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THE EFFECT OF CHANGES IN VALUE-ADDED TAX RATES (VAT) AND COST OF GOODS SOLD (COGS) ON SALES TURNOVER AT PT. VCS

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Abstract
The increase in Value Added Tax (VAT) rates and the rise in Cost of Goods Sold (COGS) significantly impact the business strategy and profitability of the company. The research aims to examine the impact of the increase in VAT rate and changes in the Cost of Goods Sold on PT's business strategy and profitability. VCS. The method used is quantitative research using PT's sales data. VCS from 2018 to 2022, as the population was selected through a purposive sampling method. Data analysis was conducted using SPSS version 27. The research findings indicate that the increase in the value-added tax rate significantly impacts PT's sales revenue. VCS, while the increase in Cost of Goods Sold does not considerably affect the company's Sales Revenue.
Keywords: Value Added Tax (VAT) Rate, Cost of Goods Sold (COGS), Sales Revenue, Freight Forwarding Services

INTRODUCTION

State revenues have an essential role in supporting various government functions, such as providing public services, developing infrastructure, and meeting the general needs of society. One of the critical factors in state income is taxes, which are obligations that citizens and business entities must fulfill to contribute to the government.(Desideria & Ngadiman, 2019). One type of tax that has a strategic role in supporting state revenue is Value Added Tax (VAT). This type of tax is managed by the central government through the Ministry of Finance and carried out by the Directorate General of Taxes(U. Gunawan, 2021).

VAT is a tax obligation imposed on every purchase and sale transaction of goods and services by tax entities, whether individuals or business entities, that meet the requirements as Taxable Entrepreneurs (PKP).(Silaen & Singgih, 2022). Every Taxpayer as an Entrepreneur who is subject to Value Added Tax by the Value Added Tax Law of 1984 and its amendments must report his business activities to be recognized as a Taxable Entrepreneur (PKP)(Government of Indonesia, 2021) as regulated in Law of the Republic of Indonesia Number 7 of 2021 concerning Harmonization of Tax Regulations. Starting April 1, 2022, the government will increase the VAT rate from 10% to 11% and from 1% to 1.1% by the provisions of Law Number 7 of 2021 concerning Harmonization of Tax Regulations (UU HPP).

PT. VCS operates in the transportation sector, including domestic and international freight forwarding services. This company has a vital role in the global supply network by arranging the delivery and transportation of goods effectively and regularly. According to the latest regulations from(Minister of Finance of the Republic of Indonesia, 2022), in regulation number 71/PMK.03/2022 concerning Value Added Tax (VAT), the VAT rate for the delivery of certain taxable services such as freight bills

and transportation services to customers has been fixed at 1.1%. This VAT is identified with code 05 on the tax invoice.

Due to the increased value-added tax (VAT) rates, many companies and business actors face consequences. Especially in the transportation management sector, this increase causes an increase in the Cost of Goods Sold in transportation service business operations, affecting selling prices and potentially affecting the company's sales turnover. According to(Herman, 2022), an increase in the cost of goods sold can reduce sales turnover, so it is essential to evaluate the impact as a reference for management in making decisions. Cost of Goods Sold is a term in accounting that includes costs incurred in each process of producing goods, whether created by yourself or other parties. Before setting up HPP, business owners must understand the components involved in production(Anggraini, 2022). These components include raw material costs, Direct Labor Costs (BTKL), shipping costs, and sales costs such as commissions or marketing costs.

COGS is an integral part of the field of accounting and financial reporting. Knowledge of sales costs is necessary to prepare accurate financial reports, including profit and loss statements. Sales activities are vital in achieving maximum profitability and ensuring business continuity aligns with desired growth. The company is expected to continue to grow through sales, including income from the sale of goods and services through credit and cash transactions(Amaliyah et al., 2021).

Based on research conducted by (Putri & Subandoro, 2022), with the title "Analysis of the Effect of an 11% VAT Rate Increase on Sales at PT This research is strengthened by other research conducted by(FP et al., 2023), with the title "The Effect of Increases in Value Added Tax (VAT) Rates and Raw Material Costs on Sales Turnover at PT Buana Raya Lestari" it was found that these two variables had a significant influence on sales turnover. Based on this background, a title can be drawn: "The Effect of Changes in Value Added Tax (VAT) Rates and Cost of Goods Sold on Sales Turnover at PT. VCS".

Based on this background, the problem formulation in this research is whether changes in Value Added Tax Rates (VAT) and Cost of Goods Sold (HPP) affect PT's sales turnover. VCS. Based on the problem formulation, this research aims to test and prove the influence of changes in Value Added Tax Rates (VAT) and Cost of Goods Sold (HPP) on the sales turnover of PT. VCS.

