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# JASAFINT

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### Preface

**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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### Audit of Human Resources Management in Vouk Hotel & Suites Bali

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Abstract: Human resource is the main pillar for a company to realize the company's vision, mission, and goals. This research aimed to assess (evaluate) the programs and resource management system in Vouk Hotel & Suites Bali. The data sources used were primary and secondary data. The primary data source was taken from structured interview and questionnaire distribution, meanwhile the secondary data source was taken from regulation book, standard operating procedure (SOP), percentage absenteeism, and employee service income in 2019 at Vouk Hotel & Suites Bali. The obtained data was analyzed by using descriptive qualitative method with four steps of analysis in audit management, namely: preliminary audit, review and management control testing, follow-up audit, and recommendation. The result of the research indicated the weaknesses of several human resource functions, those are planning, employee training & development, employee performance appraisal, and given compensation. Based on the indicating weakness of the research, therefore, some improvement recommendations were given.

**Keywords:** Management Audit, Audit of Human Resource Management.

### 1. Introduction

Human resource is the main pillar for a company as well as being the driving force to realize the company's vision, mission, and goals [1]. One of the company's success keys placed on the quality of human resource. Qualified human resource can only be obtained from a qualified human resource management as well [2].

Vouk Hotel & Suites is a company engaged in services (hospitality) which will be very dependent on its manpower. It results in human resources management becomes the main point in supporting the performance of the employee in Vouk Hotel & Suites Bali. However, based on the preliminary observation that has been conducted, the management of human resources currently still has some obstacles, such as the high level of employee absenteeism with an average of 23,09% and the highest peak is on December for 42,53%, furthermore, the compensation given is not in accordance with the workload of the employees, there are still vacant positions for a long time, the self-employed workers feel uneasy about the continuation of their contracts, and an unstructured training schedule.

The obstacles of human resources in Vouk Hotel & Suites Bali above must be corrected immediately, so that the company can properly maximize the use of human resources to gain the company's goals. It is necessary to conduct an assessment to the implementation and control of human resources programs

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[3]. In order to ensure that the functions of human resources have been running and able to contribute well in achieving the company success, an assessment (evaluation) of the implementation and control of human resources programs must be carried out through audit of human resources management [4]. According to the description above, therefore, further research through audit of human resources management in Vouk Hotel & Suites Bali needs to be conducted and it is hoped that it can provide recommendation to improve effectiveness and efficiency of the company in managing human resources in Vouk Hotel & Suites Bali.

#### 2. Literature Review

Management audit is an objectively and independently assessment of management effectiveness or organization structure to the achievement of the company's goals or policies [5]. The scope of management audit covers all aspects of management activities [6]. This scope can be in the form of all activities or can only cover certain part of the carried out programs or activities. The objectives of management audit are activities, programs, and areas within the company which is known or identified as still require improvement [7]. Audit of human resources management is a comprehensive examination of the quality of human resources within a department, division, or company, in the sense of evaluating HR activities in a company by emphasizing on the improvement [8].

The objective of strategic human resources management, to create a vision that is so fundamental issues related to the employee regarding. Hence, is given the importance of human resources as the most important factor in the production of organization [9]. Today's organizations have to remain alert and adaptive to unforeseen events, such as external crises, which create increased uncertainty among their workforce and pose immediate threats to the organizations' performance and viability [10]. Human resources management should focus on cost reduction and corporate profitability (in the short-term); on the other, their actions should provide long-term sustainability of organizational performance [11].

### 3. Research Method

This research used qualitative and quantitative data type which was sourced from primary and secondary data. Primary data source obtained directly through distributing questionnaires to 22 employees who has been selected as research samples and the result of interview with the Human Resources Department manager related to the function of human resources in Vouk Hotel & Suites Bali. Meanwhile, secondary data obtained from other parties through documentations in the form of a regulation book, standard operating procedure (SOP) for human resources functions, percentage absenteeism data, and employee service income in 2019 at Vouk Hotel & Suites Bali.

The technique in analyzing data was descriptive qualitative technique. Descriptive qualitative technique carried out by analyzing certain conditions and situation in various collected data, such as observation, questionnaire, interview, and documentation about the analyzed problems through four steps of data analysis in management audit, namely preliminary audit, review and management control testing, follow-up audit, and recommendation.

### 4. Result and Discussion

#### 4.1 Preliminary Audit

Preliminary Audit is conducted in order to carry out a further audit activity. Preliminary Audit is conducted to gain information about activities and conditions of human resources in Vouk Hotel & Suites. That information is gained through interview method and distribution of questionnaire to Human Resources Department (HRD) and several employees who have been selected as research samples.

### a. HR Planning

Based on the result of distributing questionnaires that have been conducted to 22 samples of employee, there are 4 people or 18% of employees who know the HR planning function, 17 people or 77% of employees stated that Vouk Hotel & Suites does not have a clearly documented HR planning function, and 1 person or 5% of employees do not know the HR planning function. 7 people or 32% employees



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clearly know the HR planning function, 13 people or 59% of employees stated that Vouk Hotel & Suites do not have a clear qualification regarding HR planning, and 2 people or 9% of employees stated that they do not know about the qualification for HR planning.

#### b. HR Recruitment

According to the conducted research, the following is the result of distributing questionnaire to the employees who have been selected as samples and interview with the Human Resources Department. For the questionnaire that has been distributed to 22 employees, there are 17 people or 77% of employees have firmly and clearly obtained information regarding recruitment requirements and 5 people or 23% of employees do not get a clear and firm information about recruitment requirements, then 19 people or 86% of employees are accepted in Vouk Hotel & Suites through a strict selection process and 3 people or 14% of employees are accepted through a non-strict selection process, 15 people or 68% of employees have known the stages of selection carried out to all co-workers and 7 people or 32% of employees do not know the stages of selection of the co-workers.

#### c. HR Placement

Based on the result of distributing questionnaires that have been conducted to 22 samples of employees, all employees stated that they have been placed in the desired position.

### d. HR Training and Development

Based on the result of distributing questionnaires that have been conducted to 22 samples of employees, 11 people or 50% of employees know that Vouk Hotel & Suites has training and development programs, and 11 people or 50% of employees do not know that the company has training and development programs. Furthermore, 10 people or 45% of employees stated that the company provided training to complete the work given and 12 people or 56% of employees stated that the company arranged schedule for the implementation of the training and as many as 16 people or 73% of employees stated that the company do not arrange schedule for the training. Moreover, 15 people or 68% of employees stated that the company has provided useful training, 6 people or 27% of employees stated that the company do not provide useful training, and for 1 person or 5% of employees stated that they do not know about the provided training.

### e. Employee Performance Appraisal

According to the result of distributing questionnaires that have been conducted to 22 samples of employees, 14 people or 64% of employees already know how the company carries out performance appraisal and as many as 8 people or 36% of employees do not know how the company carries out performance appraisal. Furthermore, 9 people or 41% of employees stated that the company reported the result of the performance appraisal, and as many as 13 people or 59% of employees stated that they do not know the result of the performance appraisal. 8 people or 36% of employees stated that the company asked for a response to the result of the performance appraisal report and 14 people or 64% of employees stated that the company do not ask any response to the result of the performances appraisal report.

### d. Compensation

According to the result of distributing questionnaires that have been conducted to 22 samples of employees, 5 people or 23% of employees said that they are satisfied with the compensation provided and 17 people or 77% of employees said that they are not satisfied with the compensation. Furthermore, as many as 4 people or 18% of employees stated that the company gives a bonus if the work target is achieved and 18 people or 82% of employees stated that they do not get a bonus. 22 people or 100% of employees stated that the company has provided health benefits, religious holiday allowances (RHA), and a leave.



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### f. Termination of Employment

Based on the result of distributing questionnaires that have been conducted to 22 samples of employees, 21 people or 95% of employees already know the layoff rules that have been set by the company and 1 person or 5% of employees does not know the layoff rules set by the company.

### 4.2 Review and Management Control Testing

Review and management control testing is conducted by reviewing again the evidences from the questionnaire and interview obtained in the preliminary audit to become audit findings. This reviewing is conducted by examining Standard Operating Procedure (SOP) of Vouk Hotel & Suites and Regulation Book of Vouk Hotel & Suites Bali in Chapter II and III which regulates Labour Policy, as well as conducting structured interview with Human Resources Department based on the result of the questionnaire distribution. This management control system review is conducted in order to understand better about the condition occur, thus, being able to decide the provisional audit objectives set in the preliminary audit to be upgraded to the actual audit objectives, or being ignored since the opposite happened. Moreover, the result of the review can also be used to decide whether the audit decisions can be continued or not considering the availability of the data needed and the freedom to conduct and audit.

- a. Vouk Hotels & Suites do not have SOP and specific regulations that rules human resources planning, because the fulfillment of human resources need is only based on the requests from the department head who need employees, so based on the results of management control reviews, these findings will be continued to analyze at the follow-up audit stage.
- b. Vouk Hotel & Suites has an SOP regarding employee recruitment and has been regulated in the Vouk Hotel & Suites Regulation Book CHAPTER II Article 6 regarding Employee Admission. Based on the results of the management control review, the human resources recruitment program will not proceed to the follow-up audit stage since audit findings are not found and the recruitment program has been running in accordance with the applied SOP and regulations.
- c. The process of placing employees at Vouk Hotel & Suites is done based on the results of the selection at the recruitment stage and the positions proposed by prospective employees. According to the results of the management control review, the employee placement program will not proceed to the next audit stage, because no audit findings are found and the employee placement program has been running in accordance with the applied SOP and regulations.
- d. Employee training and development programs have been regulated in the Vouk Hotel & Suites Regulation Book Chapter II Article 14, which states that the company has two training programs, namely basic training and skills training, however the company does not have an SOP that regulates training and development programs, and the implementation of training programs does not have a structured schedule. Therefore, based on the results of the management control review, the audit findings will be continued to analyze at the follow-up audit stage.
- e. The human resources performance appraisal program at Vouk Hotel & Suites has an SOP and has been regulated in the Vouk Hotel & Suites Bali Regulation Book in CHAPTER II Article 6 section 4. Employee performance appraisals are carried out by each department head and the results of the assessment will be submitted to the Human Resources Department to request authorization from the manager. The results of the performance appraisal are not announced to the employees, so that they do not know the results of their performance at the company. Based on the results of the management control review, the audit findings will be continued to analyze at the follow-up audit stage.
- f. The compensation program at Vouk Hotel & Suites already has an SOP and has been regulated in the Vouk Hotel & Suites Regulation Book CHAPTER III Article 16 regarding Benefits and Compensation. However, based on the results of the questionnaire in the preliminary audit, 17 employees were dissatisfied with the compensation given, so that this audit finding will be continued to analyze at the follow-up audit stage.



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g. The termination program at Vouk Hotel & Suites already has an SOP and has been regulated in the Vouk Hotel & Suites Regulation Book CHAPTER II Article 12 concerning Termination of Employment. Based on the results of the management control review, the employee placement program will not proceed to the follow-up audit stage, because no audit findings are found and the employee placement program has been running in accordance with the applied SOP and regulations.

#### 4.3 Follow-up Audit

The follow-up audit is a continuation of the review management control testing. In this follow-up audit, audit findings and sufficient evidences are collected and analyzed to understand the problems that occur through grouping conditions, criteria, causes, and consequences, so that in the end an audit conclusion is obtained and then recommendations on the found weaknesses are made.

### a. HR Planning

1) Condition

The company does not have a clearly documented HR plan. Fulfilling the needs of HR is only based on the request of the department head. There are still several departments that require employees.

- 2) Criteria
  - Regulation No. 13 of 2003 concerning Manpower Chapter IV articles 7 and 8 which regulate Manpower Planning and Manpower Information.
- 3) Causes
  - Based on the analysis of conditions and criteria, human resources planning at Vouk Hotel & Suites is only based on the needs of the department head. It is because the company does not have criteria or specific standards that rules HR planning, so that HR planning is only based on current needs.
- 4) Consequences
  - Vouk Hotel & Suites does not have criteria or specific standards governing HR planning, it results in the company being unable to predict the capacity needs of employees. Quantitatively, the fulfillment of human resources needs cannot be fulfilled appropriately and in the right time, so that there are many vacant in positions due to the absence of a clear HR planning. Lack of human resources at certain times, such as event activities that held by the company, results in HR within the company have to work overtime. Furthermore, it has an impact on the dissatisfaction of the employees and their lack of motivation in completing work, so that the results of the work are not maximal. This dissatisfaction has led to the absent of employees as can be seen from the high absenteeism in Table 1 of 23%. Based on the results of unstructured interviews with the HRD department, the high absence of employees in Table 1 is caused by several reasons, namely illness, religious ceremonial leave, leave for death, duty outside the region, and no reason or neglecting work. In practice, employee absenteeism occurs due to the absence of the Company Regulation Article 12 which regulates Termination of Employment in section 2. It can be seen from the increasing number of absenteeism to the highest peak in December of 42.53%.
- b. Employee Training and Development
  - 1) Condition
    - Vouk Hotel & Suites has two training programs, namely basic training and skills training. The employee training and development program does not have structured schedule. There are still many employees do not know about the employee training and development program.
  - Criteria
    - Regulation No. 13 of 2003 concerning Manpower Chapter V Articles 9 and 10 which regulate Training and Vouk Hotel & Suites Regulation Book Chapter II Articles 14 about Training and Development.
  - 3) Causes



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Based on the analysis of conditions and criteria, Vouk Hotel & Suites Bali does not have an SOP that regulates about employee training and development. In addition, the employee training schedule in Vouk Hotel & Suites is only made based on the needs of the department, so the training program is carried out in an unstructured manner. The training and development program for Vouk Hotel & Suites employees is not well documented and socialized, so there are still many employees who do not know about employee training and development program.

### 4) Consequences

Vouk Hotel & Suites Bali does not have an SOP that regulates about employee training and development, which makes it difficult for the management to control and workflow regarding training and development. The absence of SOPs regulating employee training and development programs has also resulted in the absence of employee guidance for the implementation of training and development programs. Training program which is conducted unstructured and only based on the needs of the department has resulted in the uneven development of employee skills.

### c. HR Performance Appraisal

### 1) Condition

Vouk Hotel & Suites has an employee performance appraisal program. Vouk Hotel & Suites does not give the performance appraisal report to the employees.

### 2) Criteria

Vouk Hotel & Suites Bali Standard Operating Procedure Employee Career & Development and Vouk Hotel & Suites Bali Regulation Book CHAPTER II Article 6 Section 4 regarding Job Performance Assessment.

### 3) Causes

Based on the analysis of conditions and criteria, Vouk Hotel & Suites does not have a specific procedure that regulates the distribution of employee performance appraisal.

#### 4) Consequences

Vouk Hotel & Suites does not deliver the result of performance appraisal to the employees, nor spoken or written, so that the employees unable to conduct self-evaluation to improve their performances and work quality in the future situation, as well as the self-employed workers feel uneasy with the continuation of their contract.

#### d. Compensation

### 1) Condition

The compensation in Vouk Hotel & Suites has been conducted in accordance with the procedures. The amount of the minimum wage is given based on the UMK determined by the government. Employees are not satisfied with the given compensation.

#### 2) Criteria

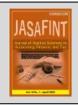
Regulation No. 13 of 2013 concerning Manpower, Chapter X Article 88 which regulates Wages, Vouk Hotel & Suites Bali Regulation Book Chapter 3 Article 16 which regulates about Wage System, and the Standard Operating Procedure for the Payroll System at Vouk Hotel & Suites Bali.

### 3) Causes

Based on the analysis of conditions and criteria, the employees in Vouk Hotel & Suites Bali are not satisfied with the compensation compared to the workload given, it is because the employees do not get overtime wages if they have to work beyond working time, and the amount of service charge they receive is small due to the decreasing of company income, as well as there is no bonus given if employees have achieved their target work.

### 4) Consequences

Providing compensation in which the value is not in accordance with the calculated expectation of the employees will result in the decreasing of employee motivation and morale in providing maximum performance for the company. Decreased employee motivation can result in laziness to work, lose interest in self-development, and not carry out their duties fully.



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#### 4.4 Recommendation

Based on the result of human resources management audit in Vouk Hotel & Suites Bali, below are some recommendations that can be given to improve the performance of human resources in Vouk Hotel & Suites Bali, those are:

- a. Vouk Hotel & Suites Bali should make a human resources plan which is clearly documented, standard, and has a clear criteria regarding the quality and quantity of human resources in each department.
- b. Vouk Hotel & Suites Bali should make an employee training and development SOPs based on the determined criteria, so that the employee training and development programs can run effectively. Furthermore, the employee development training program should be scheduled and disseminated with a better plan so that all departments carry out a structured training and development program.
- c. Vouk Hotel & Suites Bali should convey the results of the employee performance appraisal, in spoken or written, so that all employees can know the result of the evaluation for themselves.
- d. Vouk Hotel & Suites Bali should provide employee overtime wages if there are employees who work more than their work time, so that the employees become more motivated to work hardly.

#### 5. Conclusion

Based on the result and previous discussion, it can be concluded that the Management Audit process for Human Resources in Vouk Hotel & Suites Bali includes preliminary audit, reviewing management control testing, follow-up audit, and recommendation. Audit of human resources management in Vouk Hotel & Suites obtained the following results:

- a. Vouk Hotel & Suites does not have criteria or specific standard governing HR planning, it results in the needs of the employee, quantitatively, cannot be predicted in a right time, so that there are many vacant in positions.
- b. The employee training and development program in Vouk Hotel & Suites is not going well. It is caused by the absence of the procedures that governs the employee training and development, and training program is carried out in an unstructured way which is only based on the needs of each department.
- c. Vouk Hotel & Suites does not convey the result of performance appraisal to the employees, nor spoken or written. It results in the employees cannot conduct a self-evaluation.
- d. The employees in Vouk Hotel & Suites Bali are not satisfied with the compensation, it is because the amount of service charge they receive is small due to the decreasing of company income, the employees do not get overtime wages if they have to work beyond working time, and there is no bonus given if employees have achieved their target work.

#### 6. Acknowledgment

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### Effect Firm Size, Profitability and Inventory Intensity Against Effective Tax Rate (ETR)

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Abstract: The effective tax rate is the real rate that apply to the taxpayer's income. This research to find out how much influence firm size, profitability, inventory intensity on the effective tax rate of manufacturing companies listed on the Indonesia Stock Exchange from 2015 to 2019. The types of data used are quantitative data and data sources are secondary data in the form of annual financial reports of manufacturing companies in the reporting period at 2015 to 2019. The sample selection used a purposive sampling method with 53 companies and a total of pool data are 202 data. The data analysis method used is multiple regression analysis. The results of this research indicate that profitability had a positive and significant effect on the effective tax rate, inventory intensity had a significant negative effect on the effective tax rate, while firm size had a negative effect on the effective tax rate.

Keywords: Firm Size, Profitability, Inventory Intensity, Effective Tax Rate

#### 1. Introduction

Taxes are one of the largest and most dominant state revenues to date which will be used to finance state expenditures. Whereas for companies, tax is an expense that will reduce net income [1]. The difference between the target and the realization of tax revenue each year can indicate the existence of tax planning carried out by taxpayers. Tax planning carried out by the company aims to reduce the tax burden paid by the company.

To measure the effectiveness of a company in reducing its tax burden, it is seen through the company's effective tax rate. Basically, the effective tax rate is a comparison between the resulting tax liabilities and taxable income based on tax regulations on accounting profit based on accounting standards.

Previous research about the factors that influence the effective tax rate (ETR) has shown mixed results. Research on all companies listed on the Indonesia Stock Exchange from 2011 to 2016 with a sample of 163 companies shows that the leverage variable had no significant effect on ETR. The profitability and intensity of fixed assets had a negative effect on ETR. Meanwhile, the inventory turnover variable had a positive effect on ETR [2]. Research on manufacturing companies listed on the Indonesia Stock Exchange for the period 2010 to 2014 with a sample of 15 companies shows that the company size variable had no effect on the company's ETR. Meanwhile, independent commissioners and profitability had an effect on company's ETR [3]. Research on cigarette companies listed on the

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Indonesia Stock Exchange from 2009 to 2015 with a total sample of 14 companies shows that company size and profitability affect the company's ETR. Meanwhile, the level of debt had no effect on the company's ETR [4].

With the development of the taxation system and the increasingly tighter government regulations regarding the taxation system in Indonesia, and based on previous research, the authors will analyze the effect of company size, profitability and inventory intensity partially and simultaneously on the effective tax rate of existing manufacturing companies on the Indonesia Stock Exchange.

#### 1. Literature Review

#### 1.1 Theoretical Basis

### 1.1.1 Agency Theory

Agency theory is a theory that explains the relationship between principal and agent in terms of company management. Agency theory presumes that individuals in agency relationships are utility maximisers and will always take action to enhance their self-interest. Various matters relating to company performance, one of which is company policies related to taxes, can be influenced by differences in interests between principals and agents. Managers as agents have an interest in obtaining maximum incentives through high returns on their performance, while shareholders want to reduce taxes paid through low profits. Therefore, tax management measures can be used to overcome these differences of interest.

### 1.1.2 Definition of Tax

Taxes are one of the main sources of income obtained from domestic sources of funds. Taxes are people's contributions to the state treasury based on law (which can be enforced) without receiving direct service that can be demonstrated and used to pay for general expenses [5].

### 1.1.3 Definition of Effective Tax Rate

Effective Tax Rate is a comparison between the tax burden paid by the company with the company's income before tax. ETR is very useful for measuring the actual tax burden of a company. ETR is used to reflect the difference between the calculation of book profit and taxable profit [6]. The types of ETR include Average Effective Corporate Tax Rate, Average Effective Total Tax Rate, Marginal Effective Corporate Tax Wedge, Marginal Effective Corporate Tax Rate, Marginal Effective Total Tax Wedge, and Marginal Effective Total Tax Rate.

### 1.1.4 Definition of Firm Size

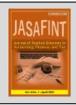
Firm size is the size of the company which can be seen from the amount of equity value, sales value and asset value [7]. Firm size is a major factor in determining the profitability of a company with a concept commonly known as economies of scale [6]. Economies of scale show the low cost advantages of large companies because they can produce products at a low unit price. Companies with large sizes buy raw materials (input production) in large quantities so that the company will get a discount (quantity discount) more from suppliers.

### 1.1.5 Definition of Profitability

Profitability is the company's ability to earn profits related to sales, total assets and own capital [8]. Another definition also states that profitability shows the company's ability to earn profits and measures the level of operational efficiency and efficiency in using its assets.

### 1.1.6 Definition of Inventory Intensity

Inventory intensity indicates the amount of inventory turnover that occurs during the period or reflects the number of times the amount of inventory is replaced in a year. Inventory intensity can be obtained by comparing the cost of goods sold with the company's total inventory.



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### 1.2 Definition of Operational Variables

### 1.2.1 Effective Tax Rate (Y)

Effective Tax Rate in this research is the dependent variable. ETR is calculated by dividing the company's total tax expense by profit before income tax with the following formula:

$$ETR = \frac{Total\ Income\ Tax\ Expense}{Income\ Before\ Tax}$$

### 1.2.2 Firm Size $(X_1)$

Firm size in this research is an independent variable that affects the dependent variable, either positively or negatively. To measure the level of firm size, it can be calculated from total assets because company size is formulated by Ln of total assets. The use of natural logs in this research aims to reduce data fluctuations without changing the proportion of the original value.

$$Firm Size = Ln (Total Assets)$$

### 1.2.3 Profitability $(X_2)$

Profitability in this research is an independent variable that affects the dependent variable, either positively or negatively. In this study, to calculate profitability using a formula of return on assets (ROA).

$$ROA = \frac{laba\ bersih\ setelah\ pajak}{Total\ aset} x\ 100\%$$

### 1.2.4 Inventory Intensity $(X_3)$

Inventory intensity indicates the amount of inventory turnover that occurs during the period or reflects the number of times the amount of inventory is replaced in a year. Inventory intensity can be obtained by comparing the cost of goods sold with the company's total inventory.

Intensitas Persediaan = 
$$\frac{Harga\ Pokok\ Penjualan}{Total\ Persediaan}x\ 100\%$$

### 1.3 Conceptual Framework

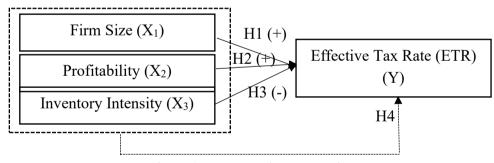


Figure 1. Conceptual Framework

Information:
Partial = Simultaneous =

The hypothesis is a temporary answer to the formulation of the research problem.

H1 : Firm size has a significant positive effect on company's ETR

H2 : Profitability has a significant positive effect on a company's ETR

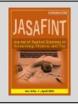
H3 : Inventory intensity has a significant negative effect on the company's ETR

H4: Firm size, profitability and inventory intensity simultaneously affect the company's ETR

### 2. Methodology

The type of data used in this research is quantitative data from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange. The data source in this study is secondary data obtained from idx.co.id. The sampling method used in this research is purposive sampling method. The

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number of samples used in this study were 53 companies with 202 data pools. The method used to collect data is the documentation method. The analysis technique used in this research is multiple regression analysis techniques.

