverage. This difference occurs because the amount budgeted cost of food more than the total cost of food is realized. This happens because the sale of food is realized less than budgeted material costs incurred thus becomes less. However, if in search of cost realization percentage value obtained by 35%, while the average cost of other food standard percentage of 30%. It shows a realization value of Rp926.789.876 is still above the average cost percentage established standards. Based on the information received, the difference is due to an increase in some raw material prices that are bought on a non-contract supplier and the difference in the quantity of raw material usage. While the cost of beverage occurs favorable variance over the cost of the beverage budgeted of Rp394.126.860 and the cost of the beverage were realized of Rp261.651.860 so that there is variance of Rp132.475.000 or 33,61%. This variance occurs because the amount budgeted cost of beverage greater than the cost of beverage that is realizable and sale of beverages smaller than budgeted material costs incurred thus becomes less. Cost realizable beverage percentage of 23,9% which is approaching the cost of a standard percentage of 23%.

Based on Table 4.3 it can be seen that a decline in GPM from 72,31% to 68,47% and also a decrease in OPM from 34,49% to 16,83%. Decreased levels of GPM and OPM is caused by the difference that is unfavorable by 27,2% in operating income and margin is favorable at 7,57% in cost of sales and operating expenses. Unfavorable variance in revenue showed a lack of effectiveness of the

implementation of the budget in achieving the targets set, and a favorable variance in operating costs is also still shows a lack of efficiency in the implementation of the operational budget at BRC Bar & Restaurant.

## 5. Conclusions and suggestions

Based on the results of research and discussion related to the evaluation of the difference in the operating budget, it can be concluded that:

1. Implementation of the operating budget in 2017 declared less effective caused because there is still unfavorable margin on operating revenues of Rp1.488.662.810 or 27,20% are sourced from food revenues of Rp848.475.207 or 15,5%, beverage revenue of Rp618.987.603 or 11,31%, and other revenue of Rp21.200.000 or 0,39%. Material variance occurs in food revenue caused by the excess quantity of Rp687.557.851 and the variance in price of Rp160.917.355, and the difference in beverage revenue caused by the excess quantity of Rp618.987.603.
2. Implementation of the operating budget in 2017 declared less efficient as an efficiency of 92,43%, which is still above the standard level of efficiency that is 65%. BRC Bar & Restaurant is only able to carry out an efficiency of 7,57% from the favorable variance in cost of sales amounted to Rp259.411.413 or 7,23%, favorable variance in payroll and related expenses amounted to Rp25.411.200 or 0,71%, and the unfavorable variance to the operating expenses of Rp13.593.737 or 0,38%. Expenditure on the cost of food exceeds the average cost percentage, so the cost becomes high enough.
3. Operating budget difference occurred in the BRC Bar & Restaurant affect either the financial performance, because the difference has resulted in declining profitability. The decline in the financial performance of the standards already set can be seen from the decline in the gross profit margin of 72,31% to 68,47% and the drop in the ratio of operating profit margin of 34,49% to 16,83%.

The advice can be given based on the results of research that has been done is as follows:

1. BRC Bar & Restaurant should increase efforts in terms of acquisition of sales by formulating new strategies that could attract the attention of consumers. Strategies that do companies such as 1) create a new menu variations, serving a special menu or menu weekly special time of the day - a particular day. 2) Creating a promotion every week by way of buy 2 get 1 free or discount on the favorites menu. 3) Organize specific events with guest stars that are of interest to many people.
2. BRC Bar & Restaurant should increase efforts in terms of control or supervision of the use of cost such as 1) Having a supplier contract of more than one supplier for the items of raw materials, so that when one of the supplier contract cannot fulfill orders the raw material can be diverted to suppliers other contracts not on non-contract supplier with a higher price. 2) Improve the monitoring of the use of raw materials to match the standard recipe. 3) Increase in the reception control purchased materials to conform to the order.
3. Budgetary operations conducted by BRC Bar & Restaurant should use methods that involve a mix of each section in the company so that the budget drawn up becoming more realistic.

## 6. Acknowledgment

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## The Analysis Of Hotel Room Cost Based on Activity Based Costing System at “RTS” Baturiti

**L G R D Rahayu<sup>\*</sup>, I N Subratha, and I W P Suta**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: [ratihdianrahayu@gmail.com](mailto:ratihdianrahayu@gmail.com)

**Abstract.** The purpose of this research to analyze and reveal the cost of hotel room based on Full Costing at Royal Tulip Saranam Resort & Spa (RTS) Baturiti, the cost of hotel room based on Activity Based Costing System (ABCS) at RTS Baturiti, and knowing the efficiency of the cost of hotel room based on ABCS at RTS Baturiti. The application of ABCS method at RTS Baturiti is expected to control costs better than to use of the Full Costing method in the hotel because the ABCS method allocates activity-based costs so as to provide a more accurate cost measurement of activity cost triggers. The result of the cost of hotel room by using ABCS, when compared with Full Costing method, it is seen that room type Saranam Room, Saranam Retreat, Deluxe Saranam, Saranam Deluxe Family, Saranam Suite shows the smaller difference from the stipulation of basic expenses in RTS Baturiti, show that for Saranam Room Rp 52.767, Saranam Retreat Rp 29.699, Saranam Deluxe Rp 328.263, Deluxe Family Saranam Rp 210.183 and Saranam Suite Rp 837.689. As for the type of room Hilltop Villa shows a larger difference around Rp 1.943.022. The difference is due to the cost of the cost driver in each room type. ABCS is able to allocate the cost of activity to each room type appropriately based on the consumption of each activity.

### 1. Introduction

Bali tourism developing as indicated by the occupancy rate of the hotel room from 58.14% to 62.89% (in 2015 to 2017). Therefore, there is a growth in room occupancy rate of 4.75% which requires a hotel room [1]. For that matter, information is available for sale. The selling price of the room is determined by the size of the hotel room fee. "RTS" at Baturiti which is a five-star hotel located in Banjar Pacung, Baturiti Village, Tabanan Regency. The hotel has 89 rooms with different room types, namely Saranam Room, Saranam Retreat, Saranam Deluxe, Saranam Deluxe Family, Saranam Suite and Hilltop Villa. Allocation cost of rooms at "RTS" Baturiti still uses Full Costing. Full costing is the recording, classification, summarizing and presentation of the costs of making and selling products or services in certain ways and their interpretation reported in the income statement [2]. Imposing product costs in the Full Costing system is carried out on direct and indirect expense related to the product. Traditionally, the imposition of cost on indirect is carried out by using a comprehensive expense or per department. This will cause many problems because the product cannot be used to pay the actual price. As a result, there will be below cost products and over costing products. This is what underlies the development of a calculation method known as Activity Based Costing System [3].

Activity Based Costing System is a repair method of Full Costing. Activity Based Costing System is an information system oriented to providing complete information about activities to enable company

personnel to manage activities or cost calculations that emphasize activities that use the type of cost driver [4]. Cost driver are measurable factors that are used to allocation cost activity costs and other activities [5]. Activity Based Costing System allocates costs based on activities so that it is expected to provide a more accurate measurement of the costs of triggering activities.

According to [6] Activity Based Costing System divides activities into four levels, namely (1) Unit level activity (2) Batch level activity (3) Product or service sustaining activity (4) Facility sustaining activity. The hotel management can use the Activity Based Costing System in determining the cost of hotel rooms, because detail information on the use of activities can provide benefits in improving the quality of more accurate decision making [7].

## 2. Methodology

This research uses the quantitative data and qualitative data. Quantitative data in the form of numbers or presumed as reports for 2017 department costs, 2017 revenue rooms, number of rooms available in 2017, number of guests staying in 2017 and number of rooms sold in 2017. Qualitative data in the form of information data, drawings, charts such as company history, organizational structure, room type and costing policy. The sources of data used in this study is primary data. Primary data is original data collected by the researcher to answer the research problem specifically [8].

The method of collecting data analysis used in this research are observation and interview. Observation used in this study are participatory observation or observation participating in direct observation of the activities carried out by the company. Interviews are data collection techniques whose implementation is carried out directly dealing with the interview [8].

The analytical technique used in this study is a comparative descriptive analysis, which compares the cost of hotel rooms based on Full Costing with Activity Based Costing System to find or determine the efficiency cost of hotel rooms.

## 3. Result and Discussion

Allocation cost of rooms can be done in two ways, namely Full Costing and Activity Based Costing System

### 3.1 Allocation cost of rooms based on Full Costing at "RTS" Baturiti.

**Table 1.** Calculation cost of rooms Full Costing Method

Cost Element	Saranam Room (Rp)	Saranam Retreat (Rp)	Saranam Deluxe (Rp)	Saranam Deluxe Family (Rp)	Saranam Suite (Rp)	Hilltop Villa (Rp)
Direct Expanse	320.028.481	453.128.356	730.675.794	276.651.421	74.483.811	104.768.195
Indirect Expanse						
16,33%	1.701.877.177					
23,12%		2.409.688.053				
37,28%			3.885.655.592			
14,12%				1.471.202.617		
3,80%					396.096.930	
5,35%						557.146.038
Cost Of Goods Sold	2.021.905.658	2.862.816.409	4.616.331.385	1.747.854.037	470.580.741	661.914.233
Total Of Sold Rooms	2.529	3.405	4.400	1.480	249	207
Cost Of Rooms	<b>799.488</b>	<b>840.768</b>	<b>1.049.166</b>	<b>1.180.982</b>	<b>1.889.882</b>	<b>3.197.653</b>



### 3.2 Allocation cost of rooms based on Activity Based Costing System in "RTS" Baturiti.

The steps taken to impose the cost of hotel rooms using Activity Based Costing System are two stages First Stage. Identify direct costs in the calculation of Activity Based Costing System methods, namely salaries and wages, employee meals, uniform, bonus or THR for department room employees. Allocation of direct costs is based on the percentage of the number of rooms available in each room type. Then the expense included in the direct expense are allocated to each type of room at "RTS" Baturiti.

Identify the activities of indirect expense that will be used as the basis for charging the cost pool and cost drivers at "RTS" Baturiti. The indirect costs are then grouped into several activities. These activities include lodging activity, laundry activity, electrical activity, water activity, breakfast activity, administration activity, marketing activity, maintenance activity, depreciation activity, and payroll activity. The activity is then classified according to the level of activity.

Determining the Cost Pool. After the cost driver is determined for various activities and grouped into several homogeneous cost pool based on the level of activity.

The cost allocation to various cost pool are homogeny. The cost originated from the Department Room are directly allocation 100% to the room, but for the cost originating from the supporting department it is only allocation 65% and the rest 35% of the costs associated with the cost of rooms.

Determine cost pool rates. After identifying the cost driver, the next step determine the cost pool rate with the cost driver. Group rates are overhead costs per unit cost driver that is allocation to a group of activities. The cost pool fee is allocation based on the cost pool I allocation up to the cost pool V divided by the cost driver that has been determined based on the activity in question so that it can make cost for each pool.

Second stage. At this stage the cost for each group of overhead costs are traced to various types of activity. This is done by using group rate consumed by each product or service. The overhead allocation from each cost group to each product is calculated by the group rate multiplied by the cost driver unit used and allocation to each room type. The following is a table of basic room expenses for each type of room at "RTS" Baturiti:

**Table 4.** Allocation cost of rooms based on Activity Based Costing System

No.	Cost Pool	Cost of Pool Rates (Rp)	Saranam Room		Saranam Retreat	
			Cost Driver	Total (Rp)	Cost Driver	Total (Rp)
1	<i>Cost Pool I</i>	135.086	2.529	341.632.957	3.405	459.968.453
2	<i>Cost Pool II</i>	83.853	4.494	376.833.518	6.152	515.861.104
3	<i>Cost Pool III</i>	5.962	5.840	34.819.357	8.760	52.229.036
4	<i>Cost Pool IV</i>	214.424	544	116.646.621	960	205.846.979
5	<i>Cost Pool V</i>	15.616	42.663	666.212.241	63.994	999.318.362
Total Indirect Expanse				1.536.144.694		2.233.223.933
Total Direct Expanse				352.312.100		528.468.150
Total Cost for Room Type				1.888.456.795		2.761.692.084
Total Of Sold Rooms				2.529		3.405
Cost Of Rooms				746.721		811.070

No.	Cost Pool	Cost of Pool Rates (Rp)	Saranam Room Deluxe		Saranam Deluxe Family	
			Cost Driver	Total (Rp)	Cost Driver	Total (Rp)
1	Cost Pool I	135.086	4.400	594.379.205	1.480	199.927.551
2	Cost Pool II	83.853	8.171	685.159.473	3.764	315.621.131
3	Cost Pool III	5.962	9.125	54.405.246	4.380	26.114.518
4	Cost Pool IV	214.424	1.150	246.587.527	612	131.227.449
5	Cost Pool V	15.616	66.661	1.040.956.627	31.997	499.659.181
Total Indirect Expanse				2.621.488.078		1.172.549.829
Total Direct Expanse				550.487.657		264.234.075
Total Cost for Room Type				3.171.975.735		1.436.783.904
Total Of Sold Rooms				4.400		1.480
Cost Of Rooms				720.904		970.800

No.	Cost Pool	Cost of Pool Rates (Rp)	Saranam Suite		Hilltop Villa	
			Cost Driver	Total (Rp)	Cost Driver	Total (Rp)
1	Cost Pool I	135.086	249	33.636.460	207	27.962.840
2	Cost Pool II	83.853	790	66.243.542	670	56.181.232
3	Cost Pool III	5.962	730	4.352.420	3.650	21.762.098
4	Cost Pool IV	214.424	142	30.448.199	1.500	321.635.904
5	Cost Pool V	15.616	5.333	83.276.530	26.664	416.382.651
Total Indirect Expanse				217.957.151		843.924.725
Total Direct Expanse				44.094.061		220.195.063
Total Cost for Room Type				262.051.212		1.064.119.788
Total Of Sold Rooms				249		207
Cost Of Rooms				1.052.415		5.140.675

**Table 5.** Comparison cost of rooms based on Full Costing with Activity Based Costing System.

Room Type	System Full Costing		Metode Activity Based Costing System		Difference	
Saranam Room	Rp	799.488	Rp	746.721	Rp	52.767
Saranam Retreat	Rp	840.768	Rp	811.070	Rp	29.699
Saranam Deluxe	Rp	1.049.166	Rp	720.904	Rp	328.263
Saranam Deluxe Family	Rp	1.180.982	Rp	970.800	Rp	210.183
Saranam Suite	Rp	1.889.882	Rp	1.052.193	Rp	837.689
Hilltop Villa	Rp	3.197.653	Rp	5.140.675	Rp	(1.943.022)

The occurrence of price differences due to the Activity Based Costing System, each product's overhead costs are allocation to many cost drivers in accordance with the demands of consumption of activity by products or services. So as to be able to allocate activity costs to each room appropriately

based on the consumption of each activity. Allocation cost of rooms using the Activity Based Costing System more accurate and applicable.

