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Selection of inventory accounting methods for industrial and consumer goods sectors: the relationship between inventory variability.

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Abstract

Inventory has a significant impact on the success of a company's operational procedures. Each company can select a method of distribution that is appropriate for its needs, and in selecting a method of distribution, the company can learn (opportunity) about the method of distribution that will be used in the company. Opportunity measure is an action taken by management in determining the inventory method that maximizes satisfaction and is profitable for the company. As a result, selecting a reliable method of gaining access to information is critical, because failing to do so will have a negative impact on your financial situation. The goal of this research is to eliminate any negative effects on the variability of the business, the size of the company, and the level of risk associated with the selection of a business assurance method. Purposive sampling was used to choose the manufacturing firm that would serve as the sample for this investigation. This company is part of the consumer products industrial sector and is listed on the Indonesia Stock Exchange. There are 40 businesses that meet the criteria, with 36 businesses using the average method and 4 businesses using the FIFO method. Data collection the technique employing second-level data. The data analysis technique used is logistic regression analysis. The results of the hypothesis testing show that the variability of inventory is affected by the choice of a inventory accounting method, but the size of the company and the level of risk are not.

Keywords: Selection of Inventory Accounting Method, inventory variability, CS and current ratio.

1. Introduction

Inventories are goods acquired by a company intended for resale or further processing while carrying out its normal business activities. Inventory in a processing company consists of inventory of raw materials and supporting materials, work-in-process inventory, and finished goods inventory (Agus, 2018). That is, inventory is the most important element in the running of the company's production process and is the largest source of funds in the company's operations. Inventory also has a very important role in terms of financial statements, so if the company experiences inventory delays, the production process will be disrupted and result in decreased company profits.

According to PSAK No. 14, the term inventory is used to describe assets: available for sale in the normal course of business (merchandise/finished goods); in the production process to be completed, then sold (goods in process / processing); and or on the way; or in the form of materials or supplies (supplies) to be used in the production process or the provision of services. Management's work in managing the company certainly expects good things in increasing the value of the entity being led because of which managers will get incentives (rewards) for their success. Managers must always consider matters relating to the company, one of which is in making decisions related to conditions that maximize inventory value. This decision requires consideration because every decision taken has an impact on the company's growth.

Inventory information is needed by internal and external stakeholders because it affects company operations and expected results. This shows the extent of the role inventory plays in finding a company's profits and taxes that must be paid. The choice of inventory accounting method is influenced by several things, including inventory variability (IV), Company Size (CS) and current ratio (CR) (Sulistyawati et al., 2020). Based on PSAK No. 14 there are three choices of inventory accounting methods recognized in Indonesia, namely the First In First Out (FIFO), Last In First Out (LIFO) and Weighted Average (Average) methods. But according to the Income Tax Law (UU No. 36 of 2008 concerning Income Tax), the LIFO method is not allowed, so only FIFO and average are allowed (Article 10 paragraph 6). In taxation in Indonesia, the Last In First Out (LIFO) method is considered to only generate losses for the state because by using this method, the profits generated will be small. Therefore, the LIFO method is not allowed to be used in tax regulations in Indonesia.

The selection of this inventory accounting method refers to the Statement of Financial Accounting Standards (PSAK) no. 14 of 2008 revisions that inventory costs must be calculated using the first-in-first-out (MPKP) or FIFO formula and a weighted average. The FIFO (first in first out) method assumes that cost factors will flow in the same direction as costs occur (first in first out). This method is mainly for perishable goods and products whose style changes quickly. Meanwhile, the average cost method assumes that the cost flow is the average of the costs incurred (Umi, 2018). The following is an example of the inventory accounting method used by companies in the consumer goods industry sector.

Table 1. Inventory Methods for Companies in the Consumer Goods Industry Sector for the 2019-2021 Period

No.	Code	Company	method
1.	INAF	PT. Indofarma Tbk	FIFO
2.	PANI	PT. Pratama Abadi Nusa Industri Tbk	FIFO
3.	ALTO	PT. Tri Banyan Tirta Tbk	Average
4.	CEKA	PT. Wilmar Cahaya Indonesia Tbk	Average
5.	HMSP	PT. HM Sampoerna Tbk	Average

Table 1 explains that each company chooses a different inventory accounting method. Big companies like PT. Indofarma Tbk, PT. Pratama Abadi Nusa Industri Tbk chooses the FIFO (First In First Out) inventory method with the aim of generating the maximum possible profit. In contrast to PT. Tri Banyan Tirta Tbk, PT. Wilmar Cahaya Indonesia Tbk, and PT. HM Sampoerna Tbk prefers the average inventory accounting method where this method tends to be relatively smaller in generating profits.