### 3. Results and Discussion

### 3.1 Multiple Regression Analysis

The requirements for multiple regression analysis have been fulfilled, namely the classical assumption test consisting of multicollinearity test, autocorrelation test, heteroscedasticity test and normality test so that a regression analysis can be performed. Following are the results of multiple regression analysis:

#### 3.1.1 t Test Result

Table 1. t Test
Coefficients<sup>a</sup>

			Unstandardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.301	.041		7.356	.000
	Firm Size	002	.001	092	-1.192	.235
	Profitability	.067	.024	.203	2.797	.006
	Inventory Intensity	003	.001	172	-2.182	.030

### a. Dependent Variable: ETR

Table 1 provides information about the regression equation and the effect of the independent variables, namely firm size, profitability and inventory intensity partially on ETR. The regression equation formula in this study is as follows:

ETR = 
$$0.301 - 0.002$$
 SIZE +  $0.067$  ROA -  $0.003$  PERS +  $0.003$ 

The constant variable of the regression has a coefficient of 0.301, meaning that if the independent variable consisting of firm size, profitability, and inventory intensity is not considered, then the ETR is 0.301. The coefficient of X1 is -0.002 which indicates that firm size has a negative effect on ETR with a regression coefficient of -0.002 which means that the firm size increases by 1 unit, then the ETR will decrease by 0.002, assuming the other independent variables are constant. The coefficient of X2 is 0.067, which indicates that profitability has a positive effect on ETR, with a regression coefficient of 0.067, which means that profitability increases by 1 unit, so ETR will increase by 0.067, assuming the other independent variables are constant. The coefficient of X3 is -0.003 which indicates that the intensity of inventory has a negative effect on ETR with a regression coefficient of -0.003 which means that the intensity of the inventory increases by 1 unit, then the ETR will decrease by -0.003, assuming the other independent variables are constant. Meanwhile, to determine whether there is an effect of variable size of the company, profitability and intensity of inventory on ETR can be seen as follows:

### 3.1.1.1 Based on the Significance Value (Sig.)

Based on table 1, the results of the SPSS test above show that only the independent variable namely profitability (X2) and inventory intensity (X3) have a significant effect on the dependent variable, namely ETR, with a significance of 0.006 and 0.030 which is smaller than the significance level of 0,05. The independent variable firm size (X1) does not have a significant effect on ETR, which is indicated by a significant value of 0.235 which has a significant value greater than the significant level of 0.05. Based on the basis of decision making in the t test, it can be concluded that the first hypothesis (H1) is rejected because company size has no significant positive effect on ETR, the second hypothesis (H2) is



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accepted because profitability has a significant positive effect on ETR and the third hypothesis (H3) is accepted significant to ETR.

### 3.1.2 Simultaneous Significance Test

Table 2. f Test

### **ANOVA**<sup>b</sup>

Mod	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.013	3	.004	4.511	.004ª
	Residual	.195	198	.001		
	Total	.208	201			

a. Predictors: (Constant), Firm Size, Profitability, Inventory Intensity

Table 2 provides information about the presence or absence of the effect of firm size, profitability and inventory intensity simultaneous on the variable of ETR.

### 3.1.2.1 Based on the Significant Value.

The results of the f test based on the significance value of (Sig.) in the table above show that the (Sig.) is 0.004 which is smaller than the significant level of 0.05, meaning that the variables of firm size, profitability and inventory intensity simultaneously have a significant effect on ETR.

### 3.1.3 Test of the Coefficient of Determination $(R^2)$

Coefficient of Determination (R<sup>2</sup>) measure how far the ability of the regression model in explaining the variation in the dependent variable. Value of (R2) which is close to one means that it provides almost all the information needed to predict the variation in the dependent variable [9]. The results of the coefficient of determination can be seen in table 3 below:

Table 3. Test of the Coefficient of Determination (R<sup>2</sup>)

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.253ª	.064	.050	.03136

a. Predictors: (Constant), Firm Size, Profitability, Inventory Intensity

Table 3 shows the magnitude of the influence of the independent variables on the dependent variable which can be explained by the regression equation model in this research amounting to 0.050. This shows that the influence of firm size, profitability, and inventory intensity variables on ETR which can be explained by the regression equation model is 5%, the remaining 95% is influenced by other factors that are not included in the regression model.

#### 3.2 Discussion

### 3.2.1 Firm size affects the effective tax rate

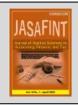
The results of testing for the first hypothesis (H1) show that firm size has a negative and insignificant effect on ETR. A large company with large asset ownership indicates that the company is relatively more capable of generating greater profits with its total assets compared to the size of a small company. The high profit earned by the company will result in higher taxes that must be paid. This condition

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b. Dependent Variable: ETR

b. Dependent Variable: ETR



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encourages managers to try to minimize profits by doing good tax planning and implementing effective accounting practices to reduce the effective tax rate. This is in line with research conducted by Susilowati, Widyawati and Nuraini (2018) which states that firm size has no effect on ETR [10] and contradicts research conducted by Darmadi (2013) which found that firm size has a positive effect on ETR [11].

### 3.2.2 Profitability affect the effective tax rate

The results of testing for the second hypothesis (H2) show that profitability has a positive and significant effect on ETR. Profitability is a performance achievement made by management in managing the company's assets, which can be seen from the profits generated by the company. The level of income is directly proportional to the tax to be paid, so that companies that have a large profit will also pay large taxes. This is in line with research conducted by Putri and Putra (2017) which states that profitability has a positive influence on ETR [12] and is in contrast to research conducted by Suardana and Maharani (2014) which in their research states that profitability is measured by ROA. negatively affects the effective tax rate [13].

### 3.2.3 Inventory intensity affect the effective tax rate

The results of testing for the third hypothesis (H3) show that inventory intensity has a negative effect on ETR. The amount of inventory intensity owned by a company is due to the cost of goods sold by large companies, so that the company's profits are small. The smaller the profit the company gets, the smaller the company tax and the smaller the ETR. This is in line with research conducted by Norfadzilah (2015) in Putri and Lautania (2016) which states that supply intensity has a negative effect on ETR. This is because inventory intensity is not included in the tax deductible in the tax system. However, managers need more effort to adjust the intensity of the company's inventory to reduce the level of the company's tax burden. In other words, an inefficient inventory evaluation method will result in high operating costs and will affect the company's revenue level [14]. This study is in contrast to research conducted by Syamsuddin and Suryarini (2019) which states that inventory intensity has a positive effect on ETR [15].

3.2.4 Firm size, profitability, and inventory intensity simultaneously affect the effective tax rate. The results of testing for the fourth hypothesis (H4) suggest that the independent variables of firm size, profitability and inventory intensity have an effect on ETR. The results of statistical testing show that the fourth hypothesis (H4) is accepted. Based on the results of this study, these three independent variables simultaneously influence ETR with a significance value that is smaller than the 0.05 significance level so that it can be concluded that firm size, profitability, and inventory intensity simultaneously affect ETR.

#### 4. Conclusion

Based on the results of the analysis and discussion in the previous chapter, the research can be concluded as follows: 1) Firm size has no significant negative effect on the effective tax rate 2) Profitability has a significant positive effect on the effective tax rate. 3) Inventory intensity has a significant negative effect on the effective tax rate. 4) Firm size, profitability and inventory intensity simultaneously have a significant effect on the effective tax rate.

#### 5. Acknowledgments

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### The Compilation of Competitive Strategy with SWOT Analysis Approach at Bali Tropic Resort & Spa

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Abstract: This study aims to determine the competitive strategy adopted the Bali Tropic Resort & Spa. The subjects in this study were 14 department head managers. This research was tested using a SWOT analysis, namely by identifying various internal and external factors of the company. The analysis of internal factors (strengths and weaknesses) and external factors (opportunities and threats) which were then formulated in the SWOT Diagram and SWOT Matrix. From the results of the analysis on the SWOT diagram, it appears that the position of the Bali Tropic Resort & Spa is located in Quadrant I, which shows that Bali Tropic Resort & Spa faces several opportunities and has various forces that drive these opportunities and it is recommended to carry out the SO strategy by taking advantage of opportunities. Based on the SWOT matrix, the SO strategy that companies can implement is to take advantage of increasingly sophisticated technological developments to facilitate promotional activities and make packages that attract guests' attention.

**Keyword**: Marketing strategy, SWOT analysis

### 1. Introduction

Companies operating in business environment nowadays have the main challenge of defending themselves in the midst of intense competition. Marketing strategy is the right step that must be taken and realized by every company in order to survive the competition. The strategy for the external environment can be determined by knowing what the threats and opportunities are for the company. After knowing the external environment that is faced, an analysis of the internal environment needs to be done to find out what the strengths and weaknesses of the company are.

Anticipating future competition that can hinder business success, a competitive strategy is needed using SWOT analysis, which is a tool that can formulate a company strategy based on strengths and opportunities, but collectively can minimize weaknesses and threats. The process of returning to strategic decisions is always related to the return of the company's mission, goals, strategies and policies. Thus strategic planning must analyse the company's strategic factors (strengths, weaknesses, opportunities, and threats) in current conditions [1].

The phenomenon of high business competition in the service sector is one of which occurs in the hotel business industry. The rapid growth of tourism in Bali has resulted in the development of the hotel business in Bali currently experiencing very rapid progress. Bali Tropic Resort & Spa is a hotel with a

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four-star classification located in the Tanjung Benoa area with a strategic location, hotel design with traditional Balinese nuances that has modern facilities with professional services.

In facing competition, which is a big challenge at this time is the number of star hotels located in the Tanjung Benoa area. The Tanjung Benoa area has many hotels with international standards. Therefore, Bali Tropic Resort & Spa must run all its operations effectively and efficiently, including in the marketing sector. External factors that change from time to time cause companies to adjust between internal and external conditions, so that Bali Tropic Resort & Spa must be able to face market changes that occur at any time. This study aims to determine the strengths, weaknesses, opportunities and threats as a basis for compiling a competitive strategy and to determine competitive strategy planning based on SWOT analysis at the Bali Tropic Resort & Spa.

#### 2. Literature Review

### 2.1. Strategy

A strategy is a plan that is prepared and managed by taking into account various sides with the aim that the influence of the plan can have a positive impact on the organization in the long term [2]. The process of strategic planning through three stages of analysis, namely the data collection stage, the analysis stage and the decision-making stage [1].

### 2.2. External Strategy Factor Matrix

External environmental analysis focuses on identifying and assessing trends and events beyond the company's control [3]. Strategic environmental issues that are considered to have a high probability to influence the company, external strategic factors consist of: demographic, legal and political, economic, socio-cultural factors [4]. These external factors affect the formation of opportunities and threats (O and T). Where this factor is related to conditions that occur outside the company that affect the company's decision making [2].

### 2.3. Internal Strategy Factor Matrix

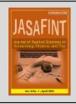
Internal analysis is an analysis carried out on the company's internal factors to be able to determine carefully the strengths and weaknesses of its strategy which can describe the company's profile [5]. These internal factors influence the formation of strengths and weaknesses (S and W). Where this factor is related to the conditions that occur in the company, which also affects the formation of company decision making [2].

### 2.4. SWOT Analysis

SWOT analysis is a powerful instrument in carrying out strategic analysis, the efficacy lies in the ability of the determinants of the company's strategy to maximize the role of strength factors and opportunity utilization so as to act as a tool to minimize weaknesses in the organization and suppress the impact of threats that arise and must be faced [6]. SWOT stands for strengths, weaknesses, opportunities, and threats, where SWOT is used as a model in analyzing a profit and non-profit oriented organization with the main objective to find out the state of the organization more comprehensively [2]. SWOT is the identity of various factors systematically to formulate a service strategy [1]. This analysis is based on logic that maximizes opportunities but at the same time minimizes deficiencies and threats". SWOT analysis compares external factors such as opportunities and threats with internal factors such as strengths and weaknesses.

### 2.5. Competition

Competition in the context of marketing is a condition where a company in a particular product or service market will show its respective advantages, with or without being bound by certain regulations in order to reach its customers [7]. The market position in competition is divided into 4, namely the market leader, competitors market, followers market, and net market. The generic competitive strategy states that companies always place themselves in one of the main aspects, namely the overall cost advantage



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strategy or differentiation strategy [7]. If the target is relatively narrow, the strategy will develop into a focused strategy. The purpose of developing strategies and tactics is for the company to be able to compete in all circumstances, especially during unfavorable economic and political conditions.

The definition of competitive advantage is the advantage over competitors is obtained by conveying greater customer value, through lower prices or by providing more benefits in accordance with higher pricing [8].

### 2.6. Marketing

The term marketing can be interpreted in various contexts according to the company's strategy development [9]. The term marketing that is widely accepted and well known as a marketing concept is marketing based on the recognition of consumer needs. Marketing as a social process where each individual and group gets what they need and want by creating and exchanging products and values with other individuals or groups [9].

### 3. Research Methods

The quantitative data used in this study are list of the number of star hotels in Bali, weight and rating data from each of the company's internal and external variables. In this research, qualitative data includes information relating to the strengths, weaknesses, opportunities and threats of the company. The data collection procedure in this study was carried out by means of a questionnaire, observation, interview, and documentation. Sampling in this study using purposive sampling. Respondents in this study were the management as an internal party of the hotel as many as 14 people. The analysis technique are as bellows:

### 3.1. Validity Test

The validity test used the Pearson Bivariate formula (Pearson Product Moment Correlation). This analysis is done by correlating each item's score with the total score using the following formula:

$$\mathbf{rxy} = \frac{\mathbf{n}(\mathbf{\Sigma}\mathbf{xy}) - (\mathbf{\Sigma}\mathbf{x})(\mathbf{\Sigma}\mathbf{y})}{\sqrt{(\mathbf{n}\mathbf{\Sigma}\mathbf{x}^2 - (\mathbf{\Sigma}\mathbf{x})^2)(\mathbf{n}\mathbf{\Sigma}\mathbf{y}^2 - (\mathbf{\Sigma}\mathbf{y})^2)}}$$

#### 3.2. Reliability Test

The reliability of the instrument shows the extent to which a measurement can provide consistent results if a re-measurement of the same symptoms is carried out [10]. Question items or statements can be said to be reliable if they provide a Cronbach Alpha ( $\alpha$ ) value> 0.60. The reliability test was carried out using the SPSS 16.

#### 3.3. External and Internal Strategy Factor Matrix

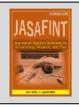
Before creating a matrix of external and internal strategic factors, first knowing the External Strategy Factors (EFAS) and Internal Strategic Factors (IFAS) [1], by: compiling column 1 (5 to 10 opportunities and threats), giving the weight of each factor in column 2 ranges from 1.0 to 0.0. To calculate the weight you can use the following formula:

$$Weight = \frac{Total\ weight\ answer\ for\ one\ factor}{Total\ weight\ answers\ for\ all\ factors}$$

Calculate the rating (in column 3) for each factor by giving a scale ranging from 5 (outstanding) to 1 (poor) based on the influence of these factors on the condition of the company.

$$Rating = \frac{Total\ respondent\ rating\ for\ 1\ factor}{Total\ Respondent}$$

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Multiply the weight in column 2 by the rating in column 3, to get the weighting factor in column 4. Use column 5 to provide comments or notes on why certain factors were selected and how the weighted scores were calculated. Add up the weighting score (in column 4), to get the total weighting score for the company in question.

### 3.4. SWOT Matrix Diagram

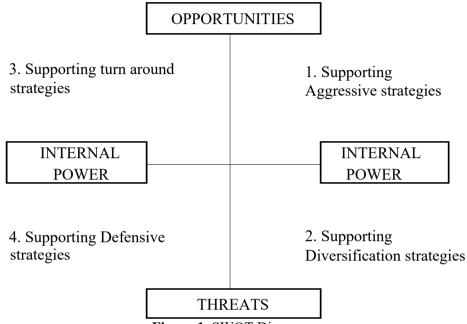


Figure 1. SWOT Diagram

### 3.5. SWOT Matrix

The optimization of the competitiveness strategy carried out by Bali Tropic Resort & Spa can be found in two aspects, namely the internal and external aspects. This matrix can generate four cells of possible alternative strategies. An alternative strategy which is the right strategy to be implemented by Bali Tropic Resort & Spa. The strategic decision-making process is always related to the development of the company's mission, objectives, strategy and policies. SWOT matrix can be seen in Table 1.

Table 1. SWOT Matrix

IFAS EFAS	STRENGTH (S) Determine 5-10 internal strength factors	WEAKNESSES (W) Determine 5-10 internal weakness factors	
OPPORTUNITIES (O) Determine 5-10 external opportunity factors	STRATEGY SO  Create a strategy that uses your strengths to take advantage of opportunities	STRATEGY WO Create strategies that minimize weaknesses to take advantage of opportunities	
THREATS (T) Determine 5-10 external	STRATEGY ST Create a strategy that uses	STRATEGY WT Create strategies that minimize	
threat factors	strength to overcome threats	weaknesses and avoid threats	

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#### 4. Result and Discussion

#### 4.1. Result

All items in the questionnaire were declared valid, because r weight is greater than r table. Where the r table in this study is 0.5324. The level of significance determined in this test is 5% with a total sample of 14 people. the results of the questionnaire test were declared reliable, marked by the Cronbach Alfa count result which was higher than the minimum limit, which is 0.6.

In order to be able to compete with other hotels, marketing activities are the most important factor in its role in the effort to increase the number of rooms used and increase the use of water sports facilities and spa. To anticipate market competition, Bali Tropic Resort & Spa has established a marketing strategy that is oriented towards increasing sales and segmenting the domestic market. Based on the results of interviews and questionnaires from 14 respondents, the position of Bali Tropic Resort & Spa in the SWOT matrix can be seen in Figure 2 below.

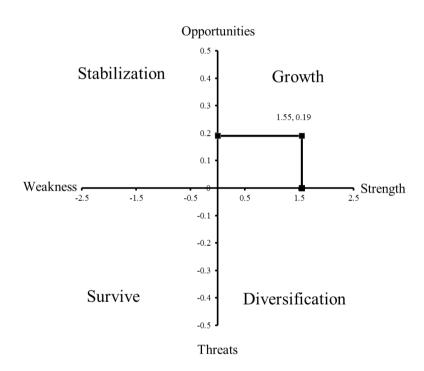


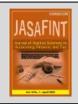
Figure 2. SWOT Diagram

Based on Figure 2, it can be seen that the difference between opportunities and threats is 0.19, and the difference between strengths and weaknesses is 1.55. The position of Bali Tropic Resort & Spa in the SWOT Matrix is in the growth quadrant, and it is recommended to carry out an SO strategy by taking advantage of existing opportunities using the company's strengths.

### 4.2. Discussion

### 4.2.1 Analysis of External Factors

The main opportunities that can be exploited by the Bali Tropic Resort & Spa are the number of tourist attractions in Bali, because of course many tourists are on vacation to Bali so they need hotels to stay, technological developments can simplify and accelerate services and channels for promotion to introducing products, good political conditions will affect competition between hotels to be healthy because the tourism sector is running normally, changes in good socio-economic conditions will result



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in many people traveling, the number of tourist attractions in Bali and increased purchasing power and consumer appetite. The biggest threat to the Bali Tropic Resort & Spa is the increase in competitor services, price increases and price competition, and besides this, the number of new hotels that have sprung up must also be watched out for.

### 4.2.2 Analysis of Internal Factors

The main strength that must be maintained and developed by Bali Tropic Resort & Spa is the design of a hotel with Balinese traditional nuances with complete entertainment facilities and offering all-inclusive packages that make it easy for tourists, this must be developed because there are not many hotels in Tanjung Benoa who offer that thing. The weaknesses that must be fixed by Bali Tropic Resort & Spa are the lack of use of the website to convey information about the packages offered and the high price levels of hotel rooms.

### 4.2.3 Competitive Strategy Bali Tropic Resort & Spa

An attractive product offering strategy by utilizing all the strengths of the hotel, namely the design of a hotel with traditional Balinese nuances that has modern facilities, has the longest beach area in Tanjung Benoa, the taste of a menu that varies from Indonesian cuisine to international dishes, has an all-inclusive package having complete entertainment facilities. Besides that, it is also necessary to improve the quality of existing products, facilities and services to be even better, by making continuous improvements to all hotel products, facilities and services. In addition, there is a need for a product strategy by making packages that attract guests attention to stay with special prices and special facilities. The packages must be packaged in such a way as to become a different product offering from other four-star hotels.

### 5. Conclusions and Suggestions

Based on the results of research and discussion, it can be concluded that:

Bali Tropic Resort & Spa is supported by a fairly good internal strength, such as complete facilities, good quality products, and services equivalent to a five-star hotel, professional resource support, and good management support. The main opportunity that can be exploited is the number of tourist attractions in Bali that require hotels to stay. The biggest threats are increased competitor services, price increases and price competition. Bali Tropic Resort & Spa has a strong market competitive position in an attractive industry. This shows that Bali Tropic Resort & Spa must continue to make efforts to improve product quality, facilities, services and product distribution. The SO strategy is the right strategy implemented by Bali Tropic Resort & Spa, which means that the company can take advantage of all its strengths and opportunities to win the competition.

The advice can be given based on the results of research that has been done are Bali Tropic Resort & Spa must pay attention to product strategy by continuously improving product quality, available facilities and services as well as offering innovative packages that can expose hotels and make maximum use of the website to promote and provide information about their own products and services facilities as well as events held by Bali Tropic Resort & Spa.

### 6. Acknowledgment

The writer admits that in this writing of journal the author has learned from various parties. The author realizes that without the guidance and assistance of various parties, it is very difficult for the writer to complete this journal. Therefore, on this occasion the author would like to express the deepest gratitude to all those who have helped and contributed to this writing of journal.

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# The Role of Green Accounting in Efforts to Prevent Environmental Pollution to Support Going Concern at CV. DBU

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**Abstract:** Green accounting is how to include the consequences of an event concerning the environment in financial statements. This study aims to determine whether environmental cost management at CV. DBU in Denpasar City based on green accounting. This research was conducted at the meat processing company due to their operational activities using an interpretive approach to CV. DBU. Data collection was carried out by interview technique and other secondary data support. The results of the study stated that CV. DBU based on the discussion, it was known that the implementation of green accounting has a positive impact on efforts to prevent environmental pollution. In addition, the implementation of green accounting also has an impact on increasing business sustainability. With the application of environmental accounting or green accounting the company will pay more attention to environmental problems. By paying attention to the environment, business continuity would be guaranteed.

**Keywords:** Green Accounting, Environmental Cost

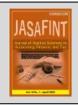
### 1. Introduction

People around the world are starting to feel environmental damage along with the development of the industrial sector. When some of these factories ignore the preservation of the natural environment by disposing of liquid waste into the river without an environmentally sound waste management process. Indonesia needs to balance economic development with environmental sustainability. Not only that, in the field of accounting it also plays a role in environmental conservation efforts, namely through voluntary disclosure in financial reports related to environmental costs. An accounting system in which there are accounts related to environmental costs is called green accounting or environmental accounting [1]. Based on this, green accounting is the first step to become a solution in these environmental problems. The aim is to improve the efficiency of environmental management by assessing environmental activities from a cost point of view (environmental costs) and the benefits or effects (economic benefit), as well as the effect of environmental protection.

CV. DBU will be said to be concerned about environmental problems if the company has concerns around it. The company maintains environmental sustainability or the application of green accounting is an effort that connects the company's economic interests and environmental preservation. Companies

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are sometimes unable to specify the costs associated with the environment, for example, companies combine environmental costs into overhead costs so that they are hidden and managers find it difficult to track and control these costs. This is also related to corporate social responsibility (CSR) which is the business approach at CV. DBU by providing economic, social and environmental benefits for all stakeholders. CSR is closely related to "sustainable development", that is, an organization, especially a company, in carrying out its activities must base its decisions not solely on its impact in an economic aspect, for example the level of profit or dividends, but must also consider the social and environmental impacts arising from this decision. both for the short term and for the longer term. One of the industries that produce waste is the meat processing industry. CV. DBU was established in 2002. This company is engaged in meat processing, from raw materials to processed food. An increase in food production is expected, but the increase of food production would be impact straight to the production waste, this should also get the attention of all parties, especially the factory that produced the waste.

### 2. Literature Review

### 2.1 Legitimacy Theory

Legitimacy theory explained that disclosure of social responsibility is carried out by companies in an effort to gain legitimacy from the community where the company is located and maximize its financial strength in the long term. The underlying theory of legitimacy is a "social contract" that occurs between the company and the community where the company operates and uses economic resources [2].