## 4. Conclusion

From the result above, the difference between charging hotel room fees according to "RTS" Baturiti based on the Full Costing method with Activity Based Costing System is caused by the overhead of using activities so that the difference is seen in the room types Saranam Room, Retreat Saranam, Deluxe Saranam, Deluxe Family Advice, and Saranam Suite shows a smaller difference on Activity Based Costing System, the difference in the room type Saranam Room is Rp 52.767, Saranam Retreat is Rp 29.699, Saranam Deluxe is Rp 328.263, Saranam Deluxe Family is Rp 210.183, and Saranam Suite is Rp 837.689. Whereas in the Hilltop Villa room type the result of Activity Based Costing System loading is greater than the hotel room cost that has been determined by the hotel management with a difference of Rp 1.943.022.

## 5. Acknowledgement

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## **Internal Audit of Food and Beverage Inventory at Astagina Resort Villa and Spa Legian (Case Study of January and March 2018)**

**M M Purwaniwati\* , D P Suciwati, and C Ardina**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: mpurwaniwati@gmail.com

**Abstract.** This study aims to test the internal audit which is divided into operational audit and financial audit of food and beverage inventory at Astagina Resort Villa & Spa Legian. During this time, there is always variance in the inventory of food and beverage between the amount of the system and the physical amount. The primary data are accounting system of purchase and sale of food and beverage inventory and how to calculate the ending balance of food and beverage inventory. The secondary data are standard operational procedure, organizational structure, result of physical calculation and record of physical quantity of supply of food and beverages in January and March 2018. Descriptive qualitative and quantitative is as an analytical technique. The results of the operational audit show weaknesses in the Company's Internal Control System such as do not use copy of the form, the absence of a surprise audit, the absence of job rotation, and the company does not establishment of an internal supervisory unit. While the results of financial audits indicate the difference of more and less on the physical calculation of inventory with the record.

### **1. Introduction**

Hotel growth in Bali has experienced a very significant development. Indonesian Hotel and Restaurant Association (IHRA) of Bali records up to 2017 the number of hotels in Bali for both the five-star hotel to non-star hotels reaches 130,000 with a total room reaches approximately 47 million. Based on these facts it can be seen that the rivalry between the hotel cannot be avoided. One strategy that can be taken by a hotel in order to win business competition is to implement GCG (Good Corporate Governance). Good corporate governance as a set of rules governing the relationship between shareholders, management companies, lenders, government, employees and holders of other internal and external interests in accordance with the rights and obligations of each party [4].

In an attempt to implement good corporate governance (GCG), a hotel must conduct periodic audits. [4] states that the audit is a systematic process to obtain and evaluate (objectively) the evidence relating to the assertion of the measures and economic events, in order to determine the level of compliance between the assertion with the established criteria, and communicate the results to the parties concerned.

One of the most important audits is internal audit. This is because through internal audit, risk that occurs due to the rapid development of the business world can be avoided. Internal audit is an examination carried out by the internal audit section of the company, on the company's financial statements and accounting records and adherence to top management policies that have been determined

with the provisions of the applicable provisions [1]. The task of an auditor is to investigate the efficiency of the implementation of the function of various organization units [6]. Internal audit is expected to increase the reliability of information about the conditions in the unit of the company. In addition, through internal audit, protection of company assets and efficiency assessment and economization of resource use can be carried out. Based on the results of [2] shows that internal audit plays a role in reducing the difference or the lack of stock inventory data in the company.

Internal audit activities can be divided into two, namely operational auditing and financial auditing [4]. Problems faced by Astagina Resort Villa & Spa Legian be the difference of food and beverage inventory during the year 2017. This difference is due to the violation of standard operating procedures performed by the storeman in the form of granting of making goods in stores without going through the store requisition that has been approved, as well as indications of fraud action over beverage inventory conducted by storeman by deliberately did not include the purchase of beverage into the stock so there is difference in adverse hotel. In the absence of internal audits, the same problem may occur again. This of course led to the company's operations disrupted and threaten business continuity.

Based on the background described above, it is an issue of concern are: 1) Are audits supplies food and beverage operations at Astagina Resort Villa & Spa Legian compliance with the internal control system (SPI)?, 2) Is the financial audit food and beverage supplies at Astagina Resort Villa & Spa Legian in January and March 2018 in accordance with financial reporting results?

## 2. Research Methods

### 2.1 Data types

The type of data: 1) qualitative data is data that is expressed in the form of words, sentences and images [9], this data consists of sales accounting system and purchase food and beverage, food and beverage inventory SOP, the organizational structure of the company. 2) quantitative data is data in the form of numbers [9], this data consists of the results of the physical inventory of food and beverage January and March 2018 and a record number of physical inventory of food and beverage January and March 2018.

### 2.2 Data source

Source of data: 1) primary data is data obtained directly from the first hand for subsequent analysis in finding solutions [8], this data consists of the accounting system of sales and purchases of food and beverage and the method of calculating the final balance of food and beverage supplies. 2) Secondary data is data published in statistical journals and information available from publications or non-publications sources in companies or outside companies [8], this data consists of food and beverage inventory SOPs, organizational structure of the company, the results of a physical inventory of food and beverage in January and March 2018, and a record number of physical inventory of food and beverage in January and March 2018.

### 2.3 Data Collection Procedures

In this study, data were collected using several procedures, including: 1) Interview method using the free guided interview type. This type of interview is done by assigning respondents and make a list of questions in general, then specific questions raised during the interview. 2) Observation method is a method by conducting field observations so that it can be proven the truth between the answers from respondents obtained during interviews with the application in the field. 3) Documentation method is a method of data collection which aims to obtain written data from the hotel related to this research. 4) Literature research method is a research method that is done by studying and collecting literature and literature related to research.

#### 2.4 Data Analysis Technique

The analysis technique used in this research is descriptive analysis techniques, with quantitative and qualitative research approaches. The use of analytical techniques in this study conducted in accordance with the procedures / internal audit are: 1) Operational audit : a) The organizational structure that separates the functional responsibility firmly. In this study, the assessment is done on the organizational structure of the company's accounting department, F & B and kitchen departments as well as the job description of the relevant section, b) Authority system and record keeping procedures that provide adequate protection against the assets, debts, income and expenses. In this study, an assessment carried out on the accounting system of purchase and sale of food and beverage inventory, c) Healthy practices in implementing the tasks and functions of each organizational unit. In this study, the assessment carried out by the implementation of SPI and observations on the implementation of the SOP. Assessment is also conducted through interviews about the policies relating to the supply of food and beverage, d) Employees whose quality is in accordance with its responsibilities. Assessment was conducted through observation of SOP in recruitment and development of employees during employment education company. 2) Financial audit: Examination of the correctness of the calculation method food and beverage inventory balances and Physical examination method of calculating the number of food and beverage.

### 3. Results And Discussion

#### 3.1 Operational Audit

The results of operational audits supplies of food and beverage at Astagina Resort Villa And Legian:

##### 3.1.1 Purchase Accounting System Inventory Food.

Internal control of purchasing food inventory is assessed based on the elements of the internal control system proposed by [7].

Here's an explanation on SPI of food procurement system: 1) Management Astagina Resort Villa & Spa Legian been doing splitting the functions of operation and storage of the accounting function and no single function that was given full responsibility to carry out all stages of a transaction, in particular transactions related to the purchasing of food supplies. There are five functions involved in the purchasing of food supplies, namely kitchen function, purchasing function, receiving function, cost control function, and accounts payable function. 2) Purchases made food supplies Astagina Resort Villa & Spa Legian occur on the basis of authorization and must go through the process of approval of the officials who have the authority to approve the purchase of food supplies. 3) Astagina Resort Villa & Spa Legian has come a ways to create a practice healthy include: any form in the purchase of food has been using the serial number printed, every purchase of supplies of food are conducted by more than one person or department that is finance department, kitchen department, and the department of food and beverage, and the necessity of taking time off by employees shall be taken at least half of the total time off periodically obtained and the three days before the end of the month are conducted physical match assets with notes. However, there are some practices that are implemented by management, including: do not make a copy or copies of documents on purchasing and receiving section, 4) Recruitment of employees involved in the purchase of food by the management system Astagina Resort Villa & Spa Legian done through the selection and management regularly hold training related to the field work associated with implementing training 2 times in 6 months.

##### 3.1.2 Beverage Inventory Purchase Accounting System.

Internal control of purchasing beverage inventory is assessed based on the elements of the internal control system proposed by [7].

Here's an explanation on SPI of beverage purchasing system: 1) Management Astagina Resort Villa & Spa Legian been doing splitting the functions of operation and storage of the accounting function and no single function that was given full responsibility to carry out all stages of a transaction, in particular relating to the purchasing transaction beverage supplies. There are five functions involved in the purchasing of inventory beverage, namely store function, purchasing function, receiving function, cost control function, and accounts payable function. 2) Beverage inventory purchases made Astagina Resort Villa & Spa Legian occur on the basis of authorization and must go through the process of approval of the officials who have the authority to approve the purchase of supplies beverage. 3) In the process of purchasing supplies beverage, Astagina Resort Villa & Spa Legian has come a ways to create a practice healthy include: any form in the purchase of beverage has been using the serial number printed, every purchase of supplies beverage undertaken by more than one person or department that is finance department, department stores, and food and beverage department, and the necessity of taking time off by employees shall be taken at least half of the total time off periodically obtained and the three days before the end of the month are conducted physical match assets with notes. However, there are some practices that are implemented by management, including: do not make a copy or copies of documents on the receiving section, 4) Recruitment of employees involved in the purchase of beverage management system Astagina Resort Villa & Spa Legian done through the selection and management regularly hold training related to the field work associated with implementing training 2 times in 6 months.

### 3.1.3 Inventory Accounting System Sales Food and Beverage.

Internal control of sale food and beverage inventory is assessed based on the elements of the internal control system proposed by [7].

Here's an explanation on SPI of food and beverage sales system: 1) Management Astagina Resort Villa & Spa Legian been doing splitting the functions of operation and storage of the accounting function and no single function that was given full responsibility to carry out all stages of a transaction, in particular transactions related to the sale of food and beverage. There are five functions involved in the sale of food and beverage inventory, namely restaurant / bar function, kitchen function, cashier function, cashier general function, and auditor income function. 2) Beverage inventory sales transactions conducted Astagina Resort Villa & Spa Legian occur on the basis of authorization and must go through the process of approval of the officials who have the authority to approve the sale transaction with supplies of food and beverage. 3) In the process of sale of supplies of food and beverage, Astagina Resort Villa & Spa Legian has come a ways to create a practice healthy include: any form in the sale of food and beverage have used the serial number printed, each sales transaction supplies of food and beverage undertaken by more from one person or department that is the finance department, the department kitchen, and the department of food and beverage, and the necessity of taking time off by employees who are required to take at least half of the total leave earned and periodically i.e. three days before the end of the month are conducted matching physical assets with notes. However, there are some practices that are implemented by management, including: non-performance of a sudden inspection (audit surprised), 4) Recruitment of employees involved in the sale of food and beverage system by management Astagina Resort Villa & Spa Legian done through the selection and management regularly hold training related to the field work associated with implementing training 2 times in 6 months.

### 3.1.4 Recommendation

Recommendation that can be given to overcome the weaknesses found in operational audit are: 1) Companies should require all the functions (section) purchase and sale of food and beverage make a copy or copies of the form. This aims to reduce clerical work and fulfill several purposes at once. 2) Companies should conduct sudden inspection to the way employees work, which can be done by the Department Head each section. With the examination of a sudden, it will encourage employees carry out their duties in accordance with the rules set. 3) Companies should do the rotation positions (job

rotation) in this year because since its establishment the company never did rotation positions. With the rotation of the post of the independence of the officials in performing their duties can be maintained. 4) Controllers that exist in the company (controller) such as Cost Control and Assistant Financial Controller can be used as a substitute for the internal watchdog unit.