The companies studied in this study are manufacturing companies in the consumer goods industry sector. Where the products produced are products that are used daily by consumers which are very easy to find and product turnover is very fast such as food, beverages, cigarettes, pharmaceuticals, cosmetics, and household needs. This identifies if the consumer demand for the product produced is relatively large so that the activity of procuring supplies by the company is very intense, therefore the company must use the appropriate SIAM to calculate inventory so that the goals of the company can be achieved.

The inventory accounting method for a company does not have to be the same as for other companies, this can be seen in the table where there are 2 companies using the FIFO method and 3 companies using the weighted average inventory accounting method. Each company has the right to freedom in choosing the inventory accounting method to be used in the company. With this freedom, management tends to take opportunistic actions. Opportunistic action is an action taken by company management in determining the inventory method that maximizes satisfaction and is profitable for the company.

There are several factors that can influence the SIAM in a company. The company will choose which inventory method is more profitable in valuing its inventory. The meaning of the importance of selecting the inventory accounting method is for the inventory control process. Not all companies have the same policy in choosing the inventory accounting method, because the accounting method used must pay attention to the type of company's operational activities (Ayem & Harjanta, 2018).

The first factor that is thought to influence the choice of inventory accounting method is IV. IV is the variation of a company's inventory value. This variation describes the company's operations reflecting inventory techniques and inventory accounting as well as inventory movements themselves (Sukriwati; et al., 2021).

CS shows operational achievement and inventory control. According to Watts and Zimmerman (1986), larger companies prefer the inventory method which can delay reporting earnings. This condition is in accordance with the assumption that the transfer of wealth to

large companies is relatively greater than that of small companies. The direct transfer of wealth is the payment of taxes.

The CR is the CR that measures the financial performance of a company's balance sheet. The CR shows the company's ability to meet short-term debt obligations (Sofyah et al., 2019). From several previous studies that have been conducted, there are some inconsistent results. Some of the variables that have been studied by previous researchers showed different results, namely they had a significant effect and no effect. According to research conducted by (Ayem & Harjanta, 2018); (Suzan & Ichsan, 2021) found that IV has a significant effect on the Choice of Inventory Accounting Method. Meanwhile (Mahardika et al., 2017) found that IV has no significant effect on the SIAM.

For the CS variable, there have been several studies conducted including research (Fitri & Firzatullah, 2021); (Sukriwati; et al., 2021) found that CS has a significant effect on the choice of inventory accounting method. Meanwhile (Ayem & Harjanta, 2018) found that CS has no significant effect on the choice of inventory accounting method. For the CR variable, several studies have been conducted including research (Erawati & Jepriansyah, 2019); (Sulistiyawati et al., 2020) found that the CR has a positive effect on the Choice of Inventory Accounting Method. Meanwhile, according to Kristina (2017) found that the CR has no effect on the Choice of Inventory Accounting Method. Therefore, based on this explanation, the purpose of this study is to determine the critical factors that can influence the choice of inventory accounting methods in manufacturing companies in the goods and consumption industry sector which are listed on the Indonesia Stock Exchange.

2. Literature Review

Positive accounting theory explains the processes that will be faced in the future using abilities, accounting knowledge and accounting policies. So, using this theory can explain and predict the consequences faced by managers in making certain decisions. Accounting policies are things that must be considered by companies, one of which is the SIAM and the factors that influence them, namely IV. IV affects the choice of inventory accounting method. To increasing profits, the company will determine the policy in choosing the method of accounting inventory in accordance with the conditions of the company. When inflation occurs, companies that use the FIFO method will generate greater profits compared to companies that use the average method, usually the profits obtained are relatively smaller. If the inventory variation value is relatively small, the company is advised to use the average inventory method, conversely, if the company has a relatively large inventory variation value, it is better to use the FIFO method.