#### 2.2 Green Accounting

Green accounting is the merging of environmental information, benefits and costs into various accounting practices and incorporating environmental costs into business decisions [3]. In Additional green accounting function to identify, measure, assess, and disclose the costs associated with the company's activities related to the environment [4].

### 2.3 Going Concern

The sustainability of a company is how long the company can develop and maintain its company condition. According to Burhany (2014) a sustainable industrial area can be realized by applying principles that are appropriate for the use of resources and materials (raw materials and energy) must be optimal, namely by using which refers to the flow of environmentally friendly materials [5].

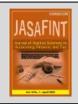
### 2.4 Green Accounting as Corporate Environmental Responsibility

Various negative impacts of company operations require an environmental accounting system as a control of corporate responsibility because waste management carried out by companies requires measurement, assessment, disclosure and reporting of waste management costs from the results of company operations. Treatment of waste management is an important part of controlling the company's responsibility for its environment [6].

2.5 Green Accounting as an Innovation to Prevent Environmental Pollution for Business Continuity
The application of environmental accounting will encourage the ability to minimize the environmental problems it faces. The application of the green accounting concept in Indonesia, which is a developing country, still required an acculturation process of ecological-based economic attitudes and behaviors which do not necessarily apply in a social accounting area, or have broad spectrum effects in other fields [7].

#### 3. Research Method

This research used descriptive qualitative data that comes from primary data and secondary data. Primary data sources are data sources that are collected directly from the original source (not through intermediary media) and still require a more in- depth analysis in this study including the results



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of interviews with management, while secondary data are sources of research data collected by researchers indirectly through intermediary media.

#### 4. Result and Discussion

#### 4.1 Green Accounting in Reducing Environmental Pollution

The company tried to gain legitimacy from the local community by trying to follow the value system that exists in the surrounding community. CV. DBU has issued special costs for the environment, because the company is aware of the impact of the company's production activities that produce waste that will have an impact on environmental pollution. However, the disclosure has not been disclosed so that it is mixed with other costs. So that the accounting section still uses conventional accounting which has not accommodated activities that have been carried out on the environment and has not been disclosed in the financial statements.

### 4.1.1 Cost in Waste Management

Costs that related to environmental cost reported by CV. DBU consists of the manufacture of STP (*Sewage Treatment Plant*) and built facility such as liquid waste containment. In addition, waste samples are taken to be checked in the laboratory before flowing into the natural environment and every 2 days it is checked by STP officers. Based on that costs about Rp57.000.000 is allocated to waste management.

### 4.2 The Implementation of Green Accounting in Going Concern

The implementation of *green accounting* in companies would reduce the occurrence of environmental pollution so that it is expected human awareness and knowledge of the impact of environmental damage will affect the sustainability of life in the future. Production management at CV. DBU yet know how the concept of *green accounting*, but the expenses for the environment has been implemented. The application of *green accounting* is very supportive of the company in disclosing the environmental problems it faces. Especially in terms of production that produces waste if it is not processed first it will not be good for the environment, so we should pay more attention to the environment and communities around the company environment.

### 4.2.1 Going Concern in Term of Profit

Going concern of CV. DBU is in an unstable financial condition, causing losses, but continues to carry out operational activities due to consumer demand for home industries. So that in carried out its operational activities cash reserved are used in addition to the costs to the environment are still implemented.

### 4.2.2 Green Accounting in Maintaining Environmental Sustainability

In the company's operational activities related to environmental sustainability, it referred to the AMDAL, document in managing and monitoring carried out by the Environmental Agency to directly review operational activities. This is supported by the PROPER certificate because the waste produced is not dangerous and can be channeled directly into nature. In addition, green accounting activities must also equalize the existing value system in the community and the existing value system in the company so that it will provide a positive image in the community in making decisions on environmental disclosures. This is in line with (Dowling and Pfeffer, 1975) which stated that an organization must try to create harmony between the social values inherent in its activities with the norms that exist in the social system of society [8].

### 4.3 Green Accounting Expectations in Supporting Going Concern

In the implementation of production activities, CV DBU. There are environmental costs for DBU, but these costs have not been grouped according to the category. From this information, costs associated with environmental activities will be classified into two cost categories, namely: *environmental* 



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prevention costs and environmental detection costs. In the classification of the types of production waste produced by CV. DBU has been done but this is not in accordance with the theory (Hansen and Mowen 2009) including the cost of training and teaching employees to study environmental impacts, environmental risk audit fees, costs of conducting field research, and costs of developing environmental management systems [9]. Next, there are only two costs for environmental detection, namely the cost of analyzing liquid waste and solid waste, this is not in accordance with the theory which consists of environmental activity auditing costs, environmentally friendly product and process inspection costs, development costs for environmental performance measures, the cost of implementing pollution testing, the cost of verifying environmental costs and the cost of measuring the level of pollution besides that of the internal environmental failure costs [10], [11], but in CV. DBU only prepared reforestation costs and this is not in accordance with theory of Hansen and Mowen. In their theory, the internal environmental failure costs consist of river cleaning costs, inefficient use of raw materials, and costs of cleaning contaminated land.

**Table 1.** Billing Ratio Environmental Expense Report Formulation

No.	Environmental Costs							
1	Environmental Prevention Costs							
1.01	The cost of evaluating and maintaining pollution control equipment							
1.02	Product costs to reduce waste							
1.03	The cost of training studying environmental impacts							
1.04	Environmental risk audit fees							
1.05	Field research implementation costs							
1.06	Environmental management system development costs							
1.07	The cost of obtaining a certificate							
2	Environmental Detection Costs							
2.01	Environmental activity audit costs							
2.02	5 1							
2.03	The cost of developing a performance measure							
2.04	Costs of conducting pollution testing							
2.05	Environmental performance verification costs							
2.06	Pollution level measurement costs							
3	Environmental Internal Failure Costs							
3.01	Equipment operating costs to reduce pollution							
3.02	Toxic waste disposal and management costs							
3.03	Pollution equipment maintenance costs							
4	Environmental External Failure Costs							
4.01	Costs of cleaning up polluted rivers / lakes							
4.02	Cost of using raw materials inefficiently							
4.03	Oil cleaning costs spilled							
4.04	Cost of cleaning up contaminated soil							
4.05	The cost of work accidents that are not environmentally friendly							

Based on Table 1 it could be seen that the environmental costs of CV. DBU based on the classification. The measurement of the company's environmental performance is based on the environmental activities carried out by the company during the productivity process by identifying these environmental costs, both internal and external costs, which will have a positive impact on the company's environmental performance [12]. This is in accordance with (Hardianti 2017) that disclosing all costs related to the environment and allocating these costs based on their categories will have a good



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impact on the company's environmental performance [13]. So that the application of green accounting at CV. DBU will have a positive effect on environmental performance and will support the sustainability of the business going forward.

### 5. Conclusion

Based on the results and discussion it could be concluded that the *green accounting* as innovation reducing environmental pollution could apply well enough to get legitimacy from the surrounding community. So that the company has an awareness of the environmental interests of the company for the sustainability of its business in the future, besides that the company can disclose the environmental problems it faces and the evaluation process such as environmental activities and always analyzes the problem of production waste. In their implementation, the company paid for environmental preservation, but there is no classification of environmental costs and CV. DBU classified it into other costs so that environmental cost was not visible in the financial statements.

### 6. Acknowledgment

The researcher realized that the journal will not be successful without the guidance and direction of various parties who have taken the time to prepare this journal. The researcher would like to thank to the first supervisor, the second supervisor, and all those who have helped in the process of compiling this journal.

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### The Analysis of Abnormal Stock Returns in LQ-45 Index During Covid-19 Pandemic

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Abstract. This research aimed: (1) to identify the average distinction of abnormal stock-return in LQ-45 during Covid-19 Pandemic around January-May 2020 in Indonesia, and (2) to identify the highest average abnormal stock-return during Covid-19 Pandemic around January-May 2020. The research sample used LQ-45 Share through purposive sampling method. Abnormal return denotes to the indicator used to measure the market reaction due to the particular event. Kolmogorov Smirnov and Kruskal Wallis test are used to assess the normality data and examine whether there was average distinction of abnormal stock-return in LQ-45 during Covid-19 Pandemic around January-May 2020 in Indonesia. The research finding represents that there is an average distinction of abnormal stock-return in LQ-45 during Covid-19 Pandemic in Indonesia. The most significant distinction shown on March 2020 which the average abnormal return value is 71.93, decreasing from February 2020 in average value of 102.43. Based on the data analysis, it is identified 17 companies with positive abnormal return whose highest average abnormal return during the pandemic around January-May 2020 is Barito Pacific Tbk (BRPT) company in value of 0.11399140.

Keywords: Stock, Abnormal Return, Index LQ-45, Covid-19 Pandemic

#### 1. Introduction

The capital market based on place of meeting between demand and supply of financial instruments for the long term, generally more than 1 (one) year [1]. There are many factors influenced capital market conditions, namely (1) availability of securities, (2) demand for securities, (3) legal and regulatory issues, (4) the existence of institutions that regulate and supervise capital market activities and various institutions that allow transactions to be carried out, efficiently, (5) the political and economic conditions of a country [2]. The Covid-19 pandemic has an impact on global economic stability. Many companies do financial analysis early to avoid bankruptcy [3]. If there are several problems in investing stocks, it is necessary to have a budget that will provide flexibility for companies to manage finances and allow companies to collaborate [4].

In addition, this pandemic situation will certainly have an impact on investors, particularly stock investors. Not only are a few stock investors considering cut loss in order to save their stock investment portfolios that are being hit by fire. With the Covid-19 Pandemic spreading around the world, the extreme declining of world commodity prices is the main reason for the investors released several stock portfolios in Indonesia. In fact, the rapid spread of the virus has a profound impact, except the global



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economy which continues to show volatility, even tending to decline. The uncertainty over the time period for this pandemic to rest also caused capital market movements in almost all countries to experience deep correction [5], [6]. Based on data obtained from bloomberg.com on May 29, 2020, stock indexes around the world that experienced a decline include the NYSE Composite Index (America) which fell -4.69%, FTSE 100 (UK) -13.45%, Hang Seng (Hong Kong) -15.67%, Shanghai Se Composite (China) -2.44%, All Ordinaries Index (Australia) -9.7% to IHSG (Indonesia) -24.34%.

The movement of Stock Composite Index (IHSG) is an important guide for analyzing the overall performance of stocks of the companies traded on the Indonesia Stock Exchange (IDX). The IHSG illustrates Indonesia's economic conditions as macro level. The significance decline in the IHSG occurred in January to May as a result of economic conditions that were responded negatively by capital market players as a result of the spread of the Covid-19 pandemic virus. Early January 2020 the IHSG closed at 6,283.58, and then at the end of January 2020 the IHSG fell by 343.53 points (-5.5%). The following month, namely the end of February 2020, the IHSG was corrected again by 487.85 points (-8.9%), the peak at the end of March 2020, the IHSG was corrected by 913.77 (-16.8%) from the closing price of the end of February. At the end of April 2020, the IHSG increased slightly in 5.62 points (1.2%), and at the end of May the IHSG also increased in 37.21 points (0.8%). The significance drop in the IHSG also resulted in the LQ-45 Index for being eroded. LQ-45 stocks are the 45 most active stocks traded which have a high level of liquidity and the highest market capitalization [7].

This current phenomenon and information greatly affect the level of sensitivity of the capital market to stock prices that have an impact on stock returns which will be obtained [8]. Some information published in the capital market affects abnormal returns, including the reaction of the capital market to rising fuel prices. The results of the research shows that there is a significant difference between abnormal returns on events before and after the fuel price hike [9]. Based on these gaps and conditions, researchers are interested in conducting research related to abnormal stock-returns during the Covid-19 pandemic on LQ-45 index which aimed to know the impact of Covid-19 pandemic event on stock prices.

#### 2. Research Method

### 2.1 Type of Data

The quantitative data used in this research are monthly closing stock price data, dividends during January-May 2020.

#### 2.2 Data Resources

Secondary data was used in this study. The secondary data was obtained in a ready-made form, which has been collected, processed and published by other parties.

### 2.3 Method of Data Collection

The documentation method was used in this research, namely the methodology of collecting data or documentation.

#### 2.4 Population and Sample

The population of this study were stocks that included in the LQ-45 index for the period January - May 2020. The sampling technique used in this study was taken by purposive sampling method.

### 2.5 Data Analysis Technique

The methodology of data analysis usually used in event studies are as follows [10]:

- Collected the sample
- Determined the research time
- Recorded the monthly stock price that are included in the LQ-45 index category at the time of the event period
- Recorded the closure of the Composite Stock Price Index during the event period.



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• Calculated the actual return

The formula to calculate the actual return is as follows [7]:

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1} + D_t}{P_{i,t-1}}$$

Calculated the market return

The market return which is represented by the Composite Stock Price Index (IHSG) can be calculated by using the formula as follows [7]:

$$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$$

• Determined the expected return

The expected return of this research was determined using market adjusted model. The formula can be seen as follows:

$$E[Ri,t] = Rmt$$

• Calculated the abnormal return

The formula that used to calculate abnormal return of stock price is as follows:

$$RTNi, t = Ri, t - E[Ri, t]$$

• Tested the hypothesis

Kruskal Wallis test was used to test the hypothesis. If the p value  $\geq \alpha$  (0.05), it means there is no difference. Meanwhile, if the p (value)  $\leq \alpha$  (0.05), it means that there are differences.

• Determined the ranking of the average Abnormal Return

### 3. Finding and Discussion

3.1Determining the abnormal return stock of LQ-45 Index Category

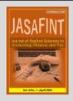
The Covid-19 pandemic in early 2020 caused the stock market to decline rapidly. The decline of the stock market that occurred was due to the many restrictions in various sectors, such as the restriction of flights by many countries, made the ISHG slumped [10]. The calculation of abnormal stock-return was done on 42 companies around January-March 2020. During the pandemic Covid-19 on January-March 2020, there were 17 companies with positive abnormal stock-return that showed getting more profit between actual return and expected return. Meanwhile, 25 companies got negative abnormal return during the pandemic Covid-19 or their profits were lower than actual return and expected return. The ranking of the average abnormal stocks-return that involved on LQ-45 can be seen in table 1:

Table 1. The Ranking of the Average Abnormal Stocks Return of LQ-45

NI.	N D			Bulan			Rata-Rata
No	Nama Perusahaan	Januari	Februari	Maret	April	Mei	AR
1	Barito Pacific Tbk	-0.05454	-0.16317	-0.09638	0.9609	-0.07685	0.113991402
2	HM Sampoerna Tbk	0.049879	-0.09188	0.01169	0.087204	0.214671	0.054313185
3	Gudang Garam Tbk	0.100126	-0.00357	-0.02654	0.06309	0.06827	0.04027629
4	Unilever Indonesia Tbk	-0.0155	-0.05947	0.229853	0.102279	-0.07133	0.037165811
5	Charoen Pokphand Indonesia Tbk	0.066078	-0.06081	0.034248	-0.10793	0.247546	0.035826581
6	Kalbe Farma Tbk	-0.05885	-0.06364	0.373866	-0.05837	-0.02409	0.0337814
7	XL Axiata Tbk	-0.04138	-0.02428	-0.05957	0.231733	0.012452	0.023790128
8	Semen Indonesia (Persero) Tbk	0.03418	-0.04139	-0.10449	0.003523	0.224815	0.023327176
9	Bank BTPN Syariah Tbk	0.11567	-0.0645	-0.2649	-0.0092	0.30889	0.017192082
10	Jasa Marga (Persero) Tbk	-0.05644	0.099435	-0.28968	0.201057	0.119095	0.014692901

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11	Erajaya Swasembada Tbk	-0.07648	0.100912	-0.25526	0.308493	-0.01186	0.013162774
12	Telekomunikasi Indonesia (Persero) Tbk	0.026539	0.000465	0.073026	0.068495	-0.10789	0.012126957
13	Vale Indonesia Tbk	-0.0724	-0.14264	0.049214	0.150715	0.073823	0.011742365
14	Bank Central Asia Tbk	0.088249	0.023387	0.047166	-0.10198	-0.00255	0.010853311
15	Surya Citra Media Tbk	0.094383	-0.14018	-0.14045	0.096384	0.128474	0.007721685
16	Indah Kiat Pulp & Paper Tbk	-0.06008	-0.08462	-0.11953	0.34494	-0.06194	0.003752327
17	Adaro Energy Tbk	-0.12593	0.024901	0.024725	-0.10981	0.187763	0.000330152
18	Indo Tambangraya Megah Tbk	-0.05987	0.206422	-0.1156	-0.15021	0.117111	-0.000429725
19	Astra International Tbk	-0.02169	-0.04788	-0.12654	-0.05192	0.231072	-0.003390871
20	Tambang Batubara Bukit Asam (Persero) Tbk	-0.10502	0.095618	0.140796	-0.17901	0.029444	-0.003634826
21	Indofood CBP Sukses Makmur Tbk	0.074851	-0.01466	0.162716	-0.07333	-0.18257	-0.006599163
22	United Tractors Tbk	-0.05231	-0.05337	0.185654	-0.0746	-0.0447	-0.007865247
23	Pakuwon Jati Tbk	-0.03305	0.101275	-0.25129	0.188173	-0.05022	-0.009020821
24	Indofood Sukses Makmur Tbk.	0.035863	-0.08729	0.144505	-0.01154	-0.12666	-0.0090244
25	Ciputra Development Tbk	-0.07216	0.13791	-0.36258	0.188377	0.047157	-0.012258213
26	Bank Rakyat Indonesia (Persero) Tbk	0.096399	-4.9E-05	-0.10831	-0.12386	0.069935	-0.013177373
27	Aneka Tambang Tbk	-0.08323	-0.11356	-0.04256	0.103492	0.0493	-0.017310761
28	Wijaya Karya (Persero) Tbk	-0.00968	0.074107	-0.38708	0.098624	0.134216	-0.017964427
29	Indocement Tunggal Prakarsa Tbk	-0.05599	-0.01204	0	-0.10147	0.030737	-0.027752999
30	AKR Corporindo Tbk	-0.09661	-0.11735	-0.08714	0.17609	-0.02872	-0.03074612
31	Bank Mandiri (Persero) Tbk	0.032669	0.049524	-0.18507	-0.07981	0.000962	-0.036344312
32	Japfa Comfeed Indonesia Tbk	0.03187	0.015377	-0.15385	-0.01278	-0.08481	-0.040839233
33	PP (Persero) Tbk	-0.08819	-0.04477	-0.37599	0.179082	0.0742	-0.051131634
34	Sri Rejeki Isman Tbk Bank Negara	-0.09262	-0.00887	-0.10742	0.071245	-0.1259	-0.052711169
35	Indonesia (Persero) Tbk	-0.01707	0.060125	-0.2862	0.038697	-0.06955	-0.05480015
36	Media Nusantara Citra Tbk	0.033133	-0.10978	-0.12814	-0.02805	-0.07893	-0.062352614
37	Bumi Serpong Damai Tbk	-0.06738	-0.0211	-0.16242	0.013139	-0.10718	-0.068986114
38	Waskita Karya (Persero) Tbk Matahari	-0.12805	-0.12527	-0.33601	0.2109	0.000375	-0.075611789
39	Department Store Tbk	-0.23174	0.150071	-0.40726	-0.12524	0.180635	-0.086706278
40	Perusahaan Gas Negara (Persero) Tbk	-0.14698	-0.16519	-0.22424	0.068594	0.002009	-0.093162566
41	Pabrik Kertas Tjiwi Kimia Tbk	-0.0421	-0.25862	-0.16742	0.214033	-0.21389	-0.093598608



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	Bank	Tabungan						
42	Indonesia	(Persero)	-0.06732	-0.00878	-0.3382	0.008715	-0.14407	-0.109929743
	Tbk							

Based on the analysis data in the table 1, it indicated that the highest average of abnormal return on January 2020 is attained by Bank BTPN Syariah Tbk (BTPS) Company with the value of 0.11567. On February 2020, the highest abnormal return was 0.206422 from Indo Tambangraya Megah Tbk (ITMG) Company. Then, the highest abnormal return on March 2020 was achieved by Kalbe Farma Tbk (KLBF) of 0.373866. On April 2020, the highest abnormal return was Barito Pacific Tbk (BRPT) in the value of 0.9609. The last, the highest abnormal return on May 2020 was Bank BTPN Syariah Tbk (BTPS) with the value of 0.30889. Therefore, it could be concluded that the highest average abnormal stock-return during pandemic Covid-19 from January- March 2020 was attained by Barito Pacific Tbk (BRPT) Company in the value of 0.113991402.

### 3.2The Result Analysis of Distinction Testing

The study of distinction test was firstly investigated with normality test using Kolmogorov Smirnov test. The result of normality test shows that the data were distributed abnormally. Therefore, it needed an alternative test of distinction testing using Kruskal Wallis test. The data of abnormal return analyzed in this study that was the data from interval type data/ratio. The Kruskal Wallis test of the abnormal stocks return of LQ-45 showed the results in table 2 below:

	Bulan	N	Mean Rank
Abnormal	Januari	42	100.86
Return	Februari	42	102.43
	Maret	42	71.93
	April	42	131.12
	Mei	42	121.17
	Total	210	
P value		0.0001	

**Table 2.** The Result Analysis Stock of LQ-45

Based on the table 2, it showed that there are distinction average of abnormal return stocks in the LQ-45 during the pandemic Covid-19 in Indonesia. The highest average of abnormal return at the 42 companies is 131.12, on April 2020. Meanwhile, the most significant distinction could be seen on March 2020, in which the average abnormal return of LQ-45 during pandemic Covid-19 with the lowest average of 71.93. It has been decreased from February 2020 with the average about 102.43. The result of Kruskal Wallis test showed that the p value = 0.0001 < 0.05 which means H0 was rejected. It could be concluded that there is the distinction average of abnormal return of LQ-45 stocks during the pandemic Covid-19 in Indonesia.

#### 4. Conclusions

Based on the analysis result and discussion, it could be concluded that there is average distinction of abnormal return stocks that are involved in LQ-45 during the pandemic Covid-19 in Indonesia. The significant distinction of the average abnormal return stock in LQ-45 could be seen on March 2020 which has the lowest average was about 71.93. It decreased from February 2020 with the average was 102.43. Based on the analysis data, it showed that 17 companies had positive abnormal return in which the highest average abnormal return stocks during the pandemic situation around January – Mei 2020 is attained by Barito Pacific Tbk (BPRT) with the average value of 0.113991402. In the second position, there is HM Sampoerna Tbk (HSMP) company with the value 0.054313185. The third is Gudang Garam Tbk (GGRM) in value of 0.004027629 and the lowest average abnormal return is achieved by Bank



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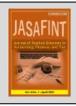
Tabungan Indonesia (Persero) Tbk (BBTN) with the value -0.109929743. The reason why investors invested their fund in BPRT stock that is because Covid-19 pandemic has been made the slump of world economic. It also made the decreasing of world oil prices. The decrease of world oil prices gives the profit to the issuers who are engaged in the petrochemical sector because they can decrease the production cost.

#### 5. Acknowledgment

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### Management Audit to Evaluate the Economical, Efficiency, and Effectiveness of Purchasing Function in GK Hotel

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Abstract. This research examines the economic, efficiency, and effectiveness of purchasing function and reveals findings obtained during the implementation of a management audit to give appropriate recommendations for better company performance in the future. The analytical techniques used in this research are quantitative and qualitative analytical techniques. The data analysis results in 2017-2019 show that the highest rate of economics occurred in 2019. The highest efficiency rate occurred in 2019 and declining the effectiveness rate in 2019. That is due to obstacles in the purchasing function resulting in wastage. These obstacles are the weaknesses in unauthorized purchase request activities, purchasing goods that did not comply with order specifications, and the delay of payment to the supplier due to a lack of funds from the head office. This research concludes that the economic rate in 2019 is uneconomical, the efficiency of purchase costs in 2019 is inefficient, and the effective rate in 2019 is quite effective. The recommendation is to make a payment agreement with the supplier, tighten the process of purchasing requests, and control in making the article description.

Keywords: Management Audit, Purchase Function, Economical, Efficiency, Effectiveness

#### 1. Introduction

As one of the four-star hotels in Kuta-Bali, GK Hotel must survive and develop in business competition by carrying out management to be economical, efficient, and effective. Auditing is required to assess the economy, efficient and effective management of a company in implementing the company's policies and procedures. Consistent with theory, a management audit is auditing a company's operations to know if the operation conducted effectively, efficiently, and economically [1].

The purchasing function is the most critical and highly influential [2]. That is because purchasing functions served to control the cost so that the profit earned can maintain its continuity. The purchasing function activities must be followed under good governance principles to achieve this goal [3]. This governance is also related to policies related to economical purchase quantity, minimum amount of inventory that must be owned, maximum amount of inventory that can be stored in the warehouse, purchase period, so that overall inventory costs can be minimized [4].