### 3.2 Financial audit

This activity is measured by an easy benchmark that is “true” or “false”. Implementation of the financial audit carried out on two months of the months of January and March 2018. Data obtained in these two months, namely:

#### 3.2.1 January 2018

Food and beverage inventory Policy Astagina Resort Villa & Spa Legian recorded by perpetual method and assessed by the moving average method. The following data on get: 1) Calculation of Ending Inventory is by adding together the initial inventory or the remaining balance of the previous value of new purchase, then divided by the total quantity of goods. The calculation method of inventory valuation can be formulated as follows:

$$P1 = \frac{So + Pb}{Q1 + Qp}$$

$$pn = \frac{S(n-1) + Pbn}{Q(n-1) + Qpn}$$

At the end of the period (monthly), the amount of the final inventory of each item multiplied by the average price of its then summed according to the food and beverage categories, with the following formula:

$$S1 = (Q \times P) A + (Q \times P) b + \dots + (Q \times P) z$$

Based on the description of how ratings are done by the average price of cost control Astagina Resort Villa & Spa Legian is “true” according to the method of calculating the value of inventory using the moving average method (moving average) proposed by [3]. 2) Calculation of the final amount of physical records inventories of food and beverage conducted in January 2018, calculated with the following formula:

$$SO2 = SO1 + \text{Purchase} + TB - SR$$

End inventory of supplies (SO2) is calculated by summing the beginning balance of inventory is concerned (SO1) with the purchase of goods in the period and transfer back (TB). The results are then reduced by the request items to the store through the store requisition (SR). Purchases of goods and transfer back to one period can increase the amount of inventory in the store. While the collection of goods by the user will reduce the amount of inventory contained in the store.

Method of calculating the final amount of inventory carried by Cost Control, researchers value of “true” in accordance with the calculation method of recording perpetual inventory method proposed by [5]. 3) Results of a physical inventory of food and beverage:



**Table 1.** Results of Physical Calculations of Food Inventory in January 2018

Item	Ending Balance	Inventory	Difference
Corn Flakes 275 gr	46	32	14
Coco Crunch 330 g	22	15	7
Sugar Import	7	7	-
Wheat Flour Triangle	37	37	-
Flour Cornstarch 330 gr	26	26	-
Atom Noodle Month	34	39	(5)
Spring Roll 8'5	22	22	-
Bread Crumb	6	6	-
Dry Kwetiau 280 gr	26	27	(1)
Cheedar Cheese	6	6	-
Cheddar Mozzarella 1 kg	13	13	-
Broiler Chicken Egg	170	166	4
Unsalted Butter Australia	35	32	3
Soun Noodles 500 gr	14	14	-
Spaghetti Barilla 500 gr	16	16	-

**Table 2.** Results of Physical Calculations of Beverage Inventory in January 2018

Item	Ending Balance	Inventory	Difference
Diet Coke Can 330 ml	91	91	-
Fanta Strawberry 330ml	150	150	-
Ginger Ale Can 330 ml	84	83	1
Tonic Water Can 330 ml	139	136	3
Soda Water Can 330 ml	102	102	-
Sprite Can 330 ml	261	266	(5)
Coca-Cola Can 330ml	313	321	(8)
Small Stars 330 ml	328	325	3
Large Star 520 ml	101	101	-
Radler Lemon 330 ml	121	121	-
Aqua Sparkling 300 ml	253	253	-
Heineken 330ml	112	112	-
Aqua Reflection 300 ml	359	359	-
Blanco Rum 700 ml	44	44	-
Smirnoff 750 ml	34	34	-

Based on table 1 and 2, there are several items that are experiencing differences with the physical count records. Here are the causes of different physical inventory: a) The excess on a physical inventory of food and beverage, due care of goods made by the user, while the user has submitted a requisition store (SR) has been submitted to the storeman. So that the goods in question recalculated inventory. b) The difference is less physical inventory, caused by making goods made in advance by the user without the use of store requisition (SR) for urgent purposes, but until a physical count is done, the SR has not been submitted. c) Especially for the shortage in the physical inventory of food that is "Corn Flakes 275 g" and "Coco Crunch 330 g", is because the item has expired so it cannot be used as inventory. Cost

Control for this difference has to make adjustments to the inventory balance with debit balance "Miscellaneous Expense" in the "Foods Inventory" in the amount of inventory which has expired. Journal of Cost control conducted by researchers value "true". d) The excess in the supply of food "Broiler Chicken Egg" is because food is broken at the time of the food expenditure by section kitchen. Daily worker to replace with similar items, so cost control is not doing the adjusting entries.

### 3.2.2 March 2018

The following data on get: 1) Calculation of Ending Inventory. The calculation method of inventory valuation performed by the Cost Control in March, the same as the calculation in the month of January, so the way ratings average price is done by cost control Astagina Resort Villa & Spa Legian is "true" according to the method of calculating the value of inventory using the moving average proposed by [3]. 2) Calculation of the final amount of physical records inventories of food and beverage which was conducted in March 2018 the same as in January 2018. The derivation of the final amount of inventory carried by Cost Control, researchers value of "true" in accordance with the calculation method of recording perpetual inventory method proposed by [5]. 3) The results of a physical inventory of food and beverage:

**Table 3.** Results of Physical Calculations of Food Inventory in March 2018

Item	Ending Balance	Inventory	Difference
Corn Flakes 275 gr	64	64	-
Coco Crunch 330 g	20	20	-
Sugar Import	11	9	2
Wheat Flour Triangle	50	50	-
Flour Cornstarch 330 gr	46	46	-
Atom Noodle Month	34	30	4
Spring Roll 8'5	22	19	3
Bread Crumb	11	11	-
Dry Kwetiau 280 gr	28	26	2
Cheedar Cheese	3	2	1
Cheddar Mozzarella 1 kg	13	10	3
Broiler Chicken Egg	130	125	5
Unsalted Butter Australia	35	35	-
Soun Noodles 500 gr	15	15	-
Spaghetti Barilla 500 gr	6	6	-

Based on the tables 3 and 4, there are some goods that undergo physical count differences with notes. Here are the causes of different physical inventory: a) The excess on a physical inventory of food and beverage, due to the storage of goods carried by the user, while the user has submitted a requisition store (SR) has been submitted to the storeman. So that the goods in question recalculated inventory. b) The difference is less physical inventory, caused by making goods made in advance by the user without the use of store requisition (SR) for the purposes of urgent and SR, but until a physical count is done, the SR has not been submitted. c) The excess in the supply of beverage "Rum Blanco 750 ml" beverage due to the rupture at the time of requisition store expenses (SR) by storeman. Storeman replace with a similar item, so cost control is not doing the adjusting entries.

**Table 4.** Results of Physical Calculations of Beverage Inventory in March 2018

Item	Ending Balance	Inventory	Difference
Diet Coke Can 330 ml	164	164	-
Fanta Strawberry 330ml	187	187	-
Ginger Ale Can 330 ml	113	113	-
Tonic Water Can 330 ml	157	157	-
Soda Water Can 330 ml	94	103	(9)
Sprite Can 330 ml	291	288	3
Coca-Cola Can 330ml	242	230	12
Small Stars 330 ml	233	220	13
Large Star 520 ml	109	109	-
Radler Lemon 330 ml	92	92	-
Aqua Sparkling 300 ml	262	262	-
Heineken 330ml	89	89	-
Aqua Reflection 300 ml	258	268	(10)
Blanco Rum 750 ml	43	41	2
Smirnoff 750 ml	51	51	-

### 3.2.3 Recommendation

Recommendation that can be given to overcome the weaknesses found in operational audit are : 1) Storeman in order to do the delivery of the goods must receive the SR first that has been approved. 2) When the user will pick up the goods at the store, outside the working day Storeman, then making the goods must be accompanied by a security and after the user finishes making obliged to make memos about the items taken, number and signature accompanying getter and Security. This memo then submitted to Storeman on weekdays. 3) Storeman and Receiver instructed to work in accordance with the SOP especially for Storeman in making delivery of the goods should be based store requisition (SR) which has been approved for the Receiver to pay attention to expiry date of each acceptance of goods. 4) If the goods needed in urgent condition, the pickup can be done without any store requisition (SR) in advance. However, store requisition (SR) must be submitted before storeman at home office. 5) Ensuring Storeman and users to work together in terms of making goods if the SR had to be approved and when the goods have been issued. 6) Instructed all employees to be more careful in order not to damage the work items to be detrimental to the company and myself.

## 4. Conclusions

Based on an analytical review, it can be concluded: The results of operational audits in the implementation of internal audit on the food and beverage supply Astagina Resort Villa & Spa Legian adequate because in accordance with the internal control system put forward by Mulyadi (2013). However, we found some weaknesses such as not utilize a copy or copies of documents, suddenly examination (audit surprised) never do, never do the rotation positions (job rotation) since the beginning of the company was established, and not the creation of the unit of the company's internal watchdog.

The results of financial audits in the internal audit on the food and beverage supply Astagina Resort Villa & Spa Legian in January and March 2018 has been adequate because in accordance with financial reporting results. However, there was an excess and less on the physical inventory with the records.

## 5. Acknowledgments

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## Analysis of Food & Beverage Inventory Control using Economic Order Quantity Method to Minimize Inventory Cost at Bali Taum Resort

**N K I Widiastini\*, I P M Astawa, and I G M Karma**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: [intanwidiastini123@gmail.com](mailto:intanwidiastini123@gmail.com)

**Abstract.** Food & beverage material procurement is still being a problem at Taum Resort Bali because inventory purchases only use estimates, causing inventory costs to be quite high. The purpose of this study is to determine the control of food & beverage supplies using the economic order quantity method at Taum Resort Bali, and to find out that food & beverage supplies controlling using economic order quantity methods can minimize inventory costs at Taum Resort Bali. This research is conducted to analysis of food & beverage inventory control using economic order quantity method to minimize inventory costs at Taum Resort Bali. The results of the analysis show that inventory control using the EOQ method includes determining the amount of economic purchases, minimum inventory, maximum inventory, and reorder. The use of this EOQ method can minimize food & beverage inventory costs for food supplies including Beef Sausage by 27% Fine Chicken by 27%, Bacon Streaky LFS by 13% and overall by 23% for a year. For beverage supplies include Bali Moon 9 Vodka 700 ml by 6%, Beer Bintang Pint Small 330 ml by 21%, Coca-Cola 330 ml by 56% and overall by 33% for a year. Through this research, it is expected that companies can carry out inventory control especially to supply food & beverage by implementing the EOQ method because the company can find out how much inventory purchases are economical, the minimum amount of inventory held, the maximum amount of inventory that can be stored in the warehouse, and reorder time so that the cost inventory can be minimized.

**Keywords:** Inventory Control, Food & Beverage Inventory, Economic Order Quantity, and Inventory Costs.

### 1. Introduction

Taum Resort Bali is one of the 4 star hotels in Bali that compete to attract tourists. The main income from a hotel is not only from hotel service sales, but also food & beverage sales from the hotel restaurant. There are 3 places to store food & beverage supplies at Taum Resort Bali, namely Walkin Chiller, Walkin Freezer, and General Store. Food & beverage supplies used by Taum Resort Bali are very many types. The type of food & beverage inventory in this study consisted of the most commonly used food & beverage. The types of food supplies are Beef Sausage, Fine Chicken Sausage, Bacon Streaky LFS.

The beverage supplies are Bali Moon 9 Vodka 700 ml, Beer Bintang Pint Small 330 ml, Coca-Cola 330 ml. Food & beverage inventories are still an obstacle, this happens because the purchase of food & beverage supplies only uses estimates that cause shortages or accumulation of food & beverage supplies. Inventory costs incurred in buying and storing food & beverage inventories are quite high. Food & beverage supplies that cause too much buildup are prone to damage. Too little inventory is also not good, because lack of inventory can result in the fulfillment of the needs of the guests, so the restaurant will lose the opportunity to make a profit. So it is necessary to carry out inventory control in order to help achieve the level of efficiency in the use of food & beverage supplies. One method that is quite efficient in managing raw material inventory is the Economic Order Quantity (EOQ) method. Using the EOQ method is able to minimize the occurrence of out of stock so that it does not interfere with the process within the company and is able to save inventory costs incurred by the company.

## 2. Methodology

The types of data used in this study are qualitative data and qualitative data which includes ordering costs, storage costs, lead time, initial inventory amount, frequency of purchases, total inventory purchases, total inventory usage, total inventory ending and the purchase price of food & beverage supplies at Taum Resort Bali in 2017. Data collected in this study are secondary data and primary data. Secondary data in this study include the amount of initial inventory, frequency of purchase, total inventory purchases, total inventory usage, total inventory end, lead time, and purchase price of supplies of Beef sausage, Fine Chicken Sausage, Bacon Streaky LFS, Bali Moon 9 Vodka 700 ml, Bintang Pint Small Beer 330 ml and 330 ml Coca-Cola. The primary data in this study include the calculation of ordering costs and storage costs. Data collection techniques in this study through interviews and documentation.

### 2.1 Analysis Techniques

#### 2.1.1 Quantitative Analysis

- Economic Order Quantity Analysis

$$EOQ = \sqrt{\frac{2 \cdot R \cdot S}{P \cdot I}}$$

Information :

EOQ = Economic Order Quantity

R = Material Requirement for One Period

S = Ordering Cost

I = Carrying Cost

P = Inventory Price

- Determine Safety Stock

$$\text{Safety Stock} = \text{The average delay in the arrival of material} \times \text{needs/day}$$

- Determine Maximum Inventory

$$\text{Maximum Inventory} = EOQ + \text{safety stock}$$

- Determine Reorder Point

$$\text{Reorder Point} = \text{Lead Time} + \text{safety stock}$$

## 2.1.2 Descriptive Analysis

Descriptive analysis in this study is an explanation of the results of an Economic Order Quantity (EOQ), Safety Stock, Maximum Inventory, and Reorder Point.

## 3. Result and Discussion

## 3.1 Economic Order Quantity

Determining economic order quantity requires inventory control measures which include determining Economic Order Quantity (EOQ), determining Safety Stock, determining Maximum Inventory, and determining the Reorder Point. Based on data management, the results obtained can be seen in Table 1 and Table 2.