This is supported by previous research conducted by (Ayem & Harjanta, 2018), (Suzan & Ichsan, 2021) which states that IV affects the choice of inventory accounting method. In contrast to research (Mahardika et al., 2017) which states that IV does not affect the choice of inventory accounting method. Based on this explanation, it is suspected that there is a positive relationship between the effect of IV on the choice of inventory accounting method so that the relationship is hypothesized:

H1: IV affects the Choice of Inventory Accounting Method.

Positive accounting theory explains the accounting practices carried out by company management in accordance with procedures and have specific goals. Company management will carry out appropriate procedures according to the conditions of the company. One of the procedures that must be carried out by management is to choose an inventory accounting method and one of the influencing factors is CS.

CS is a benchmark that can show a company in achieving smooth operations and inventory control. The size of the company can be seen from the total assets owned. CS can affect inventory accounting methods. Usually, corporate entities that tend to be large will use the average inventory method because the tax bill received is relatively smaller than using the FIFO method. Conversely, corporate entities that tend to be small will choose to use the FIFO inventory method because using the FIFO method generates greater profits so that small companies will borrow funds from banks by looking at the company's performance. This is supported by previous research conducted by (Fitri & Firzatullah, 2021), (Sukriwati; et al., 2021) which states that CS influences the choice of inventory accounting method. In contrast to research (Ayem & Harjanta, 2018) which states that CS has no effect on the choice of inventory accounting method. Based on this explanation, it is suspected that there is a positive relationship between the effect of CS on the choice of inventory accounting method so that the relationship is hypothesized:

H2: CS influences the choice of inventory accounting method.

Positive accounting theory explains the procedures that will be faced in the future using accounting knowledge, abilities, and accounting policies. In other words, this theory explains the possibilities or consequences faced by managers in choosing inventory accounting methods. One of the factors in choosing an inventory accounting method is the CR. The CR is one of the factors that can influence the choice of inventory accounting method. The higher the CR in a company, the higher the company's ability to meet its short-term obligations. The CR is also a factor that is taken into consideration by creditors when lending funds. If the company has a high CR, creditors will have more confidence in the company's ability to carry out their obligations. Thus, when a company has a relatively low CR, the company will tend to prefer the FIFO inventory method to increase the CR to gain creditors' trust.

This is supported by previous research conducted by (Erawati & Jepriansyah, 2019), (Sulistyawati et al., 2020) which states that the CR affects the choice of inventory accounting method. In contrast to research by Kristina (2017) which states that the CR does not affect the choice of inventory accounting method. Based on this explanation, it is suspected that there is a positive relationship between the effect of the CR on the choice of inventory accounting method so that the relationship is hypothesized:

H3: CR influences the Choice of Inventory Accounting Method

Based on the development of hypotheses regarding IV, CS and CR to the SIAM that have been described. So in summary this framework is:

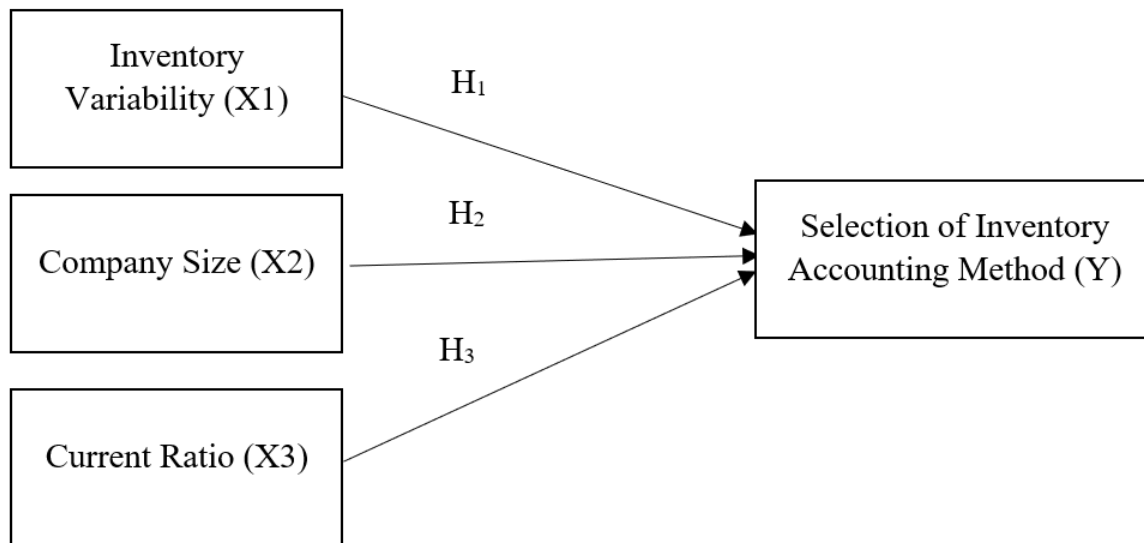


Figure 1. Research Model

3. Material and Method

The type of research used is Basic Research, this research is also often referred to as basic research. This research was conducted for the purposes of scientific development. The results of basic research are new findings in the form of general knowledge and understandings about nature and its laws (Ashadi, 2021). In this study used quantitative research methods. Quantitative research can be understood as a research method that is based on the positivism philosophy, that is used to examine certain populations or samples, that collects data using research instruments, that conducts data analysis that is quantitative and statistical in nature, and that has the goal of testing hypotheses that have already been established (Sugiyono, 2017; Khairunnisa et al, 2022).

The tools used in the research to analyze the data that has been collected and documented will be processed using Microsoft Excel 2016 and SPSS (Statistical Package for the Social Science) 25 for Windows through logistic regression, namely, to find out the inventory method used with nominal scale measurements, namely dummy variables. which gives a value of 1 for the selection of the average inventory accounting method and a value of 0 for the selection of the FIFO (First in First Out) inventory accounting method.

Companies that manufacture goods and are part of the Consumer Products Industry sector and are listed on the Indonesia Stock Exchange (IDX) between the years 2019 and 2021 make up the population for this study. Purposive sampling, which is a kind of sampling that takes specific factors into consideration, was utilized as the method of sample for this investigation. The following criteria were utilized to choose the sample: 1) Manufacturing enterprises that are included in the consumer products industrial category and that are listed on the IDX in a sequential fashion for the period of 2019-2021. 2) Providing a series of consecutive financial reports over the duration of the research. 3) Manufacturing businesses that only employ one type of inventory accounting technique.

Table 2. purposive sampling technique

Criteria	Amount
Manufacturing companies in the consumer goods industry sector listed consecutively on the Indonesia Stock Exchange in 2019-2021	51
Manufacturing companies that publish company financial reports are not consecutive during the study	(2)
Companies that do not use one type of inventory method during the study period	(9)
The number of companies that match the research criteria	40
The total sample data used in the study	40

Based on the table above, the total sample data used in this study were 40 companies, with a research time of 3 consecutive years. In this study, the sample was not multiplied by the year of study, because to find the average value of the ending inventory, the variability of the inventory was seen from the sum of the number of years of research. The sample was chosen because it met all the criteria determined according to research needs.

To provide a response to the hypotheses, this study applies a logistic regression model. If the significant value is lower than $= 0.05$ (5%), then both H_0 and H_a can be accepted. This indicates that the independent variables indeed influence the dependent variable. Nevertheless, if the significant value is more than $= 0.05$ (5%), then both H_0 and H_a are rejected, which indicates that the independent variable does not have any influence on the variable that is being studied.

4. Result

4.1 Descriptive analysis

Descriptive statistical analysis provides an overview of the variables used, such as the minimum value, maximum value, average, standard deviation, and frequency. Descriptive statistical analysis aims to collect, process, and analyze data so that it can be presented in a better view. The following is a table of descriptive statistics for each variable using SPSS for windows version 25.

Table 3. Results of Descriptive Statistical Analysis of Research Variables

Measurement	N	Min	Max	Mean	Standard deviation	Freq	%
IV	40	0.02	2.12	0.5306	0.454		
CS	40	14.88	30.61	24.9	4.63		
CR	40	0.64	7.99	2.497	1.724		
SIAM	40					36	90
						4	10

Based on table 3, SIAM is measured by classifying the type of industry into the average method and the FIFO method, where seen from the statistical data the frequency shows that out of a total of 40 sample companies 36 of them use the average method and the remaining 4 sample companies use the FIFO inventory method. This shows that 90% out of 100% of the

companies in the consumer goods industry sector listed on the Indonesia Stock Exchange use the average inventory method, while the remaining 10% are companies using the FIFO inventory method.