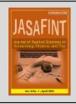
Some problems could potentially cause weaknesses such as the order of rejected goods by vendors and the purchase of goods that do not comply with the order specifications. These circumstances lead to the onset of additional costs beyond the company's purchase cost budget [5], [6]. It is judging from the

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rising cost of purchasing in 2019 the amount Rp51,283,064,093. The purchase cost exceeds the budget assigned in 2019, the amount Rp50,881,940,325. If conditions that contain weaknesses are not evaluated, it will harm the hotel. Therefore, further analysis is needed to find out the weaknesses that occur [7].

The research was conducted to determine whether the function of purchasing at the GK Hotel has been done economically, efficiently, and effectively. Management can know the weaknesses and evaluate the policies and make the right decisions so that the problems do not happen again in the future [7]. Therefore, a management tool is required to evaluate the purchasing function with audit management [3].

#### 2. Research Method

This research uses qualitative and quantitative data. Qualitative data includes standard operating procedures (SOP) and results of interviews with the purchasing manager, receiving supervisor, general store manager, account payable supervisor, and cost control manager. Quantitative data includes budget and realization of purchasing costs, budget, and revenue realization in 2017, 2018, and 2019. The analytical techniques used in this research are as follows:

### 2.1. Quantitative Data Analysis Techniques

#### 2.1.1. Economical Rate Assessment

The economic rate assessment is a measure of the inputs used in the company's operations [3]. The economic formula as follows:

Economical = 
$$\frac{\text{Realization of Purchase Costs}}{\text{Purchase Cost Budget}} \times 100 \%$$

#### 2.1.2. Efficiency Rate Assessment

The assessment of efficiency rate relates to how the company conducts the company's operations [3]. The efficiency formula as follows:

Efficiency = 
$$\frac{\text{Realization of Purchase Costs}}{\text{Realization of Revenue}} \times 100 \%$$

#### 2.1.3. Effectiveness Rate Assessment

The effectiveness rate assessment is a measure of output as the company's success rate in achieving its goal [3]. The effectiveness formula as follows:

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

#### 2.2. Qualitative Data Analysis Techniques

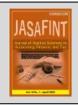
Qualitative data analysis techniques through five steps that must be carried out in the management audit as follows:

#### 2.2.1. Preliminary Audit

A preliminary audit of this research conducted to obtain information about the purchasing process conducted at GK Hotel and analyze the information obtained to identify potential problems or weaknesses.

### 2.2.2. Review and Testing of Management Control

At the step of review and testing of management control, carried out a review and test of the purchasing process, whether it is following the Standard Operating Procedure (SOP), intending to assess the economy, efficiency, and effectiveness of purchasing functions.



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#### 2.2.3. Detailed Audit

At the step of detailed audit, carried out evidence collection sufficient, competent, material, and relevant. This step is useful to support audit objectives related to the purchasing process. This step is also developing findings to find a link between one finding and another and group the findings into criteria, causes, and consequences.

#### 2.2.4. Reporting

Reporting is an activity to communicate the results of audits, including recommendations given to various interested parties [8].

#### 2.2.5. Follow Up

Follow up is an action to encourage the authorities to carry out follow up following the recommendations given [8].

#### 3. Results and Discussion

#### 3.1. Preliminary Audit

The purchasing process's three critical steps include purchasing planning, purchasing execution, and handling goods or services [3]. On that basis, the preliminary audit focuses on the three steps by carrying out the data collection procedure through the direct observation and interview step. Based on the preliminary audit results, discovered things that could potentially contain weaknesses in the purchasing function, such as ordering goods to suppliers that did not comply with the order's specifications, rejection of purchase orders by suppliers, and the increase in purchase costs 2019.

#### 3.2. Review and Testing of Management Control

The step of review and testing of management control aims to assess the economy, efficiency, and effectiveness of purchasing functions in supporting the company's achievements [3]. That stated in the theory purpose of auditing the management of purchasing functions. At this step, it also aims to ensure that the prevailing provisions and regulations have carried out the purchasing activity.

The results of the review and testing of purchasing activities state that GK Hotel has guidelines drawn up by containing written procedures for purchasing activities set out in the Standard Operating Procedure (SOP). However, several SOPs are not implemented, such as the payment process to the supplier, which sometimes does not correspond to the specified period. The store section does not authorize the purchase requisition form, and the purchase order does not comply with the purchase requisition form.

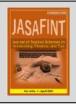
#### 3.3. Detailed Audit

The findings of audit management of purchasing function at GK Hotel are as follow:

#### 3.3.1. Late payment of the debt to the supplier

The condition that occurs is that the supplier makes a complaint to the account payable section regarding the payment that has been due, while the criteria that are the account payable section receives a purchase order form to use as the basis for making the payment process based on the specified period. That is because GK Hotel has to apply for the necessary funds to the head office based in Jakarta. The problem is that the amount of funds submitted to the head office does not match the amount received by GK Hotel. As a result, the supplier rejects the purchase order until the payment can be completed by GK Hotel so that for the goods needed immediately, the purchasing department must look for another supplier with more expensive price consequences.

One of the purchasing function's strategic objectives is that the materials' procurement must comply with the requirements and at the lowest possible cost [2]. Of course, this is not per the activity that occurs in the function of purchasing GK hotel, so it has not reached its strategic target. In addition to its strategic objectives, it will also impact the loss of trust from suppliers [9].



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#### 3.3.2. The purchase requisition form is unauthorized by store section

The condition that occurs is that the store section does not carry out its duty to check the storeroom's stock goods availability. While the criteria are submitting a request for goods by requesting authorization from the store manager. That is because the user does not request approval from the store manager in the purchase request. As a result, the user made excessive purchase requests to the purchasing section. That, of course, if it continues to happen over and over again, will lead to waste that increases the cost of purchasing, so it is not economical.

That is consistent with the theory that good planning or purchase demand should reflect the optimal relationship between the desire to meet the needs and the availability of resources owned with the lowest sacrifice (economic) [3]. In terms of economy, excessive purchases will also have an impact on the stockpile of goods in the storeroom [10].

#### 3.3.3. Purchase of goods that do not comply with the order specifications

The condition that occurs is the purchasing section's mistakes in the purchase of goods, while the criteria are creating a purchase order form based on the purchase requestion form. That occurs because the purchasing section makes a purchase order form that is not appropriate with the purchase requestion form—the purchasing section confusion in selecting the article description.

Consistent with the theory that assignment, good purchasing practices will obtain goods or services by the specification stipulated [3]. However, the purchasing practices at GK Hotel have not suitable due to purchases that do not comply with the specifications, so the purchasing section must re-purchase the goods. That is due to the article description more than one for the same or similar items. The cause has published in research which states that the appearance of more than one article description for the same or similar goods on the system make confusion in the user in creating the market list, the purchasing section in the creation of purchase orders, and the receiving section in the receipt of goods [9].

#### 3.3.4. Economical rate assessment

Calculation of economical rate:

Economical 2017 = 
$$\frac{38.205.083.115}{40.753.147.880}$$
 x 100 % = 94%  
Economical 2018 =  $\frac{43.959.775.110}{46.084.413.735}$  x 100 % = 95%  
Economical 2019 =  $\frac{51.283.064.093}{50.881.940.325}$  x 100 % = 101%

The condition is a waste of purchase costs in 2019. That can be seen from the calculation of the economic level of purchase costs in 2019 of 101%. The economic criteria state that purchasing cost is assessed economically if the realization of the purchase cost does not exceed the budgeted target result of its achievement ≤100%. That is due to an increase in the purchase of operational goods from waste in procurement or goods' purchasing activities.

The result is that the not achieved strategic targets from GK Hotel, namely the more extensive the company's funds incurred against the cost of purchasing, will affect the smaller the company's profit. Consistent with the theory that one of the purchasing function's strategic objectives is to control market share and obtain a profit rate appropriate to the specified target [2]. As a result, it has been published in research showing that uneconomic causes the company's burden to increase and will affect its less profit [11].

#### 3.3.5. Efficiency Rate Assessment

Calculation of efficiency rate:

lation of efficiency rate:  
Efficiency 2017 = 
$$\frac{38.205.083.115}{76.208.023.603} \times 100 \% = 50\%$$
  
Efficiency 2018 =  $\frac{43.959.775.110}{86.145.086.380} \times 100 \% = 51\%$ 



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Efficiency 2019 = 
$$\frac{51.283.064.093}{83.170.620.347}$$
 x 100 % = 62%

The condition that occurs is the uneconomical cost of purchasing, causing the process (efficient) in the purchase's function is not maximal. That can be seen from the calculation of the purchase cost-efficiency rate in 2019 of 62%. The efficiency criteria state that the cost of purchasing is assessed efficiently if the result is  $\leq$ 60%. That is because the cost of purchasing used has not generated a more considerable amount of revenue for the company, or the purchase cost incurred is too high.

The result is that not achieved the strategic goal of purchasing functions, consistent with the theory that achieving a strategic plan is a measure or benchmark to assess whether the purchasing function is maintained with a high level of efficiency [2]. The result of inefficient purchase costs is not the maximum profit earned by the company. That is because the cost of the purchase used is not comparable to the company's income. The result has been published in research showing that inefficiencies cause the resulting output to be less than the maximum [11].

### 3.3.6. Effectiveness Rate Assessment

Calculation of effectiveness rate:

Effectiveness 
$$2017 = \frac{76.208.023.603}{73.542.806.806} \times 100\% = 104\%$$
  
Effectiveness  $2018 = \frac{86.145.086.380}{83.079.689.499} \times 100\% = 104\%$   
Effectiveness  $2019 = \frac{83.170.620.34}{92.616.572.192} \times 100\% = 90\%$ 

The condition that occurs is the uneconomical cost of purchasing, causing the process (efficient) in the purchase's function is not maximal, and the result of income (effective) in achieving the company's goals does not run by the plan set by the company. This can be seen from the calculation of income effectiveness rate in 2019 of 90%, while the effectiveness criteria states that if the result is <100% very effective, 90.01% - 100% effective, 80.01% - 90% quite effective, 60.01% - 80% less effective and <60% ineffective. That is due to declining sales in all business sectors such as rooms, food and beverage, and spa.

The result is that the revenue in achieving the company's goals in 2019 does not appropriate the plan, namely revenue budget or not maximum. Achieve the maximum goal if the achievement is above 100%. Consistent with the theory that to measure effectiveness must first establish the output that wants to achieve (budget), then if the output that to achieved (budget) can be achieved, then the activity of the effective purchasing function [3]. The results have also been published in research showing that ineffectiveness causes the purpose of the achieved by companies not yet maximized. Achieve the goal if the percentage assessment of achievement rate reaches 100% [11].

#### 3.4. Reporting

Recommendations that can be given to address the weaknesses that occur in the purchasing function, namely before entering into a contract of cooperation between the hotel and the supplier to make an agreement on the payment as well as the debt limit provided by the supplier, the process of filing a purchase request must be tightened with a record if the purchase requisition has not been authorized by the store then it is not permitted to submit a purchase request to the purchasing department, the cost control section should be more controlling in terms of makes article descriptions in order to facilitate the related sections, the purchasing section seeks to find suppliers who offer the lowest prices so that the expenditure of funds on purchase costs can be obtained at the minimum price, the purchasing section uses funds on purchasing costs by economically and is tailored to the company's needs so that the costs sacrificed are comparable to the revenue received by the company and the achievement of the company's objectives in generating revenue should be reviewed so the company's revenue budget can be achieved to the maximum.

3.5. Follow Up



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The weaknesses found from management audit results in this purchasing function are interconnected. If the weakness is not immediately corrected, it will have an impact on operational activities. The user not requesting authorization from the store to submit a purchase request may lead to the buildup of goods stored in the storeroom and result in a hampered in business capital turnover. Also, the purchase of goods that do not comply with the order specifications causes the purchasing section must re-purchase the goods.

Late payment cause rejection of purchase order, and the purchasing section must reimburse the supplier with more expensive price consequences. In addition to being detrimental in terms of time also impacts the increased cost of purchasing. Increased purchasing costs can affect economic level, efficiency, and effectiveness. That is because the cost of purchasing exceeds the target, namely the budget of the cost of purchasing so that not the maximum profit to be earned by the company and revenue in achieving the company's objectives does not go according to the company's plan, namely the revenue budget. That can continue to repeat until it does not close the possibility for GK hotels to difficulty reaching targets in the future. Therefore, GK Hotel must immediately make improvements to the purchase function based on the recommendations provided. The recommendations have also been applied in research and show that the recommendations can be used to address weaknesses found from management audit results in purchasing functions.

#### 4. Conclusions

Audit management has been able to assess the economy, efficiency, and effectiveness of purchasing functions at the GK Hotel by detecting weaknesses that occur and give recommendations for such weaknesses. The assessment of the economic level of purchase costs in 2019 is 100%, so that it is considered uneconomical. That is due to the rising cost of purchasing in 2019. Efficiency level assessment in 2019 >60%, which means the cost of purchase used is inefficient so that the profit earned is not maximal. The effectiveness assessment in 2019 reached 90%, which means that the company's revenue does not run appropriately with the plan, namely the revenue budget. However, it quite effective because it is within the achievement rate of the goal.

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### **SWOT Analysis as a Determiner of Marketing Strategy at b Hotel Bali & Spa Denpasar**

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Abstract. This research aims to determine the marketing strategy that must be taken from the results of the SWOT analysis at the b Hotel Bali & Spa Denpasar. This study uses primary data sources and secondary data sources with data collection methods through interviews, observation and questionnaires. The analysis technique used is a qualitative descriptive analysis technique, namely the SWOT analysis technique which explains, first, the data collection stage at the Bali Hotel & Spa Denpasar regarding the identification of internal and external factors in the form of strengths, weaknesses, opportunities, and threats, the second is the analysis stage, and third namely the stage of decision making to determine the strategy to be taken by the company. The research results from the SWOT analysis show that the company is in quadrant I, where it shows a problem regarding for the strength to see opportunities where the strategy taken is the SO strategy used to be applied in developing strategies that can be suggested at management b Hotel Bali & Spa Denpasar, to can improve the progress of the hotel going forward.

Keywords: SWOT Analysis, Matrix SWOT, Marketing Strategy, b Hotel Bali & Spa Denpasar

#### 1. Introduction

The tourism sector is one of the most influential sectors for Indonesia, especially in Bali where the tourism sector is the most important sector in economic progress. b Hotel Bali & Spa Denpasar is a 4 star hotel (city hotel) which is a place that is visited by many foreign and local tourists. With a strategic location, located on the border of Denpasar city and Badung regency which is not far from Ngurah Rai International Airport, and is located at the gate of the famous tourist area, namely the Kuta area. Besides that, the room's selling price is affordable for middle to lower and upper class tourists. The service also always refers to the high and maximum service quality. The management of b Hotel Bali & Spa Denpasar has a goal to create quality services. However, it cannot be separated from the strengths and opportunities. B Hotel Bali & Spa also has a threat where every month the room occupancy rate fluctuates due to threats such as natural disasters that affect tourism as well as impacting b Hotel Bali & Spa on tourist visits.

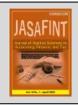
In connection with this threat, the management must of course strengthen its marketing strategy because seeing the possible threats and the current intense competition, b Hotel Bali & Spa Denpasar requires proper anticipation of all threats so that hotels can market their products in the market. In current developments, SWOT analysis is not only used to formulate strategies but is widely used in the

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preparation of business strategic planning as an objective of developing long-term strategies so that the direction and goals of the company can be achieved clearly and decisions can be made immediately and changes. in the face of competition and threats [1]. This research is entitled "SWOT analysis as a determinant of marketing strategy at b Hotel Bali & Spa Denpasar". Later the authors can find out and determine the marketing strategy that must be taken from the results of the SWOT analysis at b Hotel Bali & Spa Denpasar in the future.

#### 2. Literature Review

#### 2.1 Strategy

Strategy is a series of fundamental decisions and actions made by top management and implemented by all levels of the organization in order to achieve the goals of the organization [2].

#### 2.2 Service

Service is any activity, benefit or performance offered by one party to another that is intangible and does not cause any transfer of ownership where in its production it can be tied or not with physical products [3].

#### 2.3 Marketing Strategy

Marketing strategy is a series of goals and objectives, policies and rules that give direction to the company's marketing efforts from time to time, at each level and its references and allocations, especially as a company's response to the ever-changing competitive environment and conditions [4].

#### 2.4 Marketing Strategy Formulation

Marketing can be interpreted in various contexts according to the company's strategy development [5]. The term marketing that is widely accepted and well known as a marketing concept is marketing based on the recognition of consumer needs [3].

### 2.4.1. Competition Strategy Elements

The elements of the competition strategy can be grouped into three [6], namely:

- 1) Market segmentation is the act of identifying and forming separate groups of buyers or consumers. Each of these consumer segments has its own characteristics, product needs and marketing mix.
- 2) Targeting is an act of selecting one or more market segments to be entered.
- 3) Positioning is the determination of market position. The purpose of this positioning is to build and communicate the competitive advantages of existing products in the market into the minds of consumers.

#### 2.4.2. Elements of Marketing Tactics

The elements of the marketing mix can be classified into four groups which are called the 4P namely the product is a combination of goods or services that a company offers two target markets. The price is the amount a customer must pay to obtain a product. Place includes the company's products available to target customers. Promotion refers to the activities of communicating product goodness and persuading customers [7].

#### 2.4.3. Marketing Value Elements

Marketing values can be grouped into three, namely:

- 1) Brand, which is the value related to the name or value that is owned and attached to a company.
- 2) Service, which is the value associated with providing services to consumers. The quality of service to consumers needs to be continuously improved.
- 3) Process, which is a value related to company principles to make every employee involved and have a sense of responsibility in the process of satisfying consumers, either directly or indirectly.



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#### 2.5 SWOT Analysis

SWOT analysis is the systematic identification of various factors to formulate a company strategy [3]. Analysis of SWOT to analyze more deeply about SWOT it is necessary to know external and internal factors as an important part of a SWOT analysis, namely: External factors, these factors affect the formation of opportunities and threats (O and T) [8]. Where these factors relate to conditions that occur outside the company and influence in making company decisions. Internal factors, these factors affect the formation of strengths and weaknesses (S and W) [9]. Where these factors relate to the conditions that occur within the company, which also affects the formation of decision making in the company [10].

#### 2.6 SWOT Matrix

The SWOT matrix is a matrix compiled using the strengths, weaknesses, opportunities and threats variables identified in the internal strategic factors and external strategic factors [11]. One of the tools used to formulate strategic factors in the company is the SWOT matrix. This matrix can describe 4 sets of possible alternatives, namely: SO strategy, this strategy is made based on the company's mindset, namely with all the strengths to seize and take advantage of the greatest possible opportunities. ST strategy, this strategy is a strategy in using the strengths of the company to overcome threats. WO strategy, this strategy is applied based on the use of existing opportunities by minimizing existing weaknesses. WT strategy, this strategy is based on activities that are defensive and try to minimize existing weaknesses and avoid threats [3].

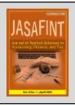
#### 3. Methodology

This research uses primary and secondary data. Primary data in this study include the results of interviews with the General Manager, Director of Sales & Marketing and several employees related to the identification of internal and external factors to determine the strengths, weaknesses, opportunities and threats at b Hotel Bali & Spa Denpasar. Meanwhile, secondary data is in the form of the history of the establishment of the company, the organizational structure, and the duties of each part of the company. Data collection procedures by interview, observation and questionnaires. The analysis technique used is a qualitative descriptive analysis technique, namely the SWOT analysis technique which explains, first the data collection stage at b Hotel Bali & Spa Denpasar regarding the identification of internal and external factors in the form of strengths, weaknesses, opportunities, and threats the second is the analysis stage, and third, namely the decision-making stage to determine the strategy that the company will take

#### 4. Result and Discussion

### 4.1 SWOT Analysis Based on Internal and External Factors

The results of the interviews and the weighting results of the SWOT analysis regarding internal and external factors, it can be concluded that there are still many shortcomings and there are also threats at b Hotel Bali & Spa Denpasar. To find out the steps that need to be taken b Hotel Bali & Spa Denpasar in determining the marketing strategy policy, a SWOT matrix is needed which can show the strengths, weaknesses, opportunities and threats that b Hotel Bali & Spa has, so it is possible to make a wrong decision in marketing, can be avoided. Based on the SWOT matrix, the results of the SWOT analysis b Hotel Bali & Spa Denpasar are as follows:



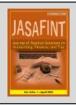
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Table 1. IFAS

	Internal Factors	Weight	Rating	Score (Weight x Rating)		
	STRENGTH			, , , ,		
1.	b Hotel Bali & Spa is a 4-star hotel that has the most complete and adequate ballroom facilities and entertainment facilities in Denpasar	0.121	3.4	0.41		
2.	b Hotel Bali & Spa uses almost all types of media to market its services ranging from print media to non- print media such as social media and events organized by b Hotel Bali & Spa to attract buying interest and consumer tastes	0.143	4.0	0.57		
3.	b Hotel Bali & Spa has a price offered in accordance with various facilities that can facilitate customer needs	0.129	3.6	0.46		
4.	b Hotel Bali & Spa also has a very good and very supportive product for consumers	0.136	3.8	0.52		
5.	Breakfast at Hotel Bali & Spa Denpasar is quite varied	0.129	3.6	0.46		
То	tal Strength Score	0.66		2.43		
	WEAKNESES					
1.	b Hotel Bali & Spa is close to the highway which is rather crowded because of the very high vehicle noise and makes guests who do not like noise very uncomfortable to stay	0.100	2.8	0.28		
2.	The parking area is not very large	0.064	1.8	0.12		
3.	Not many consumers know about Website b Hotel Bali & Spa Denpasar	0.086	2.4	0.21		
4.	No cooperation with foreign parties	0.050	1.4	0.07		
5.	b Hotel Bali & Spa has no branches	0.043	1.2	0.05		
То	Total Weakneses Score			0.72		
De	Defference Between Strength and Weakneses 2.43 0.72 1.70					

Source: Processed data

From the results of the analysis of the Strength factor table has a total value of 2.43 while Weakness is 0.72.



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Table 2. EFAS

	Eksternal Factors	Weight	Rating	Skor (Weight x Rating)
	Opportunities			
1.	b Hotel Bali & Spa is located close to entertainment and shopping centers, namely TSM (Trans Studio Mall) especially the domestic market	0.145	4.0	0.58
2.	In terms of service and also the service is very good and good and makes guests comfortable to stay	0.130	3.6	0.47
3.	Every year it is always used for events in order to increase room occupancy	0.123	3.4	0.42
4.	Increased purchasing power and consumer appetite	0.116	3.2	0.37
5.	Hotel management capability	0.109	3.0	0.33
To	tal Opportunities Score	0.623		2.17
	Threats			
1.	Competitor hotels, where there are many 4 star hotels, especially Denpasar area	0.087	2.4	0.21
2.	b Hotel Bali & Spa does not have a brand yet	0.080	2.2	0.18
3.	Price competition and promotion	0.080	2.2	0.18
4.	The increased service from competitors	0.094	2.6	0.24
5.	Natural disasters or disasters that are currently expanding, namely PANDEMI COVID-19 (Corona Virus) which is very detrimental to tourism, especially hotels	0.036	1.0	0.04
To	tal Threats Score	0.38		0.84
De	fference Between Opportunities and Threats	2.17	0.84	1.32

Source: Processed data

This table shows that for the Opportunities factor the score is 2.17 and the Threats factor is 0.84. Furthermore, the total score of each factor can be detailed, Strength: 2.43, Weaknesses: 0.72, Opportunities: 2.17, and Threats: 0.84.

Furthermore, it can be seen that the difference between Strength and Weaknesses values is 1.71 and the difference between Opprtunities and Threats values is 1.33. In calculating the strategy requires affirmation of the position in the quadrants between strengths, weaknesses, opportunities and threats, all of which are described in positive and negative lines. To find the coordinates can be done in the following ways:

Internal Analysis Coordinate

(Difference in Strengths and Weaknesses scores / 2) = 1.71 / 2 = 0.85

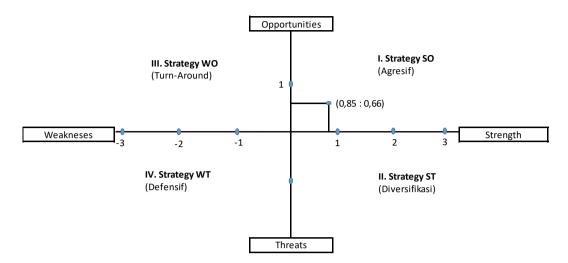
**External Analysis Coordinates** 

(Difference in score Opportunities and Threats /2) = 1.33 /2 = 0.66

From the calculation results above, it is known that the coordinate point is located at (0.85: 0.66). The results of these coordinates are presented in the SWOT matrix diagram to find out the position of the company, so it is obtained picture 1 SWOT matrix diagram as follows:



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Picture 1. SWOT Analysis Diagram

The results above show that b Hotel Bali & Spa Denpasar is included in the Quadrant I type. This position indicates that b Hotel Bali & Spa Denpasar is in a strong and chance, making it possible to continue to achieve maximum progress.