Table 1 Calculation Result Of EOQ, Safety Stock, Maximum Inventory And Reorder Point Food Inventory Taum Resort Bali Year 2017

Inventory Type	EOQ	Maximum Inventory	Safety Stock	Reorder Point
Beef Sausage	113 kg	117 kg	4 kg	8 kg
Fine Chicken Sausage	129 kg	133 kg	4 kg	8 kg
Bacon Streaky LFS	101 kg	105 kg	4 kg	8 kg

Source : Data Processed

Table 2 Calculation Result Of EOQ, Safety Stock, Maximum Inventory And Reorder Point Beverage Inventory Taum Resort Bali Year 2017

Inventory Type	EOQ	Maximum Inventory	Safety Stock	Reorder Point
Bali Moon 9 Vodka 700 ml	38 bottle	15 bottle	2 bottle	4 bottle
Beer Bintang Pint Small 330 ml	216 bottle	230 bottle	14 bottle	28 bottle
Coca-Cola 330 ml	336 cans	352 cans	16 cans	32 cans

Source : Data Processed

The results of food & beverage inventory control calculations showed that there was an increase in the number of units and a decrease in the frequency of purchases of food & beverage supplies at Taum Resort Bali.

## 3.2 Comparison of Cost Incurred By The Company With The Cost Of Analysis Result.

Based on the data obtained from the company and EOQ calculation data, it can be compared between the total costs incurred by the company and the costs that should be incurred if the company management controls the inventory held, can be seen in Table 3 and Table 4.

Table 3 Comparison Of Food Inventory Cost Issued By The Company With The Result Of The Calculation EOQ Taum Resort Bali Year 2017

Inventory Type	Company Result (Rp)	EOQ Result (Rp)	Cost Difference (Rp)	Percentage (%)
Beef Sausage	818.409	599.436	218.973	27%
Fine Chicken Sausage	929.262	677.935	251.326	27%
Bacon Streaky LFS	796.430	689.932	106.497	13%
<b>Total Cost</b>	<b>2.544.100</b>	<b>1.967.303</b>	<b>576.797</b>	<b>23%</b>

Source : Data Processed

Table 4 Comparison Of Beverage Inventory Cost Issued By The Company With The Result Of The Calculation EOQ Taum Resort Bali Year 2017

Inventory Type	Company Result (Rp)	EOQ Result (Rp)	Cost Difference (Rp)	Percentage (%)
Bali Moon 9 Vodka 700 ml	263.389	248.040	15.349	6%
Beer Bintang Pint Small 330 ml	626.284	495.705	103.580	21%
Coca-Cola 330 ml	665.032	295.176	369.856	56%
<b>Total Cost</b>	<b>1.554.705</b>	<b>1.038.921</b>	<b>515.784</b>	<b>33%</b>

Source : Data Processed

The results of the calculation show that there are differences between the costs incurred by the company and the results of EOQ analysis. The company incurs a higher cost than the results that have been analyzed using the EOQ method. Control of food & beverage supplies using the Economic Order Quantity method is proven to minimize inventory costs at Taum Resort Bali.

#### 4. Conclusion

Control of food & beverage supplies by Economic Order Quantity method at Taum Resort Bali which produces optimal quantity and frequency of purchase. Comparison of the number of units before and after using EOQ shows that there is an increase in the number of units and a decrease in the frequency of purchases in the supply of Beef Sausage, Fine Chicken, Bacon Streaky LFS, Bali Moon 9 Vodka 700 ml, Bintang Beer Small 330 ml, and Coca-Cola 330 ml. In addition, with the application of the EOQ method the company can set the amount of safety stock, maximum inventory, and reorder points to optimize inventory control.

Controlling food & beverage supplies using the Economic Order Quantity method has proven to be able to minimize inventory costs at Taum Resort Bali, to supply 27% of food Beef Sausage, 27% Fine Chicken Sausage, Bacon Streaky LFS of 13% and 23% overall, a year. As for Bali Moon 9 Vodka beverage supply 700 ml by 6%, Pint Bintang Beer Small 330 ml by 21%, and Coca-Cola 330 ml by 56%, and overall by 33% for a year.



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## Evaluation of Tangible Fixed Assets Acquisition in the Corporate Income Tax Planning Framework in Relation to Tax Efficiency at PT. Es Bali

**N K P Handayani\*, W H Utthavi, and N W D Ayuni**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: putrihanda20@gmail.com

**Abstract.** Assets are one of the most important parts of a company that must be managed properly. In the procurement of fixed assets, the company should consider the most favorable financing alternatives either in cash, credit or leasing. This research was conducted to know the application of tax planning, which purchasing alternative among of cash, credit and finance lease that gives the highest tax saving for PT. Es Bali. The data in this study is secondary data in the form of asset data purchased by the company, interest rate, interest rate to be used as discount factor, and down payment of lease paid by the company. The data collection procedure used in this research is in the form of documentation technique. The analysis by the authors in this study using quantitative data analysis techniques and data analysis techniques descriptive comparative. The results show that financial lease method provides the largest tax savings compared with other methods. Financial lease method gives tax savings of Rp. 116,978,703 for the nominal value and Rp. 236,445,409 for the present value compared to credit financing. Meanwhile, when compared with the cash method, leasing gives a tax savings of Rp. 319,927,006 for the nominal value and Rp. 397,521,943 for the present value. This is because the financial lease has a deductible expense tax deductions more than the method of cash and bank credit.

**Keywords:** alternative purchase of fixed assets, tax planning, tax savings, fixed assets, income tax

### 1. Introduction

Assets are one of the most important parts of a company that must be managed well to benefit the company so that the company's objectives can be achieved. Procurement or purchase of fixed assets, companies must consider the most profitable financing alternatives in order to minimize the company's expenses and thus the profits gained can increase.

For companies that have large capital, the easiest alternative that companies can do is to use their own capital, but it should be noted in cash financing is the minimum cash balance set by the company so as not to interfere with other activities within the company that require funds in the short term. Conversely for companies that do not have enough capital, the alternative that can be chosen is financing from outside the company, including financing from bank loans or by leasing financing.

Leasing is a financing activity in the form of providing capital goods either in finance lease or operating lease to be used by the lessee for a certain period of time based on regular payments [1].

Each type of financing method has a different treatment between accounting and tax. Funding in cash, the amount that can be financed to calculate taxable income is depreciation costs in accordance with tax regulations. While the purchase on credit, the amount that can be charged for calculating taxable income is depreciation fees, interest costs on loans from banks, and other costs for the settlement of bank credit administration. For leasing financing, things that can be financed in calculating taxable income are all lease fees and depreciation costs of the option value. Companies that have been confirmed as Taxable Entrepreneurs certainly want to minimize the tax burden in various ways but are still in the frame of tax regulations. Efforts to minimize the due tax burden can be done with a taxation strategy called tax planning. Tax planning is defined as an effort made by taxpayers to save tax by regulating the calculation of smaller income made possible by taxation legislation [2].

In the acquisition of the fixed assets, PT. Es Bali uses leasing as a financing method. This is supported by cash owned by the company. Inadequacy of cash held is a determining factor for the company to choose leasing for the acquisition of its fixed assets. Even though the costs that must be incurred every month and the interest when added, the cost of leasing will be more expensive than the purchase in cash or credit. In addition, the selection of leasing companies must pay attention to changes in supply such as the amount of interest and the interest rate system is very influential on the results of the analysis of cash outflows. So the company must look at and choose the most profitable leasing catcher for the company. Funding sources that have the smallest cash outflow will be used by companies in the procurement of fixed assets. So that the company does not choose the alternative that will be used next, the company can choose the most effective method that is most profitable for the company, be it in cash, credit or leasing the tax that will be paid by the company.

Based on these problems, the aim to be achieved in this study is to determine the evaluation of acquisition of tangible fixed assets in the framework of corporate income tax planning in relation to tax efficiency in PT. Es Bali.

## 2. Methodology

This research uses secondary data in the form of the number of units and prices of assets purchased by the company, interest rates, interest rates that will be used as discount factors, and leasing advances and value of option rights at the end of the leasing agreement. The type of data used in this research is quantitative data in the form of company financial statements and a list of fixed assets and depreciation in 2017. The sampling technique is purposive sampling, based on criteria set by the researchers. The criteria are as follows: 1) Total of fixed assets purchased in 2017, 2) Total of fixed assets whose method of acquisition does not use leasing in 2017. The number of research samples is 3 samples with the sample criteria is the number of fixed assets that are acquired using leasing.

Data analysis techniques used in this research are quantitative data and descriptive comparative data. Based on the method of analysis, observations of the data presented by the company to be researched can be done with the following stages:

- a. Collect data about the acquisition of fixed assets
- b. Calculate fiscal cost for each alternative

- 1) Cash Financing

Determination of the amount of the cost is the depreciation fee in accordance with the useful life (economic age) and depreciation method in accordance with taxation regulations [17].

- 2) Credit Financing

The cost that can be calculated are:

- a) Present Value Interest Factor of Annuity (PVIFA)

$$\text{Formula (1)} \quad PVIFA_{k,n} = \frac{1 - (1/(1+k)^n)}{k}$$

Formula (2)  $PVIFA_{k,n} = \frac{1 - (1/(1+k/12))^n}{k/12}$

- b) Installments per month are calculated by the formula:

$$\text{Installment per month} = \frac{\text{Total loan}}{IFA_{k,n}}$$

- c) Interest installments calculated using the annuity method in accordance with the agreement are:

$$\text{Interest} = \frac{\% \text{ interest 1 year} \times (\text{remaining loan})}{12 \text{ month}}$$

- d) The principal installment is an installment before the interest paid by the company is added to the bank. The formulas that can be used are:

$$\text{Principal} = \text{installment per month} - \text{interest}$$

- e) Depreciation costs according to economic age and depreciation method in accordance with taxation regulation [3].

### 3) Leasing

- a) Installment per month (*Payment*)

Monthly installments are the amount of lease payments in an annuity that must be paid by lease.

(1) Formula (1)  $PVIF_{k,n} = \frac{1 - (1/(1+k/12))^n}{k/12}$

$$\frac{\text{Nilai leasing}}{IFA_{k,n}} = \frac{\text{Nilai leasing}}{IFA_{k,n}}$$

(2) Formula installment per month =  $\frac{\text{Nilai leasing}}{IFA_{k,n}}$

- b) Interest installments calculated using the annuity method in accordance with the agreement are:

$$\text{Interest} = \frac{\% \text{ interest 1 year} \times (\text{remaining loan})}{12 \text{ month}}$$

- c) The principal installments are calculated using the formula [4]:

$$\text{Principal installments} = \text{installment payments} - \text{interest installments}$$

- d) The basis for calculating depreciation is the residual value of fixed assets.

- c. Compare the amount of fiscal costs for each alternative

- d. Calculate the amount of tax savings

- e. Compare the results of the three methods

- f. Decision making of the three methods in the framework of tax efficiency.

## 3. Result and Discussion

Table 1. Comparison of Tax Savings by Purchasing Cash, Credit and Leasing

Income Tax Deduction	TRUCK LORRIES		ICE TUBE MAKER	
	Nominal	PV Disc. Factor 12,64%	Nominal	PV Disc. Factor 11,95%
Leasing	148.634.006	113.562.227	1.155.843.060	894.776.862
Bank Credit	134.279.482	85.834.162	1.053.218.881	686.059.517
Cash	109.550.000	66.531.056	875.000.000	544.286.089
<b>Total Savings (Leasing with Credit)</b>	<b>14.354.524</b>	<b>27.728.065</b>	<b>102.624.179</b>	<b>208.717.345</b>
<b>Total Savings (Leasing with Cash)</b>	<b>39.084.006</b>	<b>47.031.171</b>	<b>280.843.060</b>	<b>350.490.773</b>

Source: Data processed, 2018

Table 1 shows the total tax savings for both assets comparison between the leasing with credit and leasing in cash. When compared overall, leasing produces the biggest tax savings compared to cash and credit. Then if disputed, leasing results in a tax savings greater than credit, namely Rp. 14,354,523 for lorries trucks and Rp. 102,624,179 for ice tube maker for nominal value and Rp. 27,728,064 (lorries truck) and Rp. 201,717,345 (ice tube maker) for the present value and leasing also resulted in tax savings greater than cash, namely Rp. 39,084,006 for trucks lorries and Rp. 280,843,060 for ice tube maker for nominal value and Rp. 47,031,170 for lorries trucks and ice tube makers for Rp. 350,490,773 for the present value.

Based on the above calculation, the analysis and discussion of the three methods of financing fixed assets can be said that the leasing financing method provides the largest tax savings compared to the other two methods, namely cash and credit. This is because leasing, especially the financial lease, has a tax deduction element which is more deductible expense than cash and credit methods.

Overall, the financial lease method is the most expensive compared to the other two methods, but the benefits in terms of tax savings are the least leasing method that is taxable so that the taxes that the company must pay become smaller. Another positive thing about financial lease is that companies do not need to prepare large cash funds in the near future to purchase fixed assets so that the cash funds can be used for the company's more urgent operational needs.

## 4. Conclusions

Based on the formulation of the problems, it can be concluded that the acquisition of fixed assets in leasing provides greater tax savings compared to financing in cash or credit. The method of financing leased assets with option rights provides a corporate income tax savings of Rp. 116,978,703 for face value and Rp. 236,445,409 for the present value compared to credit financing. Whereas when compared with the cash method, leasing results in a body income tax savings of Rp. 319,927,006 for face value and Rp. 397,521,943 for the present value. This is due to the existence of lease fees or lease fees and depreciation costs on alternative financial lease methods that can be deductible expenses in a greater amount than the alternative purchases in cash or credit. With the largest deductible expense from the financial lease method, the element of tax deduction obtained becomes large as well and reduces the company's taxable income so that it will minimize the tax that must be paid by the company.