The minimum value of IV is 0.02. The maximum value is 2.12. While the average value is 0.5306 and the standard deviation is 0.45436. The average value has a value that is greater than the standard deviation, namely $0.5306 \geq 0.45436$, meaning that the data distribution tends to be normal. The minimum value of CS is 14.88. The maximum value is 30.61. While the average value is 24.8994 and the standard deviation is 4.62869. The average value has a value that is greater than the standard deviation, namely $24.8994 \geq 4.62869$, meaning that the data distribution tends to be normal.

The minimum value of the CR is 0.64. The maximum value is 7.99. While the average value is 2.49967 and the standard deviation is 1.72364. The average value has a value that is greater than the standard deviation, namely $2.4967 \geq 1.72364$, meaning that the data distribution tends to be normal.

4.2 Logistic Regression Analysis

4.2.1 Regression Model Fit Test (Hosmer and Lemeshow's Test)

The Hosmer and Lemeshow Test is a test that is used to assess whether the model that was built is valid. It is determined to be suitable if there is not a substantial discrepancy between the value predicted by the model and the actual value. If the Hosmer and Lemeshow's Test significant value is greater than 0.05 or 5%, then the model can be said to be fit because the model fits the data. Meanwhile, if the significant value of the Hosmer and Lemeshow's Test is below 0.05 or 5%, the model is said to be unfit because the model does not match the data so that the model is unable to predict the observed value. The results of testing the feasibility of the model with the Hosmer and Lemeshow's Test are explained in table 4 as follows:

Table 4. Results of Hosmer and Lemeshow's Test

Step	Chi-square	Ddf	Sig
1	3.533	8	.897

According to the information in the table that was just presented, the outcomes of the Hosmer and Lemeshow Test have a value that is 0.897, which is higher than 0.05. It may be deduced from this that the model and the data do not significantly differ from one another. This also suggests that the model may be trusted since it provides an accurate representation of the observations. This indicates that the logistic regression model may be utilized effectively in further analyses.

4.2.2 Overall fit model

Whether or not all of the independent factors have an effect on the dependent variable may be determined with the use of the Overall Fit Model test. The likelihood function serves as the foundation for the statistics that are employed. The likelihood, denoted by the letter "L," is the probability that the proposed model accurately reflects the input data (Ghozali, 2018). The

overall evaluation of the model is indicated by the Log Likelihood value, specifically by comparing the initial -2LogL value (Block Number = 0) or a model that only includes a constant value with the final -2LogL value (Block Number = 1) or a model that includes constants and independent variables. In other words, the Log Likelihood value compares the model with only a constant value to a model that includes constants and independent variables. The criterion for making a decision on the Likelihood function is that if the final -2LogL value (Block Number = 1) is smaller than the initial -2LogL value (Block Number = 0) or there is a decrease in the initial -2LogL value, then the regression model can be said to be good. Meanwhile, if the final -2LogL value is greater than the initial -2LogL value or there is no -2LogL decrease, then the regression model can be said to be not good. Table 5 shows the initial -2LogL value, table 6 shows the final -2LogL, and the results of the Overall Fit Model test can be seen in table 5 below.

Table 5. Iteration History (block number =0)

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	27.512	1.600
	2	26.052	2.086
	3	26.007	2.193
	4	26.007	2.197
	5	26.007	2.197

At the fifth iteration, the value of -2 Log Likelihood in the initial block is 26,007. This figure is the Chi Square value, and it is 54,572 when compared to the Chi Square value in the table, which has a df of $N - 1 = 40 - 1 = 39$ and a significance level of 0.05. It would appear from the -2 Log Likelihood Chi Square table (26,007 54,572) that there is not a substantial difference between the models that contain constants. This demonstrates that the model consisting just of constants is appropriate for use.