#### 4.2 Matrix SWOT

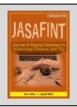
Matrix SWOT is one of the tools used to compile the company's strategic factors (strengths, weaknesses, opportunities, threats). This matriks can clearly describe how the external opportunities and threats faced by the company can be adjusted to the strengths and weaknesses it has. From the results of the SWOT analysis that has been explained previously that b Hotel Bali & Spa Denpasar is in quadrant I, where it shows the problem of strength to see opportunities where the strategy taken is the SO strategy where the strategy is to take advantage of the complete facilities that b Hotel has. Bali & Spa to attract consumer purchasing power, utilize the media to advertise events that will be held by the hotel in increasing room occupancy and maximizing service as well as good and good service for guests, and utilizing a strategic location close to entertainment and shopping centers in particular domestic market.

#### 5. Conclusion

From the results of identification of internal and external factors, it can be concluded that it is known the position of the internal and external environment b Hotel Bali & Spa Denpasar has a strong competitive market position in competing. This shows that b Hotel Bali & Spa Denpasar must continue to make efforts to improve services, comfort, facilities and product distribution. Overall, there are four alternative strategies, namely (SO, WO, ST, WT) which can be applied to increase the progress of management at b Hotel Bali & Spa Denpasar, in connection with business developments and changes in market conditions that are happening now based on internal factors. and external factors at b Hotel Bali & Spa Denpasar. The research results from the SWOT analysis show that the company is in quadrant I, where it shows a problem regarding the strength to see opportunities where the strategy taken is the SO strategy used to be applied in developing strategies that can be suggested at the b Hotel Bali & Spa Denpasar management, to can improve the progress of the hotel going forward.

#### 6. Acknowledgments

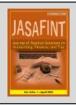
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### **Analysis of Input Tax Recalculation to Hospital Services** (Case Study at PT CRB)

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**Abstract.** PT CRB is a taxpayer who has a business in the field of medical health services specifically eye hospital. Initially, PT CRB only reported its monthly Value Added Tax (VAT) from January to December 2019. However, the reported amount of Input Tax wasn't in accordance. Input Taxes from drug purchases can't be separated exactly between delivery of drugs that are VAT payable and non-VAT payable, so the Input Taxes can't be fully credited and must be calculated with the guidelines of the Minister of Finance Regulation No. 135/PMK.11/2014. The purpose of this research was to determine the calculation of PT CRB Input Tax in 2019, the results of the recalculation of Input Taxes in accordance with PMK 135/PMK.11/2014, and the analysis of recalculated Input Taxes impact. The types of data used in this research are qualitative and quantitative data with secondary data sources. Data collection in this research is using interview techniques and documentation techniques. The data analysis technique used in this research is quantitative descriptive data analysis. Based on the results of the research, it can be concluded that the calculation of Input Tax on hospital services before recalculation shows that the total Input Tax reported by PT CRB in 2019 is about Rp. 180,518,250 and it has been fully credited. Results of the recalculation of Input Tax on hospital services at PT CRB 2019 based on PMK 135/PMK.11/2014 is Input Tax that can be credited during the January to December 2019 tax period is only Rp 63,914,935. The results of recalculated Input Taxes impact analysis are in the form of underpaid VAT of Rp 116,603,315 that be the main impact and the impact of administrative sanctions in the form of interest of 2% due to late payment of taxes.

**Keywords**: Hospital Service, Value Added Tax, Input Tax, PMK 135/PMK.11/2014

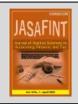
#### 1. Introduction

Indonesia continues to promote national development to achieve the welfare of its people. National development is financed by various sources of state income, namely taxes, non-taxes, and grants. The largest source of state income in Indonesia comes from taxes. One type of source of state income that comes from taxes is Value Added Tax (VAT) [1]. VAT has two main components, namely Input Tax and Output Tax. Based on Article 1 of Law no. 42 of 2009, Input Tax is a Value Added Tax that should have been paid by a Taxable Entrepreneur due to the acquisition of Taxable Goods and / or the acquisition of Taxable Services and / or the utilization of Intangible Taxable Goods from outside the

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Customs Area and / or utilization of Taxable Services from outside the Customs Area and / or import of Taxable Goods. Meanwhile, Output Tax is the payable Value Added Tax which must be collected by a Taxable Entrepreneur who delivers Taxable Goods, delivery of Taxable Services, exports of Tangible Taxable Goods, exports of Intangible Taxable Goods, and / or exports of Taxable Services [1].

Medical health services also have an important role in advancing public welfare, so it is hoped that the government will encourage medical health services provided by related parties such as hospitals to be reached by the public without burden taxes. This has been regulated in Law No. 42 of 2009 concerning Value Added Tax Article 4A paragraph 3 letter (a), which states that the delivery of services in the field of medical health services is a type of service that is not subject to VAT. Medical health services, of course, have a very close relationship with administering drugs to patients. However, drugs are one of the taxable goods regulated in the VAT Article 4A paragraph 2. These drugs are usually provided at pharmacy installations that can be found in every hospital.

The pharmacy unit in the hospital does not only serve inpatients but also outpatients. Likewise, with PT CRB, which is a taxpayer who has a business in the field of medical health services, namely eye hospitals. Initially, PT CRB only reported periodic VAT SPT every month from January to December 2019, but the reported amount of Input Tax was not in accordance. Based on the Circular Letter of the Director General of Taxes Number SE-06/PJ.52/2000 regarding VAT on Drug Replacement at Hospitals, it is stated that for medicines consumed by inpatients, VAT is not payable. Meanwhile, the medicines given to outpatients are still payable by VAT.

Input Tax originating from drug purchases cannot be separated with certainly for delivery of drugs that are subject to VAT and aren't subject to VAT so that the Input Tax cannot be fully credited and must be calculated according to the guidelines of the Minister of Finance Regulation Number 135/PMK.11/2014. The results of these calculations will give an impact on the Value Added Tax overpayment or Value Added Tax underpaid. If the result is an underpayment of VAT and the taxpayer pays by exceeding the tax payment deadline, the taxpayer will be subject to administrative sanctions.

Research on recalculation based on the Minister of Finance Regulation No. 135/PMK.11/2014 had previously carried out by Kusumastuti and Alisya [3] with objects in the fishing industry and fisheries development, it was found that after reviewing the applicable regulations, the recalculation mechanism for the Input Tax which was first calculated by the Taxable Entrepreneur before recalculation is based on estimates after it is known that the value of the payable and non-payable submission of VAT is exempted for one year, it can be recalculated based on a Regulation of the Minister of Finance. Meanwhile, the objectives in this study were to determine the calculation of Input Tax on hospital services at PT CRB before recalculation, to know the results of the recalculation of Input Tax on hospital services at PT CRB based on PMK 135/PMK.11/2014, and to analysis the impact. The recalculation of PT CRB's Input Tax is carried out based on PMK 135/PMK.11/2014.

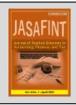
#### 2. Literature Review

#### 2.1 Definition of Tax

Taxes are compulsory contributions to the state which is owed by private persons or entities of a coercive nature based on law, without receiving direct compensation and used for state needs for the greatest welfare of the people [4].

#### 2.2 Value Added Tax (VAT)

Value Added Tax (VAT) is a tax that is collected and charged to personal taxpayers or corporate taxpayers who have become Taxable Entrepreneurs (PKP) for the sale and purchase of goods and services [5]. The legal basis for the imposition of VAT tax is the Basic Law No. 42 of 2009. If viewed from its history, Value Added Tax is a substitute for income tax. According to Mardiasmo [6], The reason for the reimbursement is because the Sales Tax is deemed no longer sufficient to accommodate community activities and has not achieved the target of development needs, among others to increase state revenue, encourage exports and equalize tax imposition.



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#### 2.3 Hospital Services

Decision of the Minister of Health No. 129/Menkes/SK/II/2008 concerning Minimum Hospital Service Standards [7] states that the minimum hospital service standards are essentially the types of hospital services that are obliged to be implemented by the government, be it the provincial/regency/city governments with a set performance standard, such as emergency services, outpatient services, and so on.

### 2.4 Director General of Taxes Circular Number SE-06/PJ.52/2000

Based on SE-06/PJ.52/2000 [8] Regarding Value Added Tax on replacement of drugs in hospitals, it is stated that the delivery of drugs by the pharmaceutical installation (drug room) is not subject to VAT, but for the delivery of drugs by the pharmaceutical installation to outpatients still payable VAT.

#### 2.5 PMK No. 135/PMK.11/2014

Regulation of the Minister of Finance of the Republic of Indonesia No. 135/PMK.011/2014 [9] is an advanced regulation previously regulated in the Minister of Finance Regulation No. 78/PMK.03/2010 [10] which states the Input Tax crediting calculation formula for businesses that deliver tax payable and are not tax payable are:

$$P = PM \times Z \tag{1}$$

Where P is the amount of Input Tax that can be credited, PM is the Input Tax that is paid by the Hospital at the time of purchasing the drug, and Z is the ratio between the tax payable to the total submission.

#### 2.6 Administrative Sanctions

According to Mardiasmo [6], Imposition of sanctions is given to create taxpayer compliance in carrying out tax obligations. Tax sanctions are a guarantee that the tax laws and regulations (taxation norms) will be obeyed, obeyed and obeyed. Or in other words, tax sanctions are a deterrent so that taxpayers do not violate taxation norms. Based on the KUP Law No. 16 of 2009[4], administrative sanctions are divided into fines, interest penalties, and increase sanctions.

#### 3. Research Method

The types of data in this study are qualitative data in the form of company business processes, and quantitative data in the form of PT CRB's financial statements and Value Added Tax recapitulation. The data sources in this study are secondary data in the form of PT CRB financial reports, VAT recapitulation, standard tax invoice data, and detailed sales data. Data collection techniques in this study are interviews and documentation.

The data analysis technique in this research is descriptive quantitative where data is collected, then calculated and analysed so that it can provide a clear picture of how the results of the recalculation of input taxes on hospital services are in accordance with applicable regulations. The stages of the quantitative descriptive data analysis technique for this study are as follows:

- a. Obtain an understanding of the relevant regulations in recalculating the Input Tax on drug purchases.
- b. Collecting the necessary data, such as the PT CRB 2019 Financial Report, standard tax invoice data, along with Value Added Tax recapitulation.
- c. Analyse the data that has been obtained.
- d. Recapitulate and identify Input Tax at PT CRB.
- e. Identifying PT CRB revenue data.
- f. Analyse the recalculation of Input Tax on hospital services at PT CRB.
- g. Analysing the impact of the recalculation of Input Tax on PT CRB so that it can fulfil its obligations as a Taxpayer in accordance with applicable regulations.
- h. Analyse administrative sanctions that may arise as a result of the recalculation of the Input Tax.



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#### 4. Result and Discussion

4.1 Calculation of Input Tax on Hospital Services at PT CRB Before Recalculation

Every service available at PT CRB is supported by various facilities such as medical equipment and medicines. The tax imposed on PT CRB when purchasing medical equipment, vehicles and medicines is called an Input Tax. When PT CRB starts operating, it will undoubtedly serve patients, both inpatients, outpatients, One Day Care (ODC) patients, and also optical sales. Medical health services are not subject to VAT, but these services cannot be separated from giving drugs to patients. The medicines are given to these patients still owed VAT as well as the sale of optics. The tax imposed on the delivery of medicines to patients and the sale of optics is an output tax.

The following is a detailed calculation of the Value Added Tax for PT CRB which is payable in the tax period January to December 2019.

Table 1. Calculation VAT Payable in January – December 2019

Period	Input Tax	Output Tax	VAT Over (Less) Payment
January	17.445.865	21.688.730	(4.242.865)
February	18.445.865	22.358.730	(3.912.865)
March	19.247.919	22.896.106	(3.648.187)
April	8.991.159	10.124.076	(1.132.918)
May	6.915.019	10.633.063	(3.718.044)
June	21.247.919	24.236.106	(2.988.187)
July	5.843.702	14.517.688	(8.673.986)
August	13.655.077	19.612.208	(5.957.131)
September	7.945.807	15.715.219	(7.769.412)
October	16.247.910	45.388.560	(29.140.650)
November	21.493.817	41.063.129	(19.569.312)
December	23.038.190	43.036.106	(19.997.916)
Total	180.518.250	291.269.720	(110.751.471)

Based on Table 1, it can be seen that the amount of PT CRB 2019 Input Tax is Rp 180,518,250 and the total output tax is Rp 291,269,720. The Input Tax has been fully credited by PT CRB resulting in an underpayment of tax of Ip 110,751,471. The underpayment of tax has been deposited into the state treasury in the month following the month of the payment concerned. For example, underpayment of January taxes will be paid in February, and so on.

### 4.2 The results of Input Tax recalculation on Hospital Services at PT CRB Based on PMK 135/PMK.11/2014

PT CRB recapitulates the amount of tax paid at the end of the 2019 tax year. In 2020, PT CRB made adjustments to the amount of tax paid to the state treasury. That happened because the Input Tax on medicines purchased by PT CRB cannot be fully credited. Therefore, it is necessary to recalculate based on the Minister of Finance Regulation Number 135 / PMK.11 / 2014. In order to recalculate, PT CRB's turnover must be known. The following is the PT CRB turnover table for 2019



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Table 2. Income PT CRB in 2019

Period	Inpatient Income	Outpatient Income	Optical Sales Income	TOTAL
January	110.554.894	863.530.767	-	974.085.661
February	111.554.884	542.453.703	-	654.008.587
March	112.356.928	547.712.358	-	660.069.286
April	102.100.158	106.107.494	-	208.207.652
May	100.024.008	130.159.848	-	230.183.856
June	114.356.898	690.140.847	-	804.497.745
July	98.952.671	335.495.999	6.024.076	440.472.747
August	106.764.036	516.622.574	4.633.063	628.019.673
September	101.054.756	521.630.817	3.915.280	626.600.853
October	123.961.760	822.410.254	68.586.156	1.014.958.170
November	657.276.997	516.622.574	80.243.750	1.254.143.321
December	319.519.999	521.630.817	94.754.992	935.905.808
TOTAL	2.058.477.990	6.114.518.051	258.157.318	8.431.153.358

The Table 2 is showing the total turnover of PT CRB in 2019 is Rp 8,431,153,358 with details of inpatient income of Rp 2,058,477,990, outpatient income of Rp 6,114,518,051, and optical income of Rp 258,157,318. One Day Care (ODC) services are combined with inpatient sales where VAT is not payable, while outpatient sales are subject to VAT 10% of the value of medicines delivered to patients, and optical sales are subject to 10% VAT. Besides having to know the total turnover of PT CRB in 2019, it is also necessary to know the amount of the Tax Imposition Base (DPP) from PT CRB so that you can find out the amount of VAT owed.

**Table 3.** Sales That are Pavable VAT PT CRB in 2019

	SALES THAT ARE PAYABLE VAT					
Period	<b>Optical Sales</b>	Outpatient Medicine	Tax Basis	VAT		
January	-	216.887.296	216.887.296	21.688.730		
February	-	223.587.296	223.587.296	22.358.730		
March	-	228.961.059	228.961.059	22.896.106		
April	-	101.240.765	101.240.765	10.124.076		
May	-	106.330.627	106.330.627	10.633.063		
Juni	-	242.361.059	242.361.059	24.236.106		
July	6.024.076	139.152.804	145.176.881	14.517.688		
August	4.633.063	191.489.016	196.122.079	19.612.208		
September	3.915.280	153.236.907	157.152.187	15.715.219		
October	68.586.156	385.299.448	453.885.604	45.388.560		
November	80.243.750	330.387.544	410.631.294	41.063.129		
December	94.754.992	335.606.064	430.361.056	43.036.106		
TOTAL	258.157.318	2.654.539.884	2.912.697.202	291.269.720		

Based on Table 3, sales that are payable Value Added Tax at PT CRB 2019 amounting to Rp 258,157,318 are VAT levied on optical sales and medicines given to outpatients subject to VAT of Rp 2,654,539,884. So that the Basic Tax Imposition (DPP) at PT CRB is Rp 2,912,697,202. The amount of Value Added Tax (VAT) is 10% of the Basic Tax Imposition (DPP), then 10% x Rp 2,912,697,202, which is Rp 291,269,720. PT CRB at the end of the tax period has fully credited the Input Tax for every



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purchase transaction of Taxable Goods. However, the Input Tax cannot be credited entirely because the total amount of the input tax is a combination of taxable goods purchase where not all taxable goods are subject to Value Added Tax (VAT). Taxable goods, mostly medicines, have different characteristics or treatments. If they are given to inpatients, the drugs are not subject to VAT. Therefore, it is necessary to recalculate the Input Tax based on PMK 135 / PMK.11 / 2014, which is formulated as follows:

$$P = \frac{X}{Y} \times PM \tag{2}$$

P represents to the amount of Input Tax that can be credited, X represents to the amount of drug delivery (outpatient) and optical sales, Y represents to the total turnover, and PM represents to the total of all Input Tax that has been paid. The results of this recalculation can be seen that in January amounting to Rp 3,884,449, February amounting to Rp 6,306,127, March amounting to Rp 6,676,608, April amounting to Rp 4,371,942, May Rp 3,194,309, June amounted to Rp 6,401,097, July amounted to Rp 1,926,045, August amounted to Rp 4,264,296, September amounted to Rp 1,992,817, October amounted to Rp 7,266,006, November amounted to Rp 7,037,500, and VAT underpayment in December amounting to Rp 10,593,737.

4.3 The Impact of the Recalculation of PT CRB's Input Tax Based on PMK 135/PMK.11/2014 Based on the data that has been presented, there are two impacts of the re-calculation of the Input Tax, namely the Main Impact and the Impact of Sanctions. The main impact is in the form of underpayment of VAT amounting to Rp 116,603,315 as a result of an error in crediting the input tax, while the impact of the sanction is in the form of an interest administration penalty of 2% due to late payment of taxes. If PT CRB will pay the underpayment of taxes in August 2020, then the administrative amount imposed on PT CRB is Rp 29,188,962.

However, this administrative sanction can be partially removed or recognized as stipulated in the Minister of Finance Regulation Number 08 / PMK.03 / 2013 concerning Procedures for Reducing or Eliminating Administrative Sanctions and Reducing or Cancellation of Tax Assessment Letter or Tax Collection Letter. PT CRB can apply for a reduction/waiver or cancellation/elimination of administrative sanctions by using to the Regional Office. These administrative sanctions can be reduced or cancelled from 0% to 100% after being reviewed and considered by the Tax Office. Submitting a request for a reduction or cancellation of this administrative sanction is PT CRB's right as a Taxpayer. However, the consideration and decision on the imposition of this administrative sanction is the right of the Tax Office.

PT CRB cannot confirm the annual turnover had been earned by PT CRB, resulting in an underpayment of taxes. That is the basis for PT CRB to enforce or enforce administrative rules. PT CRB also has not yet ascertained a reliable amount of input tax. This situation is included in the discussion of Chapter II concerning Reduction, Elimination, or Cancellation based on the Taxpayer's Application in the Minister of Finance Regulation No. 08/PMK.03/2013 paragraph (2) letter "a" [11] which states that the Directorate General of Taxes based on the request of the Taxpayer can reduce or administrative sanctions in the form of interest, fines, and increases payable under the provisions of taxation regulations if the regulation was issued due to the fault of the Taxpayer or not due to their responsibility. Therefore, it is appropriate for PT CRB to terminate or abolish this sanction.

#### 5. Conclusion

In accordance with the discussion previously described, the conclusions in this study are as follows.

1. The calculation of Input Tax on hospital services before recalculation shows that the total Input Tax reported by PT CRB in 2019 of Rp 180,518,250 has been fully credited, with the results of all PT CRB Value Added Taxes from January to December 2019 showing VAT underpayment. This underpayment of VAT is due to the greater number of outpatient drugs and optical sales compared to the purchase of taxable goods (BKP) at PT CRB. The underpayment VAT has been deposited into the state treasury in the following month of the concerned payment month.



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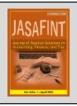
- 2. The results of the Input Tax Recalculation on hospital services at PT CRB in 2019 based on PMK 135 / PMK.11 / 2014, namely the Input Tax which can be credited during the Tax Period January to December 2019 is only Rp 63,914,935. Meanwhile, PT CRB has credited all existing Input Taxes amounting to Rp 180,518,250. Therefore, there is a difference that results in the impact of recalculating the Input Tax.
- 3. The results of the impact analysis from the recalculation of Input Tax resulted in two impacts, namely the significant impact and the impact of sanctions. The main impact is in the form of underpayment of Value Added Tax (VAT) of Rp 116,603,315 where the underpayment must be deposited into the state treasury. Meanwhile, the impact of the sanctions is that PT CRB may be subject to administrative sanctions in the form of 2% interest due to late payment of taxes. However, the administrative sanctions can be partially removed or recognized as regulated in the Minister of Finance Regulation Number 08 / PMK.03 / 2013 concerning Procedures for Reducing or Eliminating Administrative Sanctions and Reducing or Cancellation of Tax Assessment Letters or Tax Collection Letters.

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### Analysis of Credit Sales Policy to Minimize Uncollectible Receivable Risk at Bali Niksoma Boutique Beach Resort in Legian

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Abstract: The purpose of this study is to find out and analyze credit sales policies and to find out how much the allowance for receivable losses should be established at Bali Niksoma Boutique Beach Resort. This research uses qualitative data in the form of Standard Operating Procedures (SOP) and quantitative data in the form of aging schedules and sales data. The analytical tool used in the research is 5C analysis to analyze the crediting standards, credit sales policies using the checklist analysis method to analyze compliance with the credit sales policies, and the reserve method for calculating receivable losses. The results showed that the implementation of credit sales policies had not been carried out optimally, management of Bali Niksoma Boutique Beach Resort has implemented its credit policy, but there are still several policies that have not been implemented properly according to set standards. This can be seen through the result of the checklist analysis that have been carried out. Meanwhile, for the credit standard, the management has not implemented the 5C principle maximally. The amount of bad debts is classified as high, so it is necessary to establish a reserve allowance for bad debts to minimize the risk of uncollectible accounts.

**Keywords:** credit sales policy, uncollectible receivable, 5C, allowance for bad debts

#### 1. Introduction

The development of tourism in Bali will cause the number of hotels to increase which leads to intense competition. The right strategy in order to win the competition is to expand the market and increase sales volume by delaying payments or it can be said as credit sales. The implementation of the credit sales policy has a positive effect on room occupancy rates which directly affects income. Credit policy is defined as management's decision to provide credit to guests or third parties in an effort to increase hotel revenue. However, the application of credit sales raises claims / receivables owned by hotels [1].

Bali Niksoma Boutique Beach Resort is one of the hotels that sets a credit sales policy. This credit sales policy is implemented to increase guest interest and increase hotel profits. The implementation of this policy has a positive impact on the credit sales growth experienced by the company. In the last three years, sales growth has increased significantly.

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The income contributed by credit sales has a larger percentage when compared to cash sales revenue, so management needs to establish the right policy in terms of credit sales [2]. Accounts Receivable at Bali Niksoma Boutique Beach Resort has a credit sales policy of n/30. The policy targets receivables to be collected for a maximum of 30 days in the aging schedule for accounts receivable. Receivables that are past 30 days are referred to as receivables in arrears which have the potential to become uncollectible account. The following shows accounts receivable that are not yet due and accounts receivable in arrears at Bali Niksoma Boutique Beach Resort in 2019 in Table 1.

**Table 1**. Account Receivable Aging Schedule at Bali Niksoma Boutique Beach Resort in 2019

Aging	Account Receivable	Percentage
	(IDR)	
1 - 30 days	764.586.707	42,32%
31 – 60 days	468.046.286	
61 - 90  days	346.224.172	57.600/
91 – 120 days	153.605.282	57,68%
> 120 days	74.403.908	
Total	1.806.866.355	100%

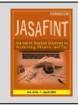
Based on Table 1, it can be seen that the amount of accounts receivable in arrears has a greater percentage, namely 57.68% compared to accounts receivable that are not yet due, which is 42.32%. The arrears to Bali Niksoma Boutique Beach Resort come from travel agents consisting of overseas agents and local agents. The high amount of receivables in arrears indicates an increase in credit risk, both in the bad or uncollectible category. Uncollectible receivable can be caused by several factors, namely negligence on the part of the creditor to comply with the affirmed receivables agreement, debtor failure in the business sector and bad character of the debtor [3]. Based on information obtained from the Account Receivable Bali Niksoma Boutique Beach Resort that many debtors do not pay their bills according to the credit sales policy n/30 and if there is a late payment, Account Receivables only contacted travel agent via email.