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## Analysis of Transfer Pricing Method Determination in Transfer Pricing Documentation Practice at PT ABC Denpasar

**N K Suandari\*, N S Hardika, and I M Wijana**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: kadeksuandari@yahoo.com

**Abstract.** PT ABC conducts an affiliated transaction with PT KLM and fulfills one of the conditions which require holding and storing transfer pricing documents in accordance with PMK No. 213 / PKM.03 / 2016. In carrying out its obligations, the first thing that PT ABC must do is to determine the transfer price method and PT ABC have to know the documents that need to be prepared in fulfilling its tax obligations. This study is intended to analyze the determination of transfer pricing method in the practice of transfer pricing at PT ABC and to find out the documents that should be prepared by PT ABC in the practice. The data used in this study are primary data obtained from interviews and secondary data obtained through documentation. The analysis technique used in this study is qualitative descriptive. Based on the results of the study, the transfer pricing method that suits with the condition of PT ABC is Comparable Uncontrolled Price/CUP. Documents that should be prepared by PT ABC are local documents.

### 1. Introduction

The transfer pricing problem occurs when every cross border transaction the taxation rights of a country are in an unfavorable position so that there is a potential loss for the revenue of the country concerned. The main factor causing the practice of transfer pricing is the existence of a special relationship (affiliation). Affiliation is the ownership relationship between one company and another. The relationship arises because of ownership or participation, ownership through the management or use of technology, and / or the existence of blood relations or because of marriage.

The beginning of the rules regarding transfer pricing only applies to companies that have affiliation relationships with other companies in different countries. However, due to the increasing transfer pricing practices that occur in Indonesia, the Minister of Finance issued PMK Number 213 / PMK.03 / 2016 which states that "taxpayers who conduct transactions with related parties are obliged to hold and store transfer pricing documents." If it meets one or several conditions in this regulation.

PT ABC is a tourism transportation company that has affiliated companies in the country. Its affiliated company, PT KLM, is a travel agent. PT ABC from 2016 has fulfilled one of the conditions contained in PMK Number 213 / PMK.03 / 2016, but PT ABC has not carried out transfer pricing documentation (TP Doc). This is because, the preparation of TP Doc is very complicated and takes a long time. On the other hand, this non-compliance has not been realized by the tax so that there has been no follow-up to the inspection or sanctions. In order to avoid the examination of the tax authorities, PT ABC must fulfill the taxation provisions, namely to organize and store transfer pricing documents.

Based on the case, the first thing PT ABC has to do is to determine the transfer price method that matches with the conditions of PT ABC.

## 2. Methodology

The definition of a special relationship based on the Income Tax Law No. 36 of 2008 Article 18 paragraphs 4: Letter (a) the relationship between taxpayers who have an investment of 25% or more on the other party, or the relationship between taxpayers who have an investment of 25% or more on two or more parties, as well as the relationship between the two parties or more is the latter; Letter (b) the relationship between two or more taxpayers who are under the same ownership or control both directly and indirectly; Letter (c) there is a relationship between the good and the poor in the lineage and / or in the degree [1].

Based on PMK Number 213 / PMK.03 / 2016, taxpayers who are required to hold and store transfer pricing determination documents are taxpayers who conduct affiliate transactions by: the gross value of the previous tax year in one tax year is more than Rp 50,000,000,000 (fifty billion rupiahs); value of the previous tax year affiliate transaction in one tax year: more than Rp. 20,000,000,000.00 (twenty billion rupiah) for transactions in tangible goods or more than Rp. 5,000,000,000.00 (five billion rupiah) for each service provision, interest payment, utilization of intangible goods, or other affiliated transactions; or affiliates in a country or jurisdiction with an income tax rate lower than the income tax rate as referred to in Article 17 of Law Number 36 of 2008 [2].

Based on the Director General of Taxes Regulation article 11 PER 32 / PJ / 2011, the transfer pricing method that can be applied consists of: Comparable Uncontrolled Price/CUP, Resale Price Method/RPM, Cost Plus Method, Profit Split Method/PSM, and Transactional Net Margin method/TNMM [3].

This study uses primary data in the form of answers from the results of the interviews conducted directly by researchers and secondary data in the form of company financial reports, company profiles, and legal data. The data collection procedures were carried out by documenting and interviewing. Data analysis techniques used in this study are qualitative descriptive based on the Regulation of the Minister of Finance PMK Number 213 / PMK.03 / 2016.

## 3. Result and Discussion

### 3.1 Transfer Pricing Method

The choice of transfer pricing method consists of identifying the availability of comparators and determining the most appropriate transfer method based on facts and conditions.

#### 3.1.1 Identifying Comparative Availability

The purpose of this stage is to ensure the availability and reliability of independent comparators that are to be used. This identification is carried out using the analysis form 5 comparative factors based on SE-50 / PJ / 2013 [4] and PER - 22 / PJ / 2013 which consist of Service Characteristics, Analysis of Asset and Risk Functions, Contract Conditions, Economic Conditions, and Business Strategy [5]. Based on the analysis of the five factors it was concluded that PT ABC had reliable comparator availability.

#### 3.1.2 Determine the Most Suitable Transfer Method Based on Facts and Conditions

In determining the transfer pricing method, the principle used is the method that best suits PT ABC's facts and conditions (the most appropriate method) as explained in PER 32 / PJ / 2011.



**Table 4.3** Selection Method Summary

Method	Status	Reason
CUP	Be Accepted	-
Resale Price	Be Rejected	There are not conditions for transfer of ownership of goods
Cost Plus	Be Rejected	Goods delivered are not semi-finished goods and there is no joint facility agreement)
Profit Split	Be Rejected	Not in accordance with PT ABC's transaction conditions, transactions between PT ABC and its affiliated companies can be reviewed separately
TNMM	Be Rejected	There is no special contribution between one party and no one makes complex transactions with each other

## a. Comparable Uncontrolled Price/CUP

Based on the 5-factor analysis, it was concluded that PT ABC had a reliable comparison. This method can be applied if the conditions of the transactions carried out between parties that have a special relationship with parties that do not have identical special relationships or have a high level of comparability or can be made accurate adjustments to eliminate the influence of differences in conditions that arise. Therefore, this method is accepted.

## b. Resale Price Method (RPM)

As explained in Chapter 2 the theoretical basis, that this method can be applied to transactions where there is a transfer of services from the company to the affiliated company then sold to a third party. In the sense, there is a process of buying and selling (transfer of ownership) in advance between the company and the affiliate company before going to the hands of a third party. Whereas in this case, PT KLM uses PT ABC's services in the case of an order from a third party and there is no transfer process to PT KLM. Because of this difference, the resale price method cannot be applied in this case.

## c. Cost Plus Method

This method cannot be applied because the right conditions in the application of this method are if the company sells semi-finished goods to its affiliated companies so that in its affiliated companies there will be further processing. This method is more suitable for manufacturing companies. In addition, there was no joint facility agreement between PT ABC and its affiliates. Therefore, the cost plus method cannot be used in this case.

## d. Profit Split Method (PSM)

This profit sharing method is not in accordance with PT ABC's conditions because transactions between PT ABC and its affiliated companies can be reviewed separately.

## e. Transactional Net Margin Method (TNMM)

Based on the criteria for conditions in this method, one party to a special relationship transaction makes a special contribution. Whereas in the case of PT ABC there is no special treatment for affiliated companies. In addition, one party does not carry out complex transactions. This can be seen from the non-affiliate customer owned by PT ABC. So PT ABC does not only depend on its affiliated companies. Therefore, this method cannot be used.

### 3.2 Documents needed to be prepared by PT ABC in the Practice of Transfer Pricing Documentation

Pursuant to article 2 of PMK Number 213 / PMK.03 / 2016 by considering the conditions of PT ABC and its relationship with its affiliated companies, the documents that must be prepared by PT ABC are local documents. The master document does not need to be made because the special relationship between PT ABC and PT KLM is a relationship based on share ownership and does not form a business group with a holding company. Then the reason for the report per country does not need to be made because the affiliate company PT ABC is in the same country. The local document consists of:

- a. Identities and business activities carried out by the taxpayer consist of: explanation of taxpayer management structure and organizational chart; a detailed description of the business and business strategy carried out by the taxpayer; operational aspects of the taxpayer's business activities; a detailed description of the business environment, including a list of key competitors.
- b. Affiliated Transaction Information and independent transactions conducted by taxpayers, consist of: transaction scheme and explanation; price policies implemented over the past 5 years; explanation of each transaction and per transaction opponent; information about transaction opponents in each type of transaction and explanation of the taxpayer's relationship with each transaction opponent; information in table form at least regarding: invoice number & date, name of the opponent of the transaction, the country or jurisdiction of the opponent of the transaction, product name, product specifications / quality, number of units / quantities, price per unit, copies of agreements / contracts related to transactions with significant value.
- c. Application of the Principles of Fairness and Commonwealth of Business consist of: a detailed description of the analysis of the comparability of each affiliate transaction conducted by a taxpayer which includes analysis of service characteristics, functional analysis (analysis of functions, assets, and risks), provisions in contracts, business strategies, and economic conditions; a description of the transfer pricing method that is most suitable for each type of affiliate transaction, the reason for choosing the method, and the advantages of the method chosen compared to other methods; explanation of the party selected as the party to be tested in the application of the method of determining the transfer price and the reason for the selection; explanation on the application of transfer pricing method based on selected comparator, price range or fair profit used, and reference points in the price range that is the basis for determining transfer prices; explanation of adjustments made in order to improve comparability; explanation regarding the conclusion that the transfer pricing has or has not been in accordance with the principle of fairness and business prevalence.
- d. Financial information of taxpayers in the form of financial statements and explanation of information in financial statements related to the application of transfer pricing methods;
- e. Non-financial events / events that affect the formation of prices or profit levels.

#### 4. Conclusion

The transfer pricing method that best suits PT ABC's facts and conditions is a price comparison method between parties that do not have a (Comparable Uncontrolled Price/ CUP). Resale Price Method cannot be used because there is no condition of transfer of ownership of goods. Cost Plus Method cannot be used because the method of goods delivered is not semi-finished goods and there is no joint facility agreement. Profit Split Method is not used because it is not in accordance with PT ABC's transaction conditions, transactions between PT ABC and its affiliated companies can be reviewed separately. The Transactional Net Margin Method cannot be used because there is no special contribution between one party and no one makes complex transactions with each other.

The documents that need to be prepared by PT ABC in terms of the practice of Transfer Pricing are local documents consisting of the following: a. Identity and business activities carried out by taxpayers; b. Information on affiliate transactions and independent transactions made by taxpayers; c. Application of the principle of fairness and business prevalence; d. Taxpayer financial information in the form of financial statements and explanation of information in financial statements related to the application of transfer pricing methods; e. Non-financial events / events that affect the formation of prices or profit levels.

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## Comparative Analysis of Article 21 Income Tax Calculation to Make Income Tax Expenses efficient (Case Study at PT. BTS)

N S Yulianti\*, I D M Partika, and I M S A Jaya

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: [nurshabrinayulianti10@gmail.com](mailto:nurshabrinayulianti10@gmail.com)

**Abstract.** For a company tax is a burden that can reduce the amount of profit earned, so the company needs to perform an action to minimize the amount of tax payable. Effort to minimize tax in accordance with tax provisions are often referred to tax planning. Tax planning for income tax article 21 is very important for a company, because in addition to earn a profit as much as possible, the company must also pay attention to the welfare of its employees. In conducting a tax planning, in addition to pay attention to the welfare of its employees, the company must also consider the impact of tax planning for the company, so that a company should choose the right method in the calculation of taxes, especially income tax article 21. This research intended to determine the effect of tax planning comparative in three policies/ cutting methods of Tax Article 21 in an effort to efficiently tax payable on PT. BTS. Type of data used in this research is secondary data obtained through the documentation and data analysis technique used is quantitative descriptive. Based on the research results, comparison of the calculation of income tax article 21 by using gross method, net method, and gross up method, the most efficient is gross up method or giving allowances amounted to taxes payable. From the comparison of the three calculations performed, gross up method generating efficiency of the corporate income tax payable in 2017 amounting to Rp 286.786.757,00 compared to other methods. But because of replace enjoyment into allowances, the company paid an additional income tax article 21 amounting to Rp 118.117.750,00, so the total corporate income tax savings after an increase in income tax article 21 is Rp 168.669.007,00. (Rp 286.786.757,00 - Rp 118.117.750,00).

**Keywords:** Tax Planning, Income Tax Article 21, Corporate Income Tax Payable Efficiency.

### 1. Introduction

In an effort to realize the national goal, the Indonesian nation, implement development in all fields. To fund the development program, the State of Indonesia has the sources of state revenue, which is derived from taxes. For a company, the tax burden would reduce the income or profits derived, so companies need to perform an action to minimize the amount of tax payable. Streamline the tax payable can be done in various ways, ranging from who is still in the area of tax legislation, through the efforts violate tax laws. Efforts to minimize tax in accordance with tax provisions often called tax planning.

Tax planning to do a company, one of which is tax planning for Income Tax (VAT). Income tax is a levy that is addressed to the public official whose income or on income received or accrued during the tax year to finance state expenditures (Supramono and Theresia, 2015: 56). Tax planning can be done as a whole, but can also be done on most types of taxes such as the income tax planning for which is given by the employer, known as Income Tax Article 21.

Article 21 Income Tax is a tax on income in the form of salaries, wages, fees, allowances and other payments under any name or any form in connection with employment or occupation, services and activities undertaken by private persons Taxable in the country, as referred to in Article 21 of the Law OF Income Tax (Mardiasmo, 2016: 197). Tax planning for Tax Article 21 is very important for a company, because in addition to profit as much as possible the company must also pay attention to the welfare of its employees. Giving a great salary and benefits will certainly make employees more motivated to be more active in the work, which in turn makes the company's performance will be better and will increase the company's profits (Hussin, 2013: 5). In doing some tax planning,

There are three (3) methods which can be selected by the company in implementing the Income Tax article 21 employees. The first method, the amount of income tax Article 21 can be deducted directly from the salary received by the employee. The second method is provided in the form of tax allowances. While the third method is a method of Gross Up by giving employees additional gross income for the tax to be borne by the employee. (Zain, 2008: 89).