Table 6. Iteration History (block number 1)

Iteration		-2 Log likelihood	Constant	Coefficients		
				X1_VP	X2_UP	X3_RL
Step 1	1	21.820	1.650	-1.462	.022	.074
	2	17.803	1.934	-2.317	.050	.165
	3	17.009	1.469	-2.827	.084	.309
	4	16.891	.912	-3.052	.108	.440
	5	16.886	.767	-3.107	.114	.478
	6	16.886	.761	-3.110	.114	.480
	7	16.886	.761	-3.110	.114	.480

Furthermore, testing the fit of the model with the data is carried out by entering 2 independent variables so that it has a df of $40 - 2 - 1 = 37$ and has a Chi Square table value of 52,192 at a significance of 0.05. It appears that the value of -2 Log Likelihood < Chi Square

table (16,886 < 52,192) indicates that the model by including the independent variables is fit with the data. This shows that the model is feasible to use.

Table 7. Comparison between -2LL Beginning and -2LL End.

	-2 Log Likelihood
-2 Log Likelihood beginning (<i>Block Number =0</i>)	26,007
-2 Log Likelihood ending (<i>Block Number =1</i>)	16,886
-2LogL decrement	9,121

Based on table 7 the results of the Overall fit Model test show that the initial -2 Log Likelihood value or before the independent variable is entered into the regression model is 26.007. Meanwhile, the final -2 Log Likelihood value or after the independent variables are entered into the regression model is 16.886. So, it can be interpreted that the final -2 Log Likelihood value is smaller than the initial -2 Log Likelihood value with a decrease of 9.121 which indicates that the model is acceptable because it fits the observation data. This shows that the addition of three independent variables, namely IV, CS and CR into the regression model can improve the fit model and show a better regression model. In this study, it shows that the regression model is fit or is in accordance with the data.

4.2.3 Classification Matrix Test Results

Testing the classification matrix is used to determine the accuracy of predictions, namely how well the regression model can classify cases. How far can the regression model predict the probability of the occurrence of the dependent variable in this study (Ghozali, 2018: 334). The results of the classification matrix test can be seen in the Classification Table test results. The Classification Table test is used to see the accuracy of the prediction results of the logistic regression model with the research data, namely the percentage of results that show correct predictions. If the percentage of correct prediction results for both rows have the same value, then these results indicate that there is homoscedasticity in the logistic regression model, whereas if the percentage of correct prediction results for the two rows has different values, then these results indicate that there is no homoscedasticity in the regression model. logistics.

Table 7. Comparison between -2LL Beginning and -2LL End.

Observed			Predicted		
			Y_MAP		
			FIFO	Mean	Percentage Correct
Step 0	Y_MAP	FIFO	0	4	.0
		Mean	0	36	100.0
		Overall			90.0
		Percentage			

The right and wrong estimated values are displayed as the results of the calculation in table 4.10, which may be found here. The value that is predicted for the dependent variable in this investigation can be found in the column section. In this case, the dependent variable is the choice of inventory accounting techniques, and the value that is anticipated for it is 1 for the

average category and 0 for the FIFO category. In addition, the row section displays the actual observed value of the average dependent variable, which is represented by the value 1, and FIFO, which is represented by the value 0. According to the findings of the SPSS test, the table predicting the selection of inventory accounting techniques that are included in the average category contains forty different businesses. This number was determined based on the results of the test. The next result is in the row section which shows that there are 36 companies that are included in the average category. So the percentage accuracy of this model is 40/36 or 90.0%.

4.2.4 Logistic Regression Analysis Results

Hypothesis testing was conducted to determine whether there is a significant effect of each independent variable (IV, CS and CR) on the dependent variable. The hypothesis test in this study uses logistic regression because the dependent variable used in this study is a dummy variable, which has a value of 0 for companies that apply the FIFO method and a value of 1 for companies that apply the average method. The following is the result of logistic regression analysis between IV (X1), CS (X2) and CR (X3) with the inventory accounting method selection variable (Y)

Table 8. Regression Analysis Results

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	X1_VP	-3.110	1.263	6.063	1	.014	.045
	X2_UP	.114	.155	.544	1	.461	1.121
	X3_RL	.480	.654	.539	1	.463	1.616
	Constant	.761	4.022	.036	1	.850	2.140

Based on table 4.11, the logistic regression equation for the influence of IV, CS and CR on the SIAM is obtained as follows.

$$\text{Ln} \frac{MAP}{1-MAP} = 0.761 - 3,110 + 0,114UP + 0,480RL + \epsilon$$

The constant value of the logistic regression equation is 0.761 indicating that if the variability of inventory, CS and CR are considered constant, then the value of selecting the inventory accounting method is 0.761. The regression coefficient for IV is -3.110, meaning that for every unit value added, the inventory accounting method will increase by -3.110 if the other independent variables have a fixed value. The regression coefficient for CS is 0.114, meaning that for each value added to CS by one unit, the choice of inventory accounting method will increase by 0.114 if the other independent variables have a fixed value. The regression coefficient of the CR is 0.480, meaning that for every unit value added to the CR, the choice of the inventory accounting method will increase by 0.480 if the other independent variables have a fixed value.