METHOD

The type of research used in this research is quantitative research. The population used in this research is the Sales Report of PT. VCS 2018 to 2022. The sampling technique used in this research was purposive sampling. According to Sugiyono (2021: 95-96), purposive sampling is a technique for sampling data sources with specific considerations. The criteria for determining the sample are as follows:

- Data from PT. The VCS is still complete and can be observed.
- Data from PT. System-organized VCS.

Table 1. Sample Criteria

Sales Report 2018-2022	60
Sales reports that are not organized by the system	(10)
Incomplete sales reports	(2)
Number of samples that meet the criteria	**48**

Source: Author (2024)

The primary and secondary data are used. Primary data was obtained from observations in the tax division of PT. VCS, while secondary data at PT. VCS uses documentary data collection by obtaining data directly from the research site. Based on the criteria table, it can be concluded that the sample used is a sales report from PT. VCS from 2019 to 2022

RESULTS AND DISCUSSION

Description of Value Added Tax (VAT) Rates

PT. VCS began to be recognized as a Taxable Enterprise (PKP) in 2017, and from then on, the company collected and paid Value Added Tax (VAT). Recapitulation of Value Added Tax (VAT) data for 2019–2022 is as follows:

Table 2. Sample Value Added Tax (VAT):

Month	2019	2020	2021	2022
January	29,242,013	44,445,565	55,550,334	111.375.216
February	27,164,465	46,299,369	83,543,400	120,186,646
March	37,956,504	44,063,773	114.224.423	116,093,985
April	33,996,805	58,848,460	78,188,837	109,134,538
May	30,119,099	44,886,572	67,808,009	95,420,387
June	22,287,422	48,493,913	127.418.205	132,087,068
July	32,622,695	51,494,349	128,240,502	82,505,819
August	40,075,179	39,356,781	91,865,206	102.893.311
September	33,608,429	37,764,475	109,952,853	73,523,003
October	50,767,299	47,585,734	93,787,652	71,945,649
November	47,981,566	51,425,143	111.268.199	66,721,484
December	48,555,993	114,753,941	182,715,729	68,090,259
Total	**434,377,469**	**629,418,075**	**1,244,563,349**	**1,149,977,365**

Source: Data processed by the Author (2024)

Description of Cost of Goods Sold (COGS)

Cost of Goods Sold calculated in PT. VCS operates in freight forwarding, namely transportation costs, goods handling costs, insurance costs, security and maintenance costs, temporary storage costs, other logistics costs, and additional operational costs. The following is a recapitulation of PT's Cost of Goods Sold data. VCS from 2019-2022:

Table 3. Sample Cost of Goods Sold (HPP)

Month	2019	2020	2021	2022
January	2,724,337,049	4,064,262,682	5,459,112,241	10,991,660,158
February	2,539,751,766	4,018,757,406	7,932,938,093	11,043,353,629
March	3,289,715,570	3,864,847,617	10,385,837,239	10,768,489,888
April	3,114,382,171	5,370,772,977	7,091,210,238	9,909,790,622
May	2,560,117,101	3,857,001,394	6,116,451,761	8,059,780,328
June	1,730,210,102	4,296,969,840	11,024,913,006	7,085,998,778
July	2,793,254,668	4,309,936,741	12.171.520.161	6,814,435,175
August	3,061,818,590	3,320,375,666	8,782,469,444	7,453,043,829
September	2,861,269,895	3,191,903,204	9,497,642,812	6,567,441,462
October	4,493,953,277	3,860,068,460	8,480,899,324	6,129,775,803
November	4,441,298,985	4,697,406,910	10,430,920,819	5,653,736,199
December	4,135,256,882	10,752,464,487	16,566,883,067	5,947,597,653
Total	**37,745,366,056**	**55,604,767,384**	**113.940.798.205**	**96.425.103.524**

Source: Data processed by the Author (2024)

Description of Sales Turnover

Sales turnover, which shows the volume of transactions and business activities, is the leading indicator of business performance in freight forwarding services. The following is a research sample from PT Sales Turnover. VCS 2019-2022:

Table 4. Sales Turnover Sample

Bulan	2019	Persentase Naik/Turun	2020	Persentase Naik/Turun	2021	Persentase Naik/Turun	2022	Persentase Naik/Turun
Januari	199.863.801		380.293.468		151.470.913		257.237.932	
Februari	176.694.464	-13%	611.178.824	38%	504.945.037	70%	1.095.497.011	77%
Maret	505.935.030	65%	541.529.293	-13%	1.150.828.864	56%	957.003.796	-14%
April	285.298.029	-77%	514.072.153	-5%	805.861.679	-43%	120.665.581	-693%
Mei	451.791.929	37%	631.655.256	19%	732.156.768	-10%	710.220.704	83%
Juni	498.532.138	9%	552.421.210	-14%	1.844.325.569	60%	5.054.003.539	86%
Juli	469.014.692	-6%	839.498.129	34%	780.770.351	-136%	768.599.663	-558%
Agustus	945.698.900	50%	615.301.894	-36%	495.918.142	-57%	2.003.786.816	62%
September	499.573.155	-89%	584.544.406	-5%	1.497.642.451	67%	189.990.889	-955%
Oktober	582.776.423	14%	898.505.000	35%	897.865.887	-67%	482.683.380	61%
November	356.856.775	-63%	445.107.020	-102%	695.899.111	-29%	478.574.724	-1%
Desember	720.342.348	50%	722.929.393	38%	1.704.689.799	59%	310.515.898	-54%
Total	**5.692.377.684**		**7.337.036.046**		**11.262.374.571**		**12.428.779.933**	

Source: Data processed by the Author (2024)

According to Table 4, PT's sales turnover is high. VCS experiences fluctuations every month. Total turnover in 2019 was 5,692,377,684, increased to 7,337,036,046 in 2020, then jumped significantly to 11,262,374,571 in 2021 and slightly higher to 12,428,779,933 in 2022. The percentage increase or decrease analysis shows significant changes from month to month and year to year. For example, February 2020 recorded a significant increase of 38% compared to the previous month, while September 2019 recorded a significant decrease of 89%.

Normality test

Tabel 5. Normality test

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			48
Normal Parameters[a,b]	Mean		,0000000
	Std. Deviation		1,19580458
Most Extreme Differences	Absolute		,139
	Positive		,107
	Negative		-,139
Test Statistic			,139
Asymp. Sig. (2-tailed)[c]			,071
Monte Carlo Sig. (2-tailed)[d]	Sig.		,070
	99% Confidence Interval	Lower Bound	,076
		Upper Bound	,074

Source: SPSS 27 output

From the SPSS output data above, it can be seen that the value of Asymp is high. Sig. (2-tailed) is 0.071 > out of 0.05, so the data can be said to be normally distributed.

Multicollinearity Test

Tabel 6. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	PPN	,638	1,567
	HPP	,638	1,567

a. Dependent Variable: OMSET

Source: SPSS 27 output

The test results prove that each independent variable has a VIF value of less than ten or a Tolerance value of more than 0.1. Thus, there is a multicollinearity relationship between the independent variables in this study.

Autocorrelation Test

Tabel 7. Autocorrelation Test

Model	Durbin-Watson
1	1,679[a]

a. Predictors: (Constant), HPP, PPN
b. Dependent Variable: OMSET

Source: SPSS 27 output

Based on the test results, it can be seen that the Durbin Watson (DW-Test) value is 1.679, between -2 and +2; this is in accordance with the basis for decision-making, so in the regression equation, there is no autocorrelation.

Heteroscedasticity Test

Tabel 8. Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-16,826	3,295		-5,106	,000
	PPN	-,041	,616	-,038	-,066	,947
	HPP	,812	,602	,766	1,349	,184

Source: SPSS 27 output

Based on the results of the heteroscedasticity test via the Glejser test, it can be seen that the significance value of the VAT and COGS variables is < 0.05. Therefore, it can be concluded that heteroscedasticity does not occur in the variables used in this research.

Multiple Linear Analysis Test

Tabel 9. Multiple Linear Analysis Test

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	10,871	7,526		1,444	,156
	PPN	5,497	1,406	2,303	3,910	,000
	HPP	-3,957	1,375	-1,695	-2,878	,006

Source: SPSS 27 output

Based on Table 9, the following multiple linear regression equation can be obtained:

$$Y = 10{,}871 + 5{,}497 - 3{,}957 + e$$

From the multiple linear regression equation, the constant value obtained is 10.871, which shows that if all independent variables have a value of 0 or are constant, then the Sales Turnover (Y) value increases by 10.871 units. The value of the regression coefficient is 5.497; a positive regression coefficient value indicates that there is a unidirectional relationship between Sales Turnover (Y) and Value Added Tax (), meaning that when VAT () increases by one unit, it will increase the value of the Turnover variable (Y) of 5.497. The regression coefficient value is -3.957, indicating a negative value, meaning that when the Cost of Goods Sold () variable increases by one unit, it will result in a decrease

in the value of the turnover variable (Y) of 3.957.$X_1X_1X_2$

Model Fit Test (F Test)

Tabel 10. Model Fit Test (F Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34,980	2	17,490	22,173	,000[b]
	Residual	35,496	45	,789		
	Total	70,476	47			

Source: SPSS 27 output

The F-test results in Table 10 show a significance value of 0.000, which indicates that this value is smaller than 0.05. This results in rejecting and accepting the independent variables, which positively and significantly influence the dependent variable.