This is not effectively done and not in accordance with the policies that have been set. The discrepancy between the policies that have been set and the realization made by the hotel triggers an increase in the risk of Uncollectible receivable. The next problem is that the Account Receivable at Bali Niksoma Boutique Beach Resort does not create allowance for accounts receivable losses to anticipate the risk of bad debts. This contrasts with principal matching where income and expenses must be matched in the same period. Based on the above background, it is deemed necessary to conduct further research on the credit sales policy at Bali Niksoma Boutique Beach Resort.

#### 2. Literature Review

#### 2.1 Credit Sales Policy

Credit sales policy is a guideline used by companies in determining whether a customer will be given credit and if given how much credit will be given [4]. The credit policy determined by management will greatly affect hotel revenues. If management wants to increase sales volume, the policy can be relaxed. However, on the other hand, if the credit policy is loose, the volume of credit sales increases, the opportunity for uncollected will also be higher, which is a cost for hotels. On the other hand, if credit policies is tightened will reduce credit sales, thereby reducing collection costs. For this reason, hotel management must determine such a credit policy in order to increase sales.



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#### 2.2 Accounts Receivable

Accounts receivables are claim arising from the sale of goods or services produced by the company [5]. Meanwhile, receivables are company rights or claims to debtors or third parties for products and services that have been enjoyed [6]. Hotel receivables usually consist of guest ledgers, city ledgers which are invoices to guests who have checked out and / or to third parties who have enjoyed hotel services and products, and other accounts receivable such as bills for room rental hotels like shopping arcades [1]. Receivables can pose risks including the risk of not paying all receivables, the risk of not paying part of the receivables, the risk of late repayment, and the risk of investing in capital.

#### 2.3 Accounts Receivable Management

Accounts receivable management is the management of accounts receivable in order to achieve optimal credit policy, namely achieving a balance between the costs resulting from the credit policy and the benefits obtained from the policy [7]. Accounts receivable management policies include credit standards, credit terms, collection of accounts receivable, evaluation of subscribers, and collect and analyze information [8]. Credit analysis is an analysis used to assess the feasibility of a credit given, the aim is to ensure credit worthiness [9]. Credit analysis can be done with various analysis tools, one of which is 5C. 5 C consist of Character, Capacity, Capital, Collateral, and Condition. The size of the company's receivables can be affected by the volume of credit sales, terms of credit sales payment, credit restriction provisions, accounts receivable collection policies, and customer payment habits [10]. Receivables collection which is usually done by the company when the customer or buyer has not paid until the specified time is by letter, telephone, personal visits and juridical action [4].

#### 2.4 Uncollectible Receivable

Uncollectible receivable are income losses that require, through appropriate journal entries in the account, a decrease in receivable assets as well as a decrease relating to shareholder earning and equity [11]. Uncollectible receivable can be caused by several factors, such as failure of creditors to comply with receivables approval, too easy to provide receivables, insufficient number of executives and staff in the accounts receivable department, weak guidance and supervision of executives and accounts receivable staff, the decline in the company's economic condition, failure of the debtor in their other line of business or company and the bad character of the debtor [3]. The recording method for uncollectible accounts can be done in two ways, namely the direct write-off method and the allowance method. The direct write-off method, no journal entries are made until a special account has been definitively determined to be uncollectible, while the allowance method uses an allowance to record losses arising from uncollectible receivable [11]. The use of the allowance method in recording uncollectible accounts receivable can be calculated by using the age of accounts receivable analysis. Accounts receivable age analysis is performed by applying different percentages to certain age groups of accounts receivable.

#### 2.5 Risk Management for Uncollectible Receivable

Risk management is a field of science that discusses how an organization applies measures in mapping various existing problems by applying various management approaches [12]. Risk can be managed by minimizing risk, transferring risk and controlling risk, while salvation for uncollectible accounts can be done with various kinds of salvage based on the problems at hand. However, in general the salvation of uncollectible accounts can be in the form of rescheduling, reconditioning, and restructuring.

#### 3. Methodology

This research uses primary data and secondary data. Primary data sources were obtained from interviews with Accounts Receivable at Bali Niksoma Boutique Beach Resort, while secondary data were in the form of aging schedule accounts receivable, cash and credit sales data, Standard Operating Procedures (SOP), and application forms. The data collection procedure was carried out by conducting interviews and documentation. The analysis technique used is descriptive quantitative and qualitative analysis techniques. The analytical tool used is the 5C analysis to analyze credit standards, credit sales



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policies using the analysis method checklist to analyze credit sales policy compliance, and the reserve method to calculate receivable losses.

#### 4. Results and Discussion

4.1 Implementation of the Credit Sales Policy at Bali Niksoma Boutique Beach Resort

The management of Bali Niksoma Boutique Beach Resort has complied with the established credit sales policy, but several policies have not been implemented properly. This can be seen in the *checklist* analysis that has been carried out. Policies that have not been implemented properly by the hotel include credit meetings, delivery periods *invoice*, and billing standards including warnings by telephone calls that have not been implemented in accordance with predetermined policies. The policy that the Bali Niksoma Boutique Beach Resort management deems difficult to implement, namely in terms of making and sending *invoices* according to the time set in the policy, this is because the *Account Receivable* at Bali Niksoma only amounts to 1 person so that this hinders the making and sending of *invoices*.

#### 4.2 Credit Sales Policy at Bali Niksoma Boutique Beach Resort

Management in implementing credit sales policies must have a credit standard that is used as a guide in determining the granting of credit facilities to travel agents. Credit standard is one of the criteria used by the company to select the debtors who will be given credit and how much should be given [8]. Based on the description of the research results on the 5C analysis, it shows that the management of Bali Niksoma Boutique Beach Resort in providing credit to debtors has not implemented 5C optimally. Bali Niksoma Boutique Beach Resort only fulfills 3 out of 5 5C criteria, namely character, capacity and condition, while the 2 unfulfilled criteria are capital and collateral because they cannot be analyzed. Thus, at Bali Niksoma Boutique Beach Resort, it can be said that credit risk is increasing because only three of the five 5C principles are fulfilled.

The credit sales policy that has been set by the management of Bali Niksoma Boutique Beach Resort is good, but there needs to be adherence to the implementation because there are several policies that have been implemented but the implementation has not been maximized according to the set standards. Policies that have not been implemented properly by the hotel are credit meetings. The management has complied with the policy to hold credit meetings but the credit meetings held were not in accordance with the stipulated policy, so that the review and follow-up related to debtor receivables was only conducted by one person, namely Account Receivable. Time to create invoices and delivery invoice that does not meet established standards, resulting in accounts receivable collection time becomes longer. The delay in sending invoices was caused by the Account Receivable only 1 person in, which was a factor in the delay in making and sending invoices. Loose delivery times lead to long receipt times, so investment in accounts receivable will also take a long time. Furthermore, namely the leniency of the warning, the account receivable has issued a warning to the travel agent but the warning is carried out only by letter, while for telephone call warnings according to the stipulated policy have not been implemented, this results in the debtor tends to ignore the warning. The billing policy if the debtor has not paid the bill about 75 days after the invoice is sent has not been implemented in accordance with the policy set by the management of Bali Niksoma Boutique Beach Resort.

### 4.3 The Amount of Allowance for Accounts Receivable Losses that must be formed by Bali Niksoma Boutique Beach Resort

Bali Niksoma Boutique Beach Resort does not form a reserve for accounts receivable losses. This contrasts with matching principle where income and expenses must be matched in the same period. The profit on the income statement looks bigger because of the high income due to the credit policy, but it is not balanced with the expense of accounts receivable for the formation of an allowance for losses on accounts. Meanwhile, viewed from the balance sheet, the amount of receivables presented in the balance sheet does not match the amount of receivables that can be realized. Account receivables that are included in the balance sheet are the amount owed by the hotel, while the amount that may be uncollectible is charged as allowance for doubtful accounts and is charged as costs bad debt [1]. Based



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on the description of the research results, it shows that the number of non-performing receivables that exceeds 90 days has a high amount and has the potential to become uncollectible receivable, so management must calculate the allowance for loss of accounts that must be established in an effort to minimize the risk of bad debts. The decision to control risk is by implementing a policy to anticipate risks before they occur [12]. In 2017, the allowance for losses on accounts that must be formed is IDR 51.246.273,00. The deletion method used is the indirect method or the backup method. The required entries on 31 December 2017 are:

Bad Debt IDR 51.246.273,00 Allowance for Bad Debt Rp.51.246.273,00

As a result of the absence of the formation of allowance for losses on accounts, the profit presented in the report profit and loss was higher at Rp51.246.273,00. In 2018, the allowance for accounts receivable losses that must be formed is IDR 77.086.353,00, so that the required journal entries on 31 December 2018 are:

Bad Debt IDR 77,086,353.00 Allowance for Bad Debt IDR 77,086,353.00

As a result of the absence of any allowance for losses accounts receivable, the profit presented in the report profit and loss was higher at Rp.77.086.353,00. In 2019, the allowance for losses on accounts that must be formed is IDR 141.239.476,00, so that the required journal entries on 31 December 2019 are:

Bad Debt IDR 141.239.476,00 Allowance for Bad Debt IDR 141.239.476.00

As a result of the absence of any allowance for losses accounts receivable, the profit presented in the report profit and loss was higher at Rp.141.239.476,00.

#### 5. Conclusion

Based on the previous discussion, it can be concluded that the implementation of the credit sales policy at Bali Niksoma Boutique Beach Resort has not been implemented optimally, this can be seen through the checklist analysis that has been carried out, which is comparing Standard Operating Procedures (SOP) with the implementation of the management. Where the management of Bali Niksoma Boutique Beach Resort has implemented its credit sales policy, but there are still several policies that have not been implemented properly according to the predetermined standards. Meanwhile, the standard for providing credit to travel agents with the 5C analysis has not been implemented optimally. The high risk of uncollectible receivables causes the hotel to implement a policy to anticipate the occurrence of risk before the risk occurs by forming an allowance for losses on accounts. In 2017, the reserves that must be formed are IDR 51,246,273.00, in 2018 IDR 77,086,353.00, and in 2019 IDR 141,239,476.00.

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### Analysis Application of Altman (Z-Score) Method and Springate (S-Score) Method to Assess Financial Distress Potential at PT Anugerah

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Abstract. The emergence of potential financial distress is an early indication of a decline in the company's financial condition. The purpose of this research is to determine the potential of financial distress at PT Anugerah, so that it will help management anticipate the potential financial distress in the company. In this research, the assessment of financial distress potential uses the Altman (Z-score) method and Springate (S-score) method. The type of data in this research is quantitative and qualitative sourced from secondary data and obtained through interviews, documentation, and observation. The data analysis technique used is a qualitative/descriptive analysis technique. The results of research study are the financial distress potential of PT Anugerah by using the Altman (Z-score) method in 2016-2019 shows PT Anugerah is in a non-financial distress condition, because the score is in the condition of Z''> 2.6. Furthermore, PT Anugerah financial distress potential using the Springate (S-score) method in 2016-2019 shows that PT Anugerah is in a non-financial distress condition, because the score is at S > 0.862.

**Keywords:** financial distress, Altman (Z-Score), Springate (S-Score)

#### 1. Introduction

Every company is founded with the hope of obtaining a profit to maintain the prosperity of the owner and the survival of the company, so that it will provide confidence in the health of the company. A reflection of the company's health condition is stated in the form of a financial statement [1]. However, in order to obtain more detailed information, it is necessary to analyse financial statements so as to obtain information that supports decision making.

Basically, financial statement analysis can show a deeper financial health condition, so that companies can determine the right strategy for the various risks that may occur. One of the risks that can be analysed relates to the uncertainty regarding the company's ability to continue its operations if its financial condition has decreased, which has the potential to create a risk of bankruptcy which affects the company's going concern [2].

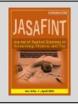
Anticipation of the possibility of bankruptcy can be seen at the initial stage, a company usually begins with financial distress. Financial distress is a stage of deterioration in financial conditions that occurs

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prior to bankruptcy or liquidation. Financial distress begins with the inability to meet its obligations, especially short-term liabilities, including liquidity obligations, and also liabilities in the solvency category [3]. This condition will certainly be detrimental to various parties, so that several theoretical approaches and financial analysis model tools can be used by companies to predict and anticipate potential financial distress, so that the company can anticipate and make the right decisions if the potential financial distress arises in the company.

Bankruptcy prediction methods have been developed with various techniques, one of which is a widely used technique, namely Multiple Discriminant Analysis (MDA). This technique combines several types of related financial ratios to form an equation. There are five bankruptcy prediction methods that are quite popular and have been used by researchers, these methods are Z-Score modification, Y-Score, X-Score, G-Score, dan S-Score [4]. These five methods use different ratios in making decisions about potential financial distress in the company.

The financial distress that must be anticipated is visible in its potential in PT Anugerah's financial statements, which are presented in Table 1.

**Table 1.** Current Asset, Current Liabilities Total Asset, Total Liabilities, and Profit/Loss PT Anugerah in 2016-2019

_	1 1 7 mageran in 2010 2019					
	Year	Current Asset	Current Liabilities	Total Asset	Total Liabilities	Profit/Loss
	2016	5.180.738.049	916.151.640	5.479.377.769	916.151.640	139.140.368
	2017	4.807.234.262	978.131.209	5.036.401.552	978.131.209	33.182.029
	2018	4.557.030.186	1.077.389.899	4.889.100.046	1.077.389.899	(27.834.171)
	2019	4.198.981.834	1.132.194.288	4.436.954.264	1.132.194.288	11.699.432

Table 1 shows that PT Anugerah has the potential to experience debt repayment difficulties due to the continuous increase every year. In addition, the profit generated by the company tends to decline for 3 years, even the company experienced a loss in 2018. The decline in profit and an increase in debt continuously must be considered and how it affects the company, because an increase in debt that occurs in a company will have the potential the emergence of financial difficulties, especially in repaying the debt

So, it is necessary to make decisions based on the analysis of the right financial statements to determine the potential for financial distress at PT Anugerah. This analysis can be done using the modified Altman (Z-Score) method and the Springate (S-Score) method. Both of these methods are very flexible because they can be used for various business fields, and are accurate in determining potential financial distress. The Altman method (Z-Score) is the first method created with the Multiple Discriminant Analysis (MDA) technique, then the Springate method (S-Score) is a development of the existing method. By using two methods, will get confidence in the prediction results of potential financial distress, because these two methods can complement the shortcomings related to the completeness of the components of the ratios used, so that the liquidity ratios, solvency ratios, profitability ratios, and activity ratios have been analysed and become involved. considerations in seeing the company's potential financial distress [5], [6].

#### 2. Literature Review

Financial statement is a report that shows the company's financial condition at this time or in a certain period. The purpose of financial statements that shows the current condition of the company is the current condition. The current condition of the company is the company's financial condition on a certain date (for balance sheet) and a certain period (for income statement) [7]. Financial statement analysis is a review or study of the relationships and tendencies or trends to determine the financial position and results of operations as well as the development of the company concerned [8]. Financial distress can be defined as a company's inability to pay its financial obligations at maturity which can lead to company bankruptcy [9]. The most famous model of financial distress is the Altman (Z-Score) which uses various



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ratios to create a financial distress prediction tool. Altman (Z-Score) uses statistical techniques (multiple discriminant analysis) to produce a prediction tool that is a linear function of several explanatory variables [10]. This prediction tool classifies or predicts the possibility of distress and non-distress for the company [11]. Springate (1978) conducted a study to find a model that could be used to predict the potential (indication) of bankruptcy. Springate uses 19 popular financial ratios that can be used to predict financial distress. After going through the same multiple discriminant analysis statistical test as that done by Altman (1968), namely distinguishing between companies that experience distress and those that are not [12].

#### 3. Research Method

This research uses quantitative and qualitative data types, with secondary data sources in the form of PT Anugerah's balance sheet and income statement for the years 2016-2019. Data collection procedures in this study were interviews, documentation and observation. The data analysis technique used is qualitative/descriptive analysis. The data that has been collected will be processed, described, and explained then a conclusion is drawn with a table, using the following formula.

- 3.1. Altman (Z-Score) Method
- 3.1.1. Working Capital to Total Asset  $(X_1)$

The ratio shows the company's ability to generate net working capital from the total assets.

WCTA 
$$(X_1)$$
 =  $\frac{\text{Working Capital}}{\text{Total Assets}}$ 

3.1.2. Retained Earnings to Total Asset  $(X_2)$ 

This ratio shows the effectiveness of management in generating retained earnings from the company's total assets.

RETA 
$$(X_2)$$
 =  $\frac{\text{Retained Earnings}}{\text{Total Assets}}$ 

3.1.3. Earnings Before Interest and Taxes to Total Asset  $(X_3)$ 

This ratio shows the company's ability to manage total assets to get profit before interest and taxes.

$$EBITTA (X_3) = \frac{EBIT}{Total Assets}$$

3.1.4. Book Value of Equity to Book Value of Debt  $(X_4)$ 

This ratio shows the company's ability to meet its obligations from the book value of equity.

BVEBVL 
$$(X_4)$$
 =  $\frac{\text{Book Value of Equity}}{\text{Book Value of Debt}}$ 

3.1.5. Altman (Z-Score) Method

$$Z'' = 6,56X1 + 3,26X2 + 6,72X3 + 1,05X4$$

- 3.2. Springate (S-Score) Method
- 3.2.1. Working Capital to Total Asset (Y1)

The ratio shows the company's ability to generate net working capital from the total assets.

WCTA 
$$(Y_1)$$
 = Working Capital Total Assets

3.2.2. Earnings Before Interest and Taxes to Total Asset (Y<sub>2</sub>)

This ratio shows the company's ability to manage total assets to get profit before interest and taxes.

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EBITTA 
$$(Y_2)$$
 =  $\frac{EBIT}{Total Assets}$ 

#### 3.2.3. Earnings Before Taxes to Current Liabilities (Y<sub>3</sub>)

This ratio shows the company's ability to pay short-term liabilities as seen by the results of the balance of net income before tax.

EBTCL 
$$(Y_3)$$
 =  $\frac{EBT}{Current Liabilities}$ 

#### 3.2.4. Sales to Total Asset $(Y_4)$

This ratio shows the company's ability to generate total sales based on the company's total assets.

$$STA (Y_3) = \frac{STA}{Total Assets}$$

#### 3.2.5. Springate (S-Score) Method

$$S = 1,03Y1 + 3,07Y2 + 0,66Y3 + 0,4Y4$$

Classifying the score results from the calculation of each method to determine the financial *distress* of a company by looking at the cut off. Table 2 is the classification of the scores for each method.

Table 2. Score Classification

Altman (2	Z-Score) Method	Springate (S-Score) Method		
Score	Condition	Score	Condition	
< 1,1	Financial distress	< 0,862	Financial distress	
1,1 > Z < 2,6 > 2,6	Grey area Non-financial distress	> 0,862	Non-financial distress	

#### 4. Results and Discussion

#### 4.1. Altman (Z-Score) Method

The calculation using the Altman (Z-Score) method combines four financial ratios, the calculation results are presented in the Table 3.

**Table 3.** Altman (Z-Score) Method Ratio Calculation Results PT Anugerah in 2016-2019

EBITTA (X<sub>3</sub>) WTCA  $(X_1)$ RETA  $(X_2)$ BVEBVL (X<sub>4</sub>) Year 2016 0,7783 0,1944 0,0237 4,9809 0,7603 4,1490 2017 0,2391 0,0046 2018 0,7117 0,2531 -0,0085 3,5379 2019 0,6912 0,2726 -0,0013 2,9189

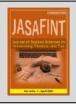
The results of the calculation of the ratio will be used to analyse financial distress predictions using the Altman (Z-Score) method formula, and then will be classified based on the cut-off method which will be compared with the results of the calculation of the Altman (Z-Score) method score at PT Anugerah each year. PT Anugerah's score classification results for 2016-2019 are presented in the table 4.

**Table 4.** Altman (Z-Score) Calculation Classification PT Anugerah in 2016-2019

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Year	Altman (Z-Score) Score	Cut Off Classification	Condition
2016	11,1984	> 2,6	Non-financial distress
2017	10,2226	> 2,6	Non-financial distress
2018	9,2159	> 2,6	Non-financial distress
2019	8,5411	> 2,6	Non-financial distress

In 2016, the ratio of working capital to total assets/WCTA (X<sub>1</sub>) shows a result of 0,7783. This means that the total assets of Rp5.479.377.768 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp4.264.586.408. The ratio of retained earnings to total assets/RETA (X<sub>2</sub>) shows a result of 0.1944. This means that the total assets of Rp5.479.377.768 have been operated effectively by the company management, so as to generate retained earnings of Rp1,065,123,597. The ratio of earnings before interest and tax to total assets/EBITTA (X<sub>3</sub>) shows a result of 0,0237. This means that the total assets of Rp5.479.377.768 have been operated effectively by the company management, so as to generate profit before interest and tax of Rp129.764.492. The ratio of book value of equity to book value of debt/BVEBVL (X<sub>4</sub>) shows a result of 4,9809. This means that the book value of equity Rp4.563.226.129 has been well managed by the company, thus fulfilling the debt of Rp916.151.640. Based on the Altman (Z-Score) method the resulting score is 11,1984, so it's in a condition of Z"> 2.6 or non-financial stress.

In 2017, the ratio of working capital to total assets/WCTA (X<sub>1</sub>) shows a result of 0,7603. This means that the total assets of Rp5.036.401.552 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.829.103.053. The ratio of retained earnings to total assets/RETA (X<sub>2</sub>) shows a result of 0,2391. This means that the total assets of Rp5.036.401.552 have been operated effectively by the company management, so as to generate retained earnings of Rp1.204.263.965. The ratio of earnings before interest and tax to total assets/EBITTA (X<sub>3</sub>) shows a result of 0,0046. This means that the total assets of Rp5.036.401.552 have been operated effectively by the company management, so as to generate profit before interest and tax of Rp23.042.746. The ratio of book value of equity to book value of debt/BVEBVL (X<sub>4</sub>) shows a result of 4,1490. This means that the book value of equity Rp4.058.270.343 has been well managed by the company, thus fulfilling the debt of Rp978.131.209. Based on the Altman (Z-Score) method the resulting score is 10,2226, so it's in a condition of Z"> 2.6 or non-financial stress.

In 2018, the ratio of working capital to total assets/WCTA ( $X_1$ ) shows a result of 0,7117. This means that the total assets of Rp4.889.100.046 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.479.640.287. The ratio of retained earnings to total assets/RETA ( $X_2$ ) shows a result of 0,2531. This means that the total assets of Rp4.889.100.046 have been operated effectively by the company management, so as to generate retained earnings of Rp1.237.445.994. The ratio of earnings before interest and tax to total assets/EBITTA ( $X_3$ ) shows a result of -0,0085. This means that the total assets of Rp4.889.100.046 not operating properly by the company management, so as to generate retained earnings of -Rp41.419.227. The ratio of book value of equity to book value of debt/BVEBVL ( $X_4$ ) shows a result of 3,5379. This means that the book value of equity Rp3.811.710.147 has been well managed by the company, thus fulfilling the debt of Rp1.077.389.899. Based on the Altman (Z-Score) method the resulting score is 9,2159, so it's in a condition of Z'> 2.6 or non-financial stress.

In 2019, the ratio of working capital to total assets/WCTA  $(X_1)$  shows a result of 0,6912. This means that the total assets of Rp4.436.954.264 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.066.787.546. The ratio of retained earnings to total assets/RETA  $(X_2)$  shows a result of 0,2726. This means that the total assets of Rp4.436.954. have been operated effectively by the company management, so as to generate retained earnings of Rp1.209.611.823. The ratio of earnings before interest and tax to total assets/EBITTA  $(X_3)$  shows a result of -0,0013. This means that the total assets of Rp4.436.954. not operating properly by the company management, so as to generate retained earnings of -Rp5.917.186. The ratio of book value of equity to book value of debt/BVEBVL  $(X_4)$  shows a result of 2,9189. This means that the book value of equity



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Rp3.304.759.976 has been well managed by the company, thus fulfilling the debt of Rp1.132.194.288. Based on the Altman (Z-Score) method the resulting score is 8,5411, so it's in a condition of Z"> 2.6 or non-financial stress.

#### 4.2. Springate (S-Score) Method

Calculations using the Springate (S-Score) method combines four financial ratios, the results of the calculations are presented in the Table 5.