4.2.5 hypothesis testing

Testing the hypothesis in this study is to use logistic regression analysis. The regression analysis used in this study was measured using a dummy variable, namely a variable that gives

a value of 1 for companies using the average method and a value of 0 for companies using the FIFO method. The t test is known as the partial test, which is to test how each independent variable influences the dependent variable, namely, to assess how the influence of IV, CS and CR. The decision-making criteria in the t test are based on the significant value of logistic regression analysis at a significant level of 0.05 or 5%. Following are the results of partial hypothesis testing (t test) that has been carried out.

In table 8 that the value of Sig. IV variable of 0.014. When compared with a significant level of 0.05, the IV variable has a smaller value so that it has a significant effect, so it can be concluded that H1 is accepted, meaning that IV affects the choice of inventory accounting method. In table 8 that the value of Sig. variable CS of 0.461. When compared with a significant level of 0.05, the variable CS has a greater value so it does not have a significant effect, so it can be concluded that H2 is rejected, meaning that CS has no effect on the choice of inventory accounting method. In table 8 that the value of Sig. CR variable of 0.463. The CR variable has a greater value than the significant level of 0.05, which indicates that it does not have a significant effect. Because of this, it is possible to draw the conclusion that H3 is not supported, which indicates that the CR does not have an impact on the inventory accounting method that is selected.

5. Discussion

The first hypothesis considers the influence that the degree of variability in inventory has on the inventory accounting technique that is selected. The findings of this research provide proof that the degree to which an inventory varies has an impact on the inventory accounting systems that are used. The statistically significant number of 0.014 0.05 demonstrates this point. This suggests that the value of significance is lower, and it also suggests that the IV variable influences the choice of inventory accounting technique. According to the findings of this investigation, the degree of variation in the inventory affects the inventory accounting system that is used. This statement is consistent with the hypothesis which states that when inflation occurs, companies that have a higher inventory variation value tend to use the FIFO inventory method, because companies that have a high variation value will generate more varied profits. While companies that have a lower variation value tend to use the average inventory method, because the level of profit generated is small so that the company can make tax savings (tax savings). This is in accordance with positive accounting theory which states that in carrying out its accounting practices, company management will carry out appropriate procedures according to economic conditions. The results of this study are not in line with research conducted by (Mahardika et al., 2017) which states that IV does not affect the choice of inventory accounting method. But consistent with research conducted by (Ayem & Harjanta, 2018) and (Suzan & Ichsan, 2021) which states that IV affects the choice of inventory accounting method.

The second hypothesis examines the influence that the size of the company has on the inventory accounting technique that is selected. The findings of this study provide proof that the size of a firm does not have any impact on the inventory accounting technique that is used. This is evident from the statistically significant result of 0.461 being more than 0.05. This suggests that the significant value is bigger and that the variable CS has no influence on the

choice of inventory accounting system. Both of these conclusions may be drawn from the fact that there is no correlation between the two. According to the findings of this investigation, the size of the business does not impact the inventory accounting technique that is used, in this second hypothesis the company sees more important political costs (tax savings) so the alternative used is to reduce profits, this statement is an explanation from The Political Hypothesis on positive accounting theory. One of the company's goals in choosing the average method for inventory is to reduce the tax burden, while companies using the FIFO method aim to increase profits to get funds from investors. This study shows that not only large-sized companies use the average method, but small-sized companies also use the method. In this explanation, it can be concluded that large companies and small companies in Indonesia, especially listed on the Indonesia Stock Exchange, are in the consumer goods industry sector which has a tendency and is more interested in using the average method because it can reduce the profits generated so they can make tax savings. The results of this study are not in line with research conducted by (Fitri & Firzatullah, 2021) and (Sukriwati; et al., 2021) which state that CS influences the choice of inventory accounting method. But it is consistent with research conducted by (Ayem & Harjanta, 2018) which states that CS has no effect on choosing an inventory accounting method. This study provides evidence that the variable CS has no effect on the choice of inventory accounting method. Judging from the average value of CS is 3,904,462. Judging from the size of the company through the average total value, there are 9 large-scale companies ($> 3,904,462$), while companies that have a small-scale size ($< 3,904,462$) have 31 companies.