Hypothesis Test (t-Test)

Tabel 11. Hypothesis Test (t-Test)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	10,871	7,526		1,444	,156
	PPN	5,497	1,406	2,303	3,910	,000
	HPP	-3,957	1,375	-1,695	-2,878	,006

Source: SPSS 27 output

From the results of the t-test, it can be seen that the VAT () variable has a significance value of 0.000, which is lower than 0.05 (0.000 < 0.05). As a result, it is rejected and accepted, indicating that the Value Added Tax Rate () positively influences Sales Turnover (Y). Meanwhile, the t-test on the Cost of Goods Sold () variable produces a significance value of 0.006 with a negative value, which exceeds 0.05 (0.006 > 0.05). Therefore, it is rejected and accepted, indicating that the Cost of Goods Sold () has a negative influence on Sales Turnover (Y).$X_1H_0H_{a1}X_1X_2H_{a2}H_0X_2$

Coefficient of Determination Test R^2

Tabel 12. Coefficient of Determination Test $\boldsymbol{R^2}$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,705[a]	,496	,474	,88814

a. Predictors: (Constant), HPP, PPN

Source: SPSS 27 output

From the test results, it can be concluded that the R Square () number is 0.474, meaning that 47.4% of the independent variables can influence the dependent variable. In comparison, the remaining 52.6% is influenced by other factors outside this research which the Author. R2 did not examine

The Effect of Value Added Tax (VAT) Rates on Sales Turnover

Based on the results of the Multiple Linear Regression Analysis Test, the calculated t-value () is 3.910, with a significance level of 0.000, which is more diminutive than 0.05. The Value Added Tax (VAT) rate positively influences Sales Turnover (Y). These findings indicate that the increase in the value-added tax rate positively and significantly impacts sales turnover at PT. VCS. It means that the company experiences instability and a decrease in sales turnover every month as a result of an increase in the Value Added Tax (VAT) rate from 1% to 1.1%.X_1

The results of this study are also supported by research results(Gunawan & Sofiani, 2023), which found that the increase in value-added tax (VAT) rates had a significant influence on sales turnover. It means that when the VAT rate increases, sales turnover also tends to experience significant changes. It shows that tax policy can have a directly visible impact on a company's sales performance.

The Influence of Cost of Goods Sold (COGS) on Sales Turnover

The results of the Multiple Linear Regression Analysis Test show that the calculated t value () is -2.878, with a significance level of 0.006, more diminutive than 0.05. It shows that the Cost of Goods Sold (COGS) does not significantly influence Sales Turnover (Y). In this context, the Cost of Goods Sold has a negative but insignificant influence on Sales Turnover at PT. VCS indicates that the Cost of Goods Sold may not be the main factor influencing sales performance.X_2

The results of this research align with the findings of research conducted by(Herman, 2022), which states that there is a negative and insignificant relationship between Cost of Goods Sold (COGS) and profit before tax at PT. Astra Agro Lestari Tbk, In other words, although the Cost of Goods Sold has the potential to influence profit before tax, the effect is not statistically significant in this context. This suggests that other factors may have a greater influence on pre-tax profits, such as pricing strategy and other operating costs, or external factors, such as market conditions and industry regulations.

CONCLUSION

The research results examine the effect of changes in value-added tax rates (VAT) and cost-of-goods sold (HPP) on PT's sales turnover. VCS, several important conclusions were found. First, the value-added tax rate significantly influences PT's sales turnover. VCS from 2019 to 2022. Second, the Cost of Goods Sold does not significantly affect Sales Turnover in the same period. Suggestions that can be taken from these results are PT. VCS is advised to consider various strategies to increase sales turnover, such as adjusting selling prices, more effective marketing strategies, and promotional programs that attract customers. In addition, it is recommended that further research consider other factors that might influence sales turnover, such as mediating variables or external factors that have yet to be considered in this research. Limitations of this study include time and resource constraints that affect the depth of analysis and generalization of the findings, as well as data that only covers 2019 to 2022 without considering recent changes that could influence the research results.

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