**Table 5.** Springate (S-Score) Method Ratio Calculation Results

PT Anugerah in 2016-2019

1 ear	$WICA(Y_1)$	EDITTA (12)	EBICL (13)	S1A (14)
2016	0,7783	0,0237	0,1519	2,4493
2017	0,7603	0,0046	0,0339	2,6352
2018	0,7117	-0,0085	-0,0258	2,7087
2019	0,6912	-0,0013	0,0103	3,2234

The results of the calculation of the ratio will be used to analyse financial distress predictions using the Springate (S-Score) method formula, and then will be classified based on the cut-off method which will be compared with the results of the calculation of the Springate (S-Score) method score at PT Anugerah each year. PT Anugerah's score classification results for 2016-2019 are presented in the table

Table 6. Springate (S-Score) Calculation Classification

PT Anugerah in 2016-2019

Ye	ar Springate (S-Score) Score	Cut Off Classification	Condition
20	1,9543	> 0,862	Non-financial distress
20	1,8736	> 0,862	Non-financial distress
20	1,7735	> 0,862	Non-financial distress
20	19 2,0040	> 0,862	Non-financial distress

In 2016, the ratio of working capital to total assets/WCTA (Y<sub>1</sub>) shows a result of 0,7783. This means that the total assets of Rp5.479.377.768 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp4.264.586.408. The ratio of earnings before interest and tax to total assets/EBITTA (Y2) shows a result of 0,0237. This means that the total assets of Rp5.479.377.768 have been operated effectively by the company management, so as to generate profit before interest and tax of Rp129.764.492. The ratio of earning before tax to current liabilities/EBTCL (Y<sub>3</sub>) shows a result of 0,1519. This means that the earning before tax Rp139.140.368 has been well managed by the company, thus fulfilling the current liabilities of Rp916.151.640. The ratio of sales to total assets/STA (Y<sub>4</sub>) shows the result of 2,4493. This means that the total assets of Rp5.036.401 has been operated properly by the company, so as to generate sales Rp13.420.632.829. Based on the Springate (S-Score) method the resulting score is 1,9543, so it's in a condition of S > 0,862 or nonfinancial stress.

In 2017, the ratio of working capital to total assets/WCTA (Y<sub>1</sub>) shows a result of 0,7603. This means that the total assets of Rp5.036.401.552 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.829.103.053. The ratio of earnings before interest and tax to total assets/EBITTA (Y2) shows a result of 0,0046. This means that the total assets of Rp5.036.401.552 have been operated effectively by the company management, so as to generate profit before interest and tax of Rp23.042.746. The ratio of earning before tax to current liabilities/EBTCL (Y<sub>3</sub>) shows a result of 0,0339. This means that the earning before tax Rp33.182.029 has been well managed by the company, thus fulfilling the current liabilities of Rp978.131.209. The ratio of sales to total assets/STA (Y<sub>4</sub>) shows the result of 2,6352. This means that the total assets of Rp5.036.401.552 has been operated properly by the company, so as to generate sales Rp13.271.970.891. Based on the

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Springate (S-Score) method the resulting score is 1,8736, so it's in a condition of S > 0,862 or non-financial stress.

In 2018, the ratio of working capital to total assets/WCTA ( $Y_1$ ) shows a result of 0,7117. This means that the total assets of Rp4.889.100.046 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.479.640.287. The ratio of earnings before interest and tax to total assets/EBITTA ( $Y_2$ ) shows a result of -0,0085. This means that the total assets of Rp4.889.100.046 not operating properly by the company management, so as to generate retained earnings of -Rp41.419.227. The ratio of earning before tax to current liabilities/EBTCL ( $Y_3$ ) shows a result of -0,0258. This means that the earning before tax -Rp27.834.171 will not be able to fulfilling the current liabilities of Rp1.077.389.899. The ratio of sales to total assets/STA ( $Y_4$ ) shows the result of 2,7087. This means that the total assets of Rp4.889.100.046 has been operated properly by the company, so as to generate sales Rp13.243.339.852. Based on the Springate (S-Score) method the resulting score is 1,7735, so it's in a condition of S > 0,862 or non-financial stress.

In 2019, the ratio of working capital to total assets/WCTA ( $Y_1$ ) shows a result of 0,6912. This means that the total assets of Rp4.436.954.264 have been operated smoothly in the company's operational activities, so as to generate working capital of Rp3.066.787.546. The ratio of earnings before interest and tax to total assets/EBITTA ( $Y_2$ ) shows a result of -0,0013. This means that the total assets of Rp4.436.954 not operating properly by the company management, so as to generate retained earnings of -Rp5.917.186. The ratio of earning before tax to current liabilities/EBTCL ( $Y_3$ ) shows a result of 0,0103. This means that the earning before tax Rp11.699.432 has been well managed by the company, thus fulfilling the current liabilities of Rp1.132.194.288. The ratio of sales to total assets/STA ( $Y_4$ ) shows the result of 3,2234. This means that the total assets of Rp4.436.954 has been operated properly by the company, so as to generate sales Rp14.302.189.016. Based on the Springate (S-Score) method the resulting score is 2,0040, so it's in a condition of S > 0,862 or non-financial stress.

#### 5. Conclusion

Based on the results and discussion, it can be concluded that the potential for financial distress at PT Anugerah 2016-2019 based on the Altman (Z-Score) method and the Springate (S-Score) method is non-financial distress.

#### 6. Acknowledgment

We would like to show our gratitude to all those who helped and supported in completing this research, as well as PT Anugerah who have been willing to spend their time being informants in this research. In addition, we also to thank all reviewers for their help in perfecting this article. For further research, it is suggested to use other methods of financial distress to improve the detailed research.

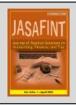
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# **Application of Capital Budgeting Method to Evaluate Investment Decisions on Additions to Fixed Assets at PT Hatten Bali**

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Abstract. This research was conducted to evaluate the investment decision to add fixed assets by PT Hatten Bali using the capital budgeting method. The results of this study are expected to be used as material for evaluating the application of the capital budgeting method in making investment decisions on fixed assets at PT Hatten Bali. The data used for this study were obtained from interviews and documentation and were analyzed using descriptive qualitative research analysis techniques with a case study approach. Based on the results of research using the capital budgeting method which consists of the method of calculating the payback period, net present value, profitability index, internal rate of return and average rate of return, all of which have shown a favorable results. From these results it can be concluded that the investment decision to add fixed assets in the form of distribution vehicles made by PT Hatten Bali can benefit the company in stable sales conditions and the application of capital budgeting methods can reduce the risk of errors or failures in making investment decisions and improve subsequent investment decisions.

Keywords: Capital Budgeting, Fixed Asset Investment Decisions

#### 1. Introduction

The addition of fixed assets will generally affect the company's finances in the long term, because the capital that must be spent is quite large and there is uncertainty in the period of return of invested capital. Therefore, companies need to carefully consider the capital they have before making investment decisions [1]. Investment decisions that have been made also need to be evaluated to see whether the investment performance has been made in accordance with the initial objectives when the investment is planned. Reassessment of investment can make it easier for an organization to plan future investments, or in other words it can help companies to avoid previous mistakes and systematically identify a successful process that can be repeated [2].

PT Hatten Bali in making an investment decision to add fixed assets did not calculate whether the investment provides a favorable prospect or not for the company and the company's subsequent financial condition, if there is an error in making this decision it can be bad for the company's finances.

Based on this background, the authors will evaluate the investment decision to add fixed assets that have been made by PT Hatten Bali using the capital budgeting method.

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#### 2. Literature Review

#### 2.1 Investment

Investment is a commitment to a number of funds or other resources carried out at this time, with the aim of obtaining a number of benefits in the future [3]. There are several stages in the investment decision making process, including: 1) Determining the objectives and types of investment decisions to be selected, 2) Identifying investment alternatives, 3) Conducting preliminary studies to obtain information in order to realize project ideas to be implemented, in this case deciding to choose of several existing investment alternatives, 4) Conducting a business feasibility study in order to implement investment decisions, 5) Implementing investment decisions [4].

#### 2.2 Fixed Assets

Fixed assets or also known as tangible assets are assets that are relatively permanent (in a long period of time) that are used in the normal activities of the company [5]. Related functions in the fixed asset accounting system consist of 1) User Function, 2) Research and Development Function, 3) Related Director, 4) President Director, 5) Purchasing Function, 6) Receiving Function, 7) Fixed Asset Function, 8) Accounting Function. More specifically, in the fixed asset purchase system or procedure, the related function or division is the part that requires fixed assets, managing director, purchasing department, receiving division, debt division, fixed asset division, and fixed asset card division [6].

#### 2.3 Capital Budgeting

Capital Budgeting is the entire process of collecting, evaluating, completing and determining investment alternatives that will provide revenue for the company for a period of more than one year [7]. In capital budgeting, there are several calculation methods [8], including:

#### 2.3.1 Payback Period (PP)

The payback period method is a calculation or determination of the time period needed to cover the initial investment of a project using the cash inflows generated by the project.

#### Criteria:

- a. If the payback period is less than the target return, the investment project is feasible.
- b. If the payback period is greater than the target return on investment, the investment project is not feasible.

#### 2.3.2 Net Present Value (NPV)

Net Present Value is a method for assessing the difference between the present value of net cash receipts in the future.

#### Criteria:

- a. If the NPV  $\geq 0$  (positive) then the proposed investment project is feasible
- b. If the NPV  $\leq$  0 (negative) then the investment project proposal is not feasible

#### 2.3.3 Profitability Index (PI)

Profitability index is a capital budgeting technique that calculates the ratio between the present value of future net cash receipts and the future and present value of the investment.

#### Criteria:

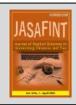
- a. If  $PI \ge 1$  then the proposed investment project is feasible
- b. If  $PI \le 0$  then the investment project proposal is not feasible

#### 2.3.4 Internal Rate of Return (IRR)

The internal rate of return method is a method that calculates interest rates by equating the present value of investment with the present value of cash receipts future clean.

#### Criteria:

- a. If the IRR> of the required interest rate, the investment project is feasible.
- b. If the IRR < of the required interest rate, the investment project is not feasible.



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#### 2.3.5 Average Rate of Return (ARR)

Average Rate of Return (ARR) is a method that calculates the average rate of return according to accounting obtained from an investment.

#### Criteria:

- a. If the ARR is greater than the minimum ARR, then the investment project is feasible.
- b. If the ARR is less than the minimum ARR, then the investment project is feasible.

#### 3. Research Methods

The data used in this study are quantitative and qualitative data [9]. The quantitative data used in this study are the income statement, list of fixed assets, sales data, distribution data, net income of distribution, and other numerical supporting data. The qualitative data in this study is in the form of an investment financing agreement letter for the purchase of the company's fixed assets and the results of interviews with distribution managers, general affairs, purchases, and finance regarding decision-making procedures for adding company fixed assets. The data collection techniques used in this study were interviews and documentation. In this research, the analysis technique used is descriptive qualitative analysis technique with the analysis stages carried out, namely describing the investment decision making procedure for adding fixed assets at PT Hatten Bali and evaluating investment decisions using the capital budgeting method.

#### 4. Results and Discussion

- 4.1 Investment Decision Making Procedures for Addition of Fixed Assets at PT Hatten Bali
- 4.1.1 Related Sections or Departments in the Fixed Asset Purchase System

The divisions or departments involved in the investment decision making procedure for the addition of fixed assets at PT Hatten Bali as follows: 1) Divisions or departments requiring asset purchases, 2) CEO of PT Hatten Bali, 3) Procurement (General Affairs), 4) Purchasing Department, 5) Head of Corporate Finance, and 6) Finance & Accounting Department.

Based on the results of the study, there are several differences related to the part involved in the purchase of fixed assets at PT Hatten Bali, there are several differences that lie in the General Affair procurement section which functions as receiving division, fixed asset division, and fixed asset card division and other different parts namely the director, where at PT Hatten Bali the authorization for fixed asset investment is given by the main management or the CEO and the authorization for cash disbursements must be given by the Head of Corporate Finance.

#### 4.1.2 Investment Decision Making Procedure for Addition of Fixed Assets

The process of making investment decisions to add fixed assets in the form of distribution vehicles at PT Hatten Bali consists of the following stages: 1) Determination of Investment Objectives and Types of Investments, 2) Identification of Investment Alternatives, 3) Conducting Preliminary Study, and 4) Implementation of Investment Decisions.

Based on the results of the study, in making investment decisions to add fixed assets by PT Hatten Bali to the addition of distribution vehicles is slightly different from the theory. The difference lies in the investment feasibility study process, where the process is not carried out in the investment decision-making process to add fixed assets. In making investment decisions, it is necessary to carry out an investment feasibility study that can be carried out using the capital budgeting method because it can reduce the risk of loss or failure which will have an impact on the company's survival [10].

#### 4.1.3 Procedure for Implementing Decisions on Adding Fixed Assets

The implementation of investment decisions to add fixed assets in the form of distribution vehicles begins with a submission from the distribution department to add distribution vehicles, then the distribution department requests approval from the CEO of PT Hatten Bali regarding the implementation of the addition of these distribution vehicles. After obtaining approval from the CEO, the distribution department forwards a request to the procurement or general affairs department to make a purchase



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request to the purchasing department. Then the purchasing department will look for suppliers or suppliers and leasing companies that have the appropriate criteria. Suppliers who have been selected will be sent the purchase order and the required documents, after which the supplier will send invoices and invoices for the purchase of fixed assets. The finance department makes a payment submission to the Head of Corporate Finance for authorization, after being authorized, the finance department will prepare a check and receipt according to the first payment amount to be submitted to the supplier as well as the installment payment schedule along with interest to the leasing party, proof of bank disbursements, and receipts. The vehicle will be received by the general affair department together with a receipt, after which the general affair will make a letter of placement of assets to be submitted to the distribution department that has proposed the purchase of the fixed assets. Finally, the general affairs section will put the purchased property and equipment on the fixed asset card.

### 4.2 Application of Capital Budgeting Method to Evaluate Investment Decisions Addition of Fixed Assets at PT Hatten Bali

PT Hatten Bali added fixed assets in the form of a Mitsubishi FE 71 PS box truck with an initial investment value of Rp 344,500,000.00. Depreciation of vehicles with an estimated economic life of 8 years without residual value and depreciated using the straight-line method is Rp 43,062,500.00 PT Hatten Bali in adding these fixed assets uses 2 sources of funds, 30% of own capital and 70% of loan capital from leasing company.

Table 1. Calculation Cost of Capital

Type of Capital	Cost of Capital	Proportion	WACC
Own Capital	14.6%	30%	4.4%
Loans	4.8%	70%	3.3%
	_		7.7%

Based on distribution reports, sales reports and distribution net income reports for the year 2016-2019, projections are made to predict the amount of distribution, sales and profits in the future using the trend linear method.

Table 2. Estimated Distribution, Sales, and Net Income from Distribution

At PT Hatten Bali in 2020-2027 Total Net Profit Distribution Sales Year (Unit) Distribution (Rp) (Unit) 2020 1.558.506 1.732.285 18.171.722.719 2021 1.719.223 1.932.037 19.872.155.460 2.131.789 2022 1.879.940 21.572.588.201 2023 2.040.657 2.331.541 23.273.020.942 2024 2.201.374 2.531.293 24.973.453.682 2025 2.362.091 2.731.046 26.673.886.423 2026 2.522.807 2.930.798 28.374.319.164 2027 2.683.524 3.130.550 30.074.751.904 TOTAL 16.968.121 19.451.338 192.985.898.495

The projection of cash inflows is carried out to describe the condition of the company's cash in the future, so that it can be seen the amount of net cash received on the investment made. In estimating the net cash flow each year over the economic life of the invested fixed assets, it is based on cash inflows in addition to cash outflows.



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Table 3. Calculation of Incremental Cash Inflow

PT Hatten Bali 2020-2027

Year	Cash Inflow After Investment (Rp)	Cash Inflow Before Investasi (Rp)	Incremental Cash Inflow (Rp)	Kumulatif Cash Inflow (Rp)
2020	2.025.700.247	1.686.376.240	339.324.007	339.324.007
2021	2.214.637.218	1.686.376.240	528.260.978	867.584.985
2022	2.403.574.189	1.686.376.240	717.197.949	1.584.782.934
2023	2.590.675.938	1.686.376.240	904.299.698	2.489.082.632
2024	2.779.612.909	1.686.376.240	1.093.236.669	3.582.319.301
2025	2.968.549.880	1.686.376.240	1.282.173.640	4.864.492.941
2026	3.157.486.852	1.686.376.240	1.471.110.612	6.335.603.553
2027	3.346.423.823	1.686.376.240	1.660.047.583	7.995.651.136
	TOTAL		7.995.651.136	

The capital budgeting method used in evaluating the decision to add fixed assets at PT Hatten Bali is: 4.2.1 Payback Period

The results of the calculations above show that the initial investment closure period of the investment is 1 year 4 days and after that the company can get a profit from the investment.



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#### 4.2.2 Net Present Value (NPV)

Table 4. Calculating of Net Present Value

Year	Cash Inflow (Rp)	Present Value 7,7%	Present Value Cash Inflow (Rp)
2020	339.324.007	0,928389031	315.024.686
2021	528.260.978	0,861906193	455.311.409
2022	717.197.949	0,800184256	573.890.507
2023	904.299.698	0,742882286	671.788.227
2024	1.093.236.669	0,689683766	753.987.583
2025	1.282.173.640	0,640294843	820.969.170
2026	1.471.110.612	0,594442709	874.490.978
2027	1.660.047.583	0,551874091	916.137.251
PV Cash Inflow			5.381.599.810
Initial Investment			344.500.000
Net Present Value			5.037.099.810

The calculation above, it can be seen that the net present value generated amounting to Rp5,037,099,810.00 which indicates that the investment is profitable to continue because the difference between the present value of future net cash receipts and the investment value produces a positive value.

#### 4.2.3 Profitability Index (PI)

Profitability Index = 
$$\frac{PV \text{ Cash Inflow}}{Initial \text{ Investment}}$$
Profitability Index = 
$$\frac{Rp 5.381.599.810}{Rp 344.500.000}$$
Profitability Index = 
$$\frac{15,62}{Initial \text{ Investment}}$$

The calculation above, the calculation result is obtained from the profitability index of 15.62. Based on these results, investment in the addition of distribution vehicles is profitable because the resulting profitability index is more than 1.



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#### 4.2.4 Internal Rate of Return (IRR)

Table 5. Calculating of Internal Rate of Return

Year	Cash Inflow	PVIF	PV Cash	PVIF	PV Cash
1 Ca1	(Rp)	137%	Inflow (Rp)	138%	Inflow (Rp)
2020	339.324.007	0,42194093	143.174.686	0,42016807	142.573.112
2021	528.260.978	0,17803415	94.048.493	0,17654120	93.259.829
2022	717.197.949	0,07511989	53.875.833	0,07417698	53.199.576
2023	904.299.698	0,03169616	28.662.826	0,03116680	28.184.125
2024	1.093.236.669	0,01337391	14.620.845	0,01309529	14.316.254
2025	1.282.173.640	0,00564300	7.235.304	0,00550222	7.054.806
2026	1.471.110.612	0,00238101	3.502.732	0,00231186	3.401.000
2027	1.660.047.583	0,00100465	1.667.761	0,00097137	1.612.519
Total PV Cash Inflow		346.788.479		343.601.222	
Initial Investment		344.500.000		344.500.000	
	NPV		2.288.479		- 898.778

$$IRR = i_1 + \frac{NPV_1}{NPV_1 - NPV_2} X (i_2 - i_1)$$

$$IRR = 137\% + \frac{Rp2.288.479}{Rp 2.288.479 - (-Rp 898.778)} X (138\%-137\%)$$

$$IRR = 137\% + 0.72\%$$

$$IRR = 137,72\%$$

The results of the above calculations can be seen that the resulting IRR is 137.72% greater than the rate of return expected by the company namely 7.7%.

#### 4.2.5 Average Rate of Return (ARR)

Average Rate Of Return = 
$$\frac{\text{Average Cash Inflow}}{\text{Average Investment}} \times 100\%$$
Average Rate Of Return = 
$$\frac{\text{Rp 999.456.392}}{\text{Rp 172.250.000}} \times 100\%$$

Average Rate Of Return = 580%

From the above calculation, it can be seen that the resulting average rate of return is 580% and exceeds the rate of return expected by the company namely 7.7%.



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**Table 6.** Comparison of Evaluation Calculation Results Investment Decision for Addition of Fixed Assets with the Capital Budgeting Method

No	Capital Budgeting Techniques	Criteria	Result	Conclusion
1	Payback Period (PP)	< 8 year	1 year, 4 days	Favorable
2	Net Present Value (NPV)	$\geq 0$ (positive)	Rp 5.037.099.810	Favorable
3	Profitability Index (PI)	> 1	15,62	Favorable
4	Internal Rate Of Return (IRR)	> 7,7%	137,72%	Favorable
5	Average Rate Of Return (ARR)	> 7,7%	580%	Favorable

Based on the comparison between the calculation results and the criteria for each calculation method investment decision to add distribution vehicles are declared profitable for the company.

#### 5. Conclusion

Based on the discussion and the results of research that has been carried out related to the evaluation of investment decisions to add fixed assets in the form of a box truck type distribution vehicle carried out by PT Hatten Bali, it can be concluded that: PT Hatten Bali did not carry out the feasibility study stage investment prior to implementation investment decisions, so it is necessary to re-evaluate the investment to improve investment decisions in the future. Making investment decisions to add distribution vehicles to PT Hatten Bali which are re-evaluated using the capital budgeting method can benefit the company in stable sales conditions and the application of the capital budgeting method can reduce the risk of errors or failures in making investment decisions and improve further investment decisions.

#### 6. Acknowledge

The author would like to show our gratitude to the lecturers and colleagues who shared their wisdom with us during the research. The author realizes that without the help and guidance of various parties it is very difficult to complete this research.

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### Analysis of Management Accounting Systems Affecting Energy Efficiency, Environmental Uncertainty and Environmental Performance of Small and Medium Enterprises

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Abstract. The purpose of this study was to analyze the management accounting system in influencing energy, environmental uncertainty and environmental performance in SMEs in Grobogan Regency. The population of this study is SMEs in the grobogan registered at the Grobogan Regency Cooperative and SME Office with a sample of 60 SME owners. The analytical tool used is Smart PLS 3.0. The results of this study are a positive management accounting system on environmental planning, a positive management accounting system supporting environmental improvement. The results of the fourth hypothesis confirm positive energy efficiency on Environmental performance. Subsequent results indicate environmental policy.

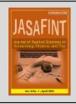
**Keywords:** Management accounting system, energy efficiency, environmental improvement, environmental performance

#### 1. Introduction

Environmental performance is one of the focuses of attention of stakeholders and investors in today's business world. Modern businesses are busy with inventive solutions to reduce their role in causing environmental pollution and nowadays economies around the world are starting to be interested in taking steps to improve environmental conditions by practicing environmentally friendly business methods [1]. The company wishes to be able to continue to produce and keep the environment in good condition, because the company's spirit is to fulfill its sustainable economic goals by maintaining profitability through strong internal awareness and maintaining environmental responsibility in the future [1].

Companies are part of society and the environment, so companies should not develop themselves without paying attention to society and the environment. Companies in Indonesia have experienced very rapid growth and development, especially manufacturing companies. The impact arising from the company's operational activities will reduce the trust of the public and stakeholders in the company so that it will affect the sustainability of the company in view of the fact that there are still some companies that do not pay attention to the conditions of society and the environment [2]

There are still many industries in Indonesia that violate environmental regulations, for example environmental pollution in Grobogan district. The activity of the soy sauce industry in Purwodadi Village, Purwodadi District, Grobogan Regency has an influence on the water and land of the



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population. The negative impact of this soy sauce waste for the water quality of residents in Purwodadi Village, Purwodadi District, Grobogan Regency can be identified from taste, color and smell. The taste of the well water which was contaminated with soy sauce industrial waste, which at first had no taste, turned out to be somewhat acidic. Based on observations from polluted residents, the color of the well water has turned slightly blackish brown. The smell of polluted well water has become unpleasant and the agricultural areas that were formerly arable are now defunct. If you look physically at the well water of residents in Purwodadi Village, Purwodadi District, Grobogan Regency, it is identified as being contaminated with soy sauce industrial waste because it has a characteristic that the rainy season is a bit black and smells so that it will cause various effects, which can be seen from various consequences such as: the population becomes difficult to get water. clean, the land becomes less fertile, the health of the population becomes disturbed due to skin diseases and itching [3].

The management accounting system (MAS) contributes very important to business development and increases company profits, as well as the opportunity to improve the environment by implementing an efficient management accounting system. (Marina, 2009). In this regard, several studies have found that reliable administration in managing company assets can empower institutions and economies to recognize environmentally friendly regulations that tend to limit environmental burdens. In this way, the economy today has identified major resolutions to eradicate and reduce dependence on harmful industrial methods such as extensive energy dependence on harmful carbon emissions.[1].

In order to reduce carbon emissions, many organizations use appropriate accounting tools to identify and provide solutions to reduce the company's carbon contribution. In this context, research Burritt, Schaltegger, & Zvezdov, (2011) has recognized the significant contribution of management accounting systems that help companies to record and measure their direct and indirect contributions to reducing carbon emissions. The role of accounting in managing, disclosing and monitoring carbon emissions within the company not only helps in reducing the amount of carbon emitted but also assists in management decision making by collecting data on the organization's energy dependence and contribution to harmful carbon emissions resulting from energy consumption (Haseeb, et al, 2019).