PT BTS which is located in Badung, Bali is a company engaged in garment producing various types of apparel. PT BTS conduct sales activities to various countries. Total circulation of PT BTS 2016 is Rp 8.304.322.490,00 with an operating profit after tax of Rp 94.249.689,00. PT base stations have permanent employees by 73 people. Total income tax article 21 payable in 2015 amounted to Rp 34.225.646,00, while the number of income tax article 21 payable in 2016 amounting to Rp 105,508,790.00. Data from 2015 to 2016 shows that the income tax payable Article 21 increases. Article 21 Income Tax payable in the year 2015 to 2016 shall be borne by the company.

By doing a comparison of the three methods of taxation, we can see which method can produce taxable income smaller so as to streamline the corporate income tax. From the results of this comparison, is expected to help the company as consideration in tax planning so as to assist in minimizing the tax with legal manner and in accordance with applicable regulations and also help companies to prosper employees and obtain greater profits.

Based on the background described above, this is an issue of concern are: 1) how the comparison calculation of Income Tax Article 21 in an effort to streamline the income tax burden on the PT. BTS through the method of Tax Article 21?

## **2. Research Methods**

### **2.1 Data types**

Quantitative data is data in the form of figures and statistical analysis using. The quantitative data used in this study is a list of salaries of employees of PT. BTS 2016, the financial statements. BTS in the form of an income statement and statement of financial position in 2016.

### **2.2 Data source**

The data used in this research is secondary data is data that is obtained in the form of finished or data that has been processed. Secondary data is a source of research data indirectly through a medium.

### **2.3 Data Collection Procedures**

Collecting data in this study using documentation, namely data collection associated company income tax Article 21 required for the object of research. Documents needed in the form of profit / loss statement and Statement of Financial Position Year 2016 Payroll Employee.

### **2.4 Data analysis technique**

In this study, this test is a quantitative descriptive data analysis techniques. Descriptive quantitative data analysis technique is an analytical technique that describes the state of a phenomenon which is then processed according to its function, and the processing results are then presented in the form of numbers that can be easily captured meaning by the receiver of information.

### 3. Results And Discussion

#### 3.1 Comparison Calculation of Income Tax Article 21 2016

In the calculation of income tax (VAT) of Article 21 can be performed with three (3) methods:

- a. Tax Article 21 is borne by the employee / salary (Gross Method)
- b. Tax Article 21 by the company / borne (Net Method)
- c. Tax Article 21 is given in the form of benefits / supported (Gross Up Method)

The following is the calculation of income tax article 21 employees at PT. BTS by applying the three methods mentioned:

##### 3.1.1 *Income Tax Article 21 is borne by Employee*

Table 1 will show the income tax recapitulation of Article 21 which is borne by the employee (gross method) PT. BTS 2016.

**Table 1**  
**Summary of Calculation of Income Tax Article 21 PT. BTS 2016 Gross Method (in rupiah)**

Information	Amount
Salary	3.565.019.212
Overtime pay	69.849.824
JKK, JKM and JKN	125.530.357
THR	183.535.383
Gross income	3.943.934.776
Position allowance	(150.178.314)
JHT	(69.025.674)
Year Net Income / Annualized	3.724.730.787
PKP	958.353.000
Income Tax Article 21 a year	105.508.790

In the gross method, the amount of income tax payable Article 21 shall be borne by the employee in the amount of US \$ 105,508,790.00 so with Article 21 of the income tax expense would result in earnings per employee is reduced. However, viewed from the side of the company / employer, there is no income tax payable Article 21. The Company is only obligated to make the payment and reporting Tax Article 21 of the salaries of employees who have been deducted.

##### 3.1.2 Article 21 of the Income Tax borne by the Company

Table 2 will show the recapitulation of Article 21 of the income tax borne by the company (net method) PT. BTS 2016.

**Table 2**  
**Summary of Calculation of Income Tax Article 21 PT. BTS 2016 Net Method (in rupiah)**

Information	Amount
Salary	3.565.019.212
Overtime pay	69.849.824
JKK, JKM and JKN	125.530.357
THR	183.535.383
Gross income	3.943.934.776
Position allowance	(150.178.314)
JHT	(69.025.674)
Year Net Income / Annualized	3.724.730.787
PKP	958.353.000
Income Tax Article 21 a year	105.508.790

In the method of the net amount of income tax article 21 payable equal to the gross method, Rp 105.508.790,00 which will be borne by the company / employer. However, viewed from the side of the employees there is no income tax payable Article 21, so it will not result in reduced employee income. company as cutter or collector would be obliged to pay and report Tax Article 21 of the salary. In the commercial accounting of the amount can be deducted as a cost but as a fiscal amount is not deductible as an expense (non-deductible) because it is part of the pleasure given to employees.

### 3.1.3 Income Tax Article 21 is given in of Allowances

Here is a sample calculation step income tax article 21 payable on employee A PT. BTS by applying the provision in the form of allowances in full (gross up) should be done in two stages as follows:

Table 3	
Stage 1 Calculating Benefit Tax Article 21 Year (in rupiah)	
Information	Amount
Salary / year	369.136.200
Overtime pay	-
Accident insurance	885.927
Life insurance	1.107.409
National health insurance	2.268.000
THR	30.761.350
Gross income	302.754.945
reduction:	
Position allowance	6,000,000
Pension plan	7,382,724
total Reduction	13.382.724
Net Income Year	291.857.926
PTKP (K / 2)	45.000.000
PKP (Article 17 paragraph 4)	246.857.000

PKP value there is in layer 2, so the formula of gross-up used is a layer-2.

Formula layer-2 =  $(PKP \times 15\%) - 5.000.0000,85$

Tax Benefit =  $(246\ 857\ 000 \times 15\%) - 5.000.0000,85$

Tax Benefit = Rp 32.028.550,00

Table 4 shows that there is a difference between the amount of Rp 97,00 allowance of Rp 32.028.550,00 with Article 21 of the Income Tax payable in the amount of Rp 32.028.550,00. In the calculation, sometimes the differences between the calculation according to the formula of gross-up and a calculated income tax article 21 after incorporating elements of tax allowances (gross up). The difference was caused by a rounding factor alone, and can also occur because taxable income is approaching the higher layers in the formula of tax allowances to gross up method. Therefore, we need a more precise formulation using interaction in Microsoft Excel and there will be no difference in Table 4.

**Table 4**  
**Phase 2 Calculated Tax Article 21 Upon granting allowances (in rupiah)**

<b>Information</b>	<b>Amount</b>	
Salary / year	369.136.200	
Tax Benefit	<b>32.028.647</b>	
Overtime pay	-	
Accident insurance	885.927	
Life insurance	1.107.409	
National health insurance	2.268.000	
THR	30.761.350	302.754.945
Gross income		
reduction:		
<b>Position allowance</b>	6.000.000	
<b>Pension plan</b>	7.382.724	
total Reduction		13.382.724
Net Income Year		291.857.926
PTKP (K / 2)		45.000.000
PKP (Article 17 paragraph 4)		246.857.000
Income Tax Article 21:		
5% x Rp 50,000,000	2.500.000	
15% x Rp 196 857 000	29.528.550	
Total Income Tax Article 21		<b>32.028.550</b>

Table 5 will show the recapitulation of the calculation of income tax article 21 employees were given in the form of benefits (gross up method) PT. BTS 2016.

**Table 5**  
**Summary of Calculation of Income Tax Article 21 PT. BTS 2016 Gross Method (in rupiah)**

<b>Information</b>	<b>Amount</b>
Salary	3.565.019.212
Tax Benefit	93.697.040
Overtime pay	69.849.824
JKK, JKM and JKN	125.530.357
THR	183.535.383
Gross income	2.667.634.950
Position allowance	(115.340.442)
JHT	(69.025.674)
Year Net Income / Annualized	2.508.432.080
PKP	965.841.000
Income Tax Article 21 a year	93.697.040

The amount of income tax payable Article 21 which is supported by the company / employer in the amount of USD 93,697,040.00 and the number could be financed (deductible) for this allowance was included in the income received by employees. In the method of income tax gross-up amount of allowances Article 21 provided to the employee actually has no effect on the income received by the employee (take home pay), because the amount of the tax allowance will be equal to the income tax payable Article 21 which must be paid to the State Treasury. However, in calculating the income tax article 21 on the method of gross-up, earning employees will look bigger by Income Tax Article 21 is added.



## 3.2 The Effect Comparison of Income Tax Calculation Article 21 to Total Tax Due to the PT. BTS

Table 6 shows a comparison of the results of calculation of Income Tax Article 21 of the third cutting method Tax Article 21. By making a comparison, a smaller gross up method Rp 93.697.040,00 of the net method and the gross method is Rp 105.508.790,00.

**Table 6**  
**Calculation results Tax Article 21 PT. BTS 2016 (in rupiah)**

Information	Gross	Net	Gross Up
Salary	3.565.019.212	3.565.019.212	3.565.019.212
Tax Benefit	-	-	93.697.040
Overtime pay	69.849.824	69.849.824	69.849.824
JKK, JKM and JKN	125.530.357	125.530.357	125.530.357
THR	183.535.383	183.535.383	183.535.383
Gross income	3.943.934.776	3.943.934.776	2.667.634.950
Position allowance	150.178.314	150.178.314	115.340.442
JHT	69.025.674	69.025.674	69.025.674
Year Net Income / Annualized	3.724.730.787	3.724.730.787	2.508.432.080
PKP	958.353.000	958.353.000	965.841.000
Income Tax Article 21 a year	105.508.790	105.508.790	93.697.040

**Table 7**  
**Calculation of Take Home Pay Employees PT. BTS 2016 (in rupiah)**

Information	Gross method	Net method	Gross Up Method
Salary	2.260.768.529	2.260.768.529	2.260.768.529
Tax Benefit	-	-	93.697.040
Overtime pay	69.849.824	69.849.824	69.849.824
THR	163.411.076	163.411.076	163.411.076
Gross income	2.494.029.429	2.494.029.429	2.587.726.469
Income Tax Article 21	(81.396.470)	-	(93.697.040)
JHT dues and JKN	(57.179.310)	(57.179.310)	(57.179.310)
Total Take Home Pay	2.355.453.650	2.436.850.120	2.436.850.120

Table 7 shows that the gross income received by the employee on a gross-up method is greater than the gross income received by employees on methods gross and net method that is Rp 2.587.726.469,00 which has a difference of Rp 93.697.040,00 from gross income received by employees at the gross method and the net method. In the gross-up method, article 21, which should be borne by the employee equal to the tax benefits provided by the company. This resulted in no reduction in take home pay received by the employee is still Rp 2.436.850.120,00. Although the method of take home pay the net amount to be equal to gross up method, but in terms of the company / employer still have to spend money to deposit Tax Article 21, which is a burden for the company / employer.

In terms of commercial, company policies apply Article 21 of the Income Tax gross-up will be seen on businesses or employers for introducing additional tax benefits will affect the company's costs increased number of both commercial and fiscal. However, if traced back that result from a larger fiscal costs will affect the upside to earnings before corporate taxes are becoming smaller and further corporate income tax payable will be smaller.

The influence on the ratio calculation through policy / method of cutting Tax Article 21 of the amount of tax payable PT. BTS 2017 tax year can be illustrated as follows:

**Table 8**  
**Profit / Loss for the Period Ended December 31, 2016 (in rupiah)**

Commentary	Gross Method	Net Method	Gross Up Method
<b>Income</b>			
Sale	8.304.322.490	8.304.322.490	8.304.322.490
<b>Total income</b>	<b>8.304.322.490</b>	<b>8.304.322.490</b>	<b>8.304.322.490</b>
<b>Cost of goods sold</b>			
Raw Material Costs			
Direct labor costs	3.852.262.352	3.852.262.352	3.852.262.352
Depreciation costs Equipment	3.635.238.104	3.635.238.104	3.635.238.104
Factory	46.099.604	46.099.604	46.099.604
Transport costs Purchase	67.069.677	67.069.677	67.069.677
Packaging costs	98.622.808	98.622.808	98.622.808
Water & Electricity Costs	60.756.546	60.756.546	60.756.546
<b>Total Cost of Sales</b>	<b>7.760.049.090</b>	<b>7.760.049.090</b>	<b>7.760.049.090</b>
<b>Gross profit</b>	<b>544.273.399</b>	<b>544.273.399</b>	<b>544.273.399</b>
<b>Fees</b>			
Cost of Employee Salaries	1.882.272.487	1.882.272.487	1.882.272.487
Cost Benefit Tax Article 21	-	-	93.697.040
Consumption costs	163.318.486	163.318.486	163.318.486
Depreciation costs	82.924.356	82.924.356	82.924.356
Amortization costs Establishment	63.097.086	63.097.086	63.097.086
Rental costs	101.033.333	101.033.333	101.033.333
Office Phone Costs	45.012.647	45.012.647	45.012.647
Internet charges	39.393.000	39.393.000	39.393.000
Cost Printing & Copy	8.754.956	8.754.956	8.754.956
Fees Office Supplies	85.124.407	85.124.407	85.124.407
Water & Electricity Costs	38.844.349	38.844.349	38.844.349
Advertising costs	2.490.050	2.490.050	2.490.050
Transportation costs	31.214.450	31.214.450	31.214.450
Official travel expenses	38.386.547	38.386.547	38.386.547
Appliance Repair Costs	15.012.500	15.012.500	15.012.500
Load permits and retributions	83.800.000	83.800.000	83.800.000
Renovation costs	4.320.000	4.320.000	4.320.000
VAT charges	139.971.371	139.971.371	139.971.371
Loan Interest Costs	33.974.246	33.974.246	33.974.246
<b>Total cost</b>	<b>2.858.944.271</b>	<b>2.858.944.271</b>	<b>2.636.474.112</b>
<b>Operational profit</b>	<b>(2.314.670.872)</b>	<b>(2.314.670.872)</b>	<b>454.059.278</b>
<b>Revenue outside of Enterprises</b>	<b>141.854.113</b>	<b>141.854.113</b>	<b>141.854.113</b>
Gain (Loss) on Foreign Exchange			
<b>Total revenue outside of Enterprises</b>	<b>141.854.113</b>	<b>141.854.113</b>	<b>141.854.113</b>
<b>Costs excluding Enterprises</b>	<b>18.269.060</b>	<b>18.269.060</b>	<b>18.269.060</b>
Bank Administration fee			
<b>Total Cost of outside business</b>	<b>18.269.060</b>	<b>18.269.060</b>	<b>18.269.060</b>
<b>Income (Loss) Before Taxes</b>	<b>(2.191.085.819)</b>	<b>(2.191.085.819)</b>	<b>577.644.330</b>
<b>Income Tax Payable</b>	<b>(389.462.153)</b>	<b>(389.462.153)</b>	<b>102.675.396</b>
<b>Profit (Loss) After Tax</b>	<b>(1.801.623.666)</b>	<b>(1.801.623.666)</b>	<b>474.968.934</b>

In Table 8, it can be seen that by applying the gross method, the amount of corporate income tax payable is equal to if applying the method of net amounting to Rp 119.329.902,00. While applying gross-up method, the amount of corporate income tax payable in the amount of Rp 102.675.396,00. Therefore, by applying the gross-up method, can be seen the amount of corporate income tax savings as follows:

Corporate income tax using the net method	Rp 389,462,153.00
Using the corporate income tax gross-up method	Rp 102,675,396.00
Corporate Tax savings	Rp 286,786,757.00
Tax Article 21 use the net method	Rp 105,508,790.00
Income Tax Article 21, using the gross-up method	Rp 93,697,040.00
Increased Income Tax Article 21	Rp 118,117,750.00
Corporate Tax savings after an increase in income tax Article 21	<b>Rp 168,669,007.00</b>

From the calculations have been done, the savings gained corporate income tax payable in the amount of Rp 168.669.007,00. Thus, it can be concluded that the method of cutting income tax article 21 employees to further minimize the amount of tax payable is to apply the gross-up method. In doing some tax planning, in addition to the well-being of its employees, the company must also consider the impact of tax planning for the company. Therefore, a company has chosen method of cutting income tax article 21 the right.

Gains derived by employees of the selection method, namely gross up take home pay (salary brought home) by employees remain intact. While corporate profits are generating the amount of corporate income tax payable is less. Of benefits both parties, it can be judged that the allowance which Article 21 Income Tax gross-up is more efficient than other methods.

#### 4. Conclusions

Based on the results of the discussion contained in the previous chapter, the conclusion as follows:

1. In the method of the gross amount of income tax payable Article 21 shall be borne by the employee in the amount of Rp 389.462.153,00. The amount will be equal to the amount of income tax article 21 payable on net method Rp 389.462.153,00 which will be borne by the company/employer, where the amount can't be expensed (non-deductible). While the gross-up method, the amount of income tax article 21, which is supported by the company/employer in the amount of Rp 102.675.396,00 and the amount can be financed (deductible).
2. By making comparisons and calculations through a policy / method Income Tax Article 21 given in the form of benefits (gross up method) will provide savings impact of corporate income tax payable, due to the income tax section 21 employees can be deducted as an expense in fiscal by the company. So that by 2016 the amount of corporate income tax payable of Rp 389.462.153,00, then with tax planning, corporate income tax amount payable in 2017 (assuming revenue and cost the same as in 2016) will be reduced to Rp 102.675.396,00, Saving corporate income tax payable occurred Rp 286.786.757,00. However, the company pays income tax in addition to the section 21 tax planning (replace the pleasure of being allowances) amounted to USD 118 117. Rp 286.786.757,00 - Rp 118.117.750,00 = Rp 168.669.007,00.

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## Analysis of Receivables Management to Minimize Uncollectible Receivables at Taum Resort Bali

P A Rahayu\*, I K Suandi, and I M Suarta

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: agustinarahayu120@gmail.com

**Abstract.** This study aims to determine 1) accounts receivable management at Taum *Resort* Bali 2) how much receivable loss reserves must be formed by Taum *Resort* Bali. The data used in this study are *aging schedule account receivable*, credit sales, total receivables, receivable policies, credit standards and collection of accounts receivable. The measuring instrument used to conduct this research is 5C analysis to analyze crediting standards, receivable policies to analyze compliance collection and collection of accounts receivable, ratios related to accounts receivable such as accounts receivable turnover ratio, ratio of average days of receivable billing, arrears ratio and billing ratio to assess the performance of accounts receivable, a backup method to calculate allowance for receivables losses. The results showed that the overall receivables management was classified as not good after being analyzed using three indicators. The first indicator is fulfilled based on 5C analysis for crediting standards. The second indicator is not met because the collection and collection of receivables is not in accordance with hotel policy. The third indicator is not fulfilled because the results of the performance analysis of accounts receivable using the ratio is not optimal. The amount of uncollectible receivables is high, so the need for the establishment of receivables loss reserves. In 2015 the allowance for receivables losses was set at Rp.43,938,899.00, in 2016 amounted to Rp.63,635,501.00 and in 2017 amounted to Rp.101,042,527.00.

### 1. Introduction

Strict hotel competition has resulted in hotels having to find sales strategies to attract guests, one of which is credit sales. The result of credit sales is the existence of receivables. Good management of accounts receivable will help management in providing cash for hotel operations [1]. If it is not managed properly, then the receivables will provide risk in the form of uncollectible receivables. Uncollectible receivables are income losses that require proper recording of journal entries in the reduction of trade receivable assets and decreases related to earnings and shareholders' equity [2]. Uncollectible receivables will interfere with hotel operations, therefore receivable management is needed to manage receivables so that the risk of uncollectible receivables can be minimized. Receivables management is the management of accounts receivable so that the credit policy reaches an optimal level, namely the achievement of a balance between costs due to credit policy and the benefits obtained from the policy [3].

Taum Resort Bali has receivables that can be classified into 3, namely credit cards, travel agents, and company ledger. The amount of doubtful accounts held by Taum Resort Bali is high, but the hotel does not form a receivable loss reserve, this is contrary to the matching principal. The Finance Controller in

approving the provision of credit facilities to travel agents in general only looks at the productivity and smoothness of payments. On the other hand, the Account Receivable section is sometimes not timely in sending invoices. Therefore, receivable management is very necessary to prevent the occurrence of uncollectible accounts. Based on the description of the background of the problem, it is necessary to discuss the management of accounts receivable at Taum Resort Bali and how many receivable loss reserves must be established by Taum Resort Bali.

## 2. Methodology

This study uses secondary data in the form of data accounts receivable scheduling, credit sales data, data on the amount of accounts receivable, data on receivable policy, credit standard data and data collection of receivables policy. Sales data, the amount of accounts receivable and the age of accounts receivable are examined from 2015 to 2017. Data collection procedures are carried out by means of documentation and interviews. The analysis techniques used are descriptive qualitative and quantitative descriptive methods. Qualitative descriptive method is used for assessing credit standards by using a 5C measuring instrument (Character, Capacity, Capital, Collateral, and Condition) and assessing collection of accounts receivable with a measure of receivable policies owned by Taum Resort Bali. Quantitative descriptive method are used to assess the performance of accounts receivable with a receivable turnover ratio, the ratio of average collection period, arrears ratio, billing ratio and to analyze the age of accounts receivable so that it is known how many reserve losses of accounts receivable must be formed. The formulas of ratio are:

- 1) Account Receivable Turn Over – ARTO

$$ARTO = \frac{\text{Credit Sales}}{\text{Receivable Average}}$$

Calculate receivable average:

$$\text{Receivable Average} = \frac{\text{Receivable Beginning Balance} + \text{Receivable Ending Balance}}{2}$$

- 2) Average Collection Period (ACP)

$$ACP = \frac{365 \text{ days}}{ARTO}$$

- 3) Arrears Ratio

$$\text{Arrears Ratio} = \frac{\text{Receivable arrears at ending period}}{\text{Receivable total at the same period}} \times 100\%$$

- 4) Billing Ratio

$$\text{Billing Ratio} = \frac{\text{Billing Receivable Total}}{\text{Receivable Total}} \times 100\%$$

### 3. Result and Discussion

#### 3.1 Taum Resort Bali Receivable Management

##### 3.1.1 5C Analysis

Credit analysis is an analysis used to assess whether or not a credit is disbursed. The goal is not to have financed credit not to have feasible. [4] Credit analysis can be done with various analytical tools, one of which is 5C. Five "C" include Character, Capacity, Capital, Collateral, and Condition "[1]. Taum Resort Bali fulfills four C factors in providing credit facilities to travel agents. The third factor, capital, cannot be analyzed. This is because the supporting data for carrying out an analysis in the form of financial statements is difficult to obtain, so that the "capital" factor tends to be ignored by the hotel and considered to have been fulfilled. The four Cs analyzed show that the entire travel agent meets the requirements of character, capacity, collateral and condition. Thus, Taum Resort Bali in providing credit facilities to travel agents has considered a factor of 5C and each agent has fulfilled these criteria.

##### 3.1.2 Collection of Receivables

Making invoices and sending invoices are carried out by the Account Receivable in the first week at the beginning of the following month, while the receivable policy states that "For Travel Agent: depending on the volume of the business and the agreement signed, generally on fortnightly or monthly basis". The Account Receivable section collects vouchers from the travel agent first until the end of the month, and arrives at the beginning of the first week of the following month after all vouchers are collected, then all vouchers are made an invoice and sent to the travel agent. In terms of accounts receivable those are past due but not yet paid by the travel agent, a warning letter is sent. Based on the receivables policy, the language contained in the reminder is made with increasingly urgent words and changes the signing of the letter and the recipient based on the type of reminder. In fact, a reminder made from the first reminder to the third reminder, the language used is the same, there are no urgent words, and the reminder signing is not in accordance with the follow-up procedure. This resulted in the debtor when receiving the reminder did not heed and tended to leave it.

##### 3.1.3 Receivables Ratio

###### 1) Receivable Turnover Ratio

Year	Credit Card	Receivable Turnover Company Ledger	Travel Agents
2015	41,46	1,38	8,40
2016	53,62	1,02	4,24
2017	19,68	1,10	3,30

The Account Receivable Turnover ratio measures the level of hotel receivable turnover into cash [1]. Calculation of receivables turnover ratio in 2015, 2016 and 2017 for sub credit cards are 41.46 times, 53.62 times and 19.68 times. Company ledger produces calculations from 2015, 2016 and 2017 of 1.38 times, 1.02 times and 1.10 times. *Travel agents* in 2015, 2016, and 2017 are 8.40 times, 4.24 times, 3.30 times. The higher the ratio shows that the working capital invested in receivables is lower [4]. The credit turnover rate for credit cards produces the best ratio.

## 2) Ratio of Average Collection Period

Year	Credit Card	Average Collection Period (Day) Company Ledger	Travel Agents
2015	9	265	43
2016	7	359	86
2017	19	333	111

This ratio measures the time period of receivables to cash [1]. The ratio of the average day of collection of receivables to credit cards from 2015 to 2017 is 9 days, 7 days and 19 days. The company ledger sub-accounts show the results of 265 days, 359 days and 333 days for 2015, 2016, and 2017. The old company ledger calculation results are due to the owners not paying their receivables. Travel agents from 2015 to 2017 resulted in calculations of 43 days, 86 days and 111 days. The lower the ratio results, the better. Then the credit card sub-accounts produce the best ratio.

## 3) Arrears Ratio

Year	Credit Card	Arrears Ratio (%) Company Ledger	Travel Agents
2015	0,94	49,73	10,82
2016	2,88	31,46	26,91
2017	6,61	36,02	16,62

The arrears ratio is used to determine the amount of outstanding and unbilled receivables from a number of credit sales made [5]. The ratio of arrears in the credit card sub-accounts in 2015, 2016 and 2017 shows the results of 0.94%, 2.88% and 6.61%. For the company ledger in 2015, 2016 and 2017 amounted to 49.73%, 31.46% and 36.02%. And for travel agents 10.82%, 26.91%, and 16.62% for 2015, 2016 and 2017. The lower the ratio the better. Of the three ratios, the credit card sub-accounts produce the best calculation.

## 4) Billing Ratio

Year	Credit Card	Billing Ratio (%) Company Ledger	Travel Agents
2015	9906	50,27	89,18
2016	97,12	68,54	73,09
2017	93,39	63,98	83,38

The collection ratio is used to determine the extent to which billing activities are carried out or how much receivable are collected from the total receivables owned by the company [5]. Billing ratio for *credit card* sub-accounts in 2015, 2016 and 2017 shows the results of 99.06%, 97.12%, and 93.39%. Company ledger produces a ratio calculation of 50.27%, 68.54%, and 63.98% for 2015, 2016, and 2017. While the travel agent produces a calculation ratio from 2015 to 2017 which is 89.18%, 73.09%, and 83.38%. The higher the ratio the better.



## 3.2 Accounts receivable loss reserves must be established by Taum Resort Bali

Taum Resort Bali does not establish allowance for loss receivable, it is seen on the chart of accounts that are used, there is no allowance for loss of accounts receivable in the balance sheet report and there is no loss on receivables in the profit and loss report. As long as the hotel management is managed by Centara Hotel & Resort, in the receivable policy there is a policy for the elimination of doubtful accounts, but the hotel does not implement it. The amount of doubtful accounts is high, so the hotel must calculate the allowance for receivables must be formed, the purpose of which is in accordance with the accounting principle of the matching principle, in which the income received in the form of high credit sales must be matched with the burden of loss on the credit policy. Journal required as of December 31, 2015, namely:

Bad Debt Expenses	Rp.43, 938,899.00
Allowance for Bad Debt	Rp.43, 938,899.00

The absence of reserves for loss receivables results in higher profits presented on report of *profit and loss* Rp.43, 938,899.00, this is because there is no loss on accounts receivable. In 2016 the allowance for receivables losses must be established amounted to Rp63, 635,501.00 so that the required journals as of December 31, 2016 are:

Bad Debt Expenses	Rp.63, 635,501.00
Allowance for Bad Debt	Rp.63, 635,501.00

As a result of not forming a reserve for loss receivables, the profit presented in the report on *profit and loss* is higher at Rp. 63,635,501.00, the cause is that there is no loss on accounts receivable. In 2017 the allowance for losses on receivables must be established amounted to Rp101, 042,527.00 so that the required journals as of December 31, 2017 are:

Bad Debt Expenses	Rp.101, 042,527.00
Allowance for Bad Debt	Rp.101, 042,527.00

The non-establishment of reserves for loss receivables results in higher profit presented on report of *profit and loss* Rp101, 042,527.00.

## 4. Conclusion

Overall receivables management at Taum *Resort* Bali is classified as poor after being analyzed using three indicators. The first indicator is fulfilled based on 5C analysis for crediting standards to *travel agents*. The second indicator is not fulfilled because the collection and collection of receivables is not in accordance with hotel policy. The third indicator is not fulfilled because the results of the performance analysis of accounts receivable using the ratio is not optimal. The amount of uncollectible receivables causes the hotel to set up a loss reserve. In 2015 reserves were in the form of Rp.43, 938,899.00, in 2016 amounted to Rp.63, 635,501.00, and in 2017 are as big as Rp.101, 042,527.00.

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## **The Influence of Average Collection Periods on Cash Ratio, Net Profit Margin, and Return on Assets at PT Angkasa Pura I Persero Branch of I Gusti Ngurah Rai International**

**R Ristanti\*, I N Sugiarta, and I M Ariana**

Accounting Department Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali – 80364

\*Email to: rizniza19@gmail.com

**Abstract.** Account receivable has a very important role in the company. Account receivable arising from the occurrence of credit sale transaction. Account receivable is able to boost profits once a certain risk. For a company that claimed to be more careful in managing their receivable in both the delivery and billing. This research was conducted at PT Angkasa Pura I (Persero) Branch of I Gusti Ngurah Rai International Airport – Bali. The purpose of this study is to know the influence of average collection periods to cash ratio, net profit margin, and return on assets. Type of data used in research is secondary data from period 2005 – 2017 financial statement. Data analysis methods used in this study is the method of simple linier regression analysis at a significance level of  $\alpha=5\%$ . This linier test is using IBM SPSS version 23. The result showed that average collection periods has significant effect on the cash ratio because the significance value is less than 0.05 ( $0.00 < 0.05$ ) and average collection periods also has significant effect on the net profit margin because the significance value is less than 0.05 ( $0.003 < 0.05$ ). Instead, average collection periods has no significant effect on return on assets because significance value is more than 0.05 ( $0.062 > 0.05$ ).

### **1. Introduction**

The aim of each company is to make a profit with one of the ways to make credit sales which will ultimately result in accounts receivable. The policy of making credit sales will be able to increase the profitability of the company but on the other hand it is also quite risky because receivables are assets that are no more liquid when compared to cash because it cannot be used at any time to full fill the company's operational activities so that this will affect the company's liquidity. The decision to sell credit must be accompanied by effective and efficient receivables management. To find out the effectiveness in managing receivables can be assessed using the ratio of average collection periods (ACP). The faster the ACP ratio, the faster the cash will be received by the company, so that the company will run more smoothly and liquidity. The high ACP exceeds the credit requirements indicating that the importance of an efficient receivable function is often overlooked and not managed properly by the company. The ability to transform receivables into cash should be of special concern to companies because the delay in the collectability of receivables by customers has a negative impact on the company's operational activities. In addition, the delay in collectability of receivables not only reflects the inefficiency of billing, but also has an impact on increasing collection costs and the risk of uncollectible receivables.

## 2. Theoretical background and method of analysis

Receivables are in the form of claim rights or bills in the form of money or other payments to a person or company. Receivables are divided into trade receivables and other receivables. The indicator used to assess whether or not the collection of accounts is efficient is the average collection period ratio, which is the average time needed to convert receivables to cash.

Formula average collection periods:

$$\text{Average Collection Periods} = \frac{\text{Total of Account Receivable}}{\text{Total of Sales}} \times 365 \text{ hari}$$

Delay in collectability of receivables will have impact on the company's liquidity and profitability. Where the liquidity in this journal is measured by cash ratio and profitability measured by net profit margin and return on assets. Following formula from the ratios:

$$\text{Cash Ratio} = \frac{\text{Cash} + \text{Cash in bank}}{\text{Current Payable}} \times 100\%$$

$$\text{Net Profit Margin} = \frac{\text{Earning after tax}}{\text{Total of sales}} \times 100\%$$

$$\text{Return on Assets} = \frac{\text{Earning after tax}}{\text{Total of Assets}} \times 100\%$$

The journal measures how the influence between independent variable (average collection periods) and dependent variable (cash ratio, net profit margin, dan return on assets) by using IBM SPSS Version 23.

As for the statistical data analysis used includes:

- a. Normality Test
- b. Heteroskedastic Test
- c. Autocorrelation Test
- d. Simple Linier Regression Test

## 3. Result and Discussion

3.1 The following are the result calculations of average collection periods, cash ratio, net profit margin, dan return on assets.

Based on the Table 1, it can be seen that the ratio of average collection periods averages more than the credit period determined by the company, namely fourteen days (14) in accordance with KEP 77 / KU.19 / 2015. In terms of the company's liquidity, it can be seen from the company's cash ratio which shows the decline from year to year to the lowest in 2017 which is 0.23%.

Company profitability can be seen from the ratio of net profit margins and return on assets. Both of these ratios tend to experience quite volatile development.

**Table 1.** The Calculation Result of Ratios

No	Average Collection Periods	Cash Ratio	Net Profit Margin	Return on Assets
2005	89	47,35%	49,19%	24,49%
2006	90	32,96%	40,07%	21,08%
2007	74	56,22%	46,86%	31,29%
2008	55	33,01%	58,29%	53,20%
2009	42	8,77%	68,66%	74,43%
2010	33	13,47%	63,46%	72,25%
2011	9	4,87%	61,77%	95,08%
2012	6	8,68%	70,95%	116,76%
2013	46	3,76%	65,17%	33,23%
2014	26	4,01%	61,78%	24,56%
2015	28	3,67%	58,99%	25,96%
2016	20	1,46%	60,02%	32,04%
2017	13	0,23%	55,42%	32,81%

### 3.2 Statistical Analysis

#### 3.2.1 The Influence of Average Collection Periods on Cash Ratio

**Table 2.** Normalize Test

<i>One-Sample Kolmogorov-Smirnov Test</i>		
		Unstandardized Residual
N		13
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std.	10,04117618
	Deviation	
Most Extreme Differences	Absolute	,105
	Positive Negative	,105
Test Statistic		-,058
Asymp. Sig. (2-tailed)		,105
		,200 <sup>c,d</sup>

The amount of Kolmogorov-Smirnov value is 0.105 and is significant at 0.200, this means that  $H_0$  is accepted which means that the data is normally distributed. This test result is consistent with the previous graph test which shows that the data is normally distributed.

**Table 3.** Heteroskedastic Test

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4,595	2,763		1,663	,124
Average Collection Period	,080	,056	,395	1,427	,181

The significance value of the average collection variable is 0.181. This value is greater than 0.05, which means there is no influence between the independent variables on absolute residuals. Thus, the model created does not contain symptoms of heteroskedastic.

**Table 4.** Autocorrelation Test

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,848 <sup>a</sup>	,719	,694	10,48767	2,266

Durbin Watson (DW) value of 2.266 and according to the criteria of autocorrelation of these values between -2 to 2 so that it can be said that the data used in this study are free of autocorrelation symptoms.

The SPSS output R square value is 0.719. This means that 71.9% cash ratio is influenced by the independent variable, average collection periods. While the rest, 28.1% is influenced by other causes outside the model.

**Table 5.** t Test

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-6,001	5,187		-	,272
Average Collection Period	,558	,105	,848	1,157 5,310	,000

By looking at the table above, a simple linear regression equation can be arranged as follows:

$$CR = -6,001 + 0,558 ACP$$

From the simple linear regression equation above, it is known to have a constant of -6,001. This number means that for each 1 unit increase on average collection periods with the assumption that other independent variables remain, the cash ratio level is predicted to decrease by 0.558.

From the table it can be seen that the value of t counts 5.310 and the significance value is less than 0.05 ( $0.000 < 0.05$ ) it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted meaning average collection periods have a significant effect on the cash ratio.

### 3.2.2 The Influence of Average Collection Periods on Net Profit Margin

**Table 6.** Normalize Test

1) <i>One-Sample Kolmogorov-Smirnov Test</i>		
		Unstandardized Residual
N		13
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	5,79142821
Most Extreme Differences	Absolute	,126
	Positive	,126
	Negative	-,087
Test Statistic		,126
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

The amount of Kolmogorov-Smirnov value is 0.126 and is significant at 0.200, this means that  $H_0$  is accepted which means that the data is normally distributed. This test result is consistent with the previous graph test which shows that the data is normally distributed.

**Table 7.** Uji Heteroskedastic

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	4,739	1,596	2,968	,013
	Average Collection Period	-,001	,032	-,025	,981

The significance value of the average collection variable is 0.981. This value is greater than 0.05, which means there is no influence between the independent variables on absolute residuals. Thus, the model created does not contain symptoms of heteroskedastic.

**Table 8.** Autocorrelation Test

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,751 <sup>a</sup>	,564	,524	6,04895	1,216

Durbin Watson (DW) value of 1.216 and according to the criteria of autocorrelation of these values between -2 to 2 so that it can be said that the data used in this study are free of autocorrelation symptoms.

The SPSS output R square value is 0.564. This means that 71.9% net profit margin is influenced by the independent variable, average collection periods. While the rest, 43.6% is influenced by other causes outside the model.

**Table 9.** t Test

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	67,851	2,992		22,678	,000
Average Collection Period	-,229	,061	-,751	-3,771	,003

By looking at the table above, a simple linear regression equation can be arranged as follows:

$$\text{NPM} = 67,851 - 0,229 \text{ ACP}$$

From the simple linear regression equation above, it is known to have a constant of 67,851. This number means that for each 1 unit increase on average collection periods with the assumption that other independent variables remain, the net profit margin level is predicted to decrease by 0.558.

From the table it can be seen that the value of t counts -3,771 and the significance value is less than 0.05 ( $0.003 < 0.05$ ) it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted meaning average collection periods have a significant effect on the net profit margin.

### 3.2.3 The Influence of Average Collection Periods on Return on Assets

The amount of Kolmogorov-Smirnov value is 0.172 and is significant at 0.200, this means that  $H_0$  is accepted which means that the data is normally distributed. This test result is consistent with the previous graph test which shows that the data is normally distributed.



**Table 10.** Normalize Test

<b>One-Sample Kolmogorov-Smirnov Test</b>		
		Unstandardized Residual
N		13
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	26,29463177
Most Extreme Differences	Absolute	,172
	Positive	,172
	Negative	-,117
Test Statistic		,172
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

**Table 11.** Homoscedastic Test

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	40,061	2,853		14,04	,000
Average Collection Periods	-,464	,058	-,924	4 -8,028	,007

The significance value of the average collection variable is 0.007. This value is greater than 0.05, which means there is no influence between the independent variables on absolute residuals. Thus, the model created does not contain symptoms of heteroskedastic.

**Table 12.** Autocorrelation Test

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,530 <sup>a</sup>	,281	,216	27,46385	,598

Durbin Watson (DW) value of 0.598 and according to the criteria of autocorrelation of these values between -2 to 2 so that it can be said that the data used in this study are free of autocorrelation symptoms.

The SPSS output R square value is 0.281. This means that 28.1% return on assets is influenced by the independent variable, average collection periods. While the rest, 71.9% is influenced by other causes outside the model.

Table 13. Uji t

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	72,336	13,584		5,325	,000
Average Collection Periods	-,571	,275	-,530	-2,074	,062

By looking at the table above, a simple linear regression equation can be arranged as follows:

$$\text{ROA} = 72,336 - 0,571\text{ACP}$$

From the simple linear regression equation above, it is known to have a constant of 72.3336. This number means that for each 1 unit increase on average collection periods with the assumption that other independent variables remain, the net profit margin level is predicted to decrease by 0.571.

From the table it can be seen that the value of t counts -3,771 and the significance value is more than 0.05 (0.003 < 0.05) it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected meaning average collection period doesn't have a significant effect on the return on assets.

#### 4. Summary

Average collection periods have significant influence on cash ratio variable with significant level less than 0.05 (0.000 < 0.05). The influence given average collection periods to cash ratio is negative.

Average collection periods have significant influence on net profit margin variable with significant level less than 0.05 (0.003 < 0.05). The influence given average collection periods to net profit margin is negative.

Average collection periods doesn't have significant influence on return on assets variable with significant level more than 0.05 (0.062 > 0.05). The influence given average collection periods to return on assets is negative.

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POLITEKNIK NEGERI BALI



## **JASAFINT**

**P3M - Politeknik Negeri Bali**

Kampus Bukit Jimbaran, PO Box 1064 Tuban, Badung, Bali

Phone: +62361 701981, Mobile/WA: +6281338158240

Email: [jasafint@pnb.ac.id](mailto:jasafint@pnb.ac.id)

<http://ojs.pnb.ac.id/index.php/JASAFINT>