The third hypothesis is concerned with the influence that the CR has on the inventory accounting method that is selected. The findings of this research project provide proof that the CR does not have any impact on the inventory accounting technique that is used. This is evident from the fact that the significant value of 0.463 is more than 0.05. This suggests that the significant value is higher than expected, and it also suggests that the CR variable does not have any impact on the inventory accounting method that is used. In this investigation, the CR does not have an impact on the inventory accounting technique that is used. The CR is a factor that is taken into consideration by creditors in lending funds, if the company has a high CR, the creditor will be more confident in the company's ability to carry out its obligations. In this third hypothesis, managers want to increase profits and assets because creditors will prefer companies that have enough assets to cover their debts. This statement is in accordance with The Debt Covenant Hypothesis theory on positive accounting theory, this theory states the requirements that must be met by companies in debt contracts. In this study the company that has the highest CR value is PT. Mandom Indonesia Tbk uses the average inventory accounting method and the company that has the lowest CR is PT. Unilever Indonesia Tbk also uses the average inventory accounting method. This is not in accordance with the statement (Erawati & Jepriansyah, 2019) which suggests that companies with high CR values will usually use the average inventory method which will generate low profits and can make tax savings. Meanwhile, companies with a low ratio value will tend to use the FIFO inventory method which will provide relatively large profits to show good performance. It can be concluded that the CR should not be used as a consideration for a company to choose an inventory accounting method. The third hypothesis relates to the effect of the CR on the choice of inventory

accounting method. Judging from the average value of the CR on the variable CR obtained an average value of 2.50. Judging from the current or not smoothness of a company in paying its short-term debt through the average value, there are 18 companies that have a smooth scale in paying short-term debt (> 2.50), while companies that have a non-current scale in paying long-term debt in short (< 2.50) there are 22 companies. The results of this study are not in line with research conducted by (Erawati & Jepriansyah, 2019) and (Sulistyawati et al., 2020) which state that the CR influences the choice of inventory accounting method. But it is consistent with research conducted by Kristina (2017) which states that the CR does not affect the choice of inventory accounting method.

6. Conclusion, Implication, and Recommendation

This study's objective is to investigate the factors that have an impact on the SIAM used by consumer goods manufacturing companies that are traded on the Indonesia Stock Exchange (IDX) between the years 2019 and 2021. These factors include CS, IV variables, and the CR. In light of the fact that the significant result was $0.014 > 0.05$, this indicates that the significant value is smaller and indicates that the IV variable influences the choice of inventory accounting method. Judging from the significant value of $0.461 > 0.05$, this indicates that the significant value is greater and indicates that the variable CS has no effect on the choice of inventory accounting method. Judging from the significant value of $0.463 > 0.05$, this indicates that the significant value is greater and indicates that the CR variable has no effect on the choice of inventory accounting method.

This research adds to the knowledge and insight of researchers and provides information about the factors that influence the SIAM. Based on the results of this study, we can obtain information that IV influences the choice of inventory accounting method. Meanwhile, CS and CR have no effect on the choice of inventory accounting method. This research helps managers establish guidelines for using the inventory accounting method. The application of the average inventory accounting method can provide an interesting view for managers, because the average method tends to provide stable profits and minimize tax costs. This research can be considered as enabling investors to see future profits and prospects for company development as investment guarantees.

This research has several limitations and needs to be improved and developed further in subsequent studies, the limitations of this research are the research period which was only studied for 3 years of observation, namely 2019-2021. This study only focuses on companies that use one of the inventory methods, namely the FIFO method and the average method. This study does not examine companies that simultaneously use the FIFO method and the average in choosing the inventory accounting method. Based on the limitations of this study, suggestions that can be given regarding the SIAM are expected to extend the observation period to predict long-term research results. Adding a sample of companies that use two inventory methods, namely the FIFO method and the average method. Not only analyzing a sample of companies that only use one inventory method

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