Linking success to corporate organizations, environmental uncertainty and MAS. The research findings indicate that the success of management accounting systems and firm structures depends on changing environments (Ahmed, et al, 2019). This study also determined that MAS is significant for influencing environmental uncertainty and that decision makers consider uncertainty in the external environment to be important in the environmental management process.

As well as, Marina (2009) examined the relationship between environmental uncertainty, MAS design, performance and decentralization in organizations. The results of empirical evidence that decentralization established that MAS is significant for achieving higher performance in the presence of lower environmental uncertainty. On the other hand, in the case of low uncertainty, decentralization and MAS found high performance results.

Likewise, the role of the management accounting system has been deemed important to generate corporate competence and performance in environmental management [8]. Mostly, the prevailing emphasis on environmental MASs in achieving sustainable cost effective solutions is significant.

In this case, Schaltegger, (2018) examines the relationship of management accounting systems in natural issues around the world covering atmospheric issues as a key to sustainability around the world. Using a qualitative approach, it can be concluded that management accounting systems underlie the tendency to prove to be an innovative management accounting tool for identifying and managing various systematic methods to aid in ecologically useful decision making in organizations.

Sroufe & Gopalakrishna-Remani, (2019) analyzed 500 organizations to examine the relationship between the environment and the implementation of the accounting system. In his research, he analyzed the contribution of company resources in improving sustainable company performance [6]. Likewise, Tetiana et al, (2018) describe that techniques and data are assembled to protect administrations in implementing great energy effectiveness and offer productivity information on company performance and progress for the use of energy-efficient innovations with reduced energy dependence.



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Similarly, Rotzek, Scope, & Günther, (2018) also analyzed energy culture to identify energy efficiency measures of modern organizations. The authors attribute energy efficiency to the driving force for environmental performance, corporate production and organizational success.

In India, Hameed, (2018), examined environmental accounting, determined that environmental management accounting affects environmental estimates and costs. In assigning these costs to business options, it is used to create and extend models to reduce environmental burdens, such as carbon emissions, energy dependence and help build a responsible image within the organization and reduce external uncertainties. In addition, this study finds that management accounting systems are an important tool for conveying environmental costs to organizational management and leadership to inspire them to recognize methods for reducing harmful environmental practices, thereby enhancing company performance and competence. Likewise, in United States, Hughes, (2001) analyzed the importance of organizational recording, information disclosure, environmental practices on environmental performance.

The role of MAS is considered important to identify carbon consumption and provide awareness to use energy more efficiently. Thus, the utilization of MAS can help an organization to expand its environmental quality and improve its environmental performance. Given the growing importance of MAS in meeting sustainable development goals, this study is intended to explore the impact of MAS in reducing environmental uncertainty and improving energy efficiency in small and medium enterprises in Grobogan (SMEs). Apart from that, current research also analyzes the role of energy efficiency and environmental uncertainty in influencing the environmental performance of SMEs.

Knowledge related to MAS will not only assist SMEs in Grobogan in identifying the important role of MAS in achieving sustainable development goals but also assist companies in reducing levels of environmental uncertainty and energy dependence which can increase organizational costs and affect environmental performance. Based on this, the research questions were raised, namely (1) does the management accounting system have a positive effect on energy efficiency? (2) Does the management accounting system have a negative effect on environmental uncertainty? (3) Does the management accounting system have a positive effect on environmental performance? (4) Does energy efficiency have a positive effect on environmental performance? (5) Does environmental uncertainty have a negative effect on environmental performance?

#### 2. Literature Review

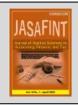
#### 2.1 Stakeholder Theory

The definition of stakeholder according to Badjuri, (2011) is all parties, both internal and external, who have a relationship that affects or is influenced, directly or indirectly by the company. Lindawati (2015) explaining stakeholder theory is that the company's business role is no longer limited to a few stakeholders and now the company is considered a social institution that can provide benefits and welfare to all stakeholders. From the two definitions above, it can be concluded that stakeholders are the parties who influence or are influenced by the company that play a role in determining the success of the company itself. Stakeholders need companies to fulfill their interests, while companies also need stakeholders to achieve success and maintain the continuity of the company.

#### 2.2 Legitimacy Theory

Legitimacy is a situation where the attention between the community and the environment has been fulfilled. Legitimacy is a psychological condition of taking sides of people and groups of people who are very sensitive to the symptoms of their surrounding environment, both physical and non-physical [15]. Lindawati (2015) states the legitimacy theory that companies continuously try to ensure that their activities / activities are in accordance with the boundaries and norms of the community where the company operates or is located.

Company legitimacy in the eyes of stakeholders can be carried out by implementing business ethics integrity and increasing corporate social responsibility [15]. Thus, companies that carry out Corporate



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Social Responsibility and protect the surrounding environment that can provide benefits to the community are also one of the company's efforts to be legitimate.

#### 2.3 Environmental Performance

The company's environmental performance is the company's performance in creating a good environment [17]. This environmental performance is seen as a form of corporate social responsibility. Moreover, social responsibility is also related to stakeholders. Concept of Ecoefficiency or also known as ecosystem efficiency is a concept that can support discussion of environmental performance. Ecoefficiency is environmental management which argues that organizations can produce more useful goods and services while simultaneously reducing negative impacts on the environment, resource consumption, and costs [18]. Thus, in this concept the company is not only tasked with producing products but must also pay attention to the environment and surrounding resources.

#### 2.4 Management Accounting System

The management accounting system is an organizational control mechanism, where the management accounting system is an effective tool in providing useful information to predict the possible consequences of various alternatives that can be done. The management accounting system is a reflection of the management planning function, namely providing information for decision making, motivating manager behavior and as a means of increasing efficiency (Marina, 2009). The above research reveals that management accounting generates useful information to assist workers, managers and executives in making better decisions. Traditionally, management accounting information has been dominated by financial information, but in its development, it turns out that the role of non-financial information also determines the output generated from the system. Research by Marina, (2009), prove that the characteristics of management accounting system information that are useful according to managers' perceptions include broad scope, timeliness, aggregation and integration.

#### 2.5 Environmental Uncertainty

According to Hammad et al, (2013), environmental uncertainty is a manager's perception of factors outside the company, such as the industrial environment, technology, competition, and the customer environment. Environmental uncertainty is an external environmental condition that can affect company operations. Environmental uncertainty has been identified as an important contextual variable in management accounting systems.

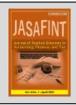
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#### 2.6 Energy Efficiency

Energy efficiency is defined as the rational and wise use of energy without reducing the energy that is really needed to support development. Generally, the industry uses the power of machinery and material handling equipment in its production process. The use of energy in the industrial sector is highly dependent on activities in producing products. Industry uses large amounts of electrical energy both in the processing (manufacturing), in packaging, and for its supporting units. Because the types and types of industries are very diverse, the efficiency of electrical energy in this sector is highly dependent on the equipment and technology used in the production process (Worrell, et al, 2009).

#### 2.7 Triple Bottom Line Concept

The term of triple bottom line was first popularized by John Elkington (1997). This theory formulates that the sustainability and growth of a company does not depend solely on operating profit (profit), but also on concrete actions that companies take towards the environment (planet) and justice (people).



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Everything is done in order to create sustainable development (sustainable development). The state of society depends on the economy, and the economy depends on society and the environment, even the global ecosystem. The three components of the triple bottom line are unstable, but dynamic depending on social, political, economic and environmental conditions and pressures, as well as possible conflicts of interest. The following is an explanation of the triple bottom line concept:

- 1. Profit
  - Companies must still be oriented to seek economic benefits that allow them to continue to operate and develop.
- 2. Planet
  - The company cares about the environment and the sustainability of biodiversity. Some CSR programs that are based on this principle are usually in the form of greening the environment, providing clean water facilities, improving housing, developing tourism (ecotourism) and so on.
- 3. People
  - Companies must have a concern for human welfare. Some of the CSR programs that are often developed by companies include: providing scholarships for students in the vicinity of the company, establishing education and health facilities, strengthening local economic capacity and so on.

The triple bottom line balance is a serious effort to synergize with the goals of sustainable development that consistently promote economic, social and environmental balance. Ideally, of course, the company does all triple bottom line activities for its stakeholders. However, the most important thing is that companies carry out CSR by emphasizing the principles of sustainable development [21].

#### 2.8 Prior Research

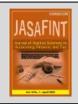
In this study, there are several studies that can be used as a reference. The research, among others, is from Alaeddin et al.(2019) which discusses the effect of management accounting systems in influencing environmental uncertainty, energy efficiency and environmental performance. By taking the MSME's object in Malaysia. The results obtained are that energy efficiency, environmental performance and environmental uncertainty are influenced by the management accounting system. Furthermore, energy efficiency has a positive and significant effect on environmental performance, and environmental uncertainty does not have a significant impact on environmental performance.

Research conducted by Agbejule (2005) which discusses the relationship between management accounting systems and perceived environmental uncertainty on managerial performance. With the object of a medium-sized manager of business units operating in Finland. The results obtained are that MAS has a positive and significant relationship with environmental uncertainty.

Gholami et al (2013) conducted a study on the Perceptions of Senior Managers on Management Accounting Systems and Environmental Performance. With industrial objects in the Klang Valley, Malaysia. The results obtained are that the manager's attitude is significantly related to population prevention, product stewardship and sustainable development.

#### 2.9 Hypothesis Development

In order to reduce carbon emissions, many organizations use appropriate accounting tools to identify and provide solutions to reduce the company's carbon contribution. In this context, the research of Burritt, Schaltegger, & Zvezdov, (2011) has recognized the significant contribution of carbon management accounting which helps companies to record and measure their direct and indirect contributions to reducing carbon emissions. The role of accounting in managing, disclosing and monitoring carbon emissions within the company not only helps in reducing the amount of carbon emitted but also assists in management decision making through collecting data on the energy dependence of the organization and the contribution to harmful carbon emissions resulting from energy consumption (Haseeb, et al, 2019).



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Hypothesis 1. Management Accounting System has a positive effect on energy efficiency.

Linking success to corporate organizations, environmental uncertainty and MAS. The research findings show that the success of the management accounting system and firm structure depends on environmental changes (Ahmed, et al, 2019). His study also determined that MAS is significant for influencing environmental uncertainty and that decision makers consider uncertainty in the external environment to be important in the environmental management process. Similarly, Marina (2009) examined the relationship between environmental uncertainty, MAS design, performance and decentralization in organizations. The results of empirical evidence that decentralization established that MAS is significant for achieving higher performance in the face of lower environmental uncertainty. On the other hand, in the case of low uncertainty, decentralization and MAS found high performance results.

Hypothesis 2. Management Accounting System has a negative effect on environmental uncertainty Likewise, the role of the management accounting system has been considered important to generate firm competence and performance in environmental management [8]. Mostly, the prevailing emphasis on environmental MASs in achieving sustainable cost effective solutions is significant. In this case,

Schaltegger, (2018) examines the relationship of management accounting systems in natural issues around the world including atmospheric issues as the key to sustainability around the world. Using a qualitative approach, it can be concluded that environmental management accounting underlies the tendency to prove to be an innovative management accounting tool for identifying and managing various systematic methods to assist ecologically useful decision making in organizations.

Hypothesis 3. MAS has a positive effect on environmental performance.

Sroufe & Gopalakrishna-Remani, (2019) analyzed 500 organizations to examine the relationship between the environment and the implementation of the accounting system. In his research, he analyzed the contribution of company resources in improving sustainable company performance [6]. Likewise, Tetiana et al, (2018) describe that techniques and data are assembled to protect administrations in implementing great energy effectiveness and offer productivity information on company performance and progress for the use of energy-efficient innovations with reduced energy dependence.

Similarly, Rotzek, Scope, & Günther, (2018) also analyzed energy culture to identify energy efficiency measures of modern organizations. The authors attribute energy efficiency to the driving force for environmental performance, corporate production and organizational success.

Hypothesis 4. Energy Efficiency has a positive effect on environmental performance.

In India, Hameed, (2018), examined environmental accounting, determined that environmental management accounting affects environmental estimates and costs. In assigning these costs to business options, it is used to create and extend models to reduce environmental burdens, such as carbon emissions, energy dependence and help build a responsible image within the organization and reduce external uncertainties. In addition, this study finds that environmental management accounting is an important tool for conveying environmental costs to organizational management and leadership in order to inspire them to recognize methods for reducing harmful environmental practices, thereby enhancing company performance and competence. Likewise, in the United States Hughes, (2001) analyzed the importance of organizational recording, information disclosure, environmental practices on environmental performance. In addition, the current research also analyzes the role of energy efficiency and environmental uncertainty in influencing the environmental performance of SMEs.

Hypothesis 5. Environmental uncertainty has a negative effect on environmental performance

#### 3. Research Model

Based on the development of the above hypothesis, the research model is described as follows:



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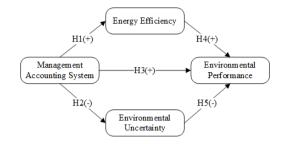


Figure 1: Research Model

#### 3.1 Population

The population of this research is SME (Small and Medium Enterprises) in the Grobogan area.

#### 3.2 Sampel

Sampling in this study using purposive sampling method with the aim of obtaining a sample that fits the criteria used in sample selection. The criteria used in selecting the sample of SMEs according to law no. 9/1995 on small businesses:

- 1. Number of employees 5- 99 people
- 2. Annual income <1 billion
- 3. Assets  $\leq$  200 million
- 4. Manufacturing company

#### 3.3 Independent Variable

The Management Accounting System as an independent variable that has characteristics, namely broad scope, timeliness, aggregation and integration (Marina, 2009)

#### a. Broad Scope

The scope of information includes external and internal factors of the company, non-economic, economic information, estimated events that may occur in the future, information related to environmental aspects. The higher the scale, the broader the information available. To measure using 4 questions by selecting a value on a scale of 1 to 5

#### b. Information Timeliness

Timeliness of information is information that reveals the timeliness of showing the time between requests for information and the presentation of desired information as well as the frequency of reporting information and the speed of making reports. To measure the timeliness (Time Lines) consists of 3 question items. Respondents were asked to choose one value on a scale of 1 to 5.

#### c. Information Aggregaation

Aggregation of information is information that takes into account the application of formal policy forms or final outcome information analytical models that are based on functional areas or are based on time. So that the higher or more important the information generated will be more aggregated. To measure using a unit (Aggregation) which consists of 4 question items. Respondents were asked to answer questions by selecting one value on a scale of 1 to a scale of 5.

#### d. Information Integration

Information integration reflects aspects such as targeted provisions or calculated activities between interaction processes between sub-units within the organization. To measure using Integration (Integration) consists of 2 question items. Respondents were asked to answer questions by selecting one value on a scale of 1 to a scale of 5.

#### 3.4 Dependent Variable

#### 3.4.1 Energy Efficiency

Energy Efficiency is an effort carried out with the aim of reducing the amount of energy required, in using a device or even an energy-related system. Various technologies have the potential to reduce



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industrial greenhouse gas emissions, of which energy efficiency is one of the most important, especially in the short to medium term. Including fuel replacement, material efficiency, renewable energy, and reduced emissions in each category, some technologies such as the use of more efficient motor systems are widely applicable across all industries, while others are process specific. In research [20] Energy efficiency has four indicators of cross-sectoral opportunities, process technology across industries, sector-specific technologies, and management or operational opportunities. Consists of four questions and is measured on a Likert scale from a scale of 1 to 5.

#### 3.4.2 Environmental Uncertainty

Environmental uncertainty is an external condition as a sense of one's inability to predict accurately the company's operations. Environmental uncertainty is expressed in questions related to the ability to predict circumstances against the organization's environment. Environmental uncertainty is measured by 7 indicators, namely environmental stability, new products in the industry, predictability of competitors, consumer preferences, emergence of scientific discoveries, competitive, regulatory constraints [24]. Measurements use a 5 point Likert scale. Respondents were asked to choose one value on a scale of 1 to 5 (Marina, 2009).

#### 3.4.3 Environmental Performance

Environmental performance is a measurable result of an environmental management system, which is related to the control of its environmental aspects [25]. Environmental performance is measured using a Likkert scale of 1 to 5. Consists of 8 indicators (environmental certification, waste reduction, emission reduction, recycling, increased environmental compliance, enhancement of company image, preserving the environment, social commitment) developed by [23]

#### 3.4.4 Data Collecting Method

The method of collecting data in this study is a questionnaire method. One way of collecting data in this study is by sending a questionnaire or questionnaire. The questionnaire or questionnaire is a list of questions given to other people who are willing to respond according to user requests. The purpose of distributing questionnaires is to find complete information about a problem from the respondent without feeling worried if the respondent gives an answer that does not match the reality in filling out the list of questions. Questionnaire with a Likert scale of 1 to 5 which means: (1) strongly disagree, (2) disagree, (3) neutral agree, (4) agree, (5) strongly agree

#### 3.4.5 Description of Research Object

The object of this research is SME (small and medium enterprises) located in Grobogan district. In this study, using purposive sampling to determine the sample based on certain criteria, namely SME manufacturing which has a total income of less than 1 billion in a year with a minimum of 5 employees. In this study, samples were obtained from the cooperative and SME offices in Grobogan district. The number of SME was recorded at 988 in the last 3 years. The sample of this study that met the criteria was only 80 SMEs in Grobogan district. Based on the SME data above, there are a number of samples that can be distributed to SME owners. The data obtained were only 60 questionnaires and 20 questionnaires were not returned.

#### 4. Result

The next analysis is hypothesis testing, this analysis is carried out by comparing the T-table value with the T-statistic generated from the bootstrapping results in PLS. The hypothesis is accepted (supported) if the T-statistic value is higher than the T-table value (1.96) with a significance level of 5% or exceeds the P-value  $\alpha = 5\%$ , p-val = 0.05 (Ghozali and Latan 2015). The results of hypothesis testing can be seen below:



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Tabel	ı ı.	Result

rabel 1. Rebalt				
	OSE	t-Stat	P Value	Result
Management Accounting System →	0,614	8,762	0,000	Accepted
Energy Efficiency				
Management Accounting System →	-0,480	5,376	0,000	Accepted
Environmental Uncertainty				
Management Accounting System →	0,526	4,468	0,000	Accepted
Environmental Performance				_
Energy Efficiency → Environmental	0,354	2,859	0,001	Accepted
Performance				_
Environmental Uncertainty ->	-0,057	0,693	0,227	Rejected
Environmental Performance				-

Source: Processed Data, 2020

Based on the table in the study, it is found that there is an influence between variables, namely the management accounting system on energy efficiency, which results in (0.614, P value 0.000 <0.05), so that H1 is accepted. The management accounting system on environmental uncertainty has a significant negative effect with the acquisition value (-0.480, P 0.000 <0.05) thus H2 is accepted. Furthermore, the management accounting system on environmental performance has results (0.526, P 0.000 <0.05) thus with energy efficiency on environmental performance 0.354 obtains a significance value of 0.001 <0.05, so that H3 and H4 are accepted so that the partial results will have a positive effect and significant means that the better the independent variable will have a better impact on the dependent variable. This result is different from the effect of environmental uncertainty on environmental performance which is found to have no effect and results in a value of -0.057 with a significant level of 0.227, therefore H5 is rejected and states that good or bad environmental uncertainty will not have an impact on the performance of the surrounding environment.

#### 5. Discussion

5.1 The Management Accounting System has a positive effect on Energy Efficiency

In this study, the management accounting system has a positive effect on energy efficiency, which can be proven by the presence of a coefficient value of 0.614 and a significance (P value) of 0.000 smaller than 0.05. The results obtained are significant, indicating that if a management accounting system owned by the manufacturing industry SMEs in the Grobogan area has increased, it will have an impact on energy efficiency which tends to increase.

The management accounting system can also be used to determine strategies, planning, controlling and optimizing the use of natural resources so that it can save energy that will be used when the physical marginal productivity of each natural resource in the production activity of a product is the same, if an activity can produce more output. Many of these inputs can lead to an increase in energy efficiency. Therefore, with the development of management accounting system technology, it is very necessary to optimize the energy that must be used in order to get profit in the development and sustainability of its business [5].

The results of this study are in line with that conducted by Haseeb et al., (2019) which states that there is a positive influence between management accounting systems on energy efficiency. The management accounting system can optimize and manage the energy needed by SMEs according to the operations used.

5.2 The Management Accounting System has a negative Effect on Environmental Uncertainty In this study, the results of the management accounting system have a negative impact on environmental uncertainty because it has a significance value of 0.000 smaller than 0.05 and a value of -0.480. Thus, a more sophisticated management accounting system will affect the ability of business actors to make



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decisions to reduce the impact of environmental uncertainty through organized internal and external management accounting system information.

Seeing the changing environment that is constantly changing, there is high environmental uncertainty to plan and predict economic growth in the future. Higher environmental uncertainty puts pressure on the organization to achieve competitive advantage and improve environmental, economic and social performance. Modern businesses faced with broad uncertainty in terms of competition, scientific discoveries, strict regulations, technological advances, and environmental changes need to take advantage of an effective management accounting system so that business voters can make decisions to reduce environmental uncertainty. Therefore, the use of a management accounting system can help reduce the impact of environmental uncertainty [1]. The results of this study are in line with that conducted by Alaeddin et al., (2019) which states that there is a negative influence between the management accounting system on environmental uncertainty.

#### 5.3 Management Accounting System has a Positive Effect on Environmental Performance

The results of the study indicate that the management accounting system has a significant positive effect on environmental performance which is indicated by a significant value of 0.000, which means it is smaller than 0.05 and 0.526. The higher the management accounting system can improve the environmental performance of the manufacturing industry SMEs, the better for managing methods of systematically making decisions and making plans in achieving good natural environmental targets effectively and in a timely manner with a management accounting system to collect, calculate, analyze cost reports the environment reduces the information gap that will be generated because the costs of environmental damage are not identified. The management accounting system used can have an impact to minimize environmental damage that will occur so that it will be easy to control and the performance of the environment is more optimal [1].

The results of this study are in line with that conducted by Schaltegger, (2018) which states that there is a positive influence between management accounting systems on environmental performance if the management accounting system used is very useful for better environmental performance and the information obtained is actual in accordance with procedures. Formal procedures and systems use financial and environmental information to maintain or modify environmental performance.

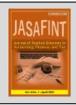
#### 5.4 Energy Efficiency has a Positive Effect on Environmental Performance

The results obtained in this study have a statistical T value of more than 1.96, namely 2.942 and a coefficient and significance of (0.354, P 0.001 <0.05) which means that there is a positive influence between energy efficiency and environmental performance. This indicates that if a business actor has the ability to use energy sources in its operational activities effectively and efficiently, it will improve and improve the performance in the surrounding environment. Energy efficiency is carried out by looking at data to protect and implement the effectiveness of energy and environmental performance information to obtain maximum results. Energy efficiency can be used to save costs incurred by the company and reduce the impact of carbon emitted by production machines. Modern production machines with the latest technology can produce more efficiently and can reduce the negative impact on the environment [1]. The results of this study are in line with that conducted by Haseeb et al., (2019) which states that there is a positive influence between energy efficiency on environmental performance.

#### 5.5 Environmental Uncertainty has No Effect on Environmental Performance

This study produces a significance level of 0.227> 0.05, thus environmental uncertainty does not affect environmental performance, therefore, a high or low level of an entrepreneur's sense of inability to predict external and internal factors in order to make decisions in the organization will not have an impact on the increase or decrease in environmental performance at SME in Grobogan.

Conditions of changing environmental uncertainty do not cause business actors to face difficulties in understanding a very complex environment so that a business actor will not experience difficulties in planning and controlling his business. Thus it does not result in planning and control of the environment,



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it will be constrained only because of environmental factors that are uncertain and unpredictable [1]. The results of this study are in line with that conducted by [1] which states that environmental uncertainty does not have a significant impact on environmental performance.

#### 6. Conclusion

This study aims to obtain empirical evidence of the effect of management accounting systems on environmental uncertainty, energy efficiency and environmental performance. Based on the results of the research conducted, it can be concluded that:

- 1. The management accounting system has a positive effect on energy efficiency
- 2. The management accounting system has a negative effect on environmental uncertainty
- 3. The management accounting system has a positive effect on environmental performance
- 4. Energy efficiency has a positive effect on environmental performance
- 5. Environmental uncertainty has no effect on environmental performance

#### 7. Limitations

The limitation in this study is the distribution of questionnaires to SME business owners whose owners have work-related activities and some of the respondents who go out of town for certain reasons, resulting in not being able to fill out the questionnaire.

#### 8. Reccomendation

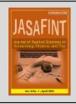
Based on the discussion and research conclusions above, suggestions that can be conveyed to researchers who will conduct research with the same and similar themes, should pay more attention to time in distributing questionnaires. So that the time and distribution of the questionnaires can run effectively and smoothly.

#### 9. Managerial Implications

Based on the discussion and research conclusions above, suggestions that can be conveyed to researchers who will conduct research with the same and similar themes, should pay more attention to time in distributing questionnaires. So that the time and distribution of the questionnaires can run effectively and smoothly